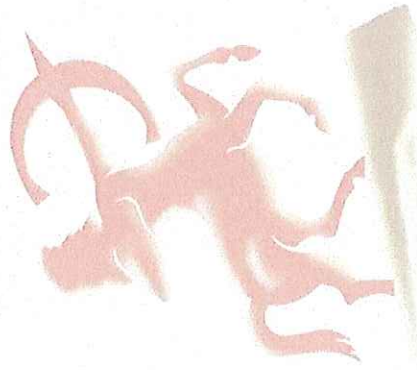




CLASSIC VALUES. INNOVATIVE ADVICE

# **Presentation to the Board of Administration Federated City Employees' Retirement System**

**June 30, 2011  
Actuarial Valuation**



**Presentation Date: November 17, 2011**

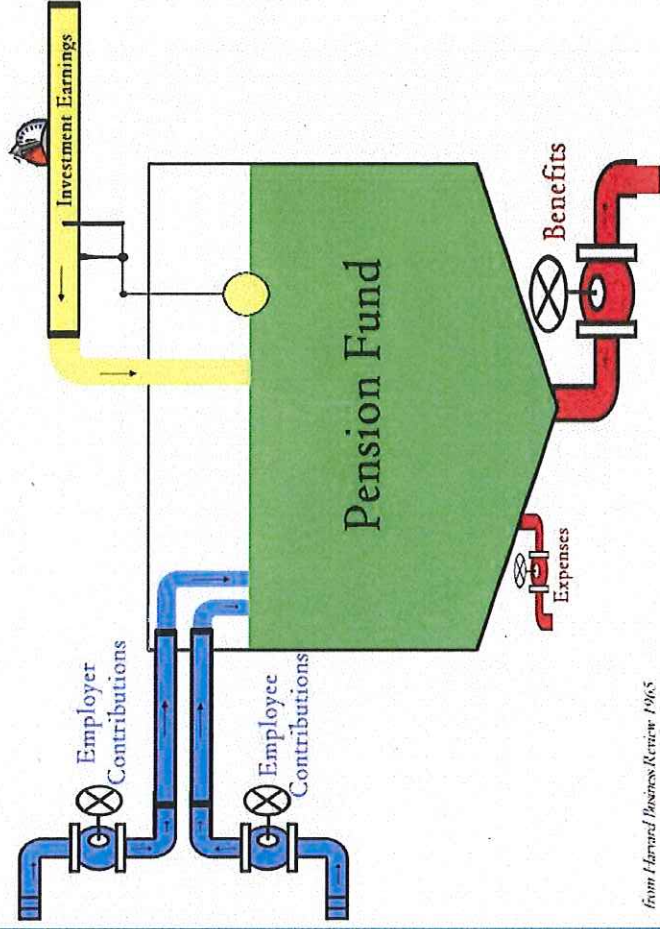


# Agenda

- The Actuarial Valuation Process
- Federated 2011 Actuarial Valuation
  - ▶ Historical Trends
  - ▶ Summary of 2011 Key Results
  - ▶ Changes Since the Prior Valuation
- Stress Testing the Future

# The Actuarial Valuation Process In General

1. Collect information
  - Participant data
  - Plan provisions
  - Financial
2. Apply assumptions
  - Demographic
  - Economic
3. Project all future benefit payments
4. Determine a present value of the benefits
5. Compare to assets
6. Calculate employer and employee contribution



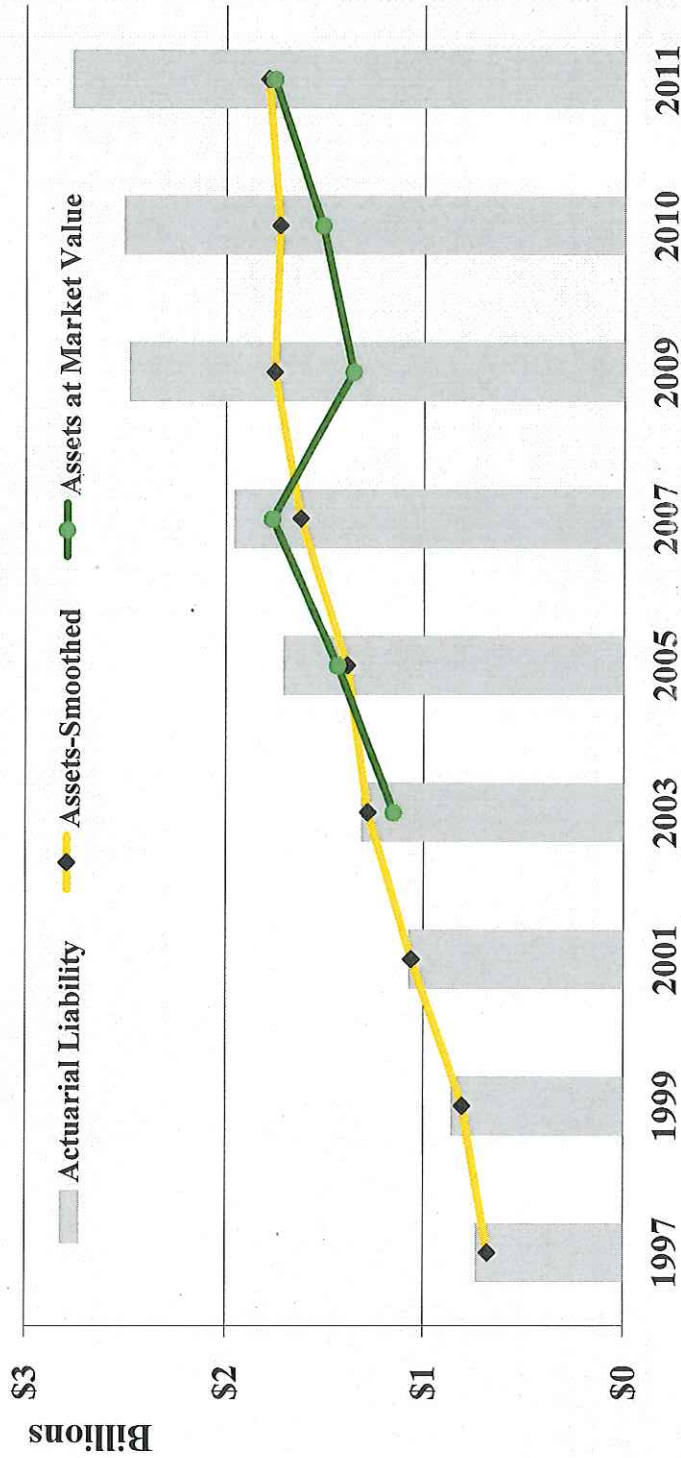
from Harvard Business Review 1965

# The Actuarial Valuation Process & Timing

- The June 30, 2011 valuation results are used to determine contribution and accounting requirements for the Fiscal Year Ending 2013
  - Member contribution rates
  - City contribution rates and amounts
  - Accounting requirements currently match funding, but GASB's proposed changes would separate accounting from funding effective for the Fiscal Year Ending 2013



# Historical Trends Assets and Liabilities



Funded Ratio  
UAL/(Surplus)  
(in millions)

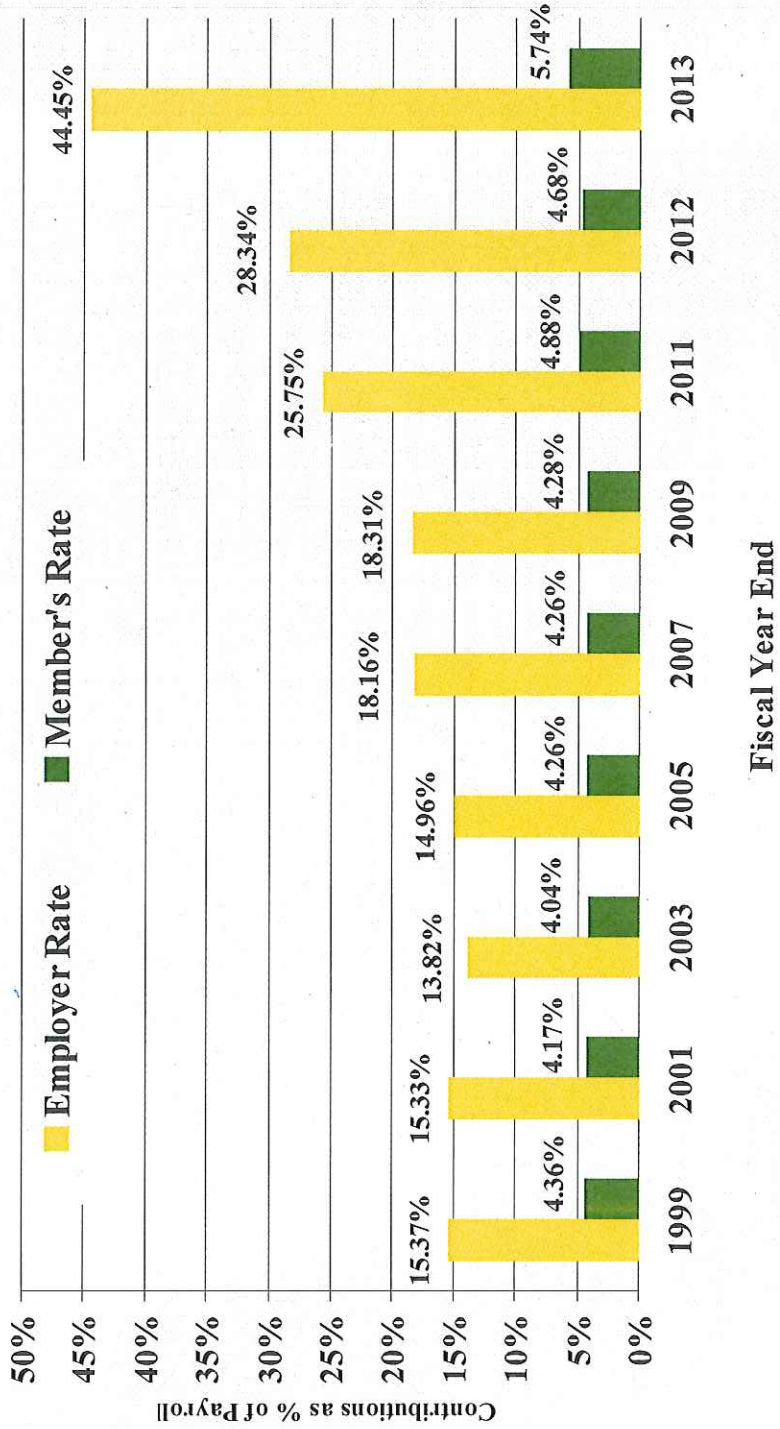
Year	Funded Ratio	UAL (Millions)	Surplus (Millions)
1997	92.3%	\$ 56.8	\$ 61.5
1999	93.3%	\$ 57.4	\$ 61.5
2001	98.9%	\$ 12.2	\$ 12.2
2003	97.6%	\$ 31.0	\$ 31.7
2005	80.9%	\$ 326.9	\$ 403.1
2007	82.8%	\$ 338.1	\$ 406.1
2009	70.7%	\$ 729.6	\$ 1,030.6
2010	68.9%	\$ 780.9	\$ 1,128.9
2011	64.6%	\$ 981.6	\$ 1,508.6

\* Market Value of Assets prior to 2003 were not reported separately for the Retirement Benefits



# Historical Trends Contribution Rates

The City of San Jose Federated Employees' Retirement System

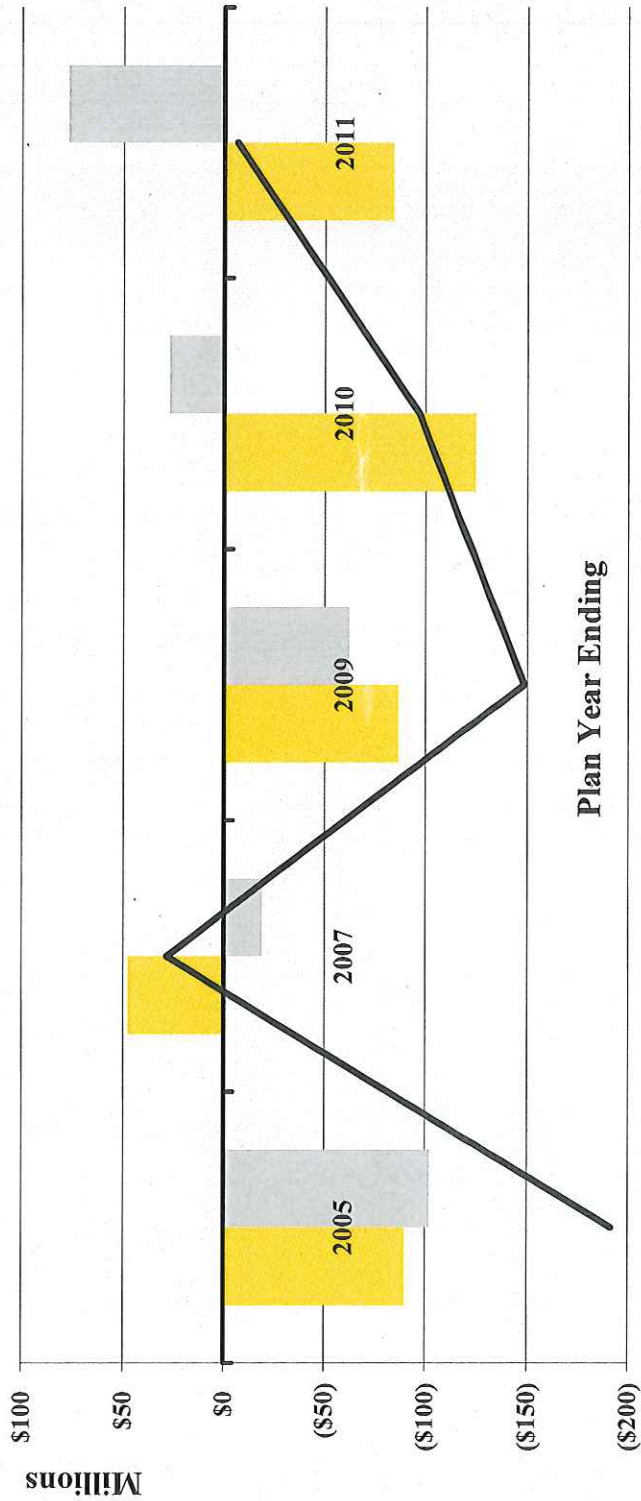




# Historical Gains and Losses

The City of San Jose Federated Employees' Retirement System

Investment G/(L)    Liability G/(L)    Net Experience G/(L)



# Summary of Key Valuation Results

Summary of Key Valuation Results		
	6/30/2011	6/30/2010
<b>Discount Rate</b>	<b>7.50%</b>	<b>7.95%</b>
Actuarial Liability (AL)	\$ 2,770,227	\$ 2,510,358
Actuarial Value of Assets (AVA)	<u>1,788,660</u>	<u>1,729,413</u>
Unfunded Actuarial Liability (UAL)	\$ 981,567	\$ 780,945
Funding Ratio - AVA	65%	69%
Market Value of Assets (MVA)	\$ 1,760,617	\$ 1,512,802
Funding Ratio - MVA	64%	60%
<b>Fiscal Year Ending</b>	<b>6/30/2013</b>	<b>6/30/2012</b>
Member Contribution Rate	5.74%	4.68%
City Contribution Rate	18.08%	12.76%
Normal Cost Rate	26.37%	15.58%
UAL Rate	<u>44.45%</u>	<u>28.34%</u>
Total City Rate	50.19%	33.02%
Total Contribution Rate		
Total Contribution Amount		
-if paid at the beginning of the year	\$ 102,972	\$ 86,888
-if paid at the end of the year	\$ 110,694	\$ 93,795

Amounts in thousands





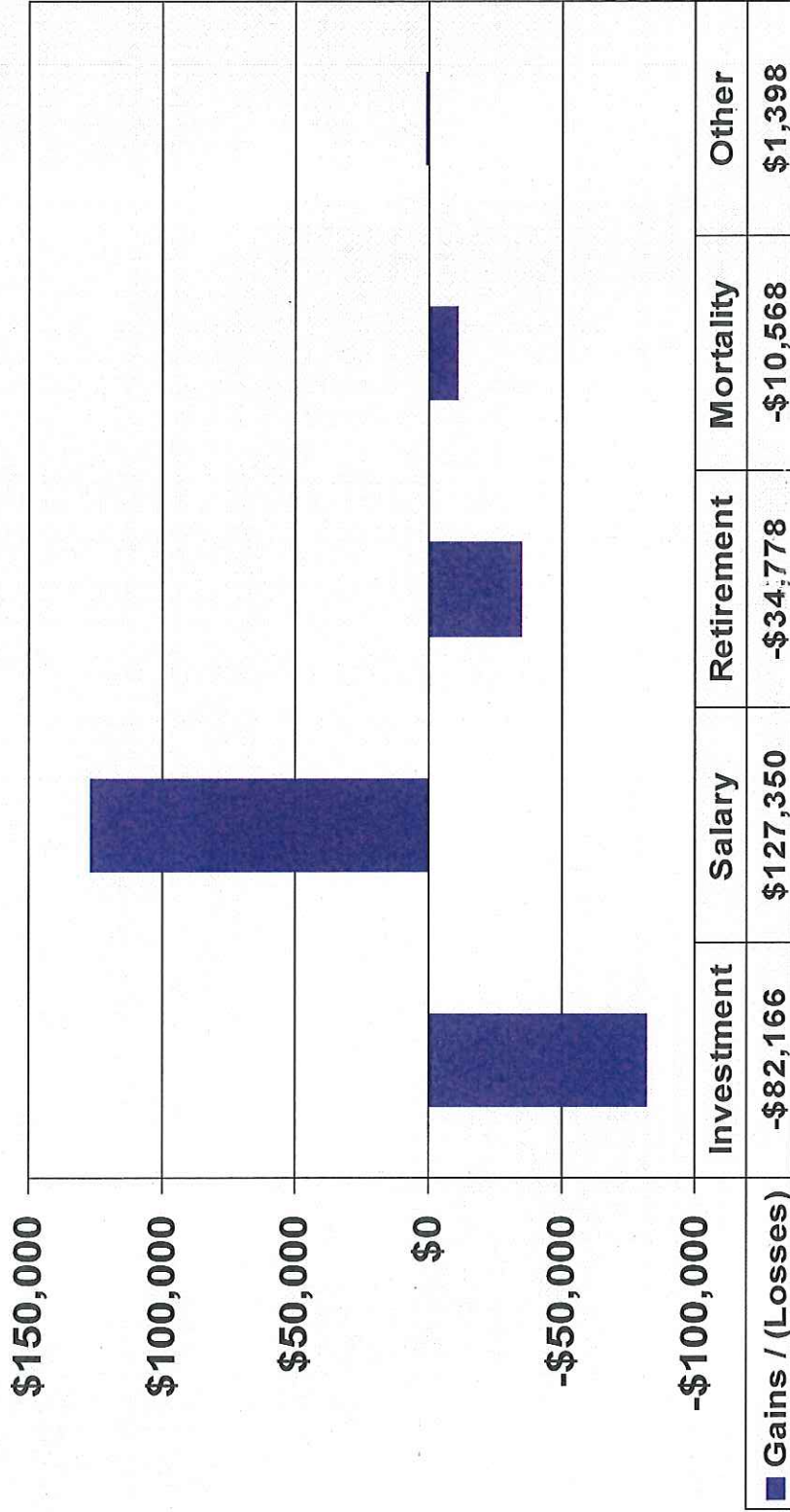


# Changes in Membership

Item	June 30, 2011	June 30, 2010	% Change
Active Counts	3,274	3,818	-14.2%
Terminated Vesteds	869	732	18.7%
Retirees	2,769	2,472	12.0%
Beneficiaries	449	428	4.9%
Disabled	210	211	-0.5%
Total City Members	7,571	7,661	-1.2%
Active Member Payroll	\$ 228,936,398	\$ 300,811,165	-23.9%
Average Pay per Active Member	69,926	78,788	-11.2%



# Experience Gains and Losses



The investment return on the market value of assets was 18.8%, but due to recognition of prior investment losses and deferred recognition of investment gains, the return on the actuarial value of assets was 5.5%

# Contribution Reconciliation

Item	Member	City Normal Cost	City UAL	City Total	City \$
1. FYE 2012 Contribution Rate	4.68%	12.76%	15.58%	28.34%	\$ 86.9
2. Plan Experience					
a) Change due to investment loss	0.00%	0.00%	2.69%	2.69%	\$ 6.2
b) Change due to demographic experience	0.14%	0.42%	-2.79%	-2.37%	\$ (5.5)
c) Change due to aggregate payroll decreasing	0.00%	0.00%	4.16%	4.16%	\$ (11.6)
3. Assumption Changes					
a) Change due to demographic assumption changes	0.57%	1.45%	2.09%	3.54%	\$ 8.2
b) Change due to explicit expense assumption	0.19%	0.51%	0.00%	0.51%	\$ 1.2
c) Change due to explicit SRBR assumption	0.00%	2.57%	0.00%	2.57%	\$ 6.0
d) Change due to economic assumption changes	0.16%	0.37%	4.64%	5.01%	\$ 11.6
4. FYE 2013 Contribution Rate	5.74%	18.08%	26.37%	44.45%	\$ 103.0

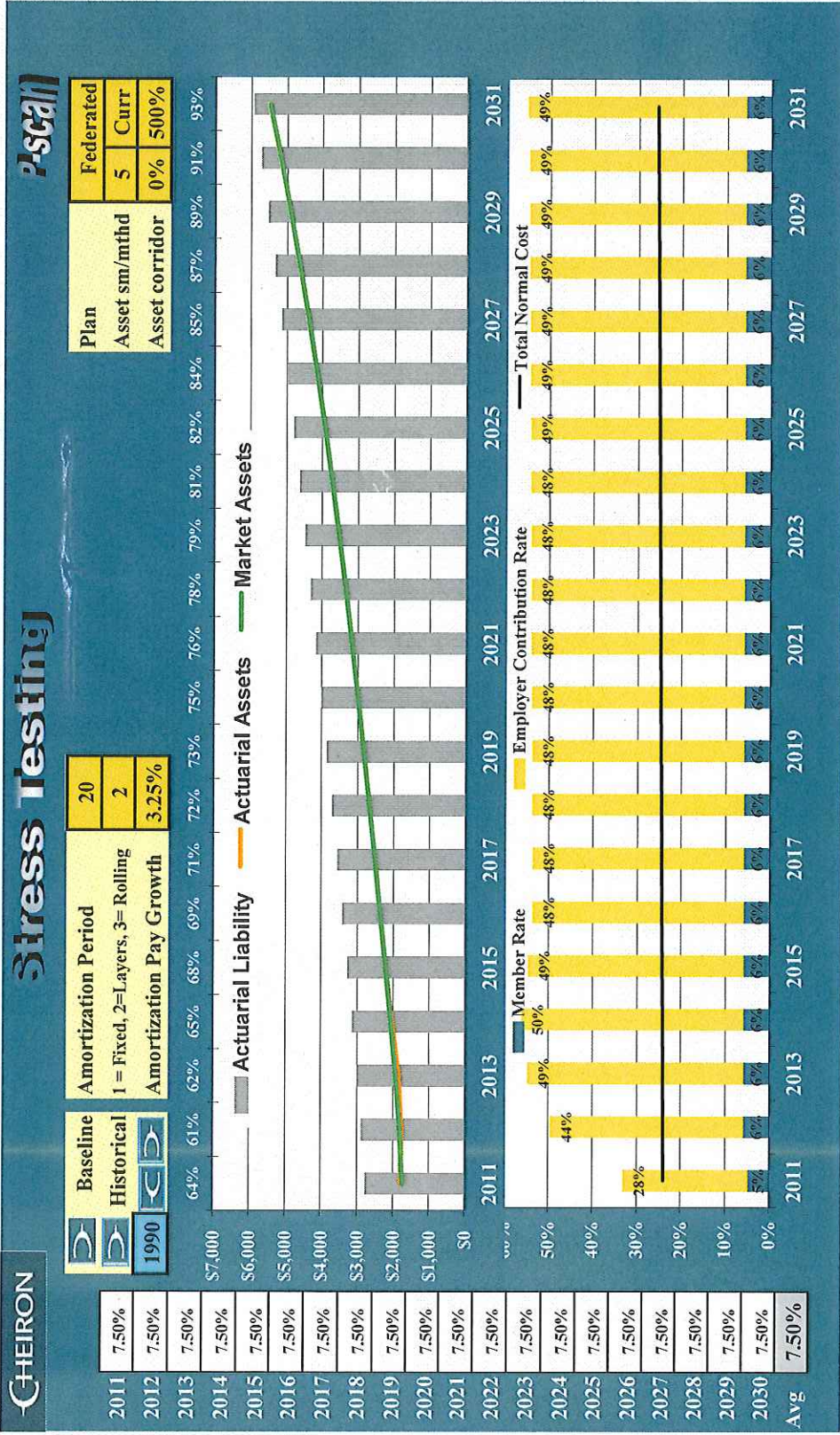
Amounts in millions

- Expected FYE 2013 City contribution from prior valuation was \$111 million
- Change due to economic assumption changes shown above includes the already anticipated impact of reducing the discount rate to 7.75%

# SRBR Calculations

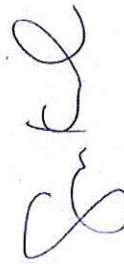
	Employee	SRBR	General	Total
<b>Total Earnings</b>				\$ 213,159,048
<b>Balance, July 1, 2010</b>	\$ 201,166,486	\$ 28,331,000	\$ 878,824,368	\$ 1,108,321,854
<b>Net Cashflow</b>				
Beginning of Year	\$ -	\$ -	\$ 33,410,021	\$ 33,410,021
Middle of Year	(13,906,729)	0	(58,269,263)	(72,175,992)
End of Year	0	0	<u>8,769,954</u>	<u>8,769,954</u>
<b>Total Net Cashflow</b>	(13,906,729)	0	(16,089,288)	(29,996,017)
<b>Crediting Rate</b>		7.95%	7.95%	
<b>Primary Interest Crediting</b>	5,561,930	2,252,315	80,084,444	87,898,689
<b>Balance, June 30, 2011</b>	\$ 192,821,687	\$ 30,583,315	\$ 942,819,524	\$ 1,166,224,526
<b>Excess Earnings</b>				
	\$ 0	12,526,036	112,734,323	125,260,359
<b>Balance, July 1, 2011</b>	\$ 192,821,687	\$ 43,109,351	\$ 1,055,553,847	\$ 1,291,484,885

# Stress Testing the Future



# Required Disclosures

- In preparing this presentation, we relied without audit, on information supplied by the San Jose Federated Employees' Retirement System.
- The actuarial assumptions, data and methods are those used in the preparation of the latest actuarial valuation report prepared for these plans as of June 30, 2011.
- The assumptions reflect our understanding of the likely future experience of the System and the assumptions as a whole represent our best estimate for the future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the System could vary from our results.
- We certify that, to the best of our knowledge, this presentation and its contents, which are work products of Cheiron, Inc., are complete and accurate and have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This presentation does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.
- Cheiron's presentation was prepared solely for the San Jose Federated Employees' Retirement System for the purposes described therein, except that the plan auditor may rely on the report solely for the purpose of completing an audit related to the matters herein. Cheiron does not intend to benefit any other person who receives the presentation and assumes no duty or liability to such a person.



Gene Kalwarski, FSA



William R. Hallmark, ASA