Public Employees' Retirement System of the State of Nevada

Actuarial Valuation and Review as of June 30, 2011

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November 8, 2011

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

Dear Retirement Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2011 for the Public Employees' Retirement System of Nevada (PERS). It summarizes the actuarial data used in the valuation, establishes the actuarially determined contribution requirements for the 2011-2012 plan year and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was 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 reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

Bv:

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Purpose

This report has been prepared by The Segal Company to present a valuation of the Public Employees' Retirement System of the State of Nevada as of June 30, 2011. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Public Employees' Retirement Act,
- The characteristics of covered active members, inactive vested members, retired members, disabled members, beneficiaries and survivors as of June 30, 2011,
- > The assets of the Plan as of June 30, 2011, provided by the Retirement Office,
- > Economic assumptions regarding future salary increases and investment earnings, and
- > Other actuarial assumptions, regarding member terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- Reference: Pg. v
- > The ratio of the valuation value of assets to actuarial accrued liabilities has decreased from 71.2% to 70.6% for Regular and increased from 67.8% to 68.4% for Police/Fire.

Reference: Pg. 16

> The normal cost rate decreased by 0.20% for Regular and 1.09% for Police/Fire since the preceding valuation. This is due mainly to changes in the payroll for those active on the valuation date that do not perfectly correlate with changes in the rate payroll, which is based on actual payroll over the entire previous year. For Regular, the active payroll decreased by 2.6% while the rate payroll decreased by only 1.9%. For Police/Fire, the active payroll decreased by 3.1% while the rate payroll increased by 0.2%. It is important to note that these decreases in normal cost rates may be seen as a short-term fluctuation rather than a long-term decrease in the cost of the plan.

Reference: Pg. 14

> There was a gain due to post-retirement benefit increases less than expected for continuing retirees and beneficiaries of \$90.6 million for Regular and \$21.6 million for Police/Fire members. This item is shown separately in Chart 18. In previous years any gain or loss due to changes in benefit amounts other than expected would have been combined with post-retirement mortality. This gain is due to lower than expected increases in the Consumer Price Index (CPI) in recent years. The current assumption is that the CPI will increase by 3.50% per year.

Reference: Pg. 16

> For Regular the actuarially determined contribution rates for 2011 increased from the previous year, while for Police/Fire there was a decrease. While both groups saw an increase due to the continuing recognition of the investment losses from the fiscal years ending June 30, 2008 and June 30, 2009, this increase was more than offset for Police/Fire primarily by the decrease in the normal cost rate.

Reference: Pg. 15

> 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 this valuation year is an odd-numbered year, no adjustment in the statutory contribution rate is required as a result of this valuation.

Summary of Contribution Rates					
	Regular	Police/Fire			
Employer-Pay*:					
Statutory Rate for Fiscal Years July 1, 2011 through June 30, 2013	23.75%	39.75%			
Actuarially Determined Contribution Rate per June 30, 2011 Actuarial Valuation	24.33%	39.45%			
Employee/Employer**:					
Statutory Rate for Fiscal Years July 1, 2011 through June 30, 2013	24.50%	40.50%			
Actuarially Determined Contribution Rate per June 30, 2011 Actuarial Valuation	25.31%	40.33%			

^{*} See cost-sharing mechanism in NRS 286.421

Reference: Pg. 12

> The rate of investment return on the market value of assets for 2010-2011 for the PERS Fund was 21.1%, and was 11.0% for the preceding year.

Reference: Pg. 11

> The return on the actuarial value of assets for 2010-2011 for the PERS Fund was 4.8% for Regular and 5.1% for Police/Fire, which is less than the investment return assumption of 8.00%. As a result, the PERS Fund experienced an investment loss on an actuarial value basis of approximately \$625 million for Regular and \$149 million for Police/Fire.

^{**} See cost-sharing mechanism in NRS 286.410

Reference: Pg. 8

> As indicated in Section 2, Subsection B (see Chart 12) of this report, the total unrecognized investment loss as of June 30, 2011 is approximately \$515 million for Regular, and \$101 million for Police/Fire compared to \$3.061 billion and \$758 million in the previous valuation, respectively. These unrecognized losses will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years and will serve to offset any investment gains that may occur after June 30, 2011. If the System earns the assumed rate of investment return of 8.00% per year (net of expenses) on a market value basis, then the deferred losses would be recognized over the next four years as shown in the footnote on Chart 12.

Reference: Pg. 8

> The footnote in Chart 12 shows that under the asset smoothing method the \$616 million in net deferred losses will be recognized in the next four valuations, but in a very non-level (uneven) pattern. In particular, first there will be losses recognized in the next two years, the first of which is actually larger than the total deferred losses of \$616 million. Those losses will then be followed by offsetting gains in the two years after that, so as to get to the net total losses of \$616 million. This means that, absent any new gains or losses in the future, there will be two more years of increases in the actuarially determined contribution rate followed by two years of rate decreases before all of the deferred losses and gains are fully recognized. We are available to discuss options to mitigate this effect.

- > The unrecognized investment losses represent about 2.4% of the PERS Fund market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$616 million market losses is expected to have an 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 of assets, the funded ratio would decrease from 70.6% to 68.9% for Regular and from 68.4% to 67.1% for Police/Fire.
 - If the deferred losses were recognized immediately in the actuarial value of assets, the actuarial contribution requirement would increase as follows:

	2011/2012 Actuarially Determined Contribution Rate	2011/2012 Rate Reflecting Deferred Losses
Regular:		
Employer-Pay	24.33%	24.76%
Employee/Employer Pay	25.31%	25.74%
Police/Fire:		
Employer-Pay	39.45%	39.80%
Employee/Employer Pay	40.33%	40.68%

- > The actuarial valuation report as of June 30, 2011 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.
- > 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 in 2013 in accordance with Board policy. As part of the experience study, we will review whether or not the current assumptions are validated by recent experience and 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. As of the valuation date, there were a total of 43 retired PERS members currently active and reenrolled in PERS under this provision. A study will be performed prior to the program being extended or made permanent to determine whether the actuarially determined cost rate is affected, and if so, how to estimate its cost.

SECTION 1: Valuation Summary for the Public Employees' Retirement System of Nevada

Summary of Key Valuation Results

	Regular		Police	e/Fire
	2011	2010	2011	2010
Actuarially Determined Contribution Rates for plan year beginning July 1:				
Employer-Pay*	24.33%	23.63%	39.45%	39.77%
Employee/Employer Pay**	25.31%	24.52%	40.33%	40.53%
Funding elements for plan year beginning July 1:				
Normal cost, including administrative expenses				
Employer-Pay*	16.03%	16.24%	28.78%	29.87%
Employee/Employer Pay**	17.01%	17.13%	29.66%	30.63%
Total Rate Payroll	\$4,847,425,149	\$4,943,566,092	\$970,209,836	\$968,353,118
Market value of assets	\$19,960,072,873	\$16,604,768,933	\$5,295,195,146	\$4,301,514,172
Actuarial value of assets	\$20,474,689,032	\$19,665,763,828	\$5,396,450,678	\$5,059,700,881
Actuarial accrued liability	\$28,988,787,341	\$27,616,269,784	\$7,887,404,826	\$7,461,469,994
Unfunded/(overfunded) actuarial accrued liability	\$8,514,098,309	\$7,950,505,956	\$2,490,954,148	\$2,401,769,113
Funded ratio on actuarial value basis (AVA / AAL)	70.6%	71.2%	68.4%	67.8%
Funded ratio on market value basis (MVA / AAL)	68.9%	60.1%	67.1%	57.6%
Demographic data for plan year beginning July 1:				
Number of retired members and beneficiaries	40,675	38,400	5,903	5,519
Number of vested former members	11,931	11,167	701	640
Number of active members	87,975	90,219	11,936	12,375
Total salary	\$4,332,600,642	\$4,457,489,170	\$882,013,236	\$907,993,497
Average salary	\$49,248	\$49,407	\$73,895	\$73,373

^{*} See cost-sharing mechanism in NRS 286.421

^{**} See cost-sharing mechanism in NRS 286.410

A. MEMBER DATA

i. Regular Members

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on the Regular member group.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1
Regular Member Population: 2002 – 2011

Year Ended June 30	Active Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2002	75,518	6,480	22,221	0.38
2003	77,569	7,159	23,480	0.39
2004	79,848	7,397	24,987	0.41
2005	83,224	8,676	26,978	0.43
2006	87,020	9,730	28,933	0.44
2007	91,757	10,394	31,104	0.45
2008	93,816	10,965	33,248	0.47
2009	92,784	10,954	36,705	0.51
2010	90,219	11,167	38,400	0.55
2011	87,975	11,931	40,675	0.60

i. Regular Members (continued)

Active Members

Plan costs are affected by the age, years of service and salaries active members. In this year's valuation, there were 87,975 active members with an average age of 46.1, average years of service of 9.6 years and average salary of \$49,248. The 90,219 active members in the prior valuation had an average age of 45.8, average service of 9.2 years and average salary of \$49,407.

Inactive Members

In this year's valuation, there were 11,931 members with a vested right to a deferred or immediate vested benefit versus 11,167 members in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

CHART 2
Distribution of Active Regular Members by Age as of June 30, 2011

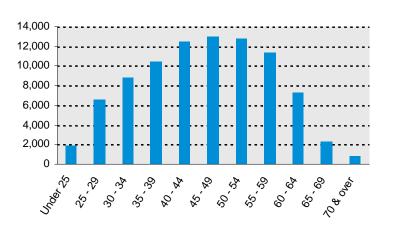
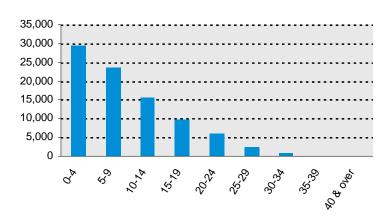


CHART 3

Distribution of Active Regular Members by Years of Service as of June 30, 2011



i. Regular Members (continued)

Retired Members and Beneficiaries

As of June 30, 2011, 36,123 retired members and 4,552 beneficiaries and survivors were receiving total monthly benefits of \$98,585,504. Of these, 273 retired members and 3 beneficiaries and survivors were receiving annual benefits of at least \$100,000, which represents 0.68% of all retirees, beneficiaries and survivors. For comparison, in the previous valuation, there were 34,047 retired members and 4,353 beneficiaries and survivors receiving monthly benefits of \$91,036,260.

These graphs show a distribution of the current retired members and beneficiaries based on their monthly amount and age, by type of pension.

CHART 4
Distribution of Retired Regular Members and Beneficiaries by Type and by Monthly Amount as of June 30, 2011

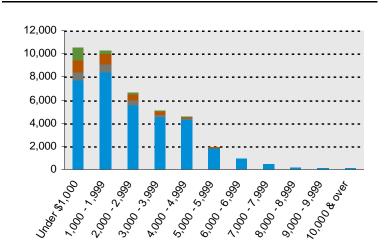
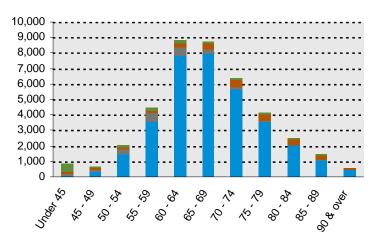


CHART 5 Distribution of Retired Regular Members and Beneficiaries by Type and by Age as of June 30, 2011





*SEGAL

■ Survivor■ Beneficiary

ii. Police/Fire Members

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on the Police/Fire member group.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 6
Police/Fire Member Population: 2002 – 2011

Year Ended June 30	Active Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2002	9,706	485	3,314	0.39
2003	9,758	528	3,560	0.42
2004	10,394	432	3,781	0.41
2005	10,771	506	4,021	0.42
2006	11,167	579	4,329	0.44
2007	11,936	596	4,583	0.43
2008	12,307	628	4,882	0.45
2009	12,633	620	5,200	0.46
2010	12,375	640	5,519	0.50
2011	11,936	701	5,903	0.55

ii. Police/Fire Members (continued)

Active Members

Plan costs are affected by the age, years of service and salaries of active members. In this year's valuation, there were 11,936 active members with an average age of 40.1, average years of service of 10.7 years and average salary of \$73,895. The 12,375 active members in the prior valuation had an average age of 39.8, average service of 10.3 years and average salary of \$73,373.

Inactive Members

In this year's valuation, there were 701 members with a vested right to a deferred or immediate vested benefit versus 640 members in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

CHART 7
Distribution of Active Police/Fire Members by Age as of June 30, 2011

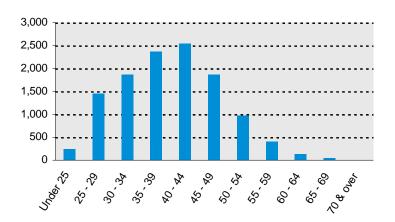
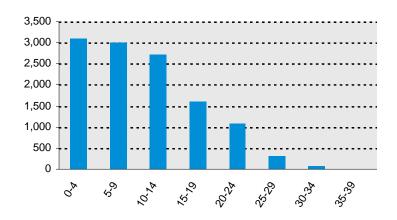


CHART 8

Distribution of Active Police/Fire Members by Years of Service as of June 30, 2011



ii. Police/Fire Members (continued)

Retired Members and Beneficiaries

As of June 30, 2011, 5,136 retired members and 767 beneficiaries and survivors were receiving total monthly benefits of \$23,762,778. Of these, 396 retired members and 4 beneficiaries and survivors were receiving annual benefits of at least \$100,000, which represents 6.78% of all retirees, beneficiaries and survivors. For comparison, in the previous valuation, there were 4,794 retired members and 725 beneficiaries and survivors receiving monthly benefits of \$21,171,622.

These graphs show a distribution of the current retired members and beneficiaries based on their monthly amount and age, by type of pension.

CHART 9

Distribution of Retired Police/Fire Members and Beneficiaries by Type and by Monthly Amount as of June 30, 2011

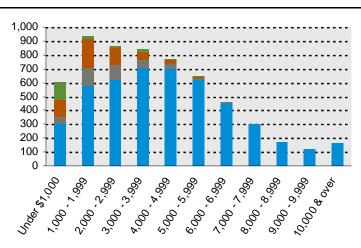
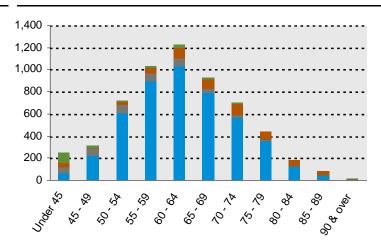


CHART 10

Distribution of Retired Police/Fire Members and Beneficiaries by Type and by Age as of June 30, 2011





■ Survivor

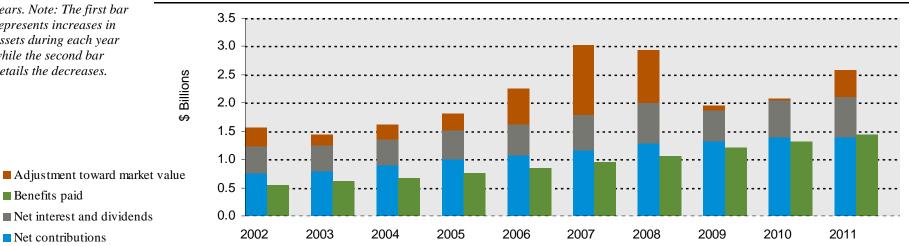
B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 11 Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2002 - 2011



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 12

Determination of Actuarial Value of Assets for Year Ended June 30, 2011

		Regi	ular	Police	/Fire
1.	Market value of assets		\$19,960,072,873		\$5,295,195,146
2.	Calculation of unrecognized return*	Original Amount*	Unrecognized <u>Return**</u>		
	(a) Year ended June 30, 2011	\$1,921,159,048	\$1,536,927,238	\$507,610,331	\$406,088,265
	(b) Year ended June 30, 2010	117,343,909	70,406,345	32,283,610	19,370,166
	(c) Year ended June 30, 2009	(4,319,746,558)	(1,727,898,623)	(1,076,354,349)	(430,541,740)
	(d) Year ended June 30, 2008	(1,970,255,593)	(394,051,119)	(480,861,117)	(96,172,223)
	(e) Year ended June 30, 2007	1,125,400,748	0	270,717,295	0
	(f) Total unrecognized return***	(\$3,126,098,446)	(\$514,616,159)	(\$746,604,230)	(\$101,255,532)
3.	Preliminary actuarial value of assets: (1) - (2f)		\$20,474,689,032		\$5,396,450,678
4.	Additional write up/(down) due to 70%/130% corridor:		\$0		\$0
5.	Actuarial value of assets: $(3) + (4)$		\$20,474,689,032		\$5,396,450,678
6.	Actuarial value as a percentage of market value: $(5) \div (1)$		102.58%		101.91%

^{*} Market value minus prior year's actuarial value, adjusted for cash flows and expected return, minus prior year's unrecognized return

^{**} Recognition at 20% per year over 5 years

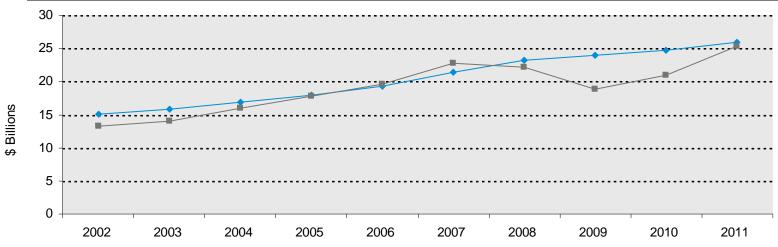
*** Deferred return as of June 30, 2011 recognized in each of the next four years:	Regular	Police/Fire
(a) Amount recognized June 30, 2012	(\$850,299,840)	(\$203,464,304)
(b) Amount recognized June 30, 2013	(456,248,720)	(107,292,082)
(c) Amount recognized June 30, 2014	407,700,591	107,978,788
(d) Amount recognized June 30, 2015	<u> 384,231,810</u>	<u>101,522,066</u>
	(\$514,616,159)	(\$101,255,532)

Both the actuarial value and market value of assets are representations of PERS's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because PERS's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 13

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2002 – 2011



C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The components of the total loss of \$95.6 million are shown below. The net experience gain from sources other than investments was 1.8% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 14
Actuarial Experience for Year Ended June 30, 2011

		Regular	Police/Fire
1.	Net gain/(loss) from investments*	(\$625,219,689)	(\$149,320,846)
2.	Net gain/(loss) from salary increases other than expected	521,339,471	206,890,685
3.	Net gain/(loss) from other experience**	(41,310,518)	(7,973,510)
4.	Net experience gain/(loss): $(1) + (2) + (3)$	(\$145,190,736)	\$49,596,329

Details in Chart 15.

^{**} Details in Chart 18. Does not include the effects of Plan or assumption changes if any.

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the PERS investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.00%. The actual rate of return on an actuarial basis for the 2011 plan year was 4.81% for Regular and 5.07% for Police/Fire.

Since the actual return for the year was less than the assumed return, PERS experienced an actuarial loss during the year ended June 30, 2011 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 15 Actuarial Value Investment Experience for Year Ended June 30, 2011

	Regular	Police/Fire
1. Actual return	\$942,690,794	\$258,581,939
2. Average value of assets	19,598,881,033	5,098,784,810
3. Actual rate of return: (1) ÷ (2)	4.81%	5.07%
4. Assumed rate of return	8.00%	8.00%
5. Expected return: (2) x (4)	<u>1,567,910,483</u>	407,902,785
6. Actuarial gain/(loss): (1) – (5)	<u>(\$625,219,689)</u>	(\$149,320,846)

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last seven years, including five-year averages. Pending an experience study scheduled to be completed before the next rate setting valuation, we have maintained the assumed rate of return of 8.00%.

CHART 16
Investment Return – Actuarial Value vs. Market Value: 2005 - 2011

		Reg	ular			Police	e/Fire	
				71010.00.10.10.00		Value t Return	Actuarial Value Investment Return	
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$1,212,108,045	9.31%	\$655,199,509	4.78%	\$282,442,259	9.30%	\$158,174,277	4.97%
2006	1,269,981,705	8.83%	943,516,255	6.51%	300,369,858	8.83%	227,032,573	6.63%
2007	2,370,161,064	15.03%	1,497,823,745	9.63%	570,204,492	15.03%	361,064,116	9.64%
2008	(596,088,431)	(3.26%)	1,320,009,898	7.68%	(144,603,728)	(3.24%)	321,274,088	7.64%
2009	(2,834,457,823)	(15.98%)	497,747,740	2.68%	(706,537,749)	(16.00%)	123,352,371	2.67%
2010	1,641,734,286	11.03%	537,022,624	2.82%	419,574,635	11.03%	141,729,146	2.93%
2011	3,489,069,530	21.10%	942,690,794	4.81%	915,513,116	21.09%	258,581,939	5.07%
Total	\$6,552,508,376		\$6,394,010,565		\$1,636,962,883		\$1,591,208,510	
Five-year averag	e return	4.89%		5.33%		5.06%		5.36%

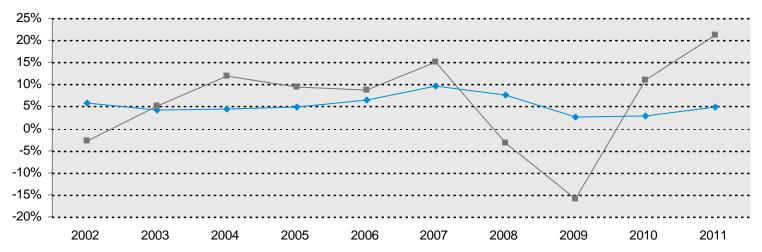
Note: Each year's yield is weighted by the average asset value in that year.

In the preceding subsection B we described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this method is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs. This effect is clear in the chart below, where the year-to-year returns on actuarial value are less volatile than the returns on market value.

This chart illustrates how this leveling effect has actually worked over the years 2002 - 2011.

CHART 17

Market and Actuarial Rates of Return for Years Ended June 30, 2002 - 2011



Actuarial Value

Market Value

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),

- > the number of disability retirements, and
- > salary increases different than assumed.

The net gain from this other experience for the year ended June 30, 2011 amounted to \$480.0 million for Regular and \$198.9 million for Police/Fire which is 1.66% and 2.52% of the actuarial accrued liability respectively.

A brief summary of the demographic gain/(loss) experience of the PERS for the year ended June 30, 2011 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent year.

CHART 18
Experience Due to Changes in Demographics for Year Ended June 30, 2011

	Regular	% of AAL	Police/Fire	% of AAL
Age and Service Retirements	(\$107,217,855)	(0.37%)	(\$14,306,545)	(0.18%)
Disability Retirements	(15,497,689)	(0.05%)	627,886	0.01%
Pre- and Post-Retirement Deaths	7,951,402	0.03%	(12,873,578)	(0.16%)
Post-Retirement Benefit Increases	90,648,725	0.31%	21,592,641	0.27%
Withdrawal From Employment	41,356,118	0.14%	3,831,786	0.05%
Individual Pay Increases	521,339,471	1.80%	206,890,685	2.62%
Active New Entrants	(43,396,229)	(0.15%)	(4,421,166)	(0.06%)
Active Rehires	(22,404,243)	(0.07%)	(3,106,398)	(0.04%)
Inactive and Retiree Showups	(11,255,884)	(0.04%)	(844,591)	(0.01%)
Other	18,505,137	0.06%	1,526,455	0.02%
Total Liability Experience Gain/(Loss) During Year	\$480,028,953	1.66%	\$198,917,175	2.52%

D. CALCULATED CONTRIBUTION RATES

The amount of annual contribution required to fund the Plan is comprised of a normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the actuarially determined contribution rate.

The statutory 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. See Exhibit III in Section 4 for details about this adjustment.

The chart compares this valuation's calculated contribution rates with the prior valuation.

CHART 19
Calculated Contribution Rates

	Year Beginning July 1					
	2	011	20	010		
	Regular	Police/Fire	Regular	Police/Fire		
Employer-Pay, current statutory rate*	23.75%	39.75%	21.50%	37.00%		
Normal cost	15.88%	28.63%	16.09%	29.72%		
Amortization percentage	8.30%	10.67%	7.39%	9.90%		
Administrative expenses	0.15%	0.15%	0.15%	0.15%		
Employer-Pay, total rate*	24.33%	39.45%	23.63%	39.77%		
New statutory rounded rate	<u>N/A</u>	<u>N/A</u>	<u>23.75%</u>	<u>39.75%</u>		
Employee/Employer Pay, current statutory rate**	24.50%	40.50%	22.50%	38.00%		
Normal cost	16.86%	29.51%	16.98%	30.48%		
Amortization percentage	8.30%	10.67%	7.39%	9.90%		
Administrative expenses	0.15%	<u>0.15%</u>	0.15%	0.15%		
Employee/Employer Pay, total rate**	25.31%	40.33%	24.52%	40.53%		
New statutory rounded rate	<u>N/A</u>	<u>N/A</u>	<u>24.50%</u>	<u>40.50%</u>		

^{*} See cost-sharing mechanism in NRS 286.421

^{**} See cost-sharing mechanism in NRS 286.410

The actuarially determined contribution rates as of June 30, 2011 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Actuarially Determined Contribution Rate

The chart below details the changes in the actuarially determined contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the actuarially determined contribution rates from the prior valuation to the amount determined in this valuation.

CHART 20
Reconciliation of Actuarially Determined Contribution Rate⁽¹⁾ from June 30, 2010 to June 30, 2011

	Regular	Estimated Annual Dollar Cost ⁽²⁾	Police/Fire	Estimated Annual Dollar Cost ⁽²⁾
Actuarially Determined Contribution Rate as of June 30, 2010	23.77%	\$1,175,085,660	39.84%	\$385,791,882
Effect of investment (gain)/loss	0.52%	25,340,136	0.51%	4,977,362
Effect of gains on individual salary experience	(0.44%)	(21,129,874)	(0.71%)	(6,896,356)
Effect on existing amortization of payroll growth less than expected	0.66%	$23,752,068^{(3)}$	0.77%	$7,669,807^{(3)}$
Effect of changes in normal cost	(0.20%)	$(25,389,897)^{(4)}$	(1.09%)	$(9,956,695)^{(4)}$
Effect of other changes ⁽⁵⁾	0.17%	8,991,583	0.21%	<u>1,937,948</u>
Total change	<u>0.71%</u>	11,564,016	<u>(0.31%)</u>	(2,267,934)
Actuarially Determined Contribution Rate as of June 30, 2011	24.48%	\$1,186,649,676	39.53%	\$383,523,948

⁽¹⁾ Average rate for the Employer-pay and Employee/Employer pay plans.

⁽²⁾ Based on rate payroll for each valuation date shown.

⁽³⁾ Actual dollar increase in existing amortization bases.

⁽⁴⁾ Actual dollar decrease in normal cost.

⁽⁵⁾ Includes effect of other differences in actual expected experience including mortality, disability, withdrawal and retirement experience. Estimated annual dollar cost also reflects change in payroll from prior valuation.

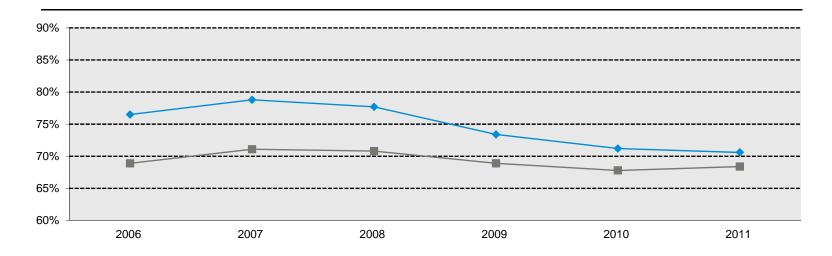
E. FUNDED RATIO

One critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan.

High ratios indicate a well-funded plan with assets sufficient to cover the plan's liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

This graph shows the funded ratio on an AVA basis for Regular and Police/Fire.

CHART 21 Funded Ratio



Regular
Police/Fire

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT A

Table of Plan Coverage
i. Regular

	Year Ended June 30					
Category	2011	2010	— Change From Prior Year			
Active members in valuation:						
Number*	87,975	90,219	-2.5%			
Average age	46.1	45.8	N/A			
Average service	9.6	9.2	N/A			
Total annual salary	\$4,332,600,642	\$4,457,489,170	-2.8%			
Average annual salary	\$49,248	\$49,407	-0.3%			
Account balances	\$570,365,440	\$543,161,848	5.0%			
Total active vested members	63,280	59,924	5.6%			
Vested terminated members:	11,931	11,167	6.8%			
Retired members:						
Number in pay status	33,855	31,917	6.1%			
Average age	68.2	68.1	N/A			
Average monthly benefit	\$2,589	\$2,537	2.0%			
Disabled members:						
Number in pay status	2,268	2,130	6.5%			
Average age	59.1	59.0	N/A			
Average monthly benefit	\$1,797	\$1,720	4.5%			
Beneficiaries:						
Number in pay status	2,832	2,702	4.8%			
Average age	70.9	70.9	N/A			
Average monthly benefit	\$1,704	\$1,662	2.5%			
Survivors:						
Number in pay status	1,720	1,651	4.2%			
Average age	54.1	53.8	N/A			
Average monthly benefit	\$1,179	\$1,150	2.5%			

^{*} For 2011, includes 72,001 members under Employer-Pay provisions and 15,974 under Employee/Employer provisions.

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT A

Table of Plan Coverage
ii. Police/Fire

	Year Ended June 30					
Category	2011	2010	Change From Prior Year			
Active members in valuation:						
Number*	11,936	12,375	-3.5%			
Average age	40.1	39.8	N/A			
Average service	10.7	10.3	N/A			
Total annual salary	\$882,013,236	\$907,993,497	-2.9%			
Average annual salary	\$73,895	\$73,373	0.7%			
Account balances	\$109,570,993	\$107,308,085	2.1%			
Total active vested members	9,082	8,871	2.4%			
Vested terminated members	701	640	9.5%			
Retired members:						
Number in pay status	4,736	4,409	7.4%			
Average age	63.3	63.4	N/A			
Average monthly benefit	\$4,502	\$4,291	4.9%			
Disabled members:						
Number in pay status	400	385	3.9%			
Average age	55.8	55.7	N/A			
Average monthly benefit	\$2,519	\$2,424	3.9%			
Beneficiaries:						
Number in pay status	558	526	6.1%			
Average age	67.9	67.4	N/A			
Average monthly benefit	\$2,047	\$1,986	3.1%			
Survivors:						
Number in pay status	209	199	5.0%			
Average age	45.2	45.7	N/A			
Average monthly benefit	\$1,399	\$1,392	0.5%			

^{*} For 2011, includes 10,496 members under Employer-Pay provisions and 1,440 under Employee/Employer provisions.

EXHIBIT B
Members in Active Service as of June 30, 2011 By Age, Years of Service, and Average Annual Salary

i. Regular

	Years of Service												
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove			
Under 25	1,944	1,904	40										
	\$21,112	\$20,803	\$35,858										
25 - 29	6,595	5,189	1,387	19									
	34,792	32,918	41,545	\$53,450									
30 - 34	8,868	4,468	3,636	739	25								
	42,150	36,240	47,022	53,307	\$59,831								
35 - 39	10,499	3,794	3,518	2,569	569	49							
	48,058	36,574	50,052	58,471	63,444	69,627							
40 - 44	12,441	3,506	3,500	2,803	1,922	653	57						
	51,507	35,259	49,081	60,248	66,554	67,976	73,908						
45 - 49	13,035	3,231	3,286	2,598	1,895	1,508	494	23					
	53,091	35,506	48,372	57,781	66,115	69,879	72,735	\$72,070					
50 - 54	12,821	2,852	3,067	2,594	1,881	1,451	790	183	3				
	53,541	35,568	47,688	57,693	63,197	68,184	73,066	72,604	*				
55 - 59	11,367	2,283	2,569	2,261	1,869	1,422	660	276	26	1			
	54,804	36,756	49,065	56,935	63,236	66,829	72,898	75,795	74,352	*			
60 - 64	7,268	1,495	1,821	1,399	1,162	856	369	131	32	3			
	53,971	38,355	48,657	56,952	61,505	65,237	70,646	76,048	89,145	*			
65 - 69	2,315	555	629	468	302	221	83	35	19	3			
	49,266	32,944	47,600	53,881	58,938	60,276	67,045	64,805	75,930	*			
70 & over	822	254	199	140	88	67	38	21	8	7			
	42,835	27,906	36,705	50,107	55,159	58,643	62,536	67,322	74,943	90,039			
Total	87,975	29,531	23,652	15,590	9,713	6,227	2,491	669	88	14			
	\$49,248	\$34,456	\$47,988	\$57,723	\$64,037	\$67,486	\$72,248	\$74,002	\$80,718	\$97,834			

^{*} Not shown for groups with fewer than five members.

EXHIBIT B
Members in Active Service as of June 30, 2011 By Age, Years of Service, and Average Annual Salary

ii. Police/Fire

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over		
Under 25	230	226	4									
	\$45,509	\$45,254	*									
25 - 29	1,461	1,093	362	6								
	55,891	52,604	65,318	\$85,753								
30 - 34	1,874	738	875	251	10							
	64,713	54,634	68,940	78,714	\$87,261							
35 - 39	2,380	456	779	930	197	18						
	73,684	52,397	69,894	82,760	92,670	\$100,235						
40 - 44	2,548	298	523	828	643	241	15					
	80,902	51,736	69,670	83,777	92,208	100,199	\$98,571					
45 - 49	1,873	168	249	403	442	491	117	3				
	85,504	50,212	65,215	81,601	92,196	99,503	108,125	*				
50 - 54	974	76	120	173	197	253	128	26	1			
	83,898	50,028	63,192	76,286	86,102	93,589	105,465	112,317	*			
55 - 59	418	34	57	94	82	64	45	35	7			
	78,422	45,179	55,611	73,189	81,877	86,890	99,624	102,493	121,329			
60 - 64	138	8	39	31	21	24	9	5	1			
	71,380	48,695	57,798	69,920	80,933	82,726	80,632	98,251	*			
65 - 69	36	4	6	7	11	6		2				
	66,385	*	57,667	63,529	69,236	78,158		*				
70 & over	4	1	1		1	1						
	*	*	*		*	*						
Total	11,936	3,102	3,015	2,723	1,604	1,098	314	71	9			
	\$73,895	\$52,148	\$67,907	\$81,594	\$90,636	\$97,048	\$104,578	\$105,529	\$117,894			

^{*} Not shown for groups with fewer than five members.

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT CReconciliation of Member Data

	Active Members	Inactive Members	Retired Members	Disabled Members	Beneficiaries and Survivors	Total
Number as of June 30, 2010	102,594	11,807	36,326	2,515	5,078	158,320
New members	5,511	41	53	7	476	6,088
Terminations – with vested rights	-1,978	1,979	-1	0	0	0
Terminations – without vested rights	-3,887	-48	N/A	N/A	N/A	-3,935
Retirements	-2,257	-790	3,076	-29	N/A	0
New disabilities	-233	-26	0	259	N/A	0
Return to work	269	-269	0	0	N/A	0
Died with or without beneficiary	-108	-62	-863	-84	-235	-1,352
Data adjustments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Number as of June 30, 2011	99,911	12,632	38,591	2,668	5,319	159,121

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis (based on unaudited financial statements)

		Year Ended June 30, 2011		Year Ended June 30, 2010
	Regular	Police/Fire	Total	Total
Net assets at actuarial value at the beginning of the year	\$19,665,763,828	\$5,059,700,881	\$24,725,464,709	\$23,971,875,851
Contribution income:				
Employer contributions*	\$937,415,377	\$327,344,226	\$1,264,759,603	\$1,281,714,847
Member contributions	81,686,848	15,346,975	97,033,823	99,683,851
Repayment and Purchase of Service	23,338,241	8,209,113	31,547,354	26,890,242
Net contribution income	\$1,042,440,466	\$350,900,314	\$1,393,340,780	\$1,408,288,940
Other income:	\$1,933,928	\$255,583	\$2,189,511	\$1,931,123
Investment income:				
Interest	\$320,071,837	\$0	\$320,071,837	\$314,391,003
Dividends	331,649,922	0	331,649,922	281,945,413
Net appreciation	3,677,504,441	0	3,677,504,441	1,409,908,664
Other	77,269,719	0	77,269,719	66,326,682
Transfer of annual investment income	(915,257,533)	915,257,533	0	0
Securities lending income	12,699,994	0	12,699,994	1,726,152
Net change in FV of securities lending	9,016,367	0	9,016,367	8,978,822
Change in unrecognized return	(2,546,378,736)	(656,931,177)	(3,203,309,913)	(1,382,557,151)
Less investment fees	(25,819,145)	0	(25,819,145)	(23,898,938)
Net investment income	\$940,756,866	\$258,326,356	\$1,199,083,222	\$676,820,647
Total income available for benefits	\$1,985,131,260	\$609,482,253	\$2,594,613,513	\$2,087,040,710
Less operating expenses:				
Retirement and Survivor Benefits	(\$1,085,834,770)	(\$254,393,971)	(\$1,340,228,741)	(\$1,236,168,061)
Disability Benefits	(58,287,479)	(13,575,388)	(71,862,867)	(65,448,334)
Post-Retirement Increases	(23,019)	(1,191)	(24,210)	(16,796)
Refunds to Members	(18,608,602)	(6,145,979)	(24,754,581)	(20,270,764)
Administrative Expenses	(9,709,653)	(870,345)	(10,579,998)	(11,118,633)
Transfer to JRS	(1,488,115)	(0)	(1,488,115)	(429,264)
Net operating expenses	(\$1,173,951,638)	(\$274,986,874)	(\$1,448,938,512)	(\$1,333,451,852)
Interfund transfer	(\$2,254,418)	\$2,254,418	\$0	\$0
Change in reserve for future benefits	\$808,925,204	\$336,749,797	\$1,145,675,001	\$753,588,858
Net assets at actuarial value at the end of the year	\$20,474,689,032	\$5,396,450,678	\$25,871,139,710	\$24,725,464,709

^{*} See cost-sharing mechanisms in NRS 286.410 and NRS 286.421

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT E
Summary Statements of Assets (based on unaudited financial statements)

		Ended 60, 2011	Year Ended June 30, 2010	
Cash equivalents	\$553,430,971			\$389,957,314
Accounts receivable:				
Contributions receivable	\$103,286,037		\$106,390,406	
Pending trades receivable	233,345,442		251,956,939	
Accrued investment income	100,557,554		<u>97,567,846</u>	
Total accounts receivable		437,189,033		455,915,191
Investments:				
Fixed income securities	\$6,873,746,896		\$6,184,214,644	
Marketable equity securities	10,059,148,942		7,833,430,243	
International securities	5,921,962,844		5,069,365,796	
Mortgage loans	1,761		4,378	
Real estate	1,234,533,004		853,999,874	
Private equity	<u>736,871,821</u>		<u>575,344,723</u>	
Total investments at market value		24,826,265,268		20,516,359,658
Collateral on loaned securities		3,550,013,175		2,942,675,281
Property and equipment		3,315,213		4,289,301
Other assets		<u>2,120,259</u>		2,053,010
Total assets		\$29,372,333,919		\$24,311,249,755
Liabilities:				
Accounts payable	(\$12,059,039)		(\$11,205,817)	
Pending trades payable	(485,608,284)		(372,683,783)	
Obligations under securities lending activities	(3,619,398,577)		(3,021,077,050)	
Total liabilities		(\$4,117,065,900)		(\$3,404,966,650)
Net assets at market value		\$25,255,268,019		\$20,906,283,105
Net assets at actuarial value		\$25,871,139,710		\$24,725,464,709

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT F

Development of the Fund Through June 30, 2011

Year Ended June 30	Member Contributions	Member Contributions	Other Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments**	Actuarial Value of Assets at End of Year
2005							\$17,886,538,573
2006	\$966,130,036	\$75,970,321	\$42,214,033	\$1,170,548,830	\$8,212,797	\$851,160,762	19,282,028,234
2007	1,046,628,769	83,219,638	45,632,332	1,858,887,861	8,588,057	948,781,892	21,359,026,885
2008	1,167,392,913	88,013,888	43,287,531	1,641,283,986	8,723,601	1,052,629,998	23,237,651,604
2009	1,213,067,534	93,648,004	28,116,522	621,100,111	9,714,463	1,211,993,461	23,971,875,851
2010	1,281,714,847	99,683,851	26,890,242	678,751,770	11,118,633	1,322,333,219	24,725,464,709
2011	1,264,759,603	97,033,823	31,547,354	1,201,272,733	10,579,998	1,438,358,514	25,871,139,710

^{*} Net of investment fees

^{**} Includes transfers in/out of the System (e.g. to the Judicial Retirement System) that correspond to transfers of liability

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT G

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2011

	Re	gular	Polic	ce/Fire
1. Unfunded/(overfunded) actuarial accrued liability at beginning of year		\$7,950,505,956		\$2,401,769,113
2. Normal cost at beginning of year		802,314,098		288,496,446
3. Actual total contributions		(1,042,440,466)		(350,900,314)
4. Interest				
(a) For whole year on $(1) + (2)$	\$700,225,604		\$215,221,245	
(b) For a half year on (3)	(41,697,619)		(14,036,013)	
(c) Total interest		658,527,985		201,185,232
5. Expected unfunded/(overfunded) actuarial accrued liability		\$8,368,907,573		\$2,540,550,477
6. Changes due to:				
(a) Investment loss	\$625,219,689		\$149,320,846	
(b) Salary increases lower than expected	(521,339,471)		(206,890,685)	
(c) Other experience	41,310,518		<u>7,973,510</u>	
(e) Total changes		\$145,190,736		(\$49,596,329)
7. Unfunded/(overfunded) actuarial accrued liability at end of year		<u>\$8,514,098,309</u>		<u>\$2,490,954,148</u>

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT H Table of Amortization Bases

Date Established	Initial Years	Initial Amount	Current Annual Payment*	Years Remaining	Outstanding Balance
Regular					
06/30/2004	30	\$3,306,492,730	\$208,252,930	23	\$4,124,494,405
06/30/2005	30	825,676,847	48,829,699	24	1,002,480,763
06/30/2006	30	376,199,046	20,890,172	25	443,811,781
06/30/2007	30	(325,346,914)	(16,963,733)	26	(372,352,807)
06/30/2008	30	597,061,087	29,231,014	27	661,938,470
06/30/2009	30	1,396,781,607	64,210,199	28	1,498,059,823
06/30/2010	30	804,325,423	34,718,240	29	833,464,228
06/30/2011	30	322,201,646	13,058,823	30	322,201,646
Subtotal			\$402,227,344	24.9**	\$8,514,098,309
Police/Fire					
06/30/2004	30	1,248,577,900	71,328,104	23	1,640,546,382
06/30/2005	30	166,690,723	8,817,241	24	211,613,783
06/30/2006	30	145,811,902	7,141,517	25	178,537,934
06/30/2007	30	(52,497,545)	(2,380,744)	26	(61,899,352)
06/30/2008	30	130,126,655	5,464,070	27	147,529,898
06/30/2009	30	204,577,462	7,953,972	28	222,711,207
06/30/2010	30	144,950,584	5,218,221	29	151,328,410
06/30/2011	30	585,886	19,530	30	585,886
Subtotal			\$103,561,911	24.1**	<u>\$2,490,954,148</u>
Grand Total					\$11,005,052,457

^{*} Level percentage of payroll with payroll expected to increase 6.5% per year for Regular and 8% per year for Police/Fire. Payments shown as of beginning of year.

^{**} Effective average amortization period.

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

EXHIBIT I

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Plan will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age;
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the level cost allocated to the current year of service.

Actuarial Accrued Liability For Actives:

The value of all projected benefit payments for current members less the portion that will be paid by future normal costs.

Actuarial Accrued Liability For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan.

SECTION 3: Supplemental Information for the Public Employees' Retirement System of Nevada

Amortization of the Unfunded Actuarial Accrued Liability:

Payments made over a period of years equal in value to the Plan's unfunded actuarial

accrued liability.

Investment Return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one

year to the next.

EXHIBIT I Summary of Actuarial Valuation Results			
The valuation was made with respect to the following data supplied to us:			
1. Retired members as of the valuation date (including beneficiaries in pay status)		46,578	
2. Members inactive during year ended June 30, 2011 with vested rights		12,632	
3. Members active during the year ended June 30, 2011		99,911	
The actuarial factors as of the valuation date are as follows:			
1. Normal cost		\$1,055,463,952	
2. Actuarial accrued liability		36,876,192,167	
Retired members and beneficiaries	\$18,331,446,722		
Inactive members with vested rights	875,480,559		
Active members	17,669,264,886		
3. Actuarial value of assets (\$25,255,268,019 at market value as reported by Retirement Office)		25,871,139,710	
4. Unfunded actuarial accrued liability (2. – 3.)		\$11,005,052,457	
5. Total Rate Payroll		\$5,817,634,985	

EXHIBIT II

Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:

Healthy: Regular: RP-2000 Combined Healthy Mortality Table, set forward one year for females (no age

set forward for males).

Police/Fire: RP-2000 Combined Healthy Mortality Table, set forward one year.

Disabled: Regular: RP-2000 Disabled Retiree Mortality Table, set back three years for males and set

forward eight years for females.

Police/Fire: For males, RP-2000 Combined Healthy Mortality Table, set forward ten years.

For females, RP-2000 Disabled Retiree Mortality Table, set forward eight years.

These mortality tables were determined to contain provision appropriate to reasonably reflect past and future mortality improvement, based on a review of mortality experience in 2007.

Termination Rates before Retirement:

ites before Kethement.		Rate	e (%)			
	Regular Mortality		Police/Fire Mortality		Disability	
Age	Male	Female	Male	Female	Regular	Police/Fire
20	0.03	0.02	0.04	0.02	0.01	0.05
25	0.04	0.02	0.04	0.02	0.01	0.05
30	0.04	0.03	0.05	0.03	0.05	0.05
35	0.08	0.05	0.08	0.05	0.08	0.08
40	0.11	0.08	0.11	0.08	0.14	0.26
45	0.15	0.12	0.16	0.12	0.26	0.47
50	0.21	0.19	0.24	0.19	0.43	0.61
55	0.36	0.31	0.42	0.31	0.61	0.60
60	0.67	0.58	0.77	0.58	0.50	0.60

Any mortality that occurs during the first two years of employment is assumed to be non-duty related.

Termination Rates before Retirement (continued):

Withdrawal Rates				
Years of Service	Regular	Police/Fire		
0	18.25%	13.00%		
1	13.00	6.50		
2	9.80	5.50		
3	7.75	4.00		
4	6.50	3.90		
5	6.00	3.75		
6	5.00	2.00		
7	4.65	2.00		
8	3.90	2.00		
9	3.70	2.00		
10	3.30	2.00		
11 or more	2.00	2.00		

No withdrawal is assumed after a member is first assumed to retire.

SECTION 4: Reporting Information for the Public Employees' Retirement System of Nevada

Retirement Rates:

Regular
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 & over	100	100	100	100

Police/Fire
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 & over	100	100	100	100	100

SECTION 4: Reporting Information for the Public Employees' Retirement System of Nevada

Retirement Age for Inactive Vested Participants:

Earliest unreduced retirement age.

Unknown Data for Participants:

Same as those exhibited by members with similar known characteristics. If not specified, Regular members are assumed to be female, and Police/Fire members are assumed to be male.

Percent Married:

Since pre-retirement death benefits are payable to a surviving beneficiary of an unmarried member, all members are assumed to have a beneficiary upon pre-retirement death.

The unmodified option is a straight life annuity except for "employer-pay" Police/Fire retirees, for whom it is a 50% joint and survivor annuity. 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 at retirement for future "employer-pay" Police/Fire retirees are shown below for selected ages:

Age	Male	Female
20	33.0%	37.1%
25	58.9%	65.2%
30	65.3%	61.8%
35	71.3%	63.6%
40	71.4%	63.1%
45	73.3%	61.0%
50	75.7%	64.0%
55	77.0%	57.6%
60	74.0%	49.5%

Age of Spouse:

Females 3 years younger than males.

Net Investment Return: 8.00% (including 3.50% for inflation).

Consumer Price Index: Increase of 3.50% per year.

Administrative Expenses: 0.15% of payroll added to Normal Cost.

Salary Increases:

	Years of		
_	Service	Regular	Police/Fire
	1	9.75%	14.75%
	2	8.25%	10.75%
	3	7.75%	10.20%
	4	7.50%	9.80%
	5	7.25%	9.40%
	6	7.00%	9.00%
	7	6.75%	8.25%
	8	6.25%	7.75%
	9	5.75%	7.25%
	10	5.50%	6.50%
	11	5.10%	6.50%
	12	4.90%	6.50%
	13 or more	4.50%	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 and 5.00% for Police/Fire. For the purpose of calculating the actuarially determined contribution rate, the total payroll growth assumptions for future years are 6.50% per year for Regular and 8.00% per year for Police/Fire.

Post-Retirement Benefit Increases:	Members retiring during 1992 and earlier are assumed to currently be at the cap described on page 41 (based upon historical CPI). Those retiring in 1993 and later (and hired prior to 2010) are assumed to reach the cap after 24 years of retirement. Those hired in 2010 or later are assumed to reach the cap after 39 years of retirement. Underlying this assumption is that CPI will grow over time at a rate of 3.50% per year.
Dependent Children:	The assumption for dependent children in the actuarial valuation is one dependent child who is 28 years younger than the member.
Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period, further adjusted, if necessary, to be within 30% of the market value.
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. 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 and current benefit accrual rate applicable to that individual.
Amortization of the Unfunded Actuarial Accrued Liability:	For the purpose of calculating the actuarially determined contribution rate, the unfunded actuarial accrued liability is amortized as a level percent of payroll over a year-by-year closed amortization period where each amortization period is set at 30 years.
Changes in Assumptions or Methods:	There have been no changes in actuarial assumptions or methods since the last valuation.

EXHIBIT III

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Nevada Public Employees' Retirement Act included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Service Retirement:

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

Requirement 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.

Requirement 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:

Requirement 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.

Requirement 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) per year

of service. Maximum benefits are 75% of average compensation.

Early Retirement:

Requirement 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 that 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 that the member is under

the age required for service retirement.

Disability:

Requirement 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, to the extent that total disability benefits would

otherwise exceed 100% of final average compensation.)

Vesting:

Requirement

Any age with five years of service, provided the member has not received a refund of member 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.

Spouse's Pre-Retirement Death Benefit:

Requirement

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. No withdrawal is assumed after a member is first assumed to retire.

Benefit

- 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

A member 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 member, a spouse who was the retired member'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 member elects an optional benefit form at the time of retirement. Service performed after July 1, 1981, in positions other than as a Police/Fire member, 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:

Benefit

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:

Benefit

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

Optional Benefit Forms

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

- Option 1 Single life annuity except for:
 Police/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.

Contribution Rates

For the fiscal years July 1, 2011 through June 30, 2013, statutory contribution rates as a percentage of compensation are as follows:

	Regular	Police/Fire
Employer-Pay	23.75%	39.75%
Employee/Employer	12.25%/12.25%	20.25%/20.25%

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 members are not credited to member accounts and are not refunded upon termination. For members 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.

Changes in Plan Provisions: There were no changes in the plan provisions since the prior valuation.

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