

***Prepared for:
The Defined Contribution and
Retirement Study Committee***

***Informational Presentation on the
Arizona State Retirement System
“Actuarial Valuation as of June 30, 2011”***

Prepared by:
Arizona State Retirement System

November 22, 2011

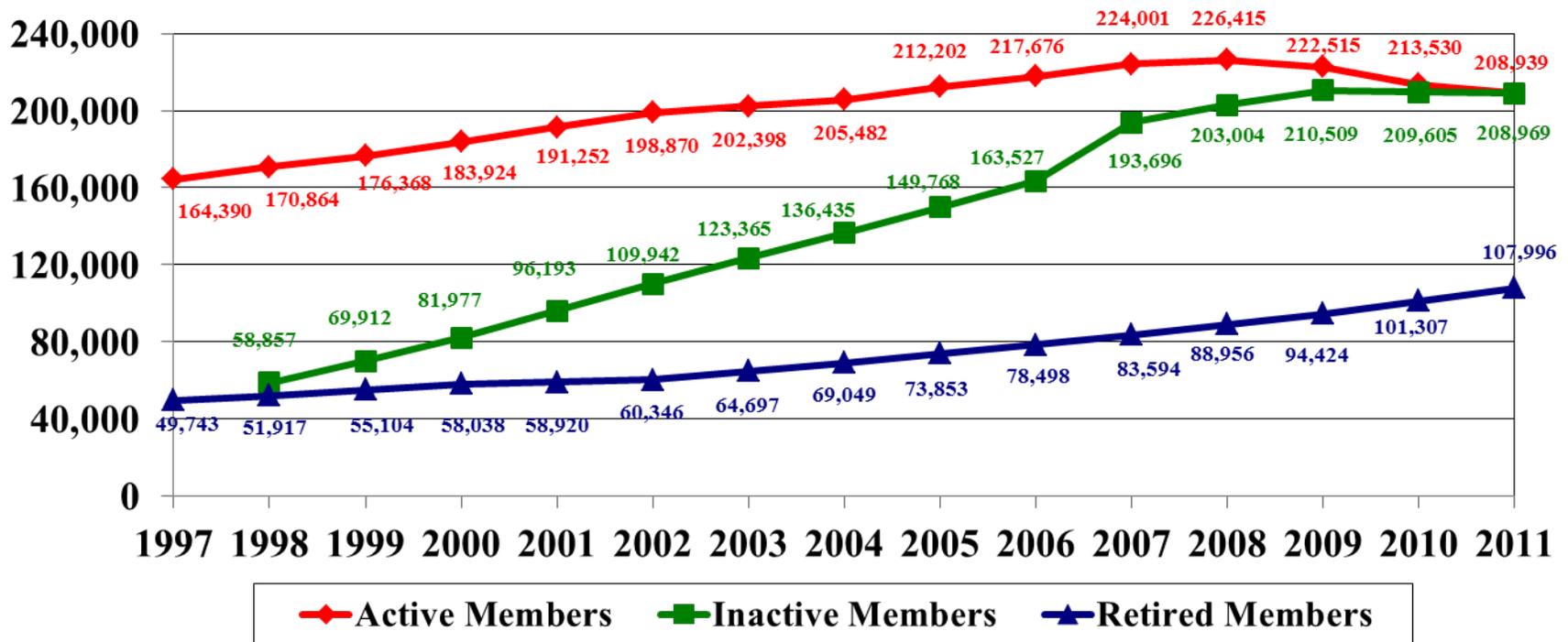


ASRS ACTUARIAL METHODS AND ASSUMPTIONS

1. **Investment yield**: 8% per annum net of all expenses.
2. **Salary increases**: 4.50% - 9.50% based on years of service.
3. **Mortality rates**: 1994 GAM Static, Projected to
4. **Amortization period**: Rolling 30-year (per statute).
5. **Actuarial value of assets**: 10-year smoothing period.
6. **Projected Unit Credit (PUC)**: (per statute).
7. **Level Dollar Amortization**



ACTIVE MEMBERS AND RETIRED MEMBERS

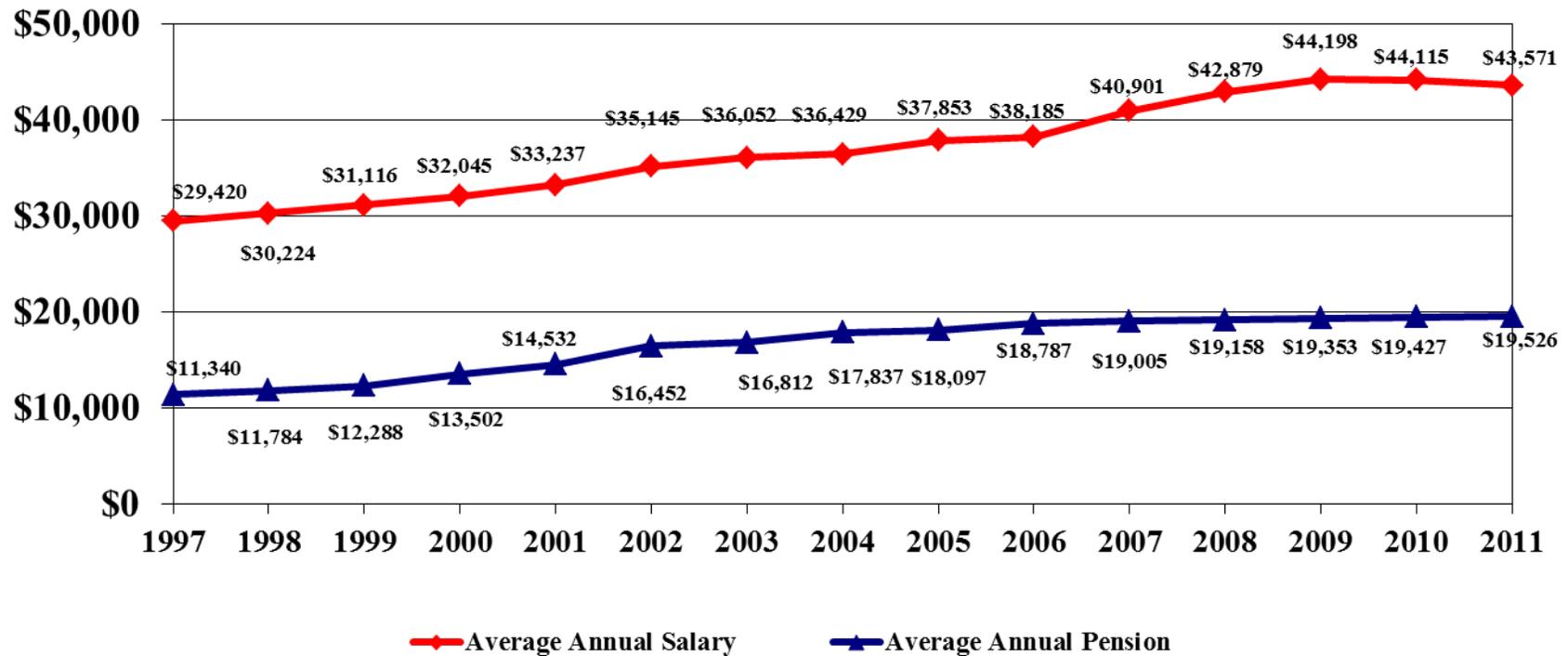


1.7% average increase in number of active members since 1997, (2.2%) since 2010
 10.2% average increase in number of inactive members since 1998, (0.3%) since 2010
 5.7% average increase in number of retired members since 1997, 6.6% since 2010

Excludes prior retirement plan referred to as the System



AVERAGE SALARY AND AVERAGE BENEFIT

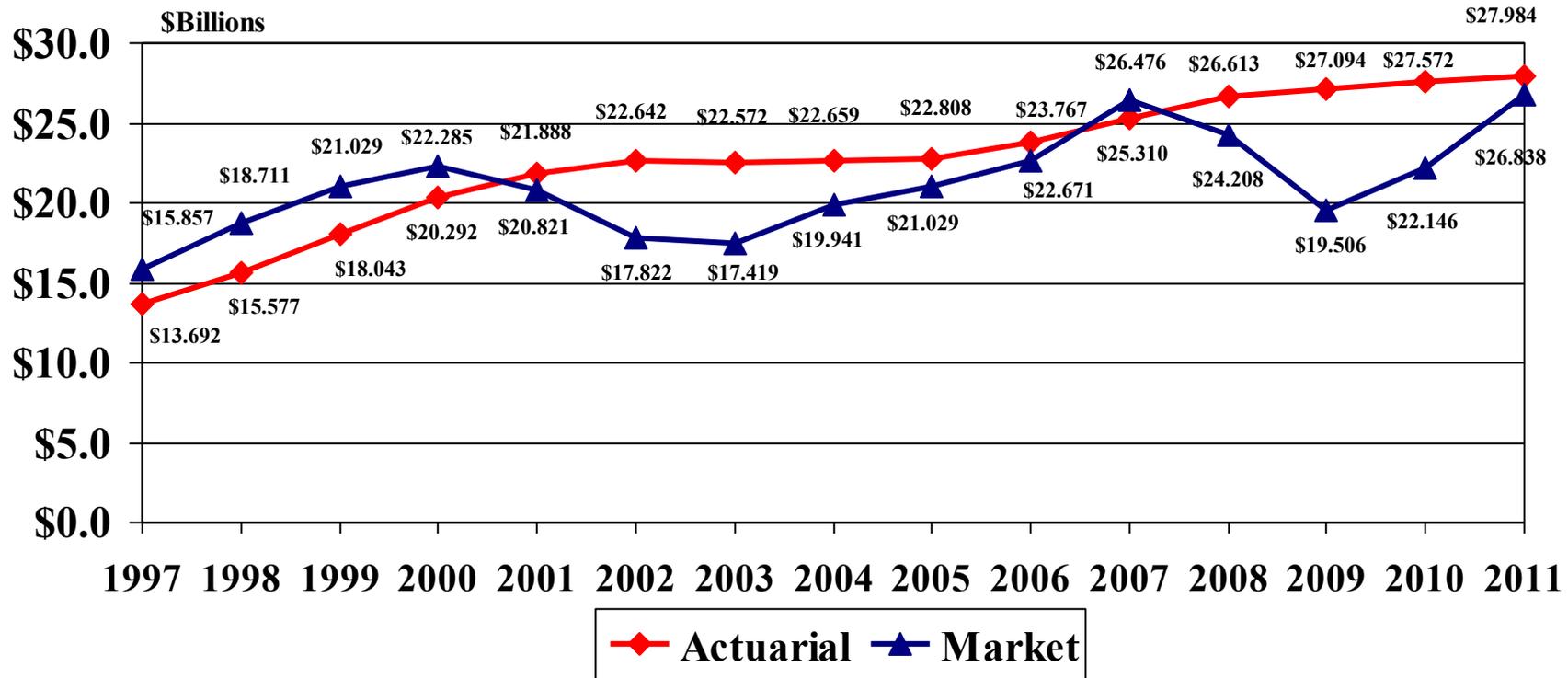


2.8% average increase in average annual salary since 1997, (1.2%) between 2010 and 2011
 4.0% average increase in average annual pension benefit since 1997, 0.5% between 2010 and 2011

Excludes prior retirement plan referred to as the System



MARKET AND ACTUARIAL VALUES OF ASSETS [401(a) only]



3.8% average increase in market value since 1997

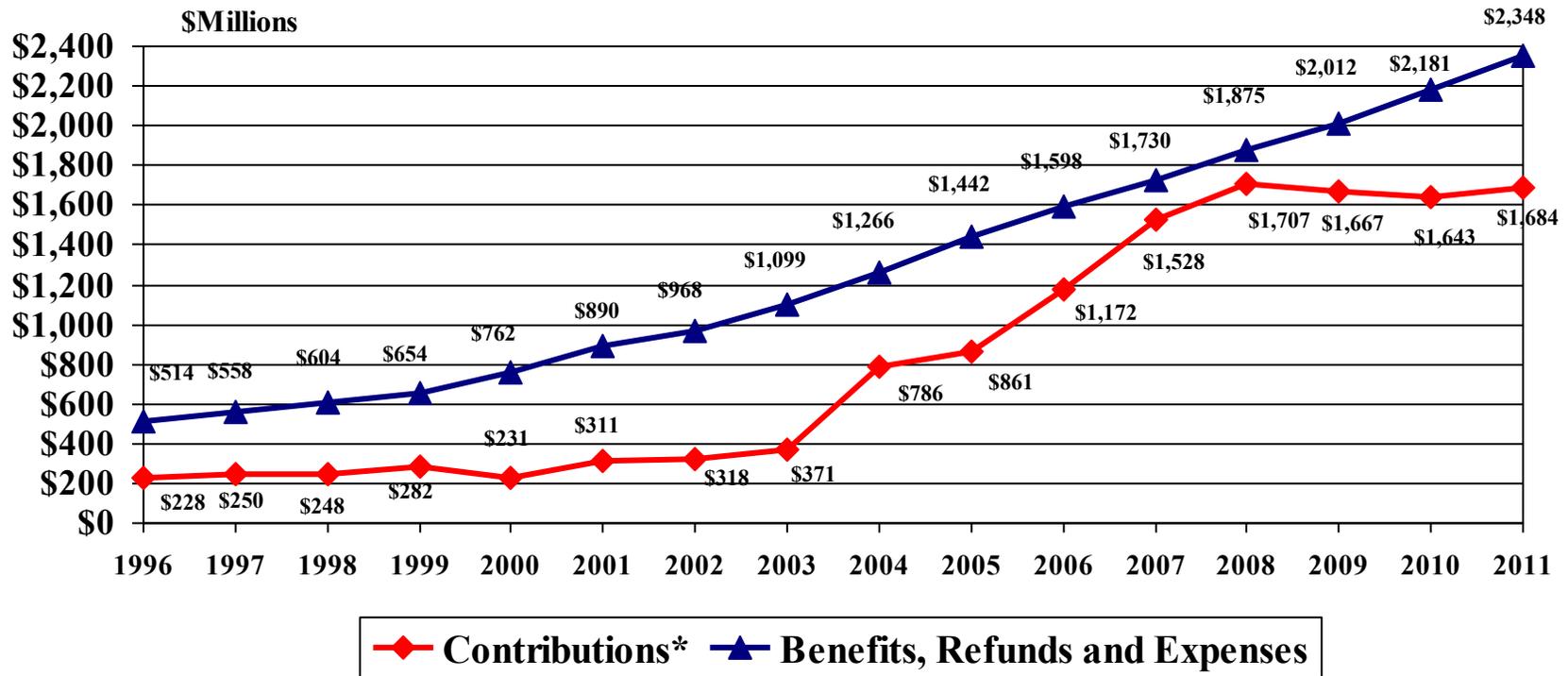
5.2% average increase in actuarial value since 1997

Actuarial assets are 104.3% of market. Actuarial assets exceed market assets by \$1.1 billion.

Includes prior retirement plan referred to as the System for 2010 and 2011



AGGREGATE CONTRIBUTIONS VS. BENEFITS, REFUNDS, AND EXPENSES [401(a) only]

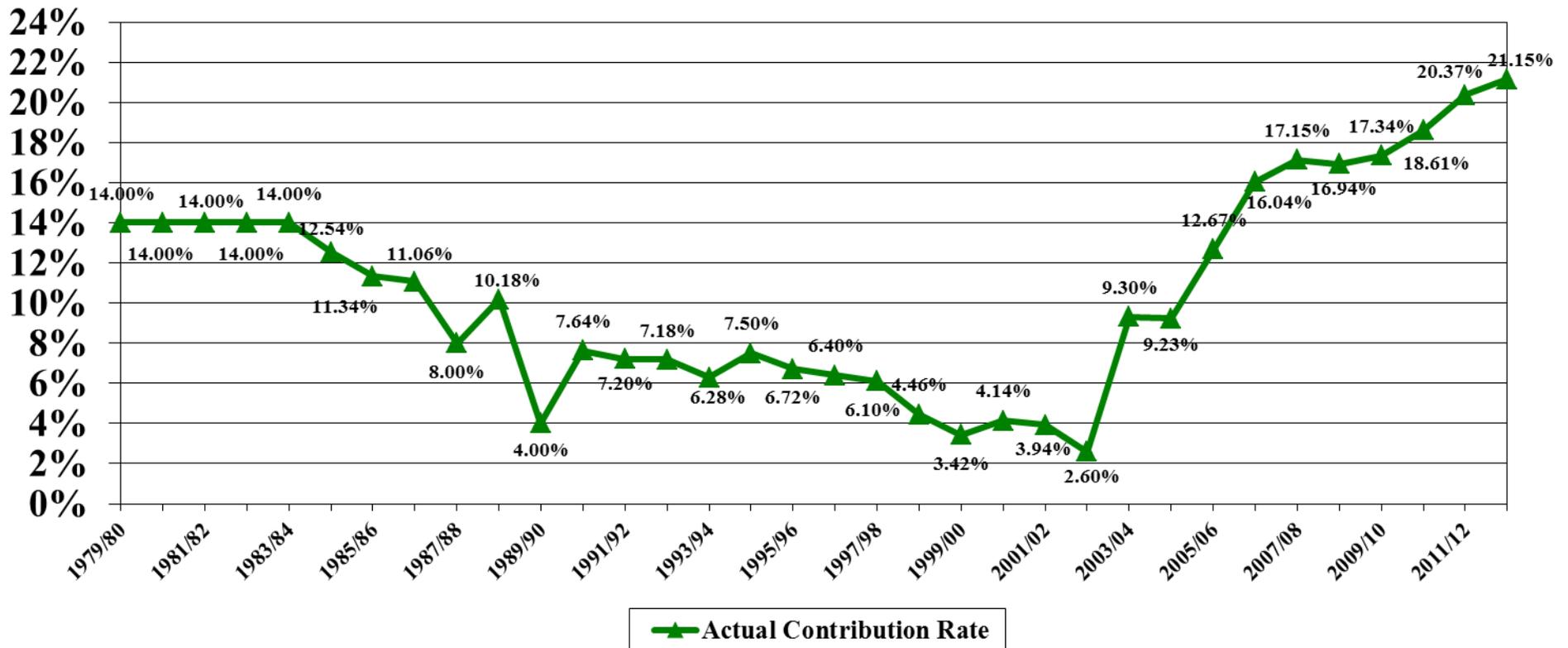


* Includes member contributions, employer contributions and service purchase contributions

Excludes prior retirement plan referred to as the System



CONTRIBUTION RATE FOR THE PLAN YEAR [401(a)]



Prior to 1997, 401(a) and 401(h) contribution rates are combined.

Includes prior retirement plan referred to as the System for 2010 and 2011



FUNDED STATUS SUMMARY

	2010		2011	
	Market Value	Actuarial Value	Market Value	Actuarial Value
Asset Amounts				
Pension 401(a)	\$ 22,146	\$	\$	\$
Health 401(h)		27,572	26,838	27,984
Total Plan	<u>996</u>	<u>1,251</u>	<u>1,195</u>	<u>1,247</u>
	\$ 23,142	\$ 28,823	\$ 28,033	\$ 29,231
Liabilities				
Pension 401(a)	\$ 36,073	\$ 36,073	\$ 37,051	\$
Health 401(h)	<u>1,485</u>	<u>1,485</u>	<u>1,504</u>	37,051
Total Plan	\$ 37,558	\$ 37,558	\$ 38,942	<u>1,504</u>
				\$ 38,942
Funded Status				
Pension 401(a)	61.4%	76.4%	72.4%	75.5%
Health 401(h)	67.1%	84.2%	79.5%	82.9%
Total Plan	61.6%	76.7%	72.7%	75.8%

Includes prior retirement plan referred to as the System



CONTRIBUTION RATE SUMMARY

	June 30, 2010			June 30, 2011		
	401(a)	401(h)	Total	401(a)	401(h)	Total
Total Contribution Rate	20.37%	0.63%	21.00%	21.15%	0.65%	21.80%
Employee Contribution Rate	11.13%	0.00%	11.13%	11.55%	0.00%	11.55%
Employer Contribution Rate	9.24%	0.63%	9.87%	9.60%	0.65%	10.25%
Funded Ratio – AVA	76.43%	84.23%	76.74%	75.53%	82.91%	75.82%
Funded Ratio – MVA	61.39%	67.03%	61.62%	72.44%	79.45%	72.71%



APPENDIX



PROJECTED FUNDED STATUS - AVA [401(a)]

Assumes future investment returns of 8.0% on Market Value of Assets and excludes future potential PBIs.

Valuation Date	No Growth in Employee Membership
6/30/2011	76%
6/30/2012	75%
6/30/2013	76%
6/30/2014	76%
6/30/2015	76%
6/30/2016	76%
6/30/2017	75%
6/30/2018	76%
6/30/2019	78%
6/30/2020	79%
6/30/2021	80%
6/30/2022	81%
6/30/2023	81%
6/30/2024	82%
6/30/2025	82%
6/30/2026	83%
6/30/2027	83%
6/30/2028	84%
6/30/2029	84%
6/30/2030	85%
6/30/2031	85%
6/30/2032	85%
6/30/2033	86%
6/30/2034	86%
6/30/2035	87%
6/30/2036	87%
6/30/2037	87%
6/30/2038	88%
6/30/2039	88%
6/30/2040	88%



PROJECTED FUNDED STATUS - MVA

[401(a)]

Assumes future investment returns of 8.0% on Market Value of Assets and excludes future potential PBIs.

Valuation Date	No Growth in Employee Membership
6/30/2011	72%
6/30/2012	73%
6/30/2013	74%
6/30/2014	74%
6/30/2015	75%
6/30/2016	76%
6/30/2017	77%
6/30/2018	78%
6/30/2019	79%
6/30/2020	79%
6/30/2021	80%
6/30/2022	81%
6/30/2023	81%
6/30/2024	82%
6/30/2025	82%
6/30/2026	83%
6/30/2027	83%
6/30/2028	84%
6/30/2029	84%
6/30/2030	85%
6/30/2031	85%
6/30/2032	85%
6/30/2033	86%
6/30/2034	86%
6/30/2035	87%
6/30/2036	87%
6/30/2037	87%
6/30/2038	88%
6/30/2039	88%
6/30/2040	88%



AGGREGATE PROJECTED CONTRIBUTION RATES [401(a)]

Assumes future investment returns of 8.0% on Market Value of Assets and excludes future potential PBIs.

Fiscal Year Beginning July 1	No Growth in Employee Membership
2012	21.15%
2013	21.66%
2014	21.78%
2015	21.99%
2016	22.03%
2017	21.96%
2018	22.04%
2019	21.74%
2020	20.94%
2021	20.19%
2022	19.78%
2023	19.45%
2024	19.12%
2025	18.80%
2026	18.46%
2027	18.10%
2028	17.80%
2029	17.50%
2030	17.19%
2031	16.86%
2032	16.55%
2033	16.26%
2034	15.98%
2035	15.71%
2036	15.44%
2037	15.20%
2038	14.98%
2039	14.77%
2040	14.59%
2041	14.42%