

**PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
OF THE STATE OF NEVADA**

*Actuarial Valuation as of June 30, 2010*

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November 1, 2010

Public Employees' Retirement Board  
State of Nevada  
693 West Nye Lane  
Carson City, Nevada 89703

Dear Retirement Board Members:

We are pleased to submit this report that presents the results of our actuarial valuation of the Public Employees' Retirement System of the State of Nevada as of June 30, 2010.

The census information on which our calculations are based and the unaudited financial information were provided by the Retirement Office staff. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We look forward to meeting with the Retirement Board to review this report on the Public Employees' Retirement System of the State of Nevada.

Sincerely,

Brad Ramirez, FSA, MAAA, EA  
Consulting Actuary

Thomas D. Levy, FSA, MAAA, EA  
Senior Vice President and Chief Actuary

John Monroe, ASA, MAAA, EA  
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## I. INTRODUCTION

Actuarial valuations of the Public Employees' Retirement System of the State of Nevada are prepared annually by the independent actuary for the Public Employees' Retirement Board. The basic purposes of annual actuarial valuations are to determine the Retirement System's actuarial liabilities and the contribution rates required to fund the Retirement System on an actuarial reserve basis.

The June 30, 2010 actuarial valuation of the Public Employees' Retirement System of the State of Nevada is based on five basic elements:

1. The current provisions of the Public Employees' Retirement Act (see Section III).
2. The characteristics of active and inactive members.
3. The characteristics of members in pay status.
4. The actuarial assumptions and methods adopted by the Public Employees' Retirement Board (see Section IV).
5. The actuarial value of the Retirement System's net assets, which on June 30, 2010 amounted to \$24.7 billion, based on unaudited assets.

### **Highlights**

The Public Employees' Retirement Act requires an adjustment in the statutory contribution rates on July 1 of each odd-numbered year, based on the actuarially determined rates indicated in the actuarial valuation report for the immediately preceding year. Rates are only adjusted upward if the new rates are more than 0.50% higher than the existing rate for Employer-Pay and more than 0.25% higher for Employee/Employer. Rates are only adjusted downward if the new rates are more than 2.00% lower than the existing rate for Employer-Pay (and adjusted only by the amount in excess of 2.00%) and more than 1.00% lower than the existing rate for Employee/Employer (and adjusted only by the amount in excess of 1.00%). Rates are rounded to the nearest 0.25% of payroll.

For both the regular and police/fire employees, the calculated rates for 2010 increased from the previous year. The most important factor in this increase was the recognition of part of the investment losses from the fiscal years ending June 30, 2008 and June 30, 2009.

Since the actuarially determined rates from the June 30, 2010 valuation were not within the ranges previously noted and this valuation year is an even-numbered year, an adjustment in the statutory contribution rates is required for fiscal years July 1, 2011 through June 30, 2013.

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employer-Pay*</b>		
Statutory Rate for Fiscal Years July 1, 2009 through June 30, 2011	21.50%	37.00%
Actuarially Determined Contribution Rate per July 1, 2010 Actuarial Valuation	23.63%	39.77%
Statutory Rate for Fiscal Years July 1, 2011 through June 30, 2013 (as determined from the July 1, 2010 valuation)	23.75%	39.75%

\* See cost-sharing mechanism in NRS 286.421

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employee/Employer*</b>		
Statutory Rate for Fiscal Years July 1, 2009 through June 30, 2011	22.50%	38.00%
Actuarially Determined Contribution Rate per July 1, 2010 Actuarial Valuation	24.52%	40.53%
Statutory Rate for Fiscal Years July 1, 2011 through June 30, 2013 (as determined from the July 1, 2010 valuation)	24.50%	40.50%

\* See cost-sharing mechanism in NRS 286.410

The return on the market value of assets for 2009-2010 for the PERS Fund was 11.03%, and was -15.99% for the preceding year.

The return on the actuarial value of assets for 2009-2010 for the PERS Fund was 2.84% compared to the investment return assumption of 8.00%. As a result, the PERS Fund experienced

an investment loss on an actuarial value basis of approximately \$987 million for regular employees and \$246 million for police/fire employees.

As indicated on page 33 of this report, the total investment loss not yet recognized as of June 30, 2010 is approximately \$3.061 billion for regular employees. Per page 34, the total investment loss not yet recognized as of June 30, 2010 is approximately \$758 million for police/fire employees. These unrecognized losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent they are not offset by recognition of gains derived from future experience. This means that earning the assumed rate of investment return of 8.00% per year (net of investment expenses) on a **market value** basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.00% rate and all other actuarial assumptions are met, the contribution requirements would increase in each of the next few years.

The ratio of the actuarial value of assets to the market value of assets for the PERS Fund is 118% for both regular and police/fire employees. Last year, these ratios were 128% for regular employees and 127% for police/fire employees.

The unrecognized investment losses represent about 18% of the PERS Fund market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$3.8 billion market losses is expected to have a significant impact on the System's future funded ratio and actuarial contribution requirement. This potential impact may be illustrated as follows:

- If the deferred losses were recognized immediately in the actuarial value assets, the funded ratio would decrease from 71.2% to 60.1% for regular members and from 67.8% to 57.6% for police/fire members.
- If the deferred losses were recognized immediately in the actuarial value of assets, the actuarial contribution requirement would increase as follows:

	<u>2010/2011 Actuarial Contribution Rate</u>	<u>2010/2011 Rate Reflecting Deferred Losses</u>
<b>Regular Employees</b>		
Employer-Pay	23.63%	26.14%
Employee/Employer Pay	24.52%	27.03%
<b>Police/Fire Employees</b>		
Employer-Pay	39.77%	42.38%
Employee/Employer Pay	40.53%	43.14%

The actuarial valuation report as of June 30, 2010 is based on financial data as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.

There were no changes in plan provisions since the preceding valuation.

There were no changes to the actuarial assumptions since the preceding valuation. The last experience study was performed prior to the June 30, 2007 valuation, and the next one is scheduled to be completed prior to the next rate-setting valuation. As part of the experience study, we will review whether or not the current assumptions reflect future expectations and may recommend changes to the current actuarial assumptions.

In 2009, the Critical Labor Shortage (CLS) program was extended through June 30, 2015 but restrictions on eligible positions were added. This program allows PERS retirees to return to work without facing the usual suspension of retirement benefits. Since the program is more restrictive than it has been in the past, and it is still temporary in nature, we believe that the cost so far is minimal. In the first year since the new restrictions took effect, a total of 19 retired PERS members were rehired and reenrolled in PERS under this provision. A study will be performed prior to the program being extended or made permanent to determine if the actuarially determined cost rate is affected, and if so, how to estimate its cost.

## Active and Inactive Vested Membership

### (Tables 1 through 6 - Section II)

A total of 114,401 active and inactive vested members of the Public Employees' Retirement System of the State of Nevada are included in this actuarial valuation. Approximately 88% of the active members are regular employees and 12% are police/fire employees.

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>	<u>Total</u>
Active members	90,219	12,375	102,594
Inactive members	<u>11,167</u>	<u>640</u>	<u>11,807</u>
Total active and inactive members	101,386	13,015	114,401

Between the 2009 and 2010 actuarial valuations, the number of active regular employees decreased by 2,565 or 2.8%, and the number of active police/fire employees decreased by 258 or 2.0%. The average annual salaries of active regular employees increased by 2.6% to \$49,407, and the average annual salaries of police/fire employees increased by 2.4% to \$73,373.

As of the valuation date, approximately 82% of regular employees and 88% of police/fire employees were covered under the Employer-Pay provisions. The number and payrolls of active members covered under Employer-Pay and Employee/Employer contribution provisions are shown below.

	<u>Regular Employees</u>		<u>Police/Fire Employees</u>		<u>Total</u>	
	<u>Number</u>	<u>Payroll (Millions)</u>	<u>Number</u>	<u>Payroll (Millions)</u>	<u>Number</u>	<u>Payroll (Millions)</u>
Employer-Pay	73,816	\$3,772.5	10,875	\$831.9	84,691	\$4,604.4
Employee/Employer	<u>16,403</u>	<u>\$685.0</u>	<u>1,500</u>	<u>\$76.1</u>	<u>17,903</u>	<u>\$761.1</u>
Total	90,219	\$4,457.5	12,375	\$908.0	102,594	\$5,365.5



**Members in Pay Status**  
**(Tables 7 through 10 - Section II)**

On the valuation date, the Public Employees' Retirement System of the State of Nevada was paying benefits to a total of 43,919 retired members, disabled members, beneficiaries, and survivors. The total number of benefit recipients increased 4.8% from 41,905 on June 30, 2009. The benefit recipients were comprised of 36,326 service retirees, 2,515 disability retirees, 3,228 beneficiaries and 1,850 survivors.

Between the 2009 and 2010 actuarial valuations, the total number of service retirees, beneficiaries, disability retirees and survivors increased as shown below:

	<u>Regular Employees</u>		<u>Police/Fire Employees</u>		<u>Total</u>	
	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>
Service	31,917	30,545	4,409	4,147	36,326	34,692
Disability	2,130	2,033	385	370	2,515	2,403
Beneficiaries	2,702	2,562	526	498	3,228	3,060
Survivors	<u>1,651</u>	<u>1,565</u>	<u>199</u>	<u>185</u>	<u>1,850</u>	<u>1,750</u>
Total	38,400	36,705	5,519	5,200	43,919	41,905

As of June 30, 2010 the average monthly benefit payable to service and disability retirees was \$2,486 for retired regular employees and \$4,141 for retired police/fire employees compared to \$2,428 and \$3,926, respectively, as of June 30, 2009.

Average monthly benefits paid to beneficiaries and survivors were \$1,468 for regular employees and \$1,823 for police/fire employees. These average benefit amounts and the amounts shown in the tables that follow include all post-retirement benefit increases as of the valuation date.

**Assets**  
**(Tables 11 through 14 - Section II)**

As of June 30, 2010, net assets totaled \$20.9 billion at market value and \$24.7 billion at actuarial value. The actuarial value of assets as a percentage of market value of assets was 118% for both regular and police/fire employees as of the valuation date. Last year, the actuarial value of assets as a percentage of market value of assets was 128% for regular employees and 127% for police/fire employees.

## **Results of the Actuarial Valuation**

### **(Tables 15 through 19 - Section II)**

Under the Entry Age Normal Cost funding method, the total actuarially-determined employer contribution rates consist of the normal cost, an administrative expense allowance, and the payment required to amortize the unfunded actuarial accrued liability over the established (GASB compliant) amortization period. Actuarial gains and losses resulting from differences between actual and assumed non-investment experience are recognized immediately in the Retirement System's actuarial accrued liabilities.

In general terms, the normal cost is the cost of benefit rights allocated to current service. The normal cost rate is the level percentage-of-salary contribution required each year per employee to accumulate, over the projected working lifetime, the reserves needed to meet the cost of projected benefits. The normal cost represents the ultimate percentage-of-salary cost of the Retirement System if the unfunded actuarial accrued liability is paid off and the actual experience of the System conforms to actuarial assumptions. The normal costs are calculated separately for regular employees and police/fire employees.

The calculated normal costs are shown in Table 15 and are summarized as follows:

	<u>Actuarially Determined Normal Costs</u>		
	<u>Regular</u> <u>Employees</u>	<u>Police/Fire</u> <u>Employees</u>	<u>Total</u>
Total Normal Cost	\$802,314,098	\$288,496,446	\$1,090,810,544

The total actuarial accrued liability represents the amount that would have been accumulated as of the valuation date if contributions sufficient to meet the normal costs of the Retirement System had been made each year in the past, net of accumulated past benefit payments. If assets equaled the total actuarial accrued liability, there would be no unfunded liability and future contribution requirements would consist solely of the calculated normal cost rates and the administrative expense allowance.

The unfunded actuarial accrued liability is the difference between the actuarial accrued liability and the actuarial value of assets. The actuarial value of assets is developed by spreading the market value gains and losses over a five-year period. The majority of public sector retirement

funds use an asset smoothing technique as part of their overall strategy in managing contribution rate volatility.

The unfunded actuarial accrued liability is shown in Tables 16 and 17, and amounts to \$7.951 billion for regular employees and \$2.402 billion for police/fire employees. The Plan has adopted the approach of amortizing year by year amounts of each year's change in the unfunded accrued liability. The annual increase or decrease in the unfunded actuarial accrued liability is amortized over a period of 30 years from July 1, 2010 and added to or subtracted from the previous years' amortizations. The method of amortizing the unfunded actuarial accrued liability is the level percentage-of-payroll method, under which the dollar amounts of calculated amortization payments increase in direct proportion to the assumed payroll growth rates. The assumed payroll growth rates are 6.50% per year for regular employees and 8.00% per year for police/fire employees.

Based on the year-by-year closed percentage-of-payroll amortization method, the annual payments required to amortize the unfunded actuarial accrued liability represent 7.39% of projected payroll for regular employees and 9.90% of projected payroll for police/fire employees. Under this method, the average length of payment for the total unfunded liability is approximately 25.7 and 25.1 years for regular and police/fire employees, respectively.

**Regular Employees**  
**Table of Amortization Payments (Thousands)**

Date Established	Years Remaining	Annual Payment*	Percent of Annualized Payroll
07/01/2004	24	\$195,543	3.95%
07/01/2005	25	45,849	0.93%
07/01/2006	26	19,615	0.40%
07/01/2007	27	(15,928)	(0.32%)
07/01/2008	28	27,447	0.55%
07/01/2009	29	60,291	1.22%
07/01/2010	30	<u>32,599</u>	<u>0.66%</u>
Total		\$365,416	7.39%

\* Amortized as a level percent of payroll with 6.5% annual payroll growth.

**Police/Fire Employees  
Table of Amortization Payments (Thousands)**

Date Established	Years Remaining	Annual Payment*	Percent of Annualized Payroll
07/01/2004	24	\$66,044	6.83%
07/01/2005	25	8,164	0.84%
07/01/2006	26	6,613	0.68%
07/01/2007	27	(2,204)	(0.23%)
07/01/2008	28	5,059	0.52%
07/01/2009	29	7,365	0.76%
07/01/2010	30	<u>4,832</u>	<u>0.50%</u>
Total		\$95,873	9.90%

\* Amortized as a level percent of payroll with 8.0% annual payroll growth.

The Retirement System's total administrative expenses are assumed to approximate 0.15% of projected payroll. Because administrative expenses are paid out of the retirement funds, the actuarially determined employer contribution rates are increased by 0.15% of payroll to determine the total contribution rates required to meet the calculated actuarial costs plus administrative expenses.

The total calculated contribution rates (as a percent of projected payroll) are:

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employer-Pay*</b>		
Normal Cost	16.09%	29.72%
Amortization Payment	7.39%	9.90%
Administrative Expenses	<u>0.15%</u>	<u>0.15%</u>
Total Employer-Pay Rate	23.63%	39.77%
Statutory Rate (2009 – 2011)	21.50%	37.00%
Statutory Rate (2011 – 2013)	23.75%	39.75%

\* See cost-sharing mechanism in NRS 286.421

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employee/Employer*</b>		
Normal Cost	16.98%	30.48%
Amortization Payment	7.39%	9.90%
Administrative Expenses	<u>0.15%</u>	<u>0.15%</u>
Total Employee/Employer Rate	24.52%	40.53%
Statutory Rate (2009 – 2011)	22.50%	38.00%
Statutory Rate (2011 – 2013)	24.50%	40.50%

\* See cost-sharing mechanism in NRS 286.410

For comparison purposes, the 2009 calculated Employer-Pay rates were 22.57% and 38.39% for regular employees and police/fire employees, respectively. The 2009 calculated Employee/Employer rates for regular employees and police/fire employees were 23.47% and 39.21%, respectively. The Employee/Employer rates exceed the Employer-Pay rates because of the additional guaranteed cost for the refund provisions applicable to employee contributions.

### **Changes in Statutory Rates**

The Public Employees' Retirement Act requires an adjustment in the statutory contribution rates on July 1 of each odd-numbered year, based on the actuarially determined rates indicated in the actuarial valuation report for the immediately preceding year. Rates are only adjusted upward if the new rates are more than 0.50% higher than the existing rate for Employer-Pay and more than 0.25% higher for Employee/Employer. Rates are only adjusted downward if the new rates are more than 2.00% lower than the existing rate for Employer-Pay (and adjusted only by the amount in excess of 2.00%) and more than 1.00% lower than the existing rate for Employee/Employer (and adjusted only by the amount in excess of 1.00%). Rates are rounded to the nearest 0.25% of payroll.

Since the actuarially determined rates from the June 30, 2010 valuation were not within the ranges previously noted and this valuation year is an even numbered year, an adjustment in the statutory contribution rates is required for fiscal years July 1, 2011 through June 30, 2013.

**Analysis of Actuarial Experience**  
**(Tables 20 and 21 - Section II)**

The determinations below are on the basis of the actuarial assumptions used in the prior actuarial valuation.

**Investment Experience.** During fiscal year 2010, the net rate of investment return, on an actuarial basis (smoothed value), was approximately 2.84%, or 5.16% lower than the assumed long-term rate of 8.00% per year. As a result of the less than assumed investment return on an actuarial value basis, the annual payments required to amortize the unfunded actuarial accrued liability for both regular employees and police/fire employees are higher than they would have been if the investment return rate had equaled the assumed rate.

**Liability Experience.** The remaining experience due to changes in accrued liability is detailed in Table 20.

**Contribution Rate Reconciliation.** A reconciliation of the actuarially determined contribution rate from July 1, 2009 to July 1, 2010 is provided in Table 21.

**Changes in Plan Provisions Since the Previous Year**

Substantial changes were made to retirement benefits for members with an effective date of membership on or after January 1, 2010:

- **Call-back pay:** The type of call-back pay that may be considered compensation has been revised for future members.
- **Benefit multiplier:** Current members earn a benefit equal to 2.67% of average compensation for each year of service with a maximum benefit of 75% of average compensation. This has been reduced to 2.50% of average compensation for each year of service for future members.
- **Early retirement:** Members with at least five years of service can elect to retire with a reduced pension. The amount of the reduction for current members is 4% per year for each year the retirement precedes the date the member is from eligibility for an unreduced service pension. The reduction will be 6% per year for future members.

- **Compensation increase limits:** The amount of an increase in compensation that can be considered when determining a retirement allowance will be limited to 10 percent per year for future members.
- **Service retirement eligibility (Regular members):** Current Regular members are eligible to begin receiving an unreduced service pension at age 65 with at least 5 years of service, at age 60 with at least 10 years of service, and at any age with at least 30 years of service. For future members, the age at which a Regular member with at least 10 years but less than 30 years of service could retire with an unreduced benefit will increase from age 60 to age 62.
- **Service retirement eligibility (Police/Fire members):** Current Police/Fire members are eligible to begin receiving an unreduced service pension at age 65 with at least 5 years of service, at age 55 with at least 10 years of service, at age 50 with at least 20 years of service, and at any age with at least 25 years of service. For future members, a Police/Fire member would be eligible for an unreduced service pension at age 65 with at least 5 years of service, at age 60 with at least 10 years of service, or at age 50 with at least 20 years of service. Eligibility for an unreduced service pension at any age with 25 years of service is not available for future members.
- **Post Retirement Benefit Increases:** Current retirees receive annual increases which can be as much as 5% per year after the fourteenth anniversary of retirement. Future members will have the same schedule of increases until it is capped at 4% per year after the twelfth anniversary of retirement.

### **Changes in Actuarial Assumptions and Methods Since the Previous Year**

There were no changes in the actuarial assumptions or cost methods since the preceding valuation.

## II. PLAN STATISTICAL AND ACTUARIAL INFORMATION

This section of the report provides the demographic characteristics of the Retirement System's active and inactive vested members, retirees and beneficiaries, asset information and the details of the actuarial calculations.



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Table 1

Active Members Included in Actuarial Valuation

Item	Actuarial Valuation as of June 30,					
	2005	2006	2007	2008	2009	2010
	<b>Regular Employees</b>					
Number	83,224	87,020	91,757	93,816	92,784	90,219
Average age	45.1	45.1	45.0	45.1	45.2	45.8
Average years of service	8.7	8.5	8.3	8.4	8.6	9.2
Average annual salary <sup>(1)</sup>	\$40,901	\$41,929	\$43,355	\$46,159	\$48,151	\$49,407
Total payroll (millions)	\$3,404.0	\$3,648.6	\$3,978.1	\$4,330.5	\$4,467.7	\$4,457.5
	<b>Police/Fire Employees</b>					
Number	10,771	11,167	11,936	12,307	12,633	12,375
Average age	39.6	39.5	39.3	39.3	39.4	39.8
Average years of service	10.0	9.9	9.7	9.8	9.8	10.3
Average annual salary <sup>(1)</sup>	\$61,277	\$64,250	\$66,316	\$70,194	\$71,669	\$73,373
Total payroll (millions)	\$660.0	\$717.5	\$791.5	\$863.9	\$905.4	\$908.0

<sup>(1)</sup> Based on compensation actually paid during the preceding plan year to active members as of the valuation date.

**Table 2****Division of Employees by Provision****Employees Under Employer-Pay Provisions**

<b>June 30,</b>	<b>Regular Employees</b>	<b>Percent of Total Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Percent of Total Police/Fire Employees</b>	<b>Total</b>	<b>Percent of Total</b>
2005	68,337	82.1%	9,146	85.0%	77,483	82.4%
2006	71,370	82.0%	9,465	84.8%	80,835	82.3%
2007	75,058	81.8%	10,122	84.8%	85,180	82.1%
2008	76,929	82.0%	10,514	85.4%	87,443	82.4%
2009	76,118	82.0%	10,910	86.4%	87,028	82.6%
2010	73,816	81.8%	10,875	87.9%	84,691	82.5%

**Employees Under Employee/Employer Provisions**

<b>June 30,</b>	<b>Regular Employees</b>	<b>Percent of Total Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Percent of Total Police/Fire Employees</b>	<b>Total</b>	<b>Percent of Total</b>
2005	14,887	17.9%	1,625	15.0%	16,512	17.6%
2006	15,650	18.0%	1,702	15.2%	17,352	17.7%
2007	16,699	18.2%	1,814	15.2%	18,513	17.9%
2008	16,887	18.0%	1,793	14.6%	18,680	17.6%
2009	16,666	18.0%	1,723	13.6%	18,389	17.4%
2010	16,403	18.2%	1,500	12.1%	17,903	17.5%

Table 3-A

Population Statistics, Employer-Pay and Employee/Employer

Regular Employees

<b>Employer-Pay</b>			
<b>June 30,</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Entry Age</b>
2005	45.2	9.4	35.2
2006	45.2	9.2	35.4
2007	45.1	9.0	35.2
2008	45.1	9.0	35.2
2009	45.2	9.2	35.1
2010	45.9	9.9	35.0

<b>Employee/Employer</b>			
<b>June 30,</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Entry Age</b>
2005	44.7	5.5	38.3
2006	44.7	5.5	38.4
2007	44.6	5.4	38.2
2008	44.9	5.6	38.2
2009	45.1	5.8	38.2
2010	45.5	6.1	38.2

**Table 3-B**

**Population Statistics, Employer-Pay and Employee/Employer**

**Police/Fire Employees**

<b>Employer-Pay</b>			
<b>June 30,</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Entry Age</b>
2005	39.9	10.9	28.7
2006	40.0	10.8	28.7
2007	39.6	10.7	28.5
2008	39.6	10.7	28.5
2009	39.6	10.7	28.5
2010	39.9	11.0	28.5

<b>Employee/Employer</b>			
<b>June 30,</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Entry Age</b>
2005	38.4	4.8	33.1
2006	38.2	4.5	33.1
2007	37.9	4.3	32.9
2008	37.7	4.3	32.7
2009	38.1	4.5	32.8
2010	38.7	5.1	32.8

Table 4-A

Active Member Distribution by Age and Years of Service

Regular Employees

June 30, 2010

Age	Years of Service									
	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over		
Total	90,219	34,581	21,704	15,430	9,609	5,691	2,398	806		
Under 20	128	128	0	0	0	0	0	0		
20 - 24	2,140	2,104	36	0	0	0	0	0		
25 - 29	7,241	6,101	1,112	28	0	0	0	0		
30 - 34	9,006	5,014	3,206	759	27	0	0	0		
35 - 39	11,073	4,526	3,289	2,652	548	57	1	0		
40 - 44	12,483	4,049	3,182	2,676	1,905	602	69	0		
45 - 49	13,403	3,939	3,155	2,582	1,861	1,371	460	35		
50 - 54	12,967	3,364	2,880	2,544	1,875	1,313	786	205		
55 - 59	11,582	2,700	2,435	2,254	1,880	1,361	654	298		
60 - 64	7,156	1,801	1,654	1,385	1,118	708	325	165		
65 - 69	2,248	591	560	422	305	225	72	73		
70 & Over	792	264	195	128	90	54	31	30		

Table 4-B

Active Member Distribution by Age and Years of Service

Police/Fire Employees

June 30, 2010

Age	Years of Service									
	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Over		
Total	12,375	3,828	2,948	2,531	1,634	980	352	102		
Under 20	0	0	0	0	0	0	0	0		
20 - 24	330	323	7	0	0	0	0	0		
25 - 29	1,592	1,336	251	5	0	0	0	0		
30 - 34	2,016	924	831	248	12	1	0	0		
35 - 39	2,581	581	861	910	215	14	0	0		
40 - 44	2,412	350	476	732	617	223	14	0		
45 - 49	1,868	185	293	354	477	426	129	4		
50 - 54	955	78	121	163	191	215	139	48		
55 - 59	426	30	67	81	84	66	60	38		
60 - 64	153	14	34	34	24	27	9	11		
65 - 69	36	4	6	3	13	8	1	1		
70 & Over	6	3	1	1	1	0	0	0		



Table 5

Salary Distributions

Regular Employees and Police/Fire Employees  
in Active Service on June 30, 2010

Actual Salary	Regular Employees		Police/Fire Employees	
	Number	Percent	Number	Percent
Total	90,219	100.0%	12,375	100%
Under \$20,000	9,571	10.6%	223	1.8%
\$20,000 - \$24,999	3,954	4.4%	56	0.5%
25,000 - 29,999	4,210	4.7%	61	0.5%
30,000 - 34,999	5,682	6.3%	103	0.8%
35,000 - 39,999	8,335	9.2%	164	1.3%
40,000 - 44,999	9,443	10.5%	378	3.1%
45,000 - 49,999	7,979	8.8%	792	6.4%
50,000 - 54,999	9,024	10.0%	984	8.0%
55,000 - 59,999	5,931	6.6%	1,219	9.9%
60,000 - 64,999	5,691	6.3%	1,199	9.7%
65,000 - 69,999	5,851	6.5%	1,143	9.2%
70,000 - 74,999	3,758	4.2%	949	7.7%
75,000 - 79,999	2,448	2.7%	635	5.1%
80,000 - 84,999	2,093	2.3%	632	5.1%
85,000 - 89,999	1,586	1.8%	790	6.4%
90,000 - 94,999	1,166	1.3%	890	7.2%
95,000 - 99,999	970	1.1%	583	4.7%
100,000 - 104,999	612	0.7%	384	3.1%
105,000 - 109,999	421	0.5%	277	2.2%
110,000 - 114,999	305	0.3%	188	1.5%
115,000 - 119,999	259	0.3%	190	1.5%
120,000 - 124,999	180	0.2%	133	1.1%
125,000 - 129,999	133	0.1%	107	0.9%
130,000 - 134,999	84	0.1%	64	0.5%
135,000 - 139,999	87	0.1%	61	0.5%
140,000 - 144,999	45	0.0%	40	0.3%
145,000 - 149,999	32	0.0%	33	0.3%
150,000 - 154,999	68	0.1%	36	0.3%
155,000 - 159,999	51	0.1%	6	0.0%
160,000 & Over	250	0.3%	55	0.4%

Note: Based on compensation actually paid during the plan year.

Table 6

## Salary Increase Rates by Service

Active Employees in Both 2010 and 2009 Actuarial Valuations			
		Percent Increase in Average Salary	
Service	Number	Actual	Expected
<b>Regular Employees</b>			
Under 5	29,818	4.7%	7.7%
5 - 10	21,512	4.1%	6.4%
10 - 15	15,369	3.0%	4.7%
15 - 20	9,581	2.2%	4.5%
20 & Over	<u>8,879</u>	<u>1.5%</u>	<u>4.5%</u>
Total	85,159	3.6%	6.1%
<b>Police/Fire Employees</b>			
Under 5	3,435	8.6%	10.1%
5 - 10	2,938	5.8%	7.8%
10 - 15	2,522	3.1%	6.5%
15 - 20	1,634	2.8%	6.5%
20 & Over	<u>1,432</u>	<u>2.2%</u>	<u>6.5%</u>
Total	11,961	5.2%	7.8%

Table 7-A

Pensions in Force  
by Type and Monthly Amount

June 30, 2010

Regular Members

Monthly Amount	Total	Service	Beneficiary	Disability	Survivor
Total	38,400	31,917	2,702	2,130	1,651
Less than \$500	3,589	2,526	349	184	530
\$500 – \$999	6,519	4,773	650	534	562
1,000 – 1,499	5,564	4,519	519	375	151
1,500 – 1,999	4,296	3,491	365	315	125
2,000 – 2,499	3,486	2,869	277	255	85
2,500 – 2,999	2,770	2,344	171	190	65
3,000 – 3,499	2,490	2,203	124	111	52
3,500 – 3,999	2,393	2,195	93	66	39
4,000 – 4,499	2,584	2,461	62	44	17
4,500 – 4,999	1,643	1,568	41	23	11
5,000 – 5,499	964	916	24	17	7
5,500 – 5,999	649	633	7	6	3
6,000 – 6,499	494	479	8	6	1
6,500 – 6,999	330	325	3	0	2
7,000 – 7,499	210	202	5	3	0
7,500 – 7,999	137	134	2	1	0
8,000 – 8,332	71	71	0	0	0
8,333 & Over	211	208	2	0	1

**Table 7-B**

**Pensions in Force  
by Type and Monthly Amount**

**June 30, 2010**

**Police/Fire Members**

<b>Monthly Amount</b>	<b>Total</b>	<b>Service</b>	<b>Beneficiary</b>	<b>Disability</b>	<b>Survivor</b>
Total	5,519	4,409	526	385	199
Less than \$500	160	57	31	5	67
\$500 – \$999	445	244	97	49	55
1,000 – 1,499	473	293	98	61	21
1,500 – 1,999	439	275	96	62	6
2,000 – 2,499	414	297	59	50	8
2,500 – 2,999	448	339	51	50	8
3,000 – 3,499	420	346	30	29	15
3,500 – 3,999	405	351	25	23	6
4,000 – 4,499	394	353	14	24	3
4,500 – 4,999	326	299	8	15	4
5,000 – 5,499	304	291	5	6	2
5,500 – 5,999	276	266	3	4	3
6,000 – 6,499	222	215	3	3	1
6,500 – 6,999	186	183	3	0	0
7,000 – 7,499	137	137	0	0	0
7,500 – 7,999	100	100	0	0	0
8,000 – 8,332	64	64	0	0	0
8,333 & Over	306	299	3	4	0

Table 8-A

**Pensions in Force  
by Type and Age**

**June 30, 2010**

**Regular Members**

<b>Age</b>	<b>Total</b>	<b>Service</b>	<b>Beneficiary</b>	<b>Disability</b>	<b>Survivor</b>
Total	38,400	31,917	2,702	2,130	1,651
Under 50	1,488	386	233	284	585
50 - 54	2,004	1,412	100	346	146
55 - 59	4,524	3,601	164	573	186
60 - 64	8,130	7,158	266	490	216
65 - 69	8,256	7,501	349	249	157
70 - 74	5,825	5,187	399	110	129
75 - 79	3,835	3,288	391	43	113
80 - 84	2,411	1,909	422	17	63
85 - 89	1,349	1,031	262	13	43
90 & Over	578	444	116	5	13

Table 8-B

**Pensions in Force  
by Type and Age**

June 30, 2010

**Police/Fire Members**

<b>Age</b>	<b>Total</b>	<b>Service</b>	<b>Beneficiary</b>	<b>Disability</b>	<b>Survivor</b>
Total	5,519	4,409	526	385	199
Under 50	504	249	40	111	104
50 - 54	667	562	26	65	14
55 - 59	971	810	50	86	25
60 - 64	1,155	994	79	64	18
65 - 69	895	767	76	35	17
70 - 74	676	550	100	17	9
75 - 79	391	311	71	5	4
80 - 84	170	117	48	1	4
85 - 89	72	40	28	0	4
90 & Over	18	9	8	1	0

Table 9-A

Pensions Awarded  
by Type and Monthly Amount

Year Ended June 30, 2010

Retired Regular Members

Monthly Amount	Total	Service	Disability
Total	2,252	2,061	191
Less than \$500	234	224	10
\$500 – \$999	399	350	49
1,000 – 1,499	295	273	22
1,500 – 1,999	257	228	29
2,000 – 2,499	220	191	29
2,500 – 2,999	173	151	22
3,000 – 3,499	122	110	12
3,500 – 3,999	118	114	4
4,000 – 4,499	108	102	6
4,500 – 4,999	100	99	1
5,000 – 5,499	68	65	3
5,500 – 5,999	49	48	1
6,000 – 6,499	26	24	2
6,500 – 6,999	21	21	0
7,000 – 7,499	19	18	1
7,500 – 7,999	11	11	0
8,000 – 8,332	17	17	0
8,333 & Over	15	15	0

Table 9-B

**Pensions Awarded  
by Type and Monthly Amount**

**Year Ended June 30, 2010**

**Retired Police/Fire Members**

<b>Monthly Amount</b>	<b>Total</b>	<b>Service</b>	<b>Disability</b>
Total	357	331	26
Less than \$500	4	4	0
\$500 – \$999	9	7	2
1,000 – 1,499	13	10	3
1,500 – 1,999	19	14	5
2,000 – 2,499	16	14	2
2,500 – 2,999	14	12	2
3,000 – 3,499	27	27	0
3,500 – 3,999	22	20	2
4,000 – 4,499	25	22	3
4,500 – 4,999	19	15	4
5,000 – 5,499	19	19	0
5,500 – 5,999	21	21	0
6,000 – 6,499	27	25	2
6,500 – 6,999	20	20	0
7,000 – 7,499	24	24	0
7,500 – 7,999	13	13	0
8,000 – 8,332	3	3	0
8,333 & Over	62	61	1



**Table 10-A**

**Pensions Awarded  
by Type and Age**

**Year Ended June 30, 2010**

**Retired Regular Members**

<b>Age</b>	<b>Total</b>	<b>Service</b>	<b>Disability</b>
Total	2,252	2,061	191
Under 50	189	129	60
50 - 54	278	229	49
55 - 59	516	450	66
60 - 64	760	744	16
65 - 69	382	382	0
70 - 74	97	97	0
75 - 79	18	18	0
80 - 84	10	10	0
85 - 89	0	0	0
90 & Over	2	2	0

**Table 10-B**

**Pensions Awarded  
by Type and Age**

**Year Ended June 30, 2010**

**Retired Police/Fire Members**

<b>Age</b>	<b>Total</b>	<b>Service</b>	<b>Disability</b>
Total	357	331	26
Under 50	77	57	20
50 - 54	110	107	3
55 - 59	101	100	1
60 - 64	55	54	1
65 - 69	13	12	1
70 - 74	1	1	0
75 - 79	0	0	0
80 - 84	0	0	0
85 - 89	0	0	0
90 & Over	0	0	0

**Table 11**  
**Market Value of Assets**  
**Combined Balance Sheet**

	<b>June 30, 2010</b>	<b>June 30, 2009</b>
<b>ASSETS:</b>		
Cash & Short-Term Investments	\$389,957,314	\$422,475,446
Contributions Receivable	106,390,406	102,154,980
Trades Pending	251,956,939	141,678,033
Accrued Investment Income	97,567,846	86,899,749
Investments	20,516,359,658	18,540,091,760
Collateral on Loaned Securities	2,942,675,281	1,760,287,271
Property & Equipment	4,289,301	4,896,423
Other Assets	<u>2,053,010</u>	<u>1,962,283</u>
Total Assets	<u>\$24,311,249,755</u>	<u>\$21,060,445,945</u>
<b>LIABILITIES:</b>		
Accounts Payable	\$11,205,817	\$13,385,742
Trades Pending	372,683,783	429,255,245
Obligations under Securities Lending	<u>3,021,077,050</u>	<u>1,847,667,862</u>
Total Liabilities	<u>\$3,404,966,650</u>	<u>\$2,290,308,849</u>
<b>NET ASSETS</b>	<u>\$20,906,283,105</u>	<u>\$18,770,137,096</u>

**Table 12**  
**Statement of Revenue and Expenses**

**Market Value Reconciliation For Year Ended June 30, 2010**

	<b>Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Total</b>
<b>Operating Revenues</b>			
Contributions:			
Employer*	\$956,181,605	\$325,533,242	\$1,281,714,847
Members	83,115,902	16,567,949	99,683,851
Repayment and Purchase of Service	<u>21,938,325</u>	<u>4,951,917</u>	<u>26,890,242</u>
Total Contributions	\$1,061,235,832	\$347,053,108	\$1,408,288,940
Investment Income:			
Interest	\$314,391,003	\$0	\$314,391,003
Dividends	281,945,413	0	281,945,413
Net Appreciation	1,409,908,664	0	1,409,908,664
Other	66,326,682	0	66,326,682
Transfer of Annual Investment Income	(419,289,320)	419,289,320	0
Securities Lending Income	1,726,152	0	1,726,152
Net Change in FV of Securities Lending	<u>8,978,822</u>	<u>0</u>	<u>8,978,822</u>
Total Investment Income	\$1,663,987,416	\$419,289,320	\$2,083,276,736
Investment Expenses	<u>(\$23,898,938)</u>	<u>\$0</u>	<u>(\$23,898,938)</u>
Net Investment Income	\$1,640,088,478	\$419,289,320	\$2,059,377,798
Other Income	\$1,645,808	\$285,315	\$1,931,123
<b>Total Operating Revenues</b>	<b>\$2,702,970,118</b>	<b>\$766,627,743</b>	<b>\$3,469,597,861</b>
<b>Operating Expenses</b>			
Benefit Payments:			
Retirement and Survivor Benefits	\$1,008,326,906	\$227,841,155	\$1,236,168,061
Disability Benefits	52,955,798	12,492,536	65,448,334
Post-Retirement Increases	15,033	1,763	16,796
Refunds to Members	15,083,679	5,187,085	20,270,764
Administrative Expenses	10,018,538	1,100,095	11,118,633
Contribution Distributions	<u>429,264</u>	<u>0</u>	<u>429,264</u>
<b>Total Operating Expenses</b>	<b>\$1,086,829,218</b>	<b>\$246,622,634</b>	<b>\$1,333,451,852</b>
<b>Excess of Revenues over Expenses</b>	<b>\$1,616,140,900</b>	<b>\$520,005,109</b>	<b>\$2,136,146,009</b>
Interfund Transfers	<u>(\$3,947,744)</u>	<u>\$3,947,744</u>	<u>\$0</u>
<b>Total Change During the Year</b>	<b>\$1,612,193,156</b>	<b>\$523,952,853</b>	<b>\$2,136,146,009</b>
<b>Fund Balance, July 1, 2009</b>	<b>\$14,992,575,777</b>	<b>\$3,777,561,319</b>	<b>\$18,770,137,096</b>
<b>Fund Balance, June 30, 2010</b>	<b>\$16,604,768,933</b>	<b>\$4,301,514,172</b>	<b>\$20,906,283,105</b>

Based on unaudited financial statements.

\* See cost-sharing mechanisms in NRS 286.410 and NRS 286.421

**Table 13**

**Determination of the Actuarial Value of Assets**

**Regular Employees**

**June 30, 2010**

1.	Actuarial Value of Assets as of the beginning of the year.....	\$19,158,282,334
2.	Contributions during the year .....	1,060,806,568
3.	Benefit payments during the year .....	1,076,381,416
4.	Expenses paid from the trust during the year.....	10,018,538
5.	Net transfers .....	(3,947,744)
6.	Expected Return at 8.0% (whole year on 1, partial year on 2, 3, 4 and 5)	1,524,390,377
7.	Write up (down)	

<u>Year Ended</u> <u>June 30</u>	<u>Original Amount</u>	<u>Write Up/(Down)</u> <u>20% of</u> <u>Original Amount</u>	<u>Percent Not Yet</u> <u>Recognized</u>	<u>Unrecognized</u> <u>Return</u>
2006	\$110,418,729	\$22,083,746	0%	\$0
2007	1,125,400,748	225,080,150	20%	225,080,150
2008	(1,970,255,593)	(394,051,119)	40%	(788,102,237)
2009	(4,319,746,558)	(863,949,312)	60%	(2,591,847,935)
2010	<u>117,343,909</u>	<u>23,468,782</u>	80%	<u>93,875,127</u>
Total	(\$4,936,838,765)	(\$987,367,753)		(\$3,060,994,895)

8.	Preliminary Actuarial Value of Assets as of the end of the year (1) + (2) - (3) - (4) + (5) + (6) + (7) .....	\$19,665,763,828
9.	Market Value of Assets as of the end of the year .....	\$16,604,768,933
10.	Additional write up/(down) due to 70%/130% corridor .....	\$0
11.	Actuarial Value of Assets as of the end of the year.....	\$19,665,763,828
12.	Actuarial Value of Assets as a percentage of Market Value of Assets.....	118.43%

**Table 14**

**Determination of the Actuarial Value of Assets**

**Police/Fire Employees**

**June 30, 2010**

1.	Actuarial Value of Assets as of the beginning of the year.....	\$4,813,593,517
2.	Contributions during the year .....	347,053,108
3.	Benefit payments during the year .....	245,522,539
4.	Expenses paid from the trust during the year.....	1,100,095
5.	Net transfers .....	3,947,744
6.	Expected Return at 8.0%.....	387,291,025
7.	Write up (down)	

<u>Year Ended</u> <u>June 30</u>	<u>Original Amount</u>	<u>Write Up/(Down)</u> <u>20% of</u> <u>Original Amount</u>	<u>Percent Not Yet</u> <u>Recognized</u>	<u>Unrecognized</u> <u>Return</u>
2006	\$26,405,168	\$5,281,033	0%	\$0
2007	270,717,295	54,143,459	20%	54,143,459
2008	(480,861,117)	(96,172,223)	40%	(192,344,447)
2009	(1,076,354,349)	(215,270,870)	60%	(645,812,609)
2010	<u>32,283,610</u>	<u>6,456,722</u>	80%	<u>25,826,888</u>
Total	(\$1,227,809,393)	(\$245,561,879)		(\$758,186,709)

8.	Preliminary Actuarial Value of Assets as of the end of the year (1) + (2) - (3) - (4) + (5) + (6) + (7) .....	\$5,059,700,881
9.	Market Value of Assets as of the end of the year .....	\$4,301,514,172
10.	Additional write up/(down) due to 70%/130% corridor .....	\$0
11.	Actuarial Value of Assets as of the end of the year.....	\$5,059,700,881
12.	Actuarial Value of Assets as a percentage of Market Value of Assets.....	117.63%

**Table 15**

**Determination of Normal Cost**

**June 30, 2010**

	<b>Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Total</b>
Normal Cost Components:			
Retirement Benefits	\$685,892,173	\$257,890,994	\$943,783,167
Termination Benefits	31,390,390	4,069,835	35,460,225
Return of Contributions	6,772,762	697,446	7,470,208
Death Benefits	38,281,114	8,793,185	47,074,299
Disability Benefits	<u>39,977,659</u>	<u>17,044,986</u>	<u>57,022,645</u>
Total Normal Cost	\$802,314,098	\$288,496,446	\$1,090,810,544

**Table 16****Determination of the Unfunded Actuarial Accrued Liability****June 30, 2010**

	<b>Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Total</b>
Actuarial Accrued Liability Components:			
Active Members:			
Retirement Benefits	\$12,531,955,015	\$3,877,408,842	\$16,409,363,857
Termination Benefits	49,692,522	(5,796,043)	43,896,479
Return of Contributions	(28,043,259)	(2,450,738)	(30,493,997)
Death Benefits	413,931,887	88,158,992	502,090,879
Disability Benefits	<u>411,770,783</u>	<u>166,620,088</u>	<u>578,390,871</u>
Total for Active Members	<u>\$13,379,306,948</u>	<u>\$4,123,941,141</u>	<u>\$17,503,248,089</u>
Inactive Vested Members	<u>\$651,701,788</u>	<u>\$43,807,913</u>	<u>\$695,509,701</u>
Pay Status Members:			
Service Retirees	\$12,225,952,143	\$2,960,387,154	\$15,186,339,297
Beneficiaries	531,678,391	139,715,477	671,393,868
Disability Retirees	542,756,316	146,414,821	689,171,137
Survivors	<u>284,874,198</u>	<u>47,203,488</u>	<u>332,077,686</u>
Total for Pay Status Members	<u>\$13,585,261,048</u>	<u>\$3,293,720,940</u>	<u>\$16,878,981,988</u>
Total Actuarial Accrued Liability	\$27,616,269,784	\$7,461,469,994	\$35,077,739,778
Actuarial Value of Assets	<u>19,665,763,828</u>	<u>5,059,700,881</u>	<u>24,725,464,709</u>
Total Unfunded Actuarial Accrued Liability	\$7,950,505,956	\$2,401,769,113	\$10,352,275,069



**Table 17****Total Unfunded Actuarial Accrued Liability (Millions)**

<b>June 30,</b>	<b>Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Total</b>
2005	\$4,252.0	\$1,470.2	\$5,722.2
2006	4,778.0	1,679.1	6,457.1
2007	4,615.8	1,696.8	6,312.6
2008	5,363.0	1,895.2	7,258.2
2009	6,929.3	2,173.9	9,103.2
2010	7,950.5	2,401.8	10,352.3*

\* Increase between 2010 total and unpaid portion of previous bases is this year's new financing base to be amortized over 30 years.

**Table 18****Percent Funded****Ratio of Actuarial Value of Assets to****Total Actuarial Accrued Liability**

<b>June 30,</b>	<b>Regular Employees</b>	<b>Police/Fire Employees</b>	<b>Total</b>
2005	77.3%	69.8%	75.8%
2006	76.5%	68.9%	74.9%
2007	78.8%	71.1%	77.2%
2008	77.7%	70.8%	76.2%
2009	73.4%	68.9%	72.5%
2010	71.2%	67.8%	70.5%

**Table 19-A**  
**Actuarially Determined Contribution Rates**  
**Regular Employees**

	Year					
	2005	2006	2007	2008	2009	2010
<b>Employer-Pay*</b>						
Normal cost	15.70%	15.48%	16.16%	16.38%	16.16%	16.09%
Amortization payment	4.59%	4.81%	4.51%	5.01%	6.26%	7.39%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>
Total contribution rate	20.44%	20.44%	20.82%	21.54%	22.57%	23.63%
<b>Employee/Employer*</b>						
Normal cost	16.61%	16.37%	17.00%	17.26%	17.06%	16.98%
Amortization payment	4.59%	4.81%	4.51%	5.01%	6.26%	7.39%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>
Total contribution rate	21.35%	21.33%	21.66%	22.42%	23.47%	24.52%
Matching Employee/Employer contribution rate	10.68%	10.67%	10.83%	11.21%	11.74%	12.26%

\* See cost-sharing mechanisms in NRS 286.410 and NRS 286.421

**Table 19-B**  
**Actuarially Determined Contribution Rates**  
**Police/Fire Employees**

	Year					
	2005	2006	2007	2008	2009	2010
<b>Employer-Pay*</b>						
Normal cost	26.13%	25.89%	29.43%	29.20%	29.53%	29.72%
Amortization payment	6.96%	7.51%	7.39%	7.71%	8.71%	9.90%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>
Total contribution rate	33.24%	33.55%	36.97%	37.06%	38.39%	39.77%
<b>Employee/Employer*</b>						
Normal cost	27.04%	26.77%	30.18%	29.97%	30.35%	30.48%
Amortization payment	6.96%	7.51%	7.39%	7.71%	8.71%	9.90%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>
Total contribution rate	34.15%	34.43%	37.72%	37.83%	39.21%	40.53%
Matching Employee/Employer contribution rate	17.08%	17.22%	18.86%	18.92%	19.61%	20.27%

\* See cost-sharing mechanisms in NRS 286.410 and NRS 286.421

Table 20

Analysis of Actuarial Experience

Gains and Losses in Actuarial Accrued Liabilities (AAL) During Year Ended June 30, 2010  
 Resulting from Differences Between Assumed Experience and Actual Experience  
 (Dollar Amounts in Millions)

Type of Activity	Gain (or Loss) For Year			
	Regular		Police/Fire	
	Amount	As Pct of AAL	Amount	As Pct of AAL
<b>Age and Service Retirements.</b> If members retire at older ages or with lower final average pay than assumed, there is a gain. If retirements occur at younger ages with higher average pay, there is a loss.	(\$70.1)	(0.25%)	\$1.4	0.02%
<b>Disability Retirements.</b> If disability claims are less than assumed, there is a gain. If there are more claims, there is a loss.	(13.9)	(0.05%)	(0.5)	(0.01%)
<b>Pre- and Post-Retirement Deaths.</b> If retirees live longer than assumed, there is a loss. If retirees live shorter than assumed, there is a gain.	88.0	0.32%	12.8	0.17%
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If less liabilities are released, there is a loss.	28.7	0.10%	2.6	0.03%
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If there are greater increases, there is a loss.	327.2	1.19%	143.5	1.93%
<b>Active New Entrants.</b> Cost due to new hires.	(30.1)	(0.11%)	(3.0)	(0.04%)
<b>Active Rehires.</b> Some new active members have past service credits reinstated, thereby increasing costs due to the unanticipated liabilities.	(13.9)	(0.05%)	(2.6)	(0.04%)

Type of Activity	Gain (or Loss) For Year			
	Regular		Police/Fire	
	Amount	As Pct of AAL	Amount	As Pct of AAL
<b>Inactive and Retiree Showups.</b> Persons in inactive or pay status who are added to the valuation data during the year.	(10.7)	(0.04%)	0.0	0.00%
<b>Other.</b> Miscellaneous gains and losses result from data changes and adjustments, timing of financial transactions, and other miscellaneous impacts on the valuation results.	(5.5)	(0.02%)	(12.9)	(0.17%)
<b>Total Liability Experience Gain (Loss) During Year.</b>	299.7	1.09%	141.3	1.89%
<b>Investment Income.</b> If there is a greater investment income than assumed, there is a gain. If there is less income, there is a loss	(987.4)	(3.58%)	(245.6)	(3.29%)
<b>Total Experience Gain (Loss) During the Year</b>	(687.7)	(2.49%)	(104.3)	(1.40%)

**Table 21**

**Reconciliation of Actuarially Determined Contribution Rates  
From July 1, 2009 to July 1, 2010**

	<b>Regular Employees</b>	<b>Police/Fire Employees</b>
Actuarially Determined Contribution Rate as of July 1, 2009 <sup>(1)</sup>	22.71%	38.47%
Effect of Investment Loss	0.81%	0.85%
Effect of Gains on Individual Salary Experience	(0.27%)	(0.49%)
Effect on Existing Amortization of Payroll Growth Less Than Expected	0.47%	1.39%
Effect of Other Experience <sup>(2)</sup>	<u>0.05%</u>	<u>(0.38%)</u>
Total Change	<u>1.06%</u>	<u>1.37%</u>
Actuarially Determined Contribution Rate as of July 1, 2010 <sup>(1)</sup>	<u>23.77%</u>	<u>39.84%</u>

<sup>(1)</sup> Average rate for the employer pay and employee/employer pay plans

<sup>(2)</sup> Includes effect of other differences in actual versus expected experience including mortality, disability, withdrawal and retirement experience

### III. SUMMARY OF PRINCIPAL PLAN PROVISIONS

Our 2010 actuarial valuation is based on the present provisions of the Nevada Public Employees' Retirement Act, which are summarized in this section. This summary is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions.

#### Service Retirement

##### *For members with an effective date of membership before January 1, 2010:*

Requirements for regular members - age 65 with five years of service, or age 60 with ten years of service, or at any age with 30 years of service.

Requirements for police/fire members - age 65 with five years of service, or age 55 with ten years of police/fire service, or age 50 with 20 years of police/fire service, or at any age with 25 years of police/fire service.

Benefit - 2.67% of final average compensation (average of 36 highest consecutive months) per year of service earned on or after July 1, 2001 plus 2.50% of final average compensation per year of service before July 1, 2001. Maximum benefits are 90% of average compensation for individuals who became members before July 1, 1985 and 75% of average compensation for individuals who became members after June 30, 1985.

##### *For members with an effective date of membership on or after January 1, 2010:*

Requirements for regular members - age 65 with five years of service, or age 62 with ten years of service, or at any age with 30 years of service.

Requirements for police/fire members - age 65 with five years of service, or age 60 with ten years of police/fire service, or age 50 with 20 years of police/fire service.

Benefit - 2.50% of final average compensation (average of 36 highest consecutive months with limitations on annual increases) per year of service. Maximum benefits are 75% of average compensation.

## **Early Retirement**

Requirements - any age with five years of service.

*For members with an effective date of membership before January 1, 2010:*

Benefit - accrued retirement benefit reduced 4% per year for each year which the member is under the age required for service retirement.

*For members with an effective date of membership on or after January 1, 2010:*

Benefit - accrued retirement benefit reduced 6% per year for each year which the member is under the age required for service retirement.

## **Vesting**

Requirements - any age with five years of service, provided the member has not received a refund of employee contributions.

Benefit - accrued service retirement benefit payable upon attainment of age 65 if member has between five and ten years of service at termination, or upon attainment of the age required for service retirement if member has ten or more years of service at termination.

## **Disability Retirement**

Requirements - five years of service and totally unable to perform current job or any comparable job for which the member is qualified by training and experience, because of injury or illness of a permanent nature, provided the member is in the employ of a participating employer at the time of application for disability retirement.

Benefit - accrued service retirement benefit without reduction for age. (System disability benefit is reduced for other benefits received on account of same disability if such other benefits are financed by a Nevada public employer, and to the extent that total disability benefits would otherwise exceed 100% of final average compensation.)



## **Optional Benefit Forms**

Regular and disability retirees may elect one of the optional benefit plans:

- Option 1 - Single life annuity except as follows:  
For Police and Fire members who contribute under the “employer pay” contribution plan, Option 1 is a 50% joint and survivor annuity
- Option 2 - 100% joint and survivor
- Option 3 - 50% joint and survivor
- Option 4 - 100% joint and survivor, with payments to beneficiary commencing at age 60
- Option 5 - 50% joint and survivor, with payments to beneficiary commencing at age 60
- Option 6 - specific sum option up to 100% of allowance paid to retiree
- Option 7 - specific sum option up to 100% of allowance paid to retiree, with payments to beneficiary commencing at age 60.

If the beneficiary predeceases the retired member, the optional allowance reverts to the unmodified allowance.

## **Survivor Benefits**

Requirements - eligible survivors of an active member who dies receive survivor benefits if: (a) the deceased member had two years of service in the 2½ years immediately preceding death; or (b) the deceased member had ten years of service; or (c) death was caused by occupational disease or a service-connected accident regardless of the deceased member’s length of service; or (d) death occurred within 18 months after termination of employment where mental or physical condition required the termination; or (e) death occurred while member was on leave of absence for training and member met requirements of (a) at time such leave began.

### Benefits

- a. Unmarried children under age 18, or age 18 to 23 and attending an accredited school on a full-time basis: \$400 per month per child. Payments cease upon attaining age 18 or age 23 if full-time student, unless child is incapacitated; or upon marriage, adoption, or death.

- b. Spouse, or survivor beneficiary of an unmarried member, of deceased member with fewer than ten years of service (and at least two years of service in the last 2½ years): \$450 per month. Payments cease upon death.
- c. Spouse, or survivor beneficiary of an unmarried member, of deceased member with ten but fewer than 15 years of service: greater of \$450 per month or Option 3 benefit that would have been payable if deceased member had retired on date of death without reduction for early payment. Payments cease upon death.
- d. Spouse, or survivor beneficiary of an unmarried member, of deceased member with 15 or more years of service: greater of \$450 per month or Option 2 benefit that would have been payable if deceased member had retired on date of death without reduction for early payment. Payments cease upon death.
- e. Spouse, or survivor beneficiary of an unmarried member, of deceased member eligible to retire with respect to both age and service: greater of \$450 per month, Option 2 or Option 3 benefit that would have been payable if deceased member had retired on death, without reduction for early payment. Payments cease upon death.
- f. Dependent parents: \$400 per month each, provided there are no other eligible survivors. Payments cease upon death.
- g. Lump sum payment option: a spouse, or survivor beneficiary of an unmarried member, may waive right to monthly survivor benefits and instead receive a lump sum refund of deceased member's contributions plus half the contributions made under the Employer-Pay provisions, provided no other person is eligible for survivor benefits.

Benefit limitations - total survivor benefits, including any other survivor benefit received from any other source, shall not exceed final average compensation (a) if the other benefit was provided or purchased by a public employer, except for lump sum payments under a group insurance program; and (b) to the extent that the total of the allowance and the other benefit would otherwise exceed the deceased member's final average compensation.

Benefit for certain spouses - an employee who begins receiving service or disability retirement benefits from the police/fire members retirement fund after June 30, 1981, is eligible to receive an unreduced service retirement allowance. Upon the death of such a retired employee, a spouse who was the retired employee's spouse at the time of retirement is entitled to receive 50% of the unreduced allowance; this benefit is payable to the surviving spouse beginning at age 50. A surviving spouse is not eligible to receive this 50% spouse's benefit if the retired employee elects an optional benefit form at the time of retirement. Service performed after July 1, 1981, in positions other than as a police/fire employee, except military service, is not credited toward this 50% spouse's benefit. Existing "employer-pay" police/fire retirees who retired after June 30, 1981 and before July 1, 2007 have been valued assuming no surviving spouse, pending the results of an analysis and verification of spousal information.

#### **Post-Retirement Benefit Increases**

*For members with an effective date of membership before January 1, 2010:*

The lesser of

(a) 2% per year following the third anniversary of the commencement of benefits, 3% per year following the sixth anniversary, 3 ½% per year following the ninth anniversary, 4% per year following the twelfth anniversary and 5% per year following the fourteenth anniversary, or

(b) the annual benefit increase is equal to the average percentage increase in the Consumer Price Index (or other Board approved index) for the three preceding years.

In any event, a member's benefit must be increased by the percentages in paragraph (a) if the benefit of a member has not been increased at a rate greater than or equal to the average of the Consumer Price Index (All Items) (or other Board approved index) for the period between retirement and the date of increase.

*For members with an effective date of membership on or after January 1, 2010:*

Same as above, except the increases do not exceed 4% per year.

## Contribution Rates

For the fiscal years July 1, 2009 through June 30, 2011, statutory contribution rates as a percentage of compensation are as follows:

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
Employer-Pay	21.50%	37.00%
Employee/Employer	11.25%/11.25%	19.00%/19.00%

Total contribution rates are adjusted at the beginning of each odd-numbered fiscal year, based on the actuarially determined rates indicated in the actuarial valuation report for the immediately preceding year. Rates are only adjusted upward if the new rates are more than 0.50% higher than the existing rate for Employer-Pay and more than 0.25% higher for Employee/Employer. Rates are only adjusted downward if the new rates are more than 2.00% lower than the existing rate for Employer-Pay (and adjusted only by the amount in excess of 2.00%) and more than 1.00% lower than the existing rate for Employee/Employer (and adjusted only by the amount in excess of 1.00%). Rates are rounded to the nearest 0.25% of payroll.

Under the Employer-Pay provisions, the contributions made by employers on behalf of employees are not credited to member accounts and are not refunded upon termination. For employees covered by the Employer-Pay provisions, average compensation is increased by half the total contribution made by the public employer and may not be less than it would have been if contributions had been made by the member and the employer separately.

## Plan Provision Changes Since the Last Valuation

Substantial changes were made to retirement benefits for members with an effective date of membership on or after January 1, 2010:

- **Call-back pay:** The type of call-back pay that may be considered compensation has been revised for future members.
- **Benefit multiplier:** Current members earn a benefit equal to 2.67% of average compensation for each year of service with a maximum benefit of 75% of average

compensation. This has been reduced to 2.50% of average compensation for each year of service for future members.

- **Early retirement:** Members with at least five years of service can elect to retire with a reduced pension. The amount of the reduction for current members is 4% per year for each year the retirement precedes the date the member is from eligibility for an unreduced service pension. The reduction will be 6% per year for future members.
- **Compensation increase limits:** The amount of an increase in compensation that can be considered when determining a retirement allowance will be limited to 10 percent per year for future members.
- **Service retirement eligibility (Regular members):** Current Regular members are eligible to begin receiving an unreduced service pension at age 65 with at least 5 years of service, at age 60 with at least 10 years of service, and at any age with at least 30 years of service. For future members, the age at which a Regular member with at least 10 years but less than 30 years of service could retire with an unreduced benefit will increase from age 60 to age 62.
- **Service retirement eligibility (Police/Fire members):** Current Police/Fire members are eligible to begin receiving an unreduced service pension at age 65 with at least 5 years of service, at age 55 with at least 10 years of service, at age 50 with at least 20 years of service, and at any age with at least 25 years of service. For future members, a Police/Fire member would be eligible for an unreduced service pension at age 65 with at least 5 years of service, at age 60 with at least 10 years of service, or at age 50 with at least 20 years of service. Eligibility for an unreduced service pension at any age with 25 years of service is not available for future members.
- **Post Retirement Benefit Increases:** Current retirees receive annual increases which can be as much as 5% per year after the fourteenth anniversary of retirement. Future members will have the same schedule of increases until it is capped at 4% per year after the twelfth anniversary of retirement.

#### IV. ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions and methods as approved by the Board are reasonably related to the past and anticipated future experience of the Public Employees' Retirement System of the State of Nevada.

##### **Investment Return**

Funding a retirement system on an actuarial reserve basis involves the accumulation of substantial reserves to pay benefits in the future. These reserves are invested and the rate of investment return is a major factor in determining the contributions required to support the ultimate cost of benefits. The long-term rate of investment return - net of investment expenses - is assumed to be 8% per year. The 8% investment return rate is based on an assumed long-term inflation rate of 3.5% per year.

During the fiscal year ended June 30, 2010, the total rate of return on an actuarial (smoothed) value basis was approximately 2.8%. The schedule that follows shows the total rate of investment return on an actuarial (smoothed) value basis for each of the past ten fiscal years.

<u>Fiscal Year Ended June 30</u>	<u>Actuarial Value of Assets Total Rate of Return</u>
2001	9.0%
2002	5.8%
2003	4.3%
2004	4.5%
2005	4.8%
2006	6.5%
2007	9.6%
2008	7.7%
2009	2.7%
2010	2.8%

### Salary and Payroll Increases

Because the benefits provided by the Retirement System are based on an employee's final average compensation (average of 36 highest consecutive months), increases in salaries have a significant effect on the System's ultimate cost. The rate of annual salary increases assumed for this actuarial valuation are shown below:

Regular Employees	
Years of Service	Rate
1	9.75%
2	8.25%
3	7.75%
4	7.50%
5	7.25%
6	7.00%
7	6.75%
8	6.25%
9	5.75%
10	5.50%
11	5.10%
12	4.90%
13 or more	4.50%

Police/Fire Employees	
Years of Service	Rate
1	14.75%
2	10.75%
3	10.20%
4	9.80%
5	9.40%
6	9.00%
7	8.25%
8	7.75%
9	7.25%
10 or more	6.50%

Assumed payroll growth rates are used to compute the unfunded actuarial accrued liability amortization payments as a level percentage of projected payroll. For this actuarial valuation, the payroll for the coming year is based on actual contributions for the prior year with an increase of 3.00% for regular employees and 5.00% for police/fire employees. The total payroll growth assumptions for future years are 6.50% per year for regular employees and 8.00% per year for police/fire employees.

### Post-Retirement Benefit Increases

Members retiring during 1992 and earlier were assumed to currently be at the cap described on page 48 (based upon historical CPI). Those retiring in 1993 and later were assumed to reach the cap after 24 years of retirement. Underlying this assumption is that CPI will grow over time at a rate of 3.50% per year.

## Retirement Rates

The assumed rates of retirement project the percentage of eligible active employees who will retire at each age. The assumed retirement rates used in the actuarial valuation are shown below:

Regular Employees				
Years of Service				
Age	5 - 19	20 - 24	25 - 29	30 or more
45 - 49	--	1%	8%	--
50 - 54	2%	2%	10%	25%
55 - 59	4%	7%	15%	30%
60 - 61	13%	20%	25%	30%
62 - 64	15%	20%	25%	30%
65 - 69	22%	25%	30%	30%
70 & older	100%	100%	100%	100%

Police/Fire Employees					
Years of Service					
Age	5 - 9	10 - 19	20 - 24	25 - 29	30 or more
40 - 44	--	1%	1%	--	--
45 - 49	--	1%	3%	15%	15%
50 - 54	1%	5%	12%	15%	25%
55 - 59	5%	12%	20%	25%	35%
60 - 64	10%	20%	25%	25%	35%
65 & older	100%	100%	100%	100%	100%

The retirement age for inactive vested members is equal to their earliest unreduced retirement age.



## Withdrawal Rates

The assumed withdrawal or turnover rates used in the actuarial valuation are shown below:

Regular Employees	
Years of Service	Rate
0	18.25%
1	13.00%
2	9.80%
3	7.75%
4	6.50%
5	6.00%
6	5.00%
7	4.65%
8	3.90%
9	3.70%
10	3.30%
11 or more	2.00%

Police/Fire Employees	
Years of Service	Rate
0	13.00%
1	6.50%
2	5.50%
3	4.00%
4	3.90%
5	3.75%
6 or more	2.00%

Withdrawal rates end when retirement rates commence.

## Disability Rates

The assumed rates of disability used in the actuarial valuation are shown below for selected ages:

<b>Age</b>	<b>Regular Employees</b>	<b>Police/Fire Employees</b>
22	0.01%	0.05%
27	0.02%	0.05%
32	0.06%	0.06%
37	0.09%	0.09%
42	0.18%	0.37%
47	0.31%	0.53%
52	0.50%	0.66%
57	0.69%	0.60%
62	0.50%	0.60%

No disability rates are assumed after age 65.

## Mortality Rates

A mortality table is used to project the number of employees who will die at each age in active service, and also to determine the amount of the reserve required at the time of retirement to pay benefits for the remainder of an employee's lifetime.

The mortality table used in the actuarial valuation to project mortality rates for non-disabled male regular members is the RP 2000 Combined Healthy Table. For non-disabled female regular members and for all police/fire members it is the RP 2000 Combined Healthy Table set forward one year. The schedules on the following page show the assumed mortality rates and projected life expectancies for selected ages:

<b>Regular Members</b>				
	<b>Mortality Rates</b>		<b>Expected Years of Life Remaining</b>	
<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
40	0.11%	0.08%	39.8	41.7
50	0.21%	0.19%	30.3	32.1
60	0.67%	0.58%	21.2	23.0
70	2.22%	1.86%	13.4	15.0
80	6.44%	5.08%	7.3	8.6

<b>Police/Fire Members</b>				
	<b>Mortality Rates</b>		<b>Expected Years of Life Remaining</b>	
<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
40	0.11%	0.08%	38.8	41.7
50	0.24%	0.19%	29.4	32.1
60	0.77%	0.58%	20.4	23.0
70	2.46%	1.86%	12.7	15.0
80	7.20%	5.08%	6.7	8.6

The mortality table used in the actuarial valuation to project mortality rates for disabled male retirees is the RP 2000 Disabled Retiree Table set back three years for regular members and the RP 2000 Combined Healthy Table set forward ten years for police/fire members. For both regular and police/fire disabled female retirees it is the RP 2000 Disabled Retiree Table set forward eight years. Any mortality that occurs in the first two years of employment is assumed to be non-duty related.

### **Presence and Age of Beneficiary**

It is assumed for purposes of the actuarial valuation that beneficiaries of female members are three years older than the female member. Beneficiaries of male members are assumed to be three years younger than the male member. Since survivor benefits are payable to a surviving beneficiary of an unmarried member, all members are assumed to have a beneficiary. Existing "employer-pay" police/fire retirees with an unmodified option who retired after June 30, 1981 and before July 1, 2007 have been valued assuming no surviving spouse, pending the results of an analysis and

verification of spousal information. The assumed probability of marriage for future “employer-pay” police/fire retirees are shown below for selected ages:

<b>Age</b>	<b>Regular Employees</b>	<b>Police/Fire Employees</b>
22	33.0%	37.1%
27	58.9%	65.2%
32	65.3%	61.8%
37	71.3%	63.6%
42	71.4%	63.1%
47	73.3%	61.0%
52	75.7%	64.0%
57	77.0%	57.6%
62	74.0%	49.5%

### **Dependent Children**

The assumption for dependent children in the actuarial valuation is one dependent child who is 28 years younger than the employee.

### **Asset Valuation Method**

The actuarial value of assets is equal to the prior year’s actuarial value of assets plus contributions, less benefit payments and expenses, an adjustment for net transfers, plus expected investment return, and 20% of each of the previous five years’ gain/(loss) due to investment return greater/(less) than expected. The actuarial value of assets is further limited to not less than 70% or greater than 130% of the market value of assets.

### **Actuarial Funding Method**

Funding the Retirement System on an actuarial reserve basis seeks to achieve the following major objectives:

- Maintain level required contribution rates as a percentage of payroll over a long period of years;
- Finance benefits earned by present employees on a current basis;
- Accumulate assets to enhance members’ benefit security;

- Produce investment earnings on accumulated assets to help meet future benefit costs;
- Allow estimates of the long-term actuarial cost of proposed amendments to System provisions; and
- Maintain the Retirement System's long-term financial viability.

A general funding objective is a level pattern of cost as a percentage of salary throughout an employee's working lifetime. The funding method used in this actuarial valuation - the Entry Age Normal Actuarial Cost Method - is intended to meet this objective and result in a relatively level long-term contribution requirement as a percentage of salary.

Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, with Normal Cost determined based on the plan provisions applicable to that individual.

#### **Amortization of the Unfunded Actuarial Accrued Liability**

The unfunded actuarial accrued liability is amortized over a year-by-year closed amortization period where each amortization period will be set at 30 years.

#### **Method and Assumption Changes Since the Last Valuation**

There were no changes in actuarial assumptions or cost methods since the preceding valuation.

## V. ACTUARIAL VALUATION STATEMENT

This statement is to certify that The Segal Company has prepared an actuarial valuation of the Public Employees' Retirement System of the State of Nevada as of June 30, 2010.

Actuarial calculations were made with respect to 102,594 covered active members, 11,807 inactive members with vested benefit rights, 38,841 service and disabled pensioners, 3,228 beneficiaries, and 1,850 survivors.

The actuarial cost factors as of the valuation date are as follows:

	<u>Regular Employees</u>	<u>Police/Fire Employees</u>	<u>Total</u>
<b>Total Normal Cost</b> .....	<b>\$802,314,098</b>	<b>\$288,496,446</b>	<b>\$1,090,810,544</b>
<b>Actuarial Accrued Liability</b>			
Active members .....	\$13,379,306,948	\$4,123,941,141	\$17,503,248,089
Inactive members .....	651,701,788	43,807,913	695,509,701
Pensioners, beneficiaries and disabled .....	13,300,386,850	3,246,517,452	16,546,904,302
Survivors .....	<u>284,874,198</u>	<u>47,203,488</u>	<u>332,077,686</u>
<b>Total Actuarial Accrued Liability</b> .....	<b>\$27,616,269,784</b>	<b>\$7,461,469,994</b>	<b>\$35,077,739,778</b>
<b>Assets at Actuarial Value</b> .....	<b><u>\$19,665,763,828</u></b>	<b><u>\$5,059,700,881</u></b>	<b><u>\$24,725,464,709</u></b>
<b>Total Unfunded Actuarial Accrued Liability</b> .....			
	<b>\$7,950,505,956</b>	<b>\$2,401,769,113</b>	<b>\$10,352,275,069</b>
<b>Payment to amortize unfunded actuarial accrued liability</b> .....			
	<b>\$365,416,453</b>	<b>\$95,872,574</b>	<b>\$461,289,027</b>
Employer-Pay Rate Payroll .....	\$4,182,593,833	\$876,793,399	\$5,059,387,232
Employee/Employer Rate Payroll .....	760,972,259	91,559,719	852,531,978
<b>Total Rate Payroll</b> .....	<b>\$4,943,566,092</b>	<b>\$968,353,118</b>	<b>\$5,911,919,210</b>

Calculated Contribution Rates (as percentage of rate payroll):	<u>Regular Employees</u>	<u>Police/Fire Employees</u>
<b>Employer-Pay, current statutory rate *</b>	<b>21.50%</b>	<b>37.00%</b>
Normal cost	16.09%	29.72%
Amortization percentage	7.39%	9.90%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>
<b>Employer-Pay, total rate *</b>	<b>23.63%</b>	<b>39.77%</b>
<b>New statutory rounded rate</b>	<b>23.75%</b>	<b>39.75%</b>
<i>* See cost-sharing mechanism in NRS 286.421</i>		
<b>Employee/Employer, current statutory rate **</b>	<b>22.50%</b>	<b>38.00%</b>
Normal cost	16.98%	30.48%
Amortization percentage	7.39%	9.90%
Administrative expenses	<u>0.15%</u>	<u>0.15%</u>
<b>Employee/Employer, total rate **</b>	<b>24.52%</b>	<b>40.53%</b>
<b>New statutory rounded rate</b>	<b>24.50%</b>	<b>40.50%</b>
<i>** See cost-sharing mechanism in NRS 286.410</i>		

The actuarial calculations were performed by qualified actuaries in accordance with generally accepted actuarial principles, based on the current provisions of the Public Employees' Retirement Act and on the actuarial assumptions and methods adopted by the Public Employees' Retirement Board.

The actuarial assumptions used in the June 30, 2010 actuarial valuation are reasonably related to the past and anticipated future experience of the retirement system.

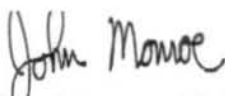
The Public Employees' Retirement System of the State of Nevada is funded on an actuarial reserve basis. Participating employers contribute to the Retirement System based on the results of actuarial valuations and the statutory funding provisions of the Public Employees' Retirement Act.



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