Marin County Employees' Retirement Association
Actuarial Review and Analysis as of June 30, 2011
County of Marin

Valuation Date	**June 30, 2010**		**June 30, 2011**	
Actuarial Accrued Liability	$1,402.4 M	Funded Ratio	$1,436.0 M	Funded Ratio
Actuarial Value of Valuation Assets	$1,018.1 M	72.6%	$1,065.3 M	74.2%
Market Value of Valuation Assets	$886.5 M	63.2%	$1,087.6 M	75.7%
Unfunded Actuarial Accrued Liability	$384.3 M		$370.8 M	
Inactive Actuarial Liability	$775.1 M		$871.2 M	
Portion Covered by Market Value of Valuation Assets	100.0%		100.0%	
Employer Normal Cost	7.82%		10.94%	
Amortization of Unfunded Liability	16.01%		15.56%	
Total Employer Rate	23.83%		26.50%	
Average Employee Rate	9.66%		10.09%	
Total Contribution Rate	33.49%		36.59%	

Changes from Prior Year:

- Changes were made in actuarial methods and assumptions; there were no changes in benefits or plan provisions.
- Overall, the Plan cost increased from 23.83% to 26.50% of active member payroll.
  - The demographic experience of the Plan – retirements, disabilities, terminations, deaths, and new entrants – was negative: Plan cost increased by 0.76% from these causes.
  - Payroll grew at less than the expected rate of 3.50%. Since the unfunded liability in dollars is amortized over payroll, Plan cost increased by 0.51% of the reduced active payroll.
  - Investment experience was slightly negative, with a 23.4% market return offset by the ongoing recognition of FY 2008 and 2009 losses, yielding a 5.3% return on the actuarial value of assets and increasing plan cost by 1.23% of pay.
  - Keeping the amortization period at 17 years rather than reducing it yearly reduced cost by 0.57% of pay.
  - The actuarial cost method was changed to Entry Age Normal-to-Final-Decrement, reducing Plan cost 0.64% of pay.
  - Demographic and assumption changes were made following an experience study. This resulted in a 1.38% increase in plan cost.

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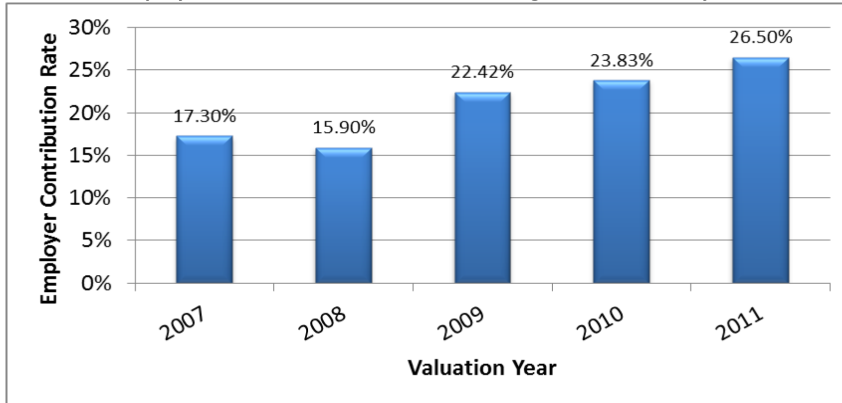
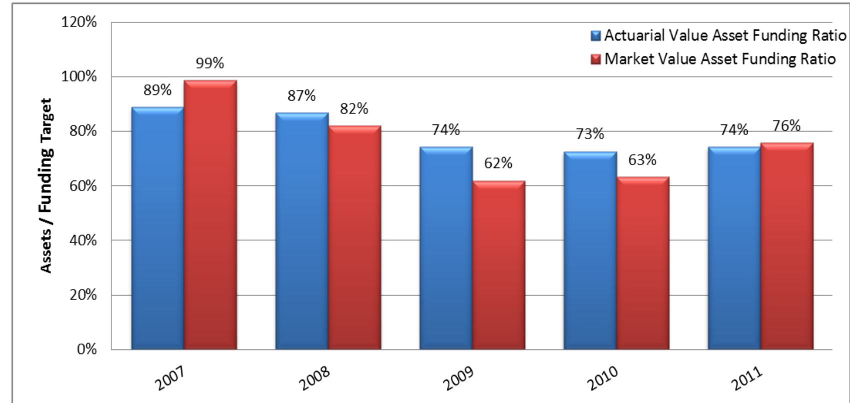
Employer Contribution Rate as a Percentage of Member Payroll



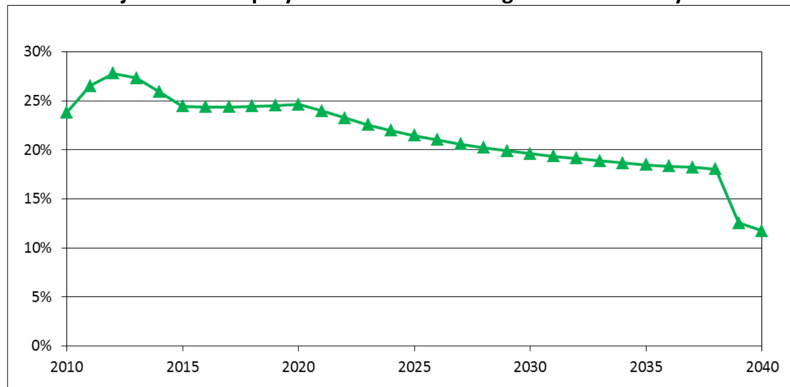
Plan Funded Ratios



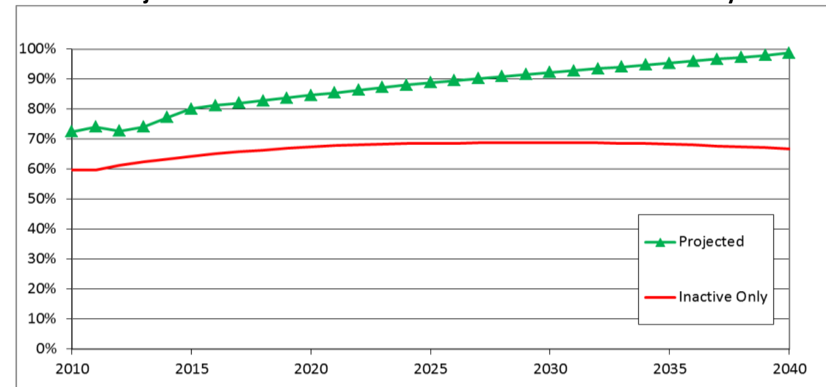
The employer contribution rate increased in fiscal 2009 due principally to poor investment returns. Recent changes in actuarial assumptions and other demographic losses have also increased the employer rate.

The above graph shows the funded ratio, both at market and actuarial value of assets. Funded ratios have trended down since 2007, due to investment performance and changes in actuarial assumptions.

Projection of Employer Cost as a Percentage of Member Payroll



Projection of Funded Ratio Based on Actuarial Accrued Liability



Cost is expected to increase over the next few years as deferred investment losses from 2008 are recognized. The sudden decline at the end of the projection is due to the end of the amortization period for the extraordinary loss of FY 2009.

The funded ratio will improve as the unfunded liability and extraordinary loss are paid off, provided all actuarial assumptions are met. This graph and the prior graph assume a 17 year amortization period for the non-extraordinary UAAL for the next two years that declines to an ultimate period of 10 years in 2020.

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Sensitivity Analysis:	2011 Baseline	+1%	-1%
Employer Cost	26.50%	17.48%	36.91%
Funding Ratio	74.18%	83.12%	65.68%
Expected Return	7.50%	8.50%	6.50%

Investment Earnings:	FY 2010	FY 2011
Market Value	8.2%	23.4%
Actuarial Value	3.3%	5.3%
Expected	7.75%	7.75%
Unrecognized Gain (Loss)	($ 132.7 M)	$ 22.5 M

Covered Payroll:	FY 2011	FY 2012
Total	$176.8 M	$175.4 M

Projected Employer Contribution:	FY 2012	FY 2013
Total Employer Rate	23.83%	26.50%
Expected Covered Payroll	$175.4 M	$179.8 M
Expected Employer Contribution	$41.8 M	$47.7 M

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Actuarial Cost Method	Entry Age Normal to Final Decrement, Aggregate Normal Cost
Amortization Method	Level % of pay; closed.
Remaining Amortization Period	17 years for the next three valuations, after which the period will descend by one year each year to an ultimate period of ten years. Half of the extraordinary asset loss from FY09 is being amortized as a level percentage of payroll over a closed 30 year period, with 28 years remaining as of June 30, 2011. Any extraordinary gains occurring during this period will first be used to offset the FY 2009 loss; any excess will be amortized over a similar long period of time, such as 30 years.
Asset Valuation Method	5 Year smoothing; each year's gain and loss recognized over a closed five-year period; Actuarial value not less than 80% and not greater than 120% of market value. Valuation Assets exclude special Non-Valuation Reserves and contingency reserve.

Actuarial Economic Assumptions:

Long-Term Inflation Rate	3.25%
Real Rate of Return	4.25%
Nominal Rate of Return	7.50%
Projected Salary Increases	3.75% - 8.25%
Cost-of-Living Adjustments	3.25%