Pension Reporting for Local Governments *: Getting Ready For the GASB Changes*

VTGFOA Annual Meeting Workshop

June 5, 2014

- **Agenda:**
  - Review of Summary of Provisions of New Pension Standards (Update from previous June 2013 VLCT presentation)
  - Accounting Issues Related to Multiple-Employer Plans under New Pension Standards
    - Will focus primarily on VMERS but VSTRS will be discussed
  - Steps to Consider for Non VMERS Plans and VMERS Participating Employers

Vermont State Retirement System Administered in Treasurer's Office

- VSERS – Vermont State Employees' Retirement System
  - 8,158 active members
  - 796 inactive members
  - 741 terminated vested members
  - 5,795 retirees
- VSTRS – Vermont State Teachers' Retirement System
  - 10,101 active members
  - 2,322 inactive members
  - 751 terminated vested members
  - 7,743 retirees
- VMERS – Vermont Municipal Employees' Retirement System
  - 6,577 active members
  - 1,765 inactive members
  - 652 terminated vested members
  - 2,146 retirees

Collectively referred to as VSRS – $254.7 million paid in retirement benefits in FY2013

Types of Defined Benefit Plans

- **Single employer** plans provide benefits for a single employer
  - VSERS
  - Some Vermont municipalities have their own plans and do not participate in VMERS or have a plan in addition to VMERS

- **Cost-sharing multiple employer** plans provide benefits for multiple employers. Assets are pooled for investment purposes and can be used to pay the benefits of any employer
  - VMERS – participating municipalities bear the obligation
  - A single actuarial valuation is conducted for all of the employees of the participating governments
  - VSTRS – cost sharing multiple employer plan with a special funding arrangement
    - State is classified as a "nonemployer contributing entity"

- **Agent multiple employer** plans provide benefits to multiple employers. Assets are pooled for investment purposes, but held in separate employer accounts for the payment of benefits

Plan Type	Assets	Liabilities
Single Employer	Distinct and Separate	Distinct and Separate
Agent Multiple Employer	Pooled for Investment	Distinct and Separate
Cost-Sharing Multiple Employer	Pooled For Investment	Commingled

An Overview of VMERS

- Vermont Municipal Employees' Retirement System (VMERS) is the public pension plan provided by the State of Vermont for participating municipalities' employees. It was created in 1975 and is governed by Vermont Statute Title 24, Chapter 125

- Board of Trustees:
  - Steven Jeffrey Chair, Employer Representative
  - Thomas Golonka, Employer Representative
  - Peter Amons, Employee Representative
  - David Rowlee, Employee Representative
  - Elizabeth Pearce , State Treasurer Ex-Officio

- Plan has approximately 450 participating entities

- As of March 31, 2014, the plan has assets of just over $501 million

VMERS Membership
(as of July 1, 2013)

Member Type	Group A	Group B	Group C	Group D	Total
Active, Vested	1,621	1,941	450	90	4,102
Active, Not Vested	996	1,185	257	37	2,475
Terminated Vested	368	262	18	4	652
Inactive	951	739	67	8	1,765
Retired	877	1,023	228	18	2,146
Total	4,813	5,150	1,020	157	11,140

VMERS Funding Progress

(amounts in Thousands)

Year Ending 6/30	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded ALL (UAAL)	Funded Ratio	Covered Payroll	UAAL as % of Payroll
2013	**$446,236**	**$528,426**	**$82,190**	**84.4%**	**$220,372**	**37.3%**
2012	417,443	488,572	71,129	85.4%	215,075	33.1%
2011	402,550	436,229	33,679	92.3%	205,589	16.4%
2010	376,153	409,022	32,869	92.0%	202,405	16.2%
2009	331,407	366,973	35,566	90.3%	191,521	18.6%
2008	348,740	343,685	-5,055	101.5%	175,894	-2.9%
2007	325,774	309,853	-15,921	105.1%	162,321	-9.8%
2006	288,347	276,552	-11,795	104.3%	148,815	-7.9%
2005	259,076	248,140	-10,936	104.4%	146,190	-7.5%
2004	232,890	225,092	-7,798	103.5%	135,351	-5.8%
2003	222,854	218,533	-4,321	102.0%	126,216	-3.4%
2002	193,278	176,109	-17,169	109.7%	106,986	-16.0%
2001	177,928	158,786	-19,142	112.1%	101,873	-18.8%
2000	161,900	138,697	-23,203	116.7%	87,147	-26.6%
1999	137,454	114,481	-22,973	120.1%	70,808	-32.4%
1998	113,678	102,005	-11,673	111.4%	87,328	-13.4%
1997	96,196	85,686	-10,510	112.3%	70,800	-14.8%

Municipal Retirement System

Category	2010	2011	2012	2013
Employee Contributions	$ 10,711,600	$ 11,702,728	$ 11,337,926	$15,060,665
Employer Contributions	$ 10,592,919	$ 11,117,363	$ 11,532,230	12,014,186
Other Income	$ 203,549	$ 266,425	$ 118,191	170,381
Investment Income (Reduction)	$ 47,598,096	$ 66,957,781	$ 7,671,464	34,838,507
Total Sources….				62,083,739
Retirement Benefits	$ 11,073,098	$ 12,298,902	$ 14,214,160	16,101,187
Refunds	$ 1,127,574	$ 1,275,979	$ 1,664,687	1,587,311
Administrative Expenses	$ 393,947	$ 569,603	$ 672,851	749,447
Other Expenses	$ 795,522	$ 886,709	$ 469,599	999,434
Total Uses….				19,437,379
Addition (Reduction) to Net Assets Held in Trust for Pension Benefits	$ 55,716,023	$ 75,013,104	$ 13,638,514	$42,646,360

VMERS Facts

- VMERS benefits are funded by member contributions, employer contributions, and net investment returns
- Investment returns historically provide the majority of funding for pension benefits
- VMERS is currently 84.4% funded. Much of the unfunded liability is related to investment performance in the Great Recession while recent smaller amounts are attributable to retirement experience, demographic or economic assumptions
- Employer rates are set by the VMERS Board of Trustees every year after an annual actuarial valuation is conducted by an independent actuary
- Member rates are set by the Legislature although the Board makes recommendations

VMERS Contribution Chart

VMERS EMPLOYER CONTRIBUTION RATES						VMERS EMPLOYEE CONTRIBUTION RATES				
	GROUP A	GROUP B	GROUP C	GROUP D			GROUP A	GROUP B	GROUP C	GROUP D
1-Jul-99	4.200%	5.600%	6.500%			1-Jul-99	3.000%	5.000%	11.000%	
1-Jul-00	4.000%	5.000%	6.000%			1-Jul-00	2.500%	4.500%	9.000%	
1-Jul-10	4.000%	5.000%	6.500%	9.500%		1-Jul-10	2.500%	4.500%	9.250%	11.000%
1-Jul-12	4.000%	5.000%	6.500%	9.500%		1-Jul-12	2.500%	4.500%	9.250%	11.000%
7/1/2013	4.000%	5.125%	6.625%	9.625%		7/1/2013	2.500%	4.625%	9.375%	11.125%
1/1/2014	4.000%	5.125%	6.750%	9.625%		1/1/2014	2.500%	4.625%	9.500%	11.125%
7/1/2014	4.000%	5.375%	6.875%	9.750%		7/1/2014	2.500%	4.750%	9.625%	11.250%
1/1/2015	4.000%	5.375%	7.000%	9.750%		1/1/2015	2.500%	4.750%	9.750%	11.250%

What Do the New Standards Mean for VMERS?

Current GASB:

- Employers only report a liability if they fail to make the full amount of their contractually required contribution to the plan. Not an issue for current participating employers
- Pension expense = pension contribution
- Does not require actuarial presentation by participating employers

New Standard:

- The participating municipality will report a net pension liability based on its proportion of the collective net pension liability of all of the governments participating
- Proportion is based on contributions (the use of the government's long-term expected contribution effort to the plan divided by those of all government in the plan is recommended)
- Since all employers (within each group) in VMERS pay the same actuarially determined contribution rate as a percentage of payroll, the proportionate share can be determined based on the proportionate share of expected payroll
- Changes will begin in 2014 for the State CAFR, including VMERS disclosures (although State will have a zero NPL), effective FY2015 for participating municipalities.

What Does it Change?

- GASB Statement No. 25 and 50:
  - Financial Reporting for Pension Plans
  - Amended by GASB Statement No. 67
- GASB Statement No. 27 and 50:
  - Accounting for Pensions by Employers
  - Amended by GASB Statement No. 68

When Does This Go Into Effect?

- GASB 67 Plan Reporting:
  - Effective for fiscal years beginning after June 15, 2013
  - For plans with a December 31 fiscal year end, December 31, 2014 financial statements
  - For plans with a June 30 fiscal year end, June 30, 2014 financial statements

- GASB 68 Employer Reporting:
  - Effective for fiscal years beginning after June 15, 2014
  - For employers with a December 31 fiscal year end, December 31, 2015 financial statements
  - For employers with a June 30 fiscal year end, June 30 , 2015 financial statements

GASB Statement 67

- Replaces current Statement of Plan Net Assets with Statement of Fiduciary Net Position (GASB 63)
- Replaces current Statement of Changes in Plan Net Assets with Statement of Changes in Fiduciary Net Position
- Revisions to Notes to the Financial Statements
- Required Supplementary Information (RSI): Ten-year Funding Trends
- Required Supplementary Information (RSI) Schedule of the Net Pension Liability

What are the Impacts of GASB 67?

- Few changes from GASB 25 for financial statements:
  - Continue to present two financial statements
    - Statement of Fiduciary Net Position
    - Statement of Changes in Fiduciary Net Position
    - Generally similar to current guidance

- Notes to Basic Financial Statement Section:
  - Additional Information on money-weighted internal rate of return on plan investments, net of investment expenses
  - New note disclosure on **Net Pension Liability or NPL**
  - Disclosure of discount rates determined by cash flow testing
  - Measurement of the NPL is as of fiscal year end

- Required Supplemental Information (RSI)
  - RSI changes primarily to reflect changes in measurement of liabilities of employers
  - RSI schedules prospective (except for contribution schedule) if information not initially available

What are the Impacts of GASB 68?

- Net Pension Obligation (NPO) on the government wide financial statements will be replaced by a Net Pension Liability (NPL)
  - On Market Value basis
  - Entry Age Normal Cost Method must be used (used in VSTRS and VSERS currently, different method for VMERS)

- Significant impact in first year due to NPL impact vs. NPO

- Discount rate equal to expected investment rate of return, except for:
  - Benefit payments not expected to be funded
  - Discounted at a high quality 20-year tax-exempt municipal bond index rate
  - "Run-out date" projections used to determine cross-over point
  - More problematic for systems currently using "open amortization"

- In prior standard, the Annual Required Contribution (ARC) was the basis of a funding strategy

- No ARC equivalent in the new standards

What are the Impacts of GASB 68?

- In current standard, the focus is on whether the government is making its ARC contributions to adequately fund the plan
- Under the new standard, the focus is on the size and growth of the NPL
- These standards do not change the VMERS funding methodology established in State Statute
- Will lead to more volatility in the NPL and funded ratio reported for accounting purposes

The Big Picture View…

- Total pension Liability (TPL)= Actuarial Accrued Liability using Entry Age Normal Cost Method (method currently used by VSERS and VSTRS)

- Net pension Liability (NPL) = TPL minus the Plan's Fiduciary Net Position (PFNP)

- PFNP = Fair Value of Plan Assets

- Pension Expense (PE)= Change in NPL from one year to the next

What is NPL?

- Net Pension Liability (NPL) = Difference between Total Pension Liability (TPL) and the plan's fiduciary net pension position
- Uses fair (market) value of assets
- Incorporates past service liability
- Includes effects of projected future salary increases and COLAs
- Must use Entry Age Normal (EAN) method (pure form, no variations)
- Discount rate requirement

Recognition of Changes to the NPL

- Most recognized as pension expense in the period of the change:
  - Current period service cost (this is essentially the same as normal cost or pension benefits earned during the reporting period)
  - Interest on total pension liability
  - Changes in benefit terms
  - Long term expected rate of return on pension plan investments

- Others recognized as deferred outflows/inflows of resources with expense recognized over defined future periods:
  - Changes of economic and demographic assumptions
  - Differences between expected and actual experience from sources other than investments
  - Difference between projected earnings on investments and actual investment earnings

Recognition in Pension Expense

- Full amount of change in NPL due to all benefit changes (for actives and retirees) being recognized immediately
- Demographic gains/loss and assumption changes are expensed over average expected working lifetime of all members (includes retirees)
- Maximum five year expensing of investment gains and losses

Sample Presentation of Impacts

Buck Consultants estimated the impact of GASB changes in a "Sample Plan"

- Compared estimated NPL (GASB 68) to NPO (GASB 27) for a local plan
- As if GASB 68 in effect for current and prior to valuations
- Basis for NPL estimates in the sample:
  - Assume current discount rate (7.25%) not impacted by asset "run out" date
  - Entry Age Normal cost method for accrued liabilities
  - Market Value of Assets
  - All other assumptions based on actuarial valuations as of 12/31/2009, 12/31/2010 and 12/31/2011

GASB Estimates for Local Plan

Estimated NPL (GASB 67/68) vs. NPO (GASB 25/27)

GASB 67/68			
Valuation Date	**12/31/2011**	**12/31/2010**	**12/31/2009**
Market Value of Assets	$ 17,908,429,907	$ 17,758,651,398	$ 16,137,374,092
Entry Age Accrued Liability	19,899,555,149	$ 19,042,111,838	$ 18,335,809,427
Unfunded Actuarial Accrued Liability	$ 1,991,125,242	$ 1,283,460,440	$ 2,198,435,335
Funded Ratio	90.0%	93.3%	88.0%
Run Out Date	None	None	None
Discount Rate	7.25%	7.25%	7.25%
Measurement Date	12/31/2011	12/31/2010	12/31/2009
Reporting Date (fiscal year ending)	**6/30/2012**	**6/30/2011**	**6/30/2010**
Net Pension Liability (NPL)* (balance sheet liability)	$ 1,991,125,242	$ 1,283,460,440	$ 2,198,435,335

GASB 25/27			
Valuation Date	**12/31/2011**	**12/31/2010**	**12/31/2009**
Actuarial Value of Assets	$ 19,326,359,293	$ 18,570,513,903	$ 17,723,253,496
Frozen Entry Age Accrued Liability	$ 19,373,799,717	$ 18,646,430,030	$ 17,804,791,750
Unfunded Actuarial Accrued Liability	$ 47,440,424	$ 75,916,127	$ 81,538,254
Funded Ratio	99.8%	99.6%	99.5%
Run Out Date	N/A	N/A	N/A
Discount Rate	7.25%	7.25%	7.25%
Reporting Date (Fiscal Year Ending)	**6/30/2012**	**6/30/2011**	**6/30/2010**
Net Pension Obligation (NPO)** (balance sheet liability)	N/A	N/A	N/A

* Each participating employer will need to disclose their proportionate share of the Net Pension Liability
** Each participating employer reports their Net Pension Obligation

Source: Buck Consultants

To Summarize…

The following will be required on the financial statements of Vermont municipalities either in VMERS or with their own retirement plans:

- Net Pension Liability
- Pension Expense
- Pension-related deferred outflows of resources and deferred inflows of resources

For single-employer defined benefit plans, each employer will recognize 100% of the above amounts for each plan

For cost-sharing multiple-employer plans (VMERS), participating employers will recognize their proportionate share of the collective amounts for the plan as a whole

Required Disclosures

- Plan description, including benefits and terms, covered employees and contribution requirements
- Aggregate Information presenting the total of the employer's pension liabilities
- Assumptions including significant economic and demographic assumptions and assumptions related to the discount rate, including:
    - Inflation rate and long-term expected return on investments and a description of how it was determined, including significant methods and assumptions;
    - Additional information related to the plan's discount rate, including periods over which the long-term rate applies;
    - Asset allocation and expected real return for each major asset class; and
    - Sensitivity of the NPL to a plus/minus 1-percentage point change in the single discount rate

RSI Changes

Includes series of ten-year schedules (prospective)

- Annual money-weighted return on plan investments
- NPL and related ratios
- Changes in NPL components by source (single and agent employers)
- Schedule of proportionate share of NPL (cost-sharing multiple employer plans)
- Contribution schedules on actuarially determined contributions (if calculated) or of statutorily established employer contributions

What Does this mean to you in 2014?

- Different rules if plan issues its own financial statements (VSRS systems do not but are part of the State's CAFR)
- If a plan issues a stand-alone GAAP-basis financial statement, GASB 67 will be implemented in the plan's 2014 statements. If an employer's GAAP-basis 2014 financial statements presents the plan as a fiduciary fund, then include any GASB 67 disclosures "essential to a fair presentation," along with its GASB 27 compliance
- In Vermont, where pension plans generally do not issue stand-alone GAAP basis financial statements:
  - The employer's GAAP-basis 2014 financial statement presents the plan as a fiduciary fund, then include all GASB 67 disclosures along with its GASB 27 compliance

Source: Paragraph 5, Footnote 9 and 11 of GASB 67, Q&A 2 of GASB 67 IG, and GASB 14 cited in GRS, "the Devil's in the Details", Florida GFOA, April 2014

What Does this Mean in 2014?

- VMERS Participants:
  - GASB 67 will have no impact on financial statements of VMERS employers
    - Pension expense = pension contribution
  - GASB 67 will have some limited impact through testing of census data (discussed later in presentation)
  - GASB 67 will provide the starting value on which your FY15 pension expense will be developed

- Non-VMERS Pension Plans:
  - You will need to implement GASB 67 if you issue GAAP-basis financial statements

- Some communities have their own plan and also participate in VMERS for selected classes of employees. Both will apply.

If you have your own plan in place of, or in addition, to VMERS…

- Will report note disclosures for GASB 67 (FY2014)

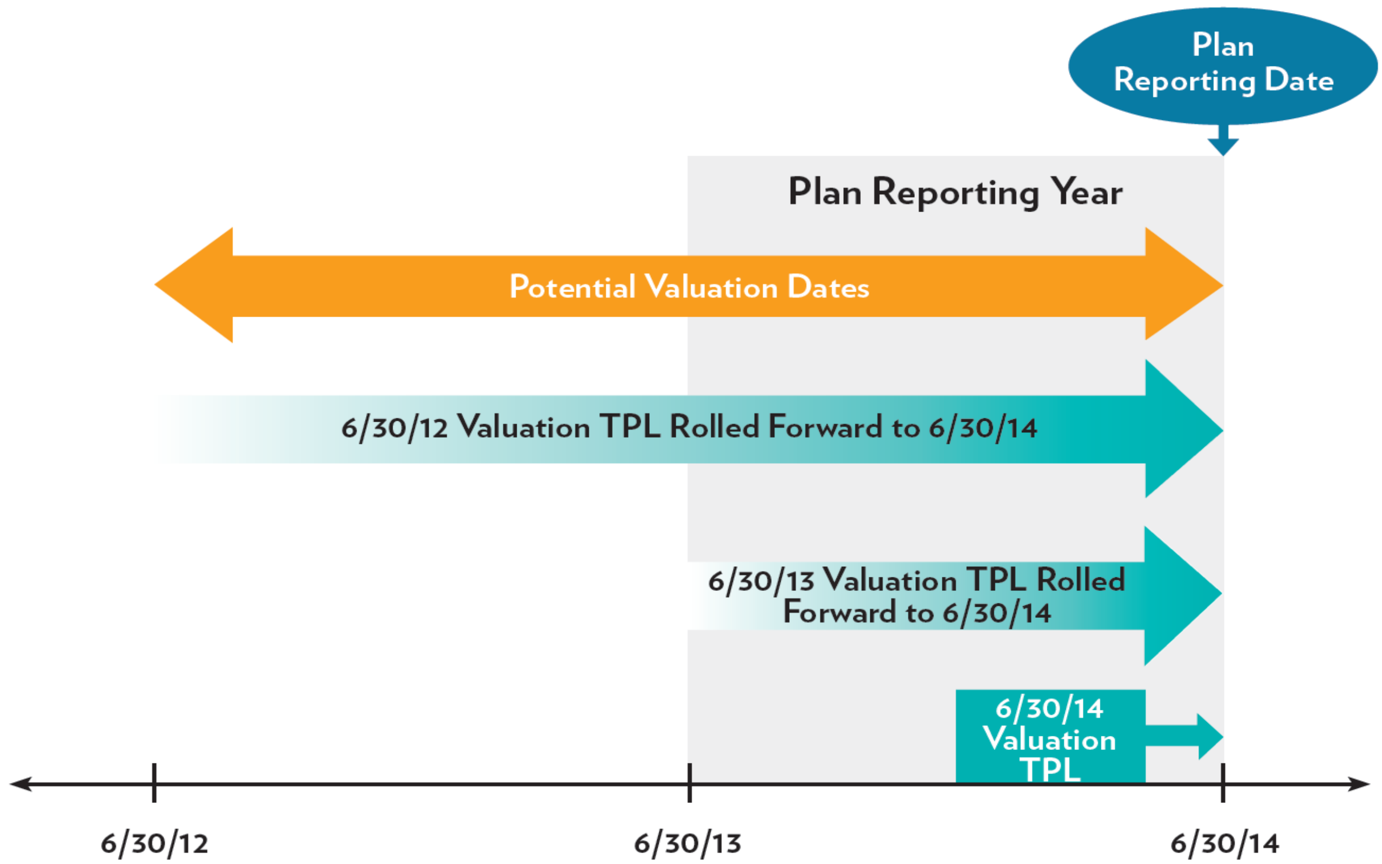
- Will report your full Net Pension Liability (NPL) on your statements (FY2015)

- Will report any additional NPL from VMERS participation as well and related disclosures (FY 2015)

VSRS Steps Taken To Date

- Selected actuarial date, measurement and reporting date
- Selected allocation method
- Determined census data sampling population
- Completed preliminary interest rate cross-over review
- Audit work plan in progress

Options for Plan Reporting Date of 6/30/14:



Source: Cheiron, GASB 67 Implementation Deadline Nears: Are Pension Plans Prepared, Winter 2014

Reporting and Funding

- The State's actuary (Buck Consultants) will complete two reports under new arrangement:
  - Funding:
    - Utilize existing funding method
    - Calculate contribution rates for participating entity
  - Reporting/Accounting
    - Additional valuation using Entry Age Normal
    - Will determine TPL, NPL and required disclosures
    - Set beginning measurement in FY2014, which will be used to calculate pension expense in 2015, in conjunction with TPL and NPL by employers.

VSRS Will Use Roll Forward of 6/30/13 Data for 6/30/14 Reporting

- Actuary will roll forward incorporating the following:
  - Actual benefit payments made during the year
  - Annual expense payments made during the year
  - Outline of any plan changes (benefits, contribution rates)
  - Any significant events (during the year)
  - Need to report market value of assets as of the measurement date

- Plan Changes:
  - VSERS – No Changes
  - VSTRS – Contribution Change to new and non-vested employees, new treatment of health care expense, removing from sub-fund of trust
  - VMERS – Increase in employee and employer contributions

Allocation to Cost Sharing Employers

- Employers participating in cost-sharing multiple-employer plans must recognize their proportionate share for the plan as a whole
- VMERS total collective TPL, NPL, PE and deferred outflows and inflows will be allocated to each participating employer based on the participating entity's proportionate share of the long-term contribution effort
- This will entail the calculation by the actuary of the present value of future contributions for each participating employer as of each measurement date
- This will not be needed for FY14 employer financial reports but both the FY14 and FY15 data will be required prior to the entity's FY15 audit
- VSRS expects to make this package available for all VMERS and VSTRS members
- An auditor will need to express an opinion on a schedule prepared by VSRS as of the measurement date showing employer proportionate share allocations. Currently determining best method to accomplish this.

VSTRS Special Funding Situation

- VSTRS allocation is adjusted for the fact that the State, as a nonemployer contributing entity, provides 100% of the “employer's required” contribution to the plan

- GASB 27: There is no pension liability recorded by local education agencies and no impact on their balance sheet
  - State records the NPO and change in NPO

- GASB 68: Since the special funding situation requires the State to contribute the 100% of the “employer’s required” contribution, the net result will be zero.

- There will still be disclosure requirements and VSRS will provide relevant data

Testing of Census Data

- AICPA provided recent guidance on testing underlying census data of active employees

- Will require additional field testing of both VSTRS and VMERS employers

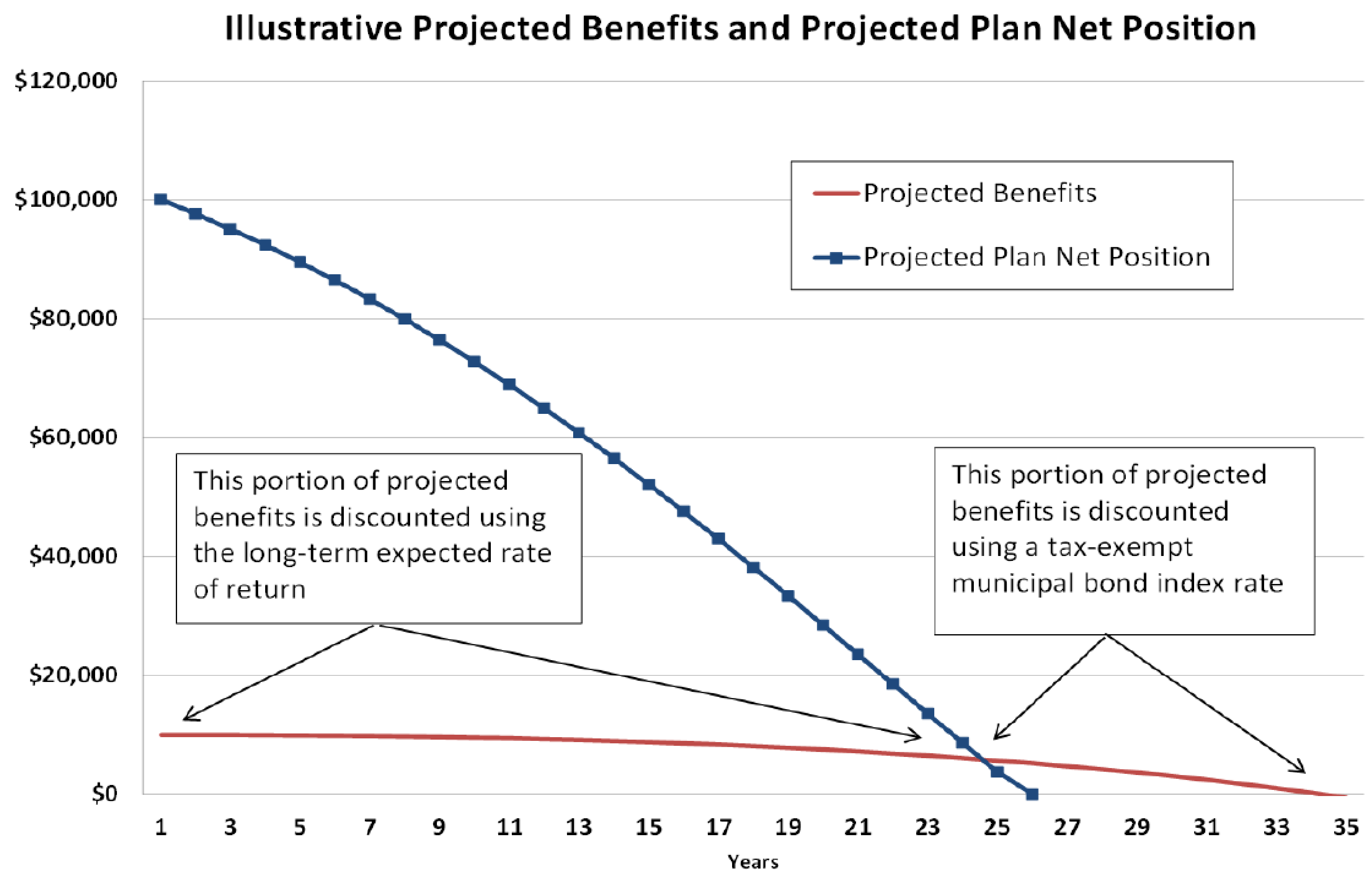
- Sampling
  - Approximately 35 VMERS employers and 25 VSTRS employers will be selected for testing beginning Summer 2014
  - Beginning with largest employers in each system
  - VRS will be contacting employers shortly

- Data to be tested:
  - Census data for actuarial valuation will utilize FY2013 data
  - Contributions and benefit payments will utilize current year information reported to the plan

Discount Rate

- If the pension plan’s current assets, in combination with the appropriate projection of contributions and expected returns, are not sufficient to cover all projected future benefit payments, then a blended discount rate must be used

- Blended rate has two comp nets:
  - Plan’s long-term expected rate of return for the period that current and expected future assets are available to pay expected plan benefits
  - Yield or index rate for 20 year tax-exempt general obligation bond with an average rating of AA/Aa or higher



Source: Gabriel Roeder & Smith

Discount Rate Determination

- Project **benefits** for current actives, inactives and retirees
- Project **administrative expenses**
- Project **employee contributions** from current actives
- Project **contributions** from the employer and non-employer contributing entities and other sources:
  - *Professional judgment applied to (a) those contribution amounts are established by statute or contract or (b) a formal, written policy related to those contributions exists. Consider 5-year contribution history*
  - *In other circumstances, the amount of projected cash flows for contributions from the employer and non-employer contributing entities should be limited to an average of contributions from those sources over the most recent five-year period and may be modified based on consideration of subsequent events (GASB Statement No. 68, paragraph 28)*
- Project **investment return** under expected investment policy
- If there is a cross-over date, it will depend on the funding policy

VSRS has Completed a Preliminary Cross-Over Determination

- All three systems are expected NOT to have a cross-over date based on current analysis

- These are subject to further review, including review of reasonableness of actuarial assumptions and plan changes over the past year

Let's Talk About Funding!

While recent emphasis has been on GASB changes, states and municipalities should continue to focus on good funding practices.

- The "Funding Policy" of a Pension Plan is a systematic set of procedures used to determine the contributions which will be made in a specific year and series of years…It must address how the contributions will be made for ongoing benefits as well as how to finance gains or losses as experience occurs

  – GRS

- Elements to Consider:
  - Funding Required Contributions
  - Realistic and Well defined Actuarial Assumptions
  - Actuarial Cost Methods
  - Amortization Method and Period

Separates Funding Policy from Accounting Expense

- GASB clearly states that new standards are not intended as a funding strategy
- In prior standard, the Annual Required Contribution (ARC) was the basis of a funding strategy
- There will likely be increased volatility in the NPL and Pension Expense from year to year
  - Uses fair market values that fluctuate from year to year
  - Changes in liabilities will be recognized over a shorter period of time
  - All employers affected; employers participating in cost-sharing plans will see their proportional share of the pension expense vary from year to year
- The annual pension expense will likely be too volatile and complex to serve as a funding policy

Actuarially Determined Contributions

"The Board has removed the specific link between (a) the accounting measures of the net pension liability and pension expense and (b) the actuarially determined funding-based measures. However, the Board concluded that, in circumstances in which an actuarially determined contribution rate is established, a 10-year schedule providing information about that contribution rate, the contractually required contribution rate for cost-sharing pension plans, contributions to the pension plan, and certain ratios is essential for providing historical and economic context for the amount of contributions reported as additions to the pension plan's fiduciary net position. Therefore, this information should be presented as required supplementary information."

Source: Paragraph 106, GASB Statement No. 67

GFOA Recommended Funding Policy

- "In the absence of ARC disclosures, it will be difficult for stakeholders, including policy-makers, employees and the public to determine whether obligations are being appropriately funded."

- **Recommendation**. The Government Finance Officers Association (GFOA) recommends that every state and local government that offers defined benefit pensions formally adopt a funding policy that provides reasonable assurance that the cost of those benefits will be funded in an equitable and sustainable manner. Such a funding policy should incorporate each of the following principles and objectives:
  - Every government employer that offers defined benefit pensions should continue to obtain no less than biennially an actuarially determined contribution (ADC) to serve as the basis for its contributions;
  - The ADC should be calculated in a manner that fully funds the long-term costs of promised benefits, while balancing the goals of 1) keeping contributions relatively stable and 2) equitably allocating the costs over the employees' period of active service;
  - Every government employer that offers defined benefit pensions should make a commitment to fund the full amount of the ADC each period. For some government employers, a reasonable transition period will be necessary before this objective can be accomplished;
  - Every government employer that offers defined benefit pensions should demonstrate accountability and transparency by communicating all of the information necessary for assessing the government's progress toward meeting its pension funding objectives.

- The GFOA intends to develop additional best practices that will provide specific guidance on the practical application of these principles and objectives to each of the three core elements of a comprehensive pension funding policy: actuarial cost method, asset smoothing, and amortization.

- Approved by the GFOA's Executive Board, February 2013

Actuarial Assumptions

- Actuarial valuations make use of projections, known as actuarial assumptions
- Two Categories:
  - Demographic (those pertaining to a pension plan's membership)
  - Participants (when participants will retire, and how long they'll live after they retire)
- Economic assumptions pertain to such factors as the rate of wage growth and the investment return on the fund's assets.

Impact of Assumption Changes on Valuation Results and Gains/Losses

Demographic or Economic Assumption	Description	Cost Impact on Valuation	Impact on Gain/losses if assumption varies from actual experience
Expected retirement age, or rates of retirement by age or service	The age (or ages) when employees are expected to retire	Earlier assumed retirement usually increases cost	If more members retired later in their careers, this could result in gains. Generally, losses result when member retires earlier without full actuarial reduction. Other scenarios may result in gain/losses
Termination Experience: Pre retirement termination of employment	The annual rate of employment termination of employees at various stages of their careers	Greater assumed turnover decreases liability and cost	Higher than anticipated terminations will likely result in actuarial gains
Mortality	The probability of dying within one year at each age	Lower mortality increases liability and cost	Higher than anticipated longevity will result in actuarial losses
Salary increases	The expected rate of future salary increases for employees at various stages of their careers	Higher assumption causes higher liability and cost	Higher than anticipated salary generally increases to actives will create actuarial losses
Inflation	The rate at which price levels are rising, and purchasing power is growing	Higher assumption causes higher liability and cost	Higher than anticipated inflation will create actuarial losses. COLAs are impacted by this but limited by a cap on COLAs
Rate of return on plan assets	Based on invested plan asset categories and assumed rates of return.	Higher assumption causes lower liability and costs	Higher than anticipated actuarial return will result in an actuarial gain

Actuarial Cost Methods

- An actuarial method that defines the allocation of pension costs (and contributions) over a member's working career
- All standard actuarial cost methods are comprised of two components: normal cost and the actuarial accrued liability
- Each method results in a different balance between current year and future year costs
- GASB 25/27: The six actuarial methods used in determining postretirement benefits liability are – entry age, frozen entry age, attained age, frozen attained age, projected unit credit, and aggregate
- Under GASB67 and 68 entry age normal will be required for reporting/accounting purposes
- Various methods previously used or to be continued as a funding policy may result in considerable variance to GASB 67/68

Classification of Funding Methods

Cost Allocation Cost Method

Prospective benefit at retirement is estimated, the actuarial value at the entry age or attained age is estimated and the cost allocated to a particular year

Example: **Entry Age Normal** Cost or Aggregate Cost

Benefit Allocation Cost Method

Benefits are allocated to a particular year and the actuarial value of the allocated portion is assigned to each year

Example: Unit Credit or **Projected Unit Credit**

Source: IPPFA TRUSTEE CERTIFICATION, State of Illinois

Determination of Normal Cost

Cost Allocation Cost Method

1. Estimate prospective benefit
2. Determine actuarial value of prospective benefit
3. Divide this value by the value of $1 per year from point A to point B
4. Normal Cost is the resulting quotient

Benefit Allocation Cost Method

1. Must ascertain the "accumulated benefit" (amount allocated to a particular year)
2. Determine the actuarial value of the accumulated benefit
3. Normal Cost is the increase in accumulated benefit each year

Source: IPPFA TRUSTEE CERTIFICATION, State of Illinois

Vermont Systems & Actuarial Method

- VMERS uses a method classified as a cost allocation cost method. It is a hybrid method called projected benefit cost method. It is less conservative than Entry Age Normal (EAN) inasmuch as it establishes a fixed normal cost percentage for all active participants in a particular group and does not change it unless there is a change in benefits or assumptions
  - Fixes division of cost between normal and unfunded liability which in the case of a well funded plan would result in highly stable costs
  - As funded status has declined, this method should be evaluated
  - Recommend EAN for funding and reporting (GASB 68)

- VSTRS and VSERS use Entry Age Normal for current GASB, aiding in conversion to GASB 67/68

Two Most Common Methods

- Entry Age Normal (EAN) Cost Method: a method of splitting the present value of benefits (PVB) into the actuarial accrued liability (AAL) and the present value of future normal costs (PVFNC). The AAL is based on projected pay and current service
  - The method defines the normal cost as a level percent of pay from entry age until retirement
  - EAN generally puts more of the liability into the AAL and less into PVFNC than other methods

- Projected Unit Credit (PUC) Funding Method: A method of splitting the PVB into the AAL and the PVFNC is based on projected pay and current service
  - The normal cost for each member increases as the member approaches retirement age
  - PUC generally puts less of the liability into the AAL and more into the PVFNC than EAN

- Compared to an EAN approach, the PUC method accumulates assets more slowly, produces more volatile measures of contribution rates, and results in rising rather than level contribution rates.

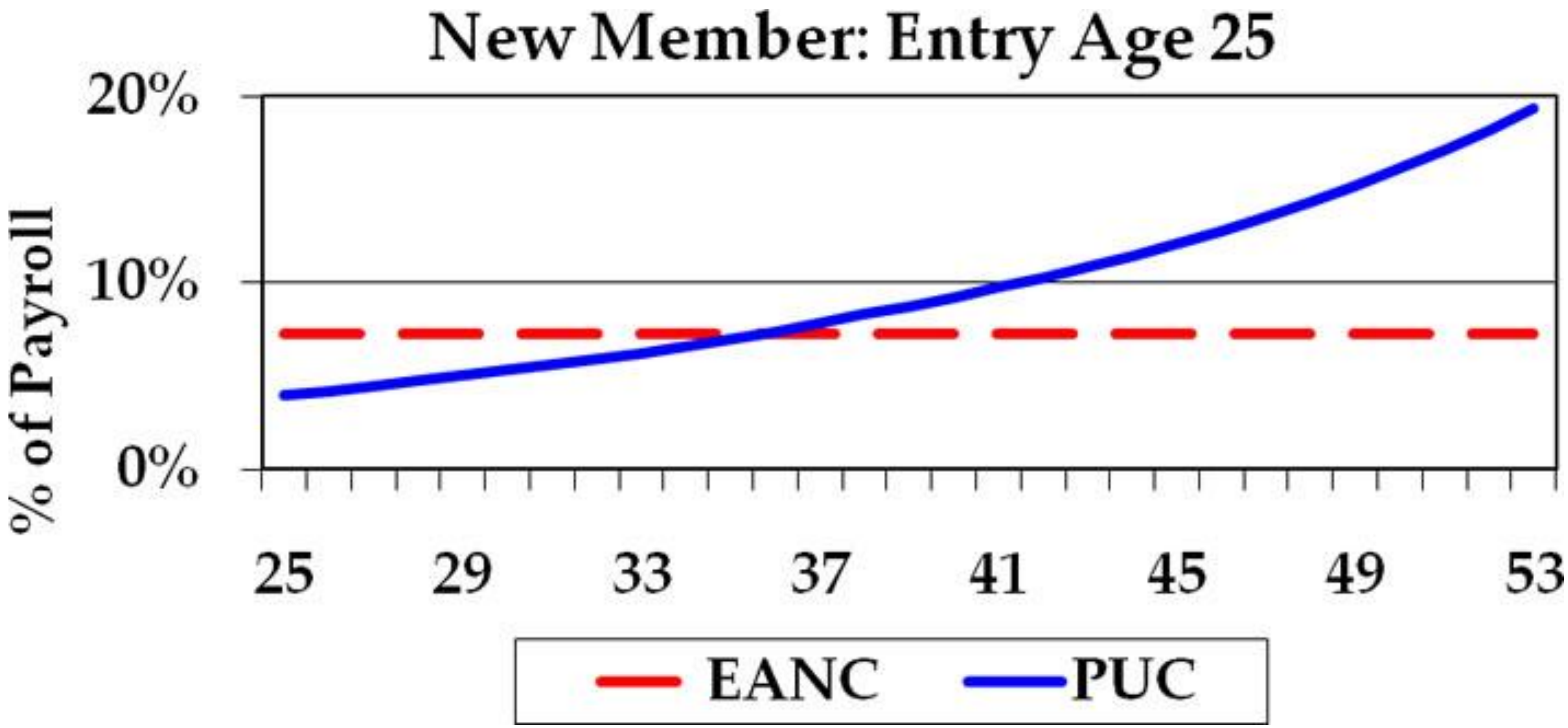
Methods Vary By Private & Public Sector

Actuarial cost method	Private sector	Public sector
Projected unit credit	74%	14%
Entry age normal	19	70
Other	7	16

Sources: Watson Wyatt Worldwide (2006); and National Association of State Retirement Administrators, *Public Fund Survey* (PFS), 2006.

Adapted in: "The Miracle of Funding by State and Local Plans, Center for Retirement Research at Boston College, April 2008

Entry Age Normal vs. PUC



Example TMRS City under EAN and PUC

(Illustrative based upon December 31, 2011 results)

		EAN	PUC
		(1)	(2)
1.	Present Value of Benefits	$ 140,186	$ 140,186
2.	Less PV Future Normal Costs	(23,860)	(31,457)
3.	Total actuarial accrued liability (1 - 2)	$ 116,326	$ 108,729
4.	Actuarial value of assets	(107,232)	(107,232)
5.	UAAL (3 - 4)	$ 9,094	$ 1,497
6.	Funded ratio (4 / 3)	92.2%	98.6%
7.	UAAL/Payroll	45.3%	7.5%
	FY2013 Contribution Rate		
8.	Full retirement rate		
	a. Normal cost	8.31%	9.52%
	b. Amortization Payment	2.85%	0.47%
	c. 25 Year ARC	11.16%	9.99%
9.	Estimated Contributions	$ 2,241	$ 2,005

$ in thousands

GRS

Amortization: Paying Down the Unfunded Liability

- **Amortization Method**: How the plan pays down the unfunded liability
  - **Level Dollar**: a fixed dollar amount which remains unchanged over time
  - **Level percentage**: a fixed percentage of payroll which typically results in an annual payment rising over time at the rate of payroll growth

- **Amortization Period**: When the plan pays down the unfunded liability
  - **Closed:** A plan commits to fully paying down the unfunded liability by a specific date in the future. Although gains and losses in the intervening years may result in falling or rising amortization payments, the end of the repayment period remains fixed.
  - **Open:** As of the valuation date, the unfunded liability is amortized over a certain number of years, up to 30 years.
    - At subsequent valuation dates, the liability is re-amortized over the same number of years,
    - The effect is continued refinancing of the unfunded liability.

In Conclusion

- Single employer plans will implement GASB 67 disclosures in FY 2014.
- Though the changes for VMERS municipal employers will not go into effect until fiscal year 2015, we encourage employers to discuss these changes and their implications with the policy makers and preparers of your financial statements now.
- The Treasurer's Office and VMERS will provide more information about implementation as it becomes available.
- Evaluate your funding policy
- State Treasurer's Office has a GASB 67/68 Resource Page on its web site.