North Carolina Retirement Systems

Legislative Retirement System Principal Results of Actuarial Valuation as of December 31, 2012

January 16, 2014
Board of Trustees Meeting
Larry Langer and Mike Ribble

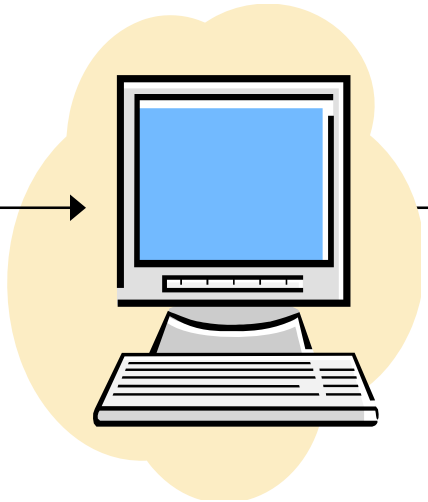
Purpose of the Annual Actuarial Valuation

- Each year, the actuary determines the amount of contributions to be made to the Retirement System during each member's career that, when combined with investment return, will be sufficient to pay for retiree benefits.
- This contribution is determined through the annual actuarial valuation, which is summarized in the annual actuarial valuation report.
- In addition, the annual actuarial valuation is performed to:
  - Determine progress on funding the Retirement Systems
  - Explore why the results of the current valuation differ from the results of the valuation of the previous year
  - Satisfy regulatory and accounting requirements

The Valuation Process

INPUT

- Member Data
- Asset Data
- Benefit Provisions
- Actuarial Assumptions
- Funding Methodology



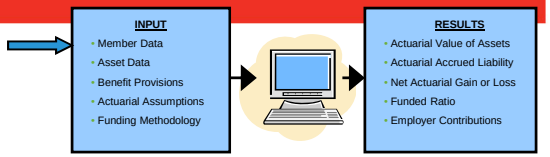
RESULTS

- Actuarial Value of Assets
- Actuarial Accrued Liability
- Net Actuarial Gain or Loss
- Funded Ratio
- Employer Contributions

Events During Year Ending December 31, 2012 Which Impacted the December 31, 2012 Actuarial Valuation Results

- Results of this valuation deviated from last year's valuation due to several causes:
  - Market value returns of 11.8% compared to 7.25% assumed
  - Valuation payroll increased by 1.7% compared to 3% assumed
  - Successful transition of valuation responsibilities to Buck Consultants
- Overall, the above resulted in:
  - A funded ratio that was somewhat higher than would have been expected based on last year's results, but was overall slightly lower because no employer contributions are currently being made
  - No employer required contributions for FYE June 30, 2015
  - Lower projected benefit amounts being accrued by active members

Member Data

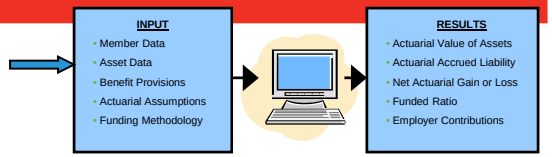


GROUP	NUMBER As of 12/31/12	NUMBER As of 12/31/11
Active members		
Number	169	170
Reported compensation	$3,510,220	$3,552,297
Valuation compensation	$3,740,429	$3,678,834
Retired members and survivors of deceased members currently receiving benefits		
Number	283	278
Annual allowance	$2,079,757	$2,051,304

Overall, the membership has remained relatively stable.

Refer to Tables on pages 3 and 4 of the actuarial valuation report for more information on the member data submitted for the valuation.

Asset Data

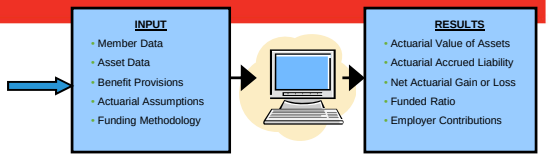


Transactions	December 31, 2012
Additions	
Contributions	$ 252,250
Net Investments Income	3,101,166
Total	3,353,416
Deductions	
Benefit Payments	2,122,629
Net Increase / (Decrease)	1,230,787
Net Assets Held in Trust for Pension Benefits	
Beginning of Year	27,183,483
End of Year	28,414,270
Estimated net investment return	11.81%

Returns were more than the 7.25% assumed rate of return.

Refer to Schedule A on page 11 of the actuarial valuation report, for more information on the plan assets submitted for the valuation.

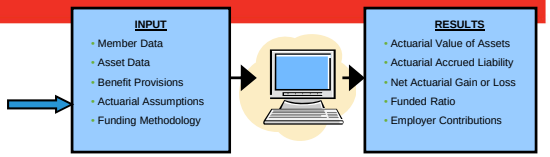
Benefit Provisions



- Benefit provisions are described in North Carolina General Statutes, Chapter 120
- There were no significant changes from the prior year's valuation.

Refer to Schedule C of the actuarial valuation report, beginning on page 14, for a summary of the benefit provisions submitted for the valuation.

Actuarial Assumptions

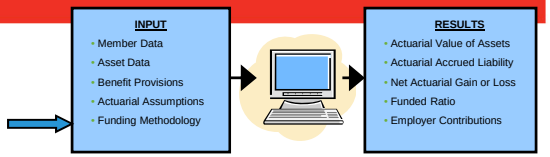


- Demographic (future events that relate to people)
  - Retirement
  - Termination
  - Disability
  - Death
- Economic (future events that relate to money)
  - Interest rate - 7.25% per year
  - Salary increase - 7.50% per year

Our next scheduled experience study will be prepared as of December 31, 2014 and presented to the Board in October 2015. Consideration may be given to preparing the experience review earlier to make assumptions and funding policy consistent with the other North Carolina Retirement Systems, as appropriate.

Refer to Schedule B of the actuarial valuation report, beginning on page 12, for more information on the actuarial assumptions used for the valuation.

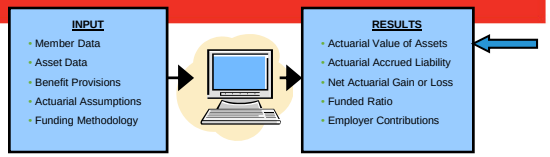
Funding Methodology



- The Funding Methodology is the payment plan for the Retirement System and is composed of the three following components:
  - Actuarial Cost Methods allocate costs to the actuarial accrued liability for past service and normal cost for current service
    - Board has adopted Projected Unit Credit as its actuarial cost method
  - Asset Valuation Methods smooth or average the market value returns over time to alleviate contribution volatility that results from market returns
    - 20% of market value plus 80% of expected actuarial value
  - Amortization Methods determine the payment schedule for unfunded actuarial accrued liability
    - Payment level: the payment is determined as a level dollar amount, similar to a mortgage payment
    - Payment period: an eight-year open amortization period

Schedule B of the actuarial valuation report, beginning on page 12, provides more information on the funding methodology.

Actuarial Value of Assets

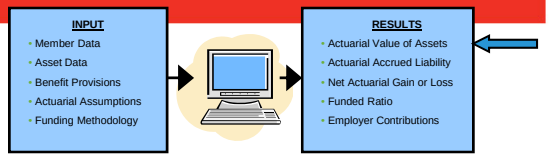


1.	Actuarial Value of Assets as of December 31, 2011	$	29,468,021
2.	2012 Net Cash Flow		
	a. Contributions		252,250
	b. Disbursements		2,122,629
	c. Net Cash Flow: (a) - (b)		(1,870,379)
3.	Expected Investment Return: [(1) x .0725] + [(2)c x .03625]		2,068,630
4.	Expected Actuarial Value of Assets as of December 31, 2012: (1) + (2)c + (3)		29,666,272
5.	Market Value of Assets as of December 31, 2012		28,414,270
6.	Excess of Market Value over Expected Actuarial Value of Assets: (5) - (4)		(1,252,002)
7.	20% Adjustment towards Market Value: (6) x .20		(250,400)
8.	Actuarial Value of Assets as of December 31, 2012: (4) + (7)		29,415,872
9.	Rate of investment return on actuarial value		6.37%
10.	Rate of investment return on market value		11.81%

The actuarial value of assets smooths investment gains/losses, resulting in less volatility in the employer contribution. However, low returns in the past result in $0.25 million asset loss recognition this year.

Refer to Schedule A on page 11 of the actuarial valuation report.

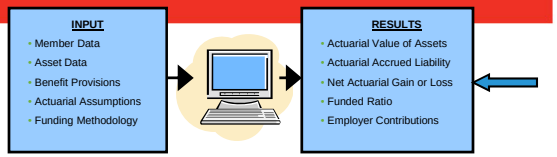
Principal Results



	December 31, 2012	December 31, 2011
Actuarial Value of Assets	$ 29,415,872	$ 29,468,021
Market Value of Assets	28,414,270	27,183,483
Actuarial Accrued Liability	$ 23,851,789	$ 23,756,551
Unfunded Actuarial Accrued Liability	(5,564,083)	(5,711,470)
Funded Ratio	123.3%	124.0%
Annual Required Contribution		
Fiscal Year Ending	June 30, 2015	June 30, 2014
Normal Cost	21.59%	20.99%
Disability Benefit	0.65	2.19
Accrued Liability	(22.24)	(23.18)
Total	0.00%	0.00%

Note that even though no contribution is required under the current funding policy, benefits under this System are accruing at 21.59% of pay. These accruals are currently being paid for out of assets in excess of the actuarial accrued liability. This is projected to be temporary – over the long term, contributions will migrate to 21.59% of pay. Consideration should be given to preparing for the need for higher contributions.

Net Actuarial Gain or Loss



Reconciliation of Change in Unfunded Actuarial Accrued Liability Since the Prior Valuation` (in Millions)

Unfunded accrued liability as of 12/31/11	$	(5.7)
Normal cost during 2012		1.0
Reduction due to actual contributions during 2012		(0.3)
Interest on unfunded accrued liability, normal cost and contributions		(0.4)
Asset (gain)/loss		0.3
Accrued liability (gain)/loss		(0.5)
Impact of legislative changes		0.0
Unfunded accrued liability as of 12/31/12	$	(5.6)

The accrued liability gain of $0.5 million means that the unfunded actuarial accrued liability was $0.5 million lower than we would have expected based on the assumptions.

The primary source of the accrued liability gain was lower reported compensation than assumed based on the prior valuation.

The asset loss of $0.3 million means that the asset valuation method resulted in a recognition of $0.3 million of deferred asset losses.

Refer to Section V on page 7 of the actuarial valuation report for more information on the Actuarial Gain or Loss submitted for the valuation.

Key Takeaways

- Market value returns of 11.8%
  - Compared to 7.25% assumed
- Valuation payroll increased by 1.2%
  - Compared to 3% assumed increase
- No employer required contributions for FYE June 30, 2015; that being said, over the next several years, contributions will likely increase to the current cost of benefits accruing of 21.59% of pay
- Overall, the Funded Ratio decreased from 124.0% (12/31/2011) to 123.3% (12/31/2012), primarily due to paying for benefit accruals out of assets in excess of actuarial accrued liability
- We may recommend that assumptions and methods be reviewed one year earlier than expected.

Key Takeaways

- The Legislative Retirement System is very well funded compared to peers. This is due to:
  - A history of appropriating and contributing the recommended contribution requirements
  - Assumptions that in aggregate are more conservative than peers

Questions?

THANK YOU