FLORIDA RETIREMENT SYSTEM PENSION PLAN

GASB 67 DISCLOSURE AS OF JUNE 30, 2016 MEASUREMENT DATE
Fiscal Year: July 1, 2015 to June 30, 2016

Prepared by

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Certification

Actuarial computations presented in this report under Statement No. 67 of the Governmental Accounting Standards Board are for purposes of assisting the Florida Department of Management Services in fulfilling its financial accounting requirements. No attempt is being made to offer any accounting opinion or advice. This report is for fiscal year July 1, 2015 to June 30, 2016. The reporting date for determining plan assets and obligations is June 30, 2016. The calculations enclosed in this report have been made on a basis consistent with our understanding of the plan provisions. Determinations for purposes other than meeting financial reporting requirements may be significantly different than the results contained in this report. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security or meeting employer funding requirements.

In preparing this report, we relied, without audit, on information as of June 30, 2015 and June 30, 2016 furnished by the Florida Department of Management Services. This information includes, but is not limited to, statutory provisions, member census data, and financial information. Please note that this report is based on the June 30, 2016 assets for the program as reported to us by the Florida State Board of Administration. Please see Milliman's forthcoming funding valuation report, which will be published by December 1, 2016 for more information on the plan's participant group as of July 1, 2016 as well as a summary of the plan provisions and a summary of the actuarial methods and assumptions used for funding purposes.

We performed a limited review of the census and financial information used directly in our analysis and have found them to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

We hereby certify that, to the best of our knowledge, this report, including all costs and liabilities based on actuarial assumptions and methods, is complete and accurate and determined in conformance with generally recognized and accepted actuarial principles and practices, which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Code of Professional Conduct and supporting Recommendations of the American Academy of Actuaries. Please note that the investment return assumption of 7.60% is a *prescribed assumption* as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it was set by the 2016 FRS Actuarial Assumptions Conference. The prescribed assumption conflicts with our judgment regarding what would constitute a reasonable assumption under ASOP 27. Details are shown in our 2016 FRS Actuarial Assumptions Conference presentation materials.

This valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan’s funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurements.

Certification

Milliman's work is prepared solely for the internal use and benefit of the Florida Department of Management Services. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions: (a) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to the Plan Sponsor's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Fund; and (b) the Plan Sponsor may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and has been prepared in accordance with generally recognized accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

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Overview of GASB 67 and GASB 68

The Governmental Accounting Standards Board (GASB) released new accounting standards for public pension plans and participating employers in 2012. These standards, GASB Statements No. 67 and 68, have substantially revised the accounting requirements previously mandated under GASB Statements No. 25 and 27. The most notable change is the distinct separation of funding from financial reporting. The Annual Required Contribution (ARC) has been eliminated under GASB 67 and 68 and is no longer relevant for financial reporting purposes. As a result, plan sponsors have been encouraged to establish a formal funding policy that is separate from financial reporting calculations.

GASB 67 applies to financial reporting for public pension plans. Under GASB 67, enhancements to the financial statement disclosures are required, along with certain required supplementary information.

GASB 68 governs the specifics of accounting for public pension plan obligations for participating employers. GASB 68 requires a liability for pension obligations, known as the Net Pension Liability, to be recognized on the balance sheets of participating employers. Changes in the Net Pension Liability will be immediately recognized as Pension Expense on the income statement or reported as deferred inflows/outflows of resources depending on the nature of the change.

Relationship Between Valuation Date and Measurement Date

Relationship Between Valuation Date and Measurement Date

The Valuation Date is July 1, 2016. This is the date as of which the actuarial valuation is performed. The Measurement Date is June 30, 2016.

Schedule of Employer Contributions

Fiscal Year Ending June 30	Actuarially Determined Contribution[1]	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll[2]	Contribution as a % of Covered Payroll
2007	$2,455,255,000	$2,736,861,000	($281,606,000)	$26,366,086,000	10.38%
2008	2,612,672,000	2,796,651,000	(183,979,000)	26,872,418,000	10.41%
2009	2,535,854,000	2,808,418,000	(272,564,000)	26,554,114,000	10.58%
2010	2,447,374,000	2,721,618,000	(274,244,000)	25,747,369,000	10.57%
2011	3,680,042,000	3,050,684,000	629,358,000	25,668,958,000	11.88%
2012	1,962,816,000	1,185,310,000	777,506,000	24,476,272,000	4.84%
2013	2,091,343,000	1,388,656,000	702,687,000	24,553,693,402	5.66%
2014	2,190,424,344	2,190,424,344	0	24,723,565,000	8.86%
2015	2,438,084,925	2,438,084,925	0	32,726,034,000	7.45%
2016	2,438,659,458	2,438,659,458	0	33,214,217,000	7.34%

[1] For fiscal years prior to 2013-14 the Annual Required Contribution (ARC) under GASB Statement No. 27 is shown.

[2] For the fiscal years ending 2014 and before, covered payroll shown includes Pension Plan actives and members in DROP, but excludes the payroll for Investment Plan members and other payroll on which only statutory UAL rates are charged. For the fiscal years ending 2015 and later, covered payroll shown includes the payroll for Investment Plan members and other payroll on which only statutory UAL rates are charged.

Actuarial Methods and Assumptions Used for Funding Policy

The following actuarial methods and assumptions will be used in the July 1, 2016 funding valuation. Please see the actuarial valuation report for funding purposes to be published by December 1, 2016 for further details.

Valuation Timing	Actuarially determined contribution rates for a given plan year are calculated in the valuation conducted as of the beginning of the preceding plan year (e.g., rates for the 2017-2018 plan year are calculated in the 7/1/2016 actuarial valuation).
Actuarial Cost Method	Ultimate entry age
Amortization Method	
Level percent or level dollar	Level percent
Closed, open, or layered periods	Closed, layered
Amortization period at 07/01/2016	30 years
Payroll growth rate	3.25%
Asset Valuation Method	
Smoothing period	5 years
Recognition method	Asymptotic
Corridor	80% - 120% of fair market value
Inflation	2.60%
Salary Increases	Varies by membership class, length of service and sex; details in valuation report
Investment Rate of Return	7.60% The investment return assumption, which was set by the 2016 FRS Actuarial Assumptions Conference, is a *prescribed assumption* as defined by Actuarial Standard of Practice Number 27 (ASOP 27).
Cost of Living Adjustments	3% for pre-July 2011 benefit service; 0% thereafter
Retirement Age	Varies by tier, membership class, age, and sex; details in valuation report
Turnover	Varies by membership class, length of service, age and sex; details in valuation report
Mortality	Generational RP-2000 with Projection Scale BB, details in actuarial valuation report for plan funding purposes

Statement of Fiduciary Net Position

	June 30, 2015	June 30, 2016
Assets		
Cash and cash equivalents	$ 725,275,586	$ 137,044,262
State treasury investment pool	1,648,038	1,993,615
Total cash and cash equivalents	726,923,624	139,037,877
Investments:		
Certificates of deposit	1,936,529,355	775,061,750
U.S. government and federally guaranteed obligations	7,622,314,823	11,074,341,487
Federal agencies	9,458,712,224	7,725,368,565
Commercial paper	5,867,392,218	3,516,125,179
Options	33,150	38,673,495
Repurchase agreements	400,000,000	850,000,000
International bonds and notes	2,636,428,966	1,717,404,822
Bonds and Notes	7,735,700,449	6,593,710,408
Real estate contracts	10,142,273,433	10,581,549,014
International Equity commingled	6,315,997,920	5,452,109,522
Short-term investment funds	12,264,488	1,097,231
Domestic equity / domestic equity commingled	43,387,207,094	41,029,901,819
Alternative investments	19,596,356,887	22,440,286,022
International equity	36,089,572,296	31,814,912,316
Total investments	151,200,783,303	143,610,541,630
Receivables:		
Contributions receivable	210,652,630	155,931,273
Pending investment sales	1,477,146,161	1,499,739,882
Forward contracts receivable	2,203,248,822	4,040,802,822
Other receivables	539,212,007	1,031,730,332
Total receivables	4,430,259,620	6,728,204,309
Security lending collateral	8,346,890,175	1,915,672,097
Prepaid items; furniture & equipment net accumulated depreciation	8,991,387	8,139,499
Total assets	164,713,848,109	152,401,595,412
Liabilities		
Accrued DROP liability[1]	308,549,911	411,260,011
Obligations under security lending agreements	8,395,913,686	1,960,173,146
Pending investment purchases	4,984,157,006	3,168,482,487
Forward contracts payable	2,198,672,804	4,008,031,731
Other liabilities and payables	372,160,800	1,072,727,522
Total liabilities	16,259,454,207	10,620,674,897
Fiduciary Net Position		
Held in trust for pension benefits	$ 148,454,393,902	$ 141,780,920,515

[1]Per our understanding, the accrued DROP liability represents lump sum DROP exit payments made early in the subsequent plan year for members exiting the DROP on or shortly before the asset measurement date.

Statement of Changes in Fiduciary Net Position

	June 30, 2015	June 30, 2016
Additions		
Member contributions	$ 698,304,112	$ 710,716,815
Employer contributions	2,438,084,925	2,438,659,458
Total contributions	3,136,389,037	3,149,376,273
Transfers from the Investment Plan	57,536,043	54,889,558
Investment income (loss):		
Interest	901,745,439	732,373,981
Dividends	2,002,846,459	1,856,399,033
Net increase in fair value of investments	2,402,481,481	(3,293,230,449)
Securities lending income	46,845,509	52,954,963
Net real estate operating income	488,969,490	481,636,140
Other investment income	209,831,981	1,555,188,508
Less investment expenses:		
Direct investment expense	529,631,944	555,437,751
Securities lending expense	8,671,776	12,959,914
Net investment income	5,514,416,639	816,924,511
Other income	8,870,833	3,657,861
Total additions	8,717,212,552	4,024,848,203
Deductions		
Benefit payments[1]	9,530,429,352	10,056,869,186
Transfers to the Investment Plan	719,182,111	612,301,153
Refunds of member contributions	9,425,580	10,644,011
Administrative expenses	18,073,979	18,507,240
Total deductions	10,277,111,022	10,698,321,590
Net increase (decrease)	$ (1,559,898,470)	$ (6,673,473,387)
Net position restricted for pensions		
Beginning of year	$ 150,014,292,372	$ 148,454,393,902
End of year	$ 148,454,393,902	$ 141,780,920,515

[1]Includes transfers to other funds and general revenue-funded benefit payments

*Certain transactions for the period ending June 30, 2015 were recategorized in this report compared to last year's report. Ending balances were unchanged.

Money-Weighted Rate of Return

Fiscal Year Ending June 30	Net Money-Weighted Rate of Return
2014	17.57%
2015	3.77%
2016	0.57%

Calculation of Money-Weighted Rate of Return

The money-weighted rate of return considers the changing amounts estimated as invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. Cash flows are estimated on a monthly basis and are assumed to occur at the beginning of each month. Cash inflows are netted with cash outflows, resulting in a net cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows with Interest
Beginning value - July 1, 2015	$148,454,393,902	12	1.00	$149,295,609,394
Monthly net external cash flows:				
July	(624,504,647)	12	1.00	(628,043,397)
August	(624,504,647)	11	0.92	(627,759,560)
September	(624,504,647)	10	0.83	(627,440,397)
October	(624,504,647)	9	0.75	(627,156,834)
November	(624,504,647)	8	0.67	(626,873,398)
December	(624,504,647)	7	0.58	(626,554,686)
January	(624,504,647)	6	0.50	(626,271,522)
February	(624,504,647)	5	0.42	(625,988,486)
March	(624,504,647)	4	0.33	(625,670,224)
April	(624,504,647)	3	0.25	(625,387,460)
May	(624,504,647)	2	0.17	(625,104,824)
June	(624,504,647)	1	0.08	(624,787,011)
Ending value - June 30, 2016				141,778,571,595
Money-weighted plan rate of returr	0.57% [1]			

[1]The money-weighted plan rate of this return is an estimate using estimated level monthly net external cash flows. It can differ from the more precise return calculated by the Florida State Board of Administration.

*In the prior report the total of the market value of assets as of the beginning of the measurement period plus the sum of the monthly net external cash flows during the measurement period was shown. It is not included in this report as it is not necessary for GASB-mandated calcuations.

Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in October 2016 the FRS Actuarial Assumptions conference reviewed long-term assumptions developed by both Milliman's capital market assumptions team and by a capital market assumptions team from Aon Hewitt Investment Consulting, which consults to the Florida State Board of Administration. The table below shows Milliman's assumptions for each of the asset classes in which the plan was invested at that time based on the long-term target asset allocation. The allocation policy's description of each asset class was used to map the target allocation to the asset classes shown below. Each asset class assumption is based on a consistent set of underlying assumptions, and includes an adjustment for the inflation assumption. These assumptions are not based on historical returns, but instead are based on a forward-looking capital market economic model. The 2016 FRS Actuarial Assumptions Conference selected a return assumption of 7.60%, which is a *prescribed assumption* as defined by Actuarial Standard of Practice Number 27 (ASOP 27).

Asset Class	Target Allocation*	Annual Arithmetic Return	Compound Annual (Geometric) Return	Standard Deviation
Cash	1%	3.0%	3.0%	1.7%
Fixed income	18%	4.7%	4.6%	4.6%
Global equity	53%	8.1%	6.8%	17.2%
Real estate	10%	6.4%	5.8%	12.0%
Private equity	6%	11.5%	7.8%	30.0%
Strategic investments	12%	6.1%	5.6%	11.1%
Assumed inflation - mean			2.6%	1.9%

* As outlined in the Plan's investment policy

Depletion Date Projection

GASB 67 generally requires that a blended discount rate be used to measure the Total Pension Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair market value of assets) is projected to cover benefit payments and administrative expenses. A 20-year high quality (AA/Aa or higher) municipal bond rate must be used for periods where the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 67 will sometimes require that the actuary perform projections of future benefit payments and asset values. GASB 67 (paragraph 43) does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for the Florida Department of Management Services:

- The Florida Department of Management Services has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.

- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100% funded position by the end of the amortization period if future actual experience follows assumptions.

- GASB 67 specifies that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience which might impact the plan's funded position.

Based on these circumstances, it is our professional opinion that the detailed depletion date projections outlined in GASB 67 would clearly indicate that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses. As such, the detailed projections were not developed.

Net Pension Liability

Net Pension Liability	June 30, 2015	June 30, 2016
Total pension liability	$161,370,735,088	$167,030,999,000
Fiduciary net position	148,454,393,902	141,780,920,515
Net pension liability	12,916,341,186	25,250,078,485
Fiduciary net position as a % of total pension liability	92.00%	84.88%
Covered payroll	32,726,034,000	33,214,217,000
Net pension liability as a % of covered payroll	39.47%	76.02%

The total pension liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below. The total pension liability is calculated using the Individual Entry Age Normal cost allocation method, which differs from the Ultimate Entry Age Normal cost allocation method used in the actuarial valuation for funding purposes for the System.

Discount Rate

Discount rate	7.65%	7.60%
Long-term expected rate of return, net of investment expense	7.65%	7.60%
Municipal bond rate	N/A	N/A

The plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees if future experience follows assumptions and the Actuarially Determined Contribution (ADC) in contributed in full each year. Therefore, the discount rate for calculating the total pension liability is equal to the long-term expected rate of return. The rate of return assumption is a prescribed assumption as defined by Actuarial Standard of Practice Number 27 (ASOP 27). The 7.60% assumption was adopted by the 2016 FRS Actuarial Assumptions Conference.

Other Key Actuarial Assumptions

The actuarial assumptions that determined the total pension liability as of June 30, 2016 were based on the results of an actuarial experience study for the July 1, 2008 - June 30, 2013 experience observation period.

Valuation date	July 1, 2015	July 1, 2016
Measurement date	June 30, 2015	June 30, 2016
Inflation	2.60%	2.60%
Salary increases including inflation	3.25%	3.25%
Mortality	Generational RP-2000 with Projection Scale BB*	Generational RP-2000 with Projection Scale BB**
Actuarial cost method	Individual Entry Age	Individual Entry Age

* See July 1, 2015 Actuarial Valuation Report for funding purposes for details
** See July 1, 2016 Actuarial Valuation Report for funding purposes for details

Changes in Net Pension Liability

Changes in Net Pension Liability	Total Pension Liability (a)	Increase (Decrease) Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances as of June 30, 2015	$ 161,370,735,088	$ 148,454,393,902	$ 12,916,341,186
Changes for the year:			
Service cost	2,132,905,650		2,132,905,650
Interest on total pension liability	12,109,113,805		12,109,113,805
Effect of plan changes	32,310,000		32,310,000
Effect of economic/demographic gains or losses	980,191,881		980,191,881
Effect of assumptions changes or inputs	1,030,667,368		1,030,667,368
Benefit payments[1]	(10,624,924,792)	(10,624,924,792)	0
Employer contributions		2,438,659,458	(2,438,659,458)
Member contributions		710,716,815	(710,716,815)
Net investment income		820,582,372	(820,582,372)
Administrative expenses		(18,507,240)	18,507,240
Balances as of June 30, 2016	$ 167,030,999,000	$ 141,780,920,515	$ 25,250,078,485

[1] Benefit payments shown above include outbound transfers to the Investment Plan and returns of contributions, net of $54,889,559 inbound transfers from the Investment Plan.

Sensitivity Analysis

The following presents the net pension liability of the Pension Plan, calculated using the discount rate of 7.60%, as well as what the Pension Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.60%) or 1 percentage point higher (8.60%) than the current rate.

	1% Decrease 6.60%	Current Discount Rate 7.60%	1% Increase 8.60%
Total pension liability	$188,268,024,512	$167,030,999,000	$149,353,979,968
Fiduciary net position	141,780,920,515	141,780,920,515	141,780,920,515
Net pension liability	$ 46,487,103,997	$ 25,250,078,485	$ 7,573,059,453

Schedule of Changes in Net Pension Liability and Related Ratios[1] (in 1,000s)

	June 30, 2014	June 30, 2015	June 30, 2016
Total Pension Liability			
Service cost	$2,256,738	$2,114,047	$2,132,906
Interest on total pension liability	11,489,921	11,721,563	12,109,114
Effect of plan changes	0	0	32,310
Effect of economic/demographic (gains) or losses	(448,818)	1,620,863	980,192
Effect of assumption changes or inputs	1,256,045	0	1,030,667
Benefit payments	(8,714,251)	(10,201,501)	(10,624,925)
Net change in total pension liability	5,839,635	5,254,972	5,660,264
Total pension liability, beginning	150,276,128	156,115,763	161,370,735
Total pension liability, ending (a)	156,115,763	161,370,735	167,030,999
Fiduciary Net Position			
Employer contributions	$2,190,424	$2,438,085	$2,438,659
Member contributions	682,507	698,304	710,717
Investment income net of investment expenses	22,812,286	5,523,287	820,582
Benefit payments	(8,714,251)	(10,201,501)	(10,624,925)
Administrative expenses	(18,352)	(18,074)	(18,507)
Net change in plan fiduciary net position	16,952,615	(1,559,898)	(6,673,473)
Fiduciary net position, beginning	133,061,677	150,014,292	148,454,394
Fiduciary net position, ending (b)	150,014,292	148,454,394	141,780,921
Net pension liability, ending = (a) - (b)	$6,101,471	$12,916,341	$25,250,078
Fiduciary net position as a % of total pension liability	96.09%	92.00%	84.88%
Covered payroll[2]	$24,723,565	$32,726,034	$33,214,217
Net pension liability as a % of covered payroll	24.68%	39.47%	76.02%

[1]This exhibit will fill in to a ten-year schedule as results for new fiscal years are calculated.

[2] For the fiscal years ending 2014 and before, covered payroll shown includes Pension Plan actives and members in DROP, but excludes the payroll for Investment Plan members and other payroll on which only statutory UAL rates are charged. For the fiscal years ending 2015 and later, covered payroll shown includes the payroll for Investment Plan members and other payroll on which only statutory UAL rates are charged.

*Amounts shown in exhibit are rounded to the nearest thousand. As such, sums may differ from amounts displayed due to rounding.

Glossary

Actuarially Determined Contribution
A target contribution to a defined benefit pension plan for the reporting period, determined based on the funding policy and the most recent actuarial measurement available when the contribution for the reporting period was adopted.

Deferred Inflows/Outflows of Resources
Portion of changes in net pension liability that is not immediately recognized in pension expense. These changes include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on plan investments.

Discount Rate
Single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the sum of:

1) The actuarial present value of benefit payments projected to be made in future periods where the plan assets are projected to be sufficient to meet benefit payments, calculated using the Long-Term Expected Rate of Return.
2) The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.

Fiduciary Net Position
Equal to market value of assets.

Long-Term Expected Rate of Return
Long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits, net of

Money-Weighted Rate of Return
The internal rate of return on pension plan investments, net of investment expenses.

Municipal Bond Rate
Yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Net Pension Liability
Total pension liability minus the plan's fiduciary net position.

Projected Benefit Payments
All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and expected future service.

Service Cost
The portion of the actuarial present value of projected benefit payments that is attributed to a valuation year by the cost allocation method.

Total Pension Liability
The portion of actuarial present value of projected benefit payments that is attributable to past periods of member service using the individual entry age cost allocationmethod based on the requirements of GASB 67 and 68.