

**TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF ILLINOIS**

**June 30, 2011
Actuarial Valuation of
Pension Benefits**

December 2011

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OF THE STATE OF ILLINOIS**

**ACTUARIAL VALUATION
JUNE 30, 2011**

SECTION I — PRINCIPAL RESULTS

1. We have summarized below the principal results of this year's valuation along with a comparison with last year's valuation results. The schedule also includes the significant membership data and asset data used in the valuations.

SUMMARY OF PRINCIPAL RESULTS

Item	Year Ended June 30	
	2011	2010
Benefit Trust Reserve		
• Active members reported to the actuary:		
– Number	170,190	169,173
– Annual salaries (adjusted for data lag)	\$ 9,574,334,000	\$ 9,301,554,000
– Average age	41.7	41.7
– Average service	10.1	10.0
• Number of inactives	115,295	111,858
• Retirees and beneficiaries in receipt of benefits:		
– Number	101,352	97,796
– Annual annuities (at June 30)	\$ 4,418,017,000	\$ 4,107,592,000
• Assets		
– Market value	\$ 37,471,267,000	\$ 31,323,784,000
– Actuarial value	\$ 37,769,753,000	\$ 37,439,092,000
• Pension benefit obligation	\$ 81,299,745,000	\$ 77,293,198,000
• Unfunded pension benefit obligation (based on actuarial value of assets)	\$ 43,529,992,000	\$ 39,854,106,000
• Funded ratio:		
– Market value	46.1%	40.5%
– Actuarial value	46.5%	48.4%

SECTION V — MEMBERSHIP DATA

The June 30, 2011 actuarial valuation was based on the latest membership data available, which were submitted by the System for (i) active and inactive members as of June 30, 2010, and (ii) annuitants and survivor annuitants in receipt of benefits as of June 30, 2011. As part of the valuation procedure, annualized salaries and member account balances reported for active and terminated members were increased by 4% to adjust for the one year lag in the census information reported for active members.

While the actuary did not verify the data at their source, the actuary did perform tests for internal consistency and reasonableness in relation to the data submitted for the previous valuation.

A comparison of the data for the current and previous valuations is as follows:

Comparison of Membership Data

Data Item	Valuation June 30, 2011	Valuation June 30, 2010	Percentage Change
Active membership:			
• Full-time and regular part-time:			
➤ Number	137,711	138,180	(0.3)
➤ Annual Compensation	\$ 9,412,873,000	\$ 9,147,433,000	2.9
➤ Average Compensation	\$ 68,352	\$ 66,199	3.3
• Substitute, part-time, hourly paid (limited schedule)			
➤ Number	32,479	30,993	4.8
➤ Annual Compensation	\$ 161,461,000	\$ 154,121,000	4.8
➤ Average Compensation	\$ 4,971	\$ 4,973	(0.0)
• Total Number	170,190	169,173	0.6
Inactive Membership:			
• Eligible for deferred annuities	16,266	16,370	(0.6)
• Eligible for refunds or single sum benefits only	99,029	95,488	3.7
Annuitants (retirees, disabilitants and survivors):			
• Number	101,352	97,796	3.6
• Annual annuities	\$ 4,418,017,000	\$ 4,107,592,000	7.6
• Average annual annuities	\$ 43,591	\$ 42,002	3.8

Notes:

1. Rates of pay for individual teachers who were on full-time or regular part-time status at both June 30, 2010 and June 30, 2011 increased on average 5.67%, compared to the expected average increase of 7.11%.
2. The 3.7% increase in the number of inactive members eligible for refunds or single sum benefits only is due primarily to experience among substitutes and other members on a limited or flexible schedule.

SECTION VI — ASSETS

1. Market Value of Assets as of June 30, 2011						\$ 37,471,267,194
2. Determination of Deferred Gain (Loss)						
		<u>Market Return on Assets</u>				
<u>Fiscal Year Ending</u>	<u>Actual</u>	<u>Expected</u>	<u>Gain/(Loss)</u>	<u>% Deferred</u>		<u>Deferred Amount</u>
2011	\$ 7,234,539,490	\$ 2,616,321,757	\$ 4,618,217,733	80%		\$ 3,694,574,186
2010	3,646,060,161	2,388,884,043	1,257,176,118	60%		754,305,671
2009*	(8,654,702,712)	3,213,711,375	(11,868,414,087)	40%		(4,747,365,635)
2008*	-	-	-	20%		-
			\$ (5,993,020,236)			\$ (298,485,778)
3. Actuarial Value of Assets as of June 30, 2011 (1) - (2)						\$ 37,769,752,972
4. Actuarial Value of Assets as of June 30, 2010						\$ 37,439,091,771
5. Return on Actuarial Basis (3) - [(4) + (B) + (C) + (D)]						\$ 1,417,717,711
6. Expected Actuarial Return on Assets for Fiscal 2011 (G) x [(4) + .5 x ((B) + (C) + (D))]						\$ 3,136,122,899
7. 2011 Actuarial Basis Asset Gain / (Loss) (5) - (6)						\$ (1,718,405,188)
8. Actuarial Rate of Return (5) / [(4) + 0.5 x ((B) + (C) + (D))]						3.84%

* Prior to June 30, 2009, market value of assets was used. There are no deferred gains or losses prior to that date.

(A) Certified Market Value of Assets as of June 30, 2010		\$ 31,323,784,214
(B) Contributions in Fiscal Year 2011		3,234,205,731
(C) Benefit Payments in Fiscal Year 2011		(4,303,470,170)
(D) Administrative Expense in Fiscal Year 2011		(17,792,071)
(E) Actual Return in Fiscal Year 2011		<u>7,234,539,490</u>
(F) Market Value of Assets as of June 30, 2011		\$ 37,471,267,194
(G) Valuation Interest Rate as of June 30, 2010		8.50%
(H) Expected Market Return on Assets for Fiscal 2011 (G) x [(A) + .5 x ((B)+(C)+(D))]		\$ 2,616,321,757
(I) 2011 Market Basis Asset Gain / (Loss) (E) - (H)		\$ 4,618,217,733
(J) Market Rate of Return (E) / [(A) + 0.5 x ((B) + (C) + (D))]		23.50%