Maryland Transit Administration Pension Plan

GASB68 Actuarial Information for the Measurement Period Ending June 30, 2015

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Submitted by:

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BOLTON PARTNERS

August 25, 2015

Robert Alonso
Chief Financial Officer
Maryland Transit Administration
1 St. Paul Street
Baltimore, MD 21202

Re: MTA Pension Plan – GASB68 Actuarial Information for the Measurement Period Ending June 30, 2015

Dear Robert,

The following report contains the GASB 67 and GASB 68 actuarial information to be included with the MTA's financial statements for FY2015. The GASB68 information has been provided as of the June 30, 2015 measurement date for FY15.

Methodology, Reliance and Certification

There are many actuarial standard communication requirements that we must comply with and important information we should provide beyond simply providing "the numbers" contained in the attachments. The remainder of this letter provides that information.

This report is prepared for the MTA. The report contains the actuarial information to be included with the MTA's financial statements for the year ending June 30, 2015 (the MTA's fiscal year end date) as required by GASB68. This information has been prepared for use in the financial statements of the MTA. This information is not intended for, nor should it be used for, any additional purposes.

The total pension liability is based on the July 1, 2014 actuarial valuation data and assumptions as determined by Bolton and rolled forward to June 30, 2015. The methods, assumptions, and participant data used are detailed in the July 1, 2014 actuarial valuation report with the exception of the actuarial cost method, the discount rate and the rates of expected future increases to the benefit cap and the benefits for pensioners and beneficiaries. These calculations are based on the Level Percent of Pay Entry Age Normal cost method as required by GASB68. The calculations are also based on a blended discount rate of 4.75%. The plan's expected rate of investment return of 8.25% has been blended with the Bond Buyer GO 20-year Bond Municipal Bond Index of 3.80% as of June 30, 2015. The development of the blended discount rate is included within this report. The projected benefits for purposes of this report include expected Cost-of-Living Adjustments (COLAs) for benefits for pensioners and beneficiaries of 2.50% per year and expected increases in the benefit cap of 2.00% per year. Although there is not a firm promise to provide COLAs, there is a pattern of providing annual increases and have been included as part of the substantive plan.

The included calculations assume that the MTA will continue to make all required actuarially determined contributions. Since the actuarially determined contributions do not reflect any assumed future increases of benefits for pensioners and beneficiaries (COLAs) or the benefit cap, the plan's fiduciary net position is not expected to be available to make all future benefit payments of current plan members. The calculation of the Actuarially Determined Contribution for the fiscal year ended June 30, 2015 is contained in the July 1, 2013 actuarial valuation report.

Methodology, Reliance and Certification (cont.)

The long-term nominal expected rate of return on pension plan investments was determined using a building-block method where return expectations are established for each asset class. The building-block approach uses the current underlying fundamentals, not historical returns. For example, spread and the risk free rate are used for fixed income; and dividends, earnings growth and valuation are used for equity. These return expectations are weighted based on asset/target amounts.

These calculations and comparisons with assets are applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. The future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

The MTA is responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in this report. The MTA is solely responsible for communicating to Bolton Partners, Inc. any changes required thereto.

The MTA could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. This type of analysis would be a separate assignment.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the MTA or in this case a measure of accounting expense. It does not affect the cost of the plan. As the experience of the plan evolves, it is normal for the level of contributions and expense of the plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We will not be responsible for contributions that are made at a future time rather than an earlier time. The plan sponsor is responsible for funding the cost of the plan.

We make every effort to ensure that our calculations are accurately performed. These calculations are complex. Despite our best efforts, we may make a mistake. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

Methodology, Reliance and Certification (cont.)

This report is based on plan provisions, census data, and asset data submitted by the MTA. We have relied on this information for purposes of preparing this report, but have not performed an audit. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.

The MTA is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Bolton Partners, Inc.'s actuaries have not provided any investment advice to the MTA.

The information in this report was prepared for the internal use of the MTA, the plan and their auditors in connection with our actuarial valuations of the pension plan as required by GASB68. This report may not be used for any other purpose; Bolton Partners, Inc. is not responsible for the consequences of any unauthorized use or the reliance on this information by any other party.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this report, you selected an assumption based on the expected long-term rate of return on plan investments. Using a lower discount rate assumption, such as a rate based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the Plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the Plan in the case of Plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as 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.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The July 1, 2014 actuarial valuation report summarizes the data, methods, and assumptions used to prepare these results.

Sincerely,

BOLTON PARTNERS, INC.

Kevin Binder, FSA, EA, MAAA

Kristopher Seets, FSA, EA

Maryland Transit Administration Pension Plan

Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Net Pension Liability

The components of the net pension liability at June 30, 2015, were as follows:

Total pension liability	$ 908,528,257
Plan fiduciary net position	(228,261,060)
Employer's net pension liability	$ 680,267,197
Plan fiduciary net position as a percentage of the total pension liability	25.12%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2014 rolled forward to June 30, 2015 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.5 percent
Salary increases	Rates vary by participant service
Investment rate of return	8.25 percent, net of pension plan investment expense, including inflation for funded benefits. Unfunded benefits are discounted at 3.80 percent. The effective blended discount rate is 4.75%.
Mortality	RP-2000 tables for males (two-year setback) and females. The RP-2000 Disabled Retiree table is used for disabled members, with a five-year setback for females

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2014 actuarial valuation report.

Sensitivity of the net pension liability to changes in the discount rate

	1% Decrease 3.75%	*Current Discount Rate* 4.75%	*1% Increase* 5.75%
Employer's net pension liability	$ 802,198,232	$ 680,267,197	$ 578,209,841

Maryland Transit Administration Pension Plan

Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/14	$ 841,351,000	$ 211,303,379	$ 630,047,621
Changes for the year:			
Service cost	24,718,074		24,718,074
Interest	39,236,563		39,236,563
Changes of benefit terms	-		-
Differences between expected and actual experience	(19,621,279)		(19,621,279)
Changes of assumptions	53,480,106		53,480,106
Contributions - employer		35,400,000	(35,400,000)
Contributions - member		-	-
Net investment income		14,044,525	(14,044,525)
Benefit payments, including refunds of member contributions	(30,636,207)	(30,636,207)	-
Administrative expense		(1,850,637)	1,850,637
Other		-	-
Net Changes	67,177,257	16,957,681	50,219,576
Balances at 6/30/15	$ 908,528,257	$ 228,261,060	$ 680,267,197

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2015

Note	Description	Amount
A	Service Cost	$ 24,718,074
B	Interest on the total pension liability	39,236,563
A	Changes of benefit terms	-
C	Differences between expected and actual experience	(2,803,040)
C	Changes of assumptions	7,640,015
A	Employee contributions	-
D	Projected earnings on pension plan investments	(10,106,098)
C	Differences between expected and actual earnings on plan investments	(787,685)
A	Pension plan administrative expense	1,850,637
A	Other changes in fiduciary net position	-
	Total Pension Expense	$ 59,748,466

Notes:

A Provided in the Changes in Net Pension Liability exhibit.

B Based on the following calculation:

	Amount for Period (a)	Portion of Period (b)	Projected Rate of Return (c)	Projected Earnings (a) x (b) x (c)
Beginning total pension liability	$ 841,351,000	100%	4.75%	$ 39,964,173
Service Cost (End of Year)	24,718,074	0%	4.75%	-
Benefit payments, including refunds of employee contributions	(30,636,207)	50%	4.75%	(727,610)
Total interest on the total pension liability				$ 39,236,563

C Provided in the Schedules of Deferrals.

D Based on the following calculation:

	Amount for Period (a)	Portion of Period (b)	Projected Rate of Return (c)	Projected Earnings (a) x (b) x (c)
Beginning plan fiduciary net position	$ 211,303,379	100%	4.75%	$ 10,036,911
Employer contributions	35,400,000	50%	4.75%	840,750
Employee contributions	-	50%	4.75%	-
Benefit payments, including refunds of employee contributions	(30,636,207)	50%	4.75%	(727,610)
Administrative expense and other	(1,850,637)	50%	4.75%	(43,953)
Total Projected Earnings				$ 10,106,098

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2015, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ 16,818,239
Changes of assumptions	45,840,091	-
Net difference between projected and actual earnings on pension plan investments	-	3,150,742
Total	$ 45,840,091	$ 19,968,981

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2016	$ 4,049,290
2017	4,049,290
2018	4,049,290
2019	4,049,288
2020	4,836,975
Thereafter	4,836,977

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Changes in the Net Pension Liability and Related Ratios
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total pension liability										
Service cost	$ 24,718	$ 19,438								
Interest	39,237	43,472								
Changes of benefit terms	-	-								
Differences between expected and actual experience	(19,621)	4,025								
Changes of assumptions	53,480	38,643			Information for FY2013 and earlier is not available					
Benefit payments, including refunds of member contributions	(30,636)	(32,598)								
Net change in total pension liability	67,177	72,980								
Total pension liability - beginning	841,351	768,371								
Total pension liability - ending (a)	$ 908,528	$ 841,351								
Plan fiduciary net position										
Contributions - employer	$ 35,400	$ 39,749								
Contributions - member	-	-								
Net investment income	14,045	15,783								
Benefit payments, including refunds of member contributions	(30,636)	(32,598)								
Administrative expense	(1,851)	(1,587)								
Other	-	-								
Net change in plan fiduciary net position	$ 16,958	$ 21,347								
Plan fiduciary net position - beginning	211,303	189,957								
Plan fiduciary net position - ending (b)	$ 228,261	$ 211,303								
Net pension liability - ending (a)-(b)	$ 680,267	$ 630,048								
Plan fiduciary net position as a percentage of the total pension liability	25.12%	25.11%								
Covered-employee payroll	$ 137,680	$ 135,545								
Net pension liability as a percentage of covered-employee payroll	494.09%	464.83%								
Expected average remaining service years of all participants	7	7								

Notes to Schedule:

Benefit changes: None

Changes of assumptions: FY15 reflects a reduction to the effective discount rate from 5.24% to 4.75%

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Schedule of Employer Contributions
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined contribution	$ 40,807	$ 39,749								
Contributions in relation to the actuarially determined contribution	35,400	39,749		Information for FY2013 and earlier is not available						
Contribution deficiency (excess)	$ 5,407	$ -								
Covered-employee payroll[1]	$ 137,680	$ 135,545								
Contributions as a percentage of covered employee payroll	25.71%	29.33%								

[1]Covered-employee payroll shown is expected pensionable earnings only. Amounts do not include any non-pensionable earnings.

Notes to Schedule

Valuation date:
Actuarially determined contribution amounts are calculated as of the beginning of the fiscal year (July 1) for the year immediately following the fiscal year. Actuarial valuations are performed every year.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Level Dollar Entry Age Normal
Amortization method	Level Payments (Closed)
Remaining amortization period	Remaining payments range from 5 to 25 years
Asset valuation method	5-year smoothed market
Inflation	3.5 percent
Salary increases	Rates vary by participant service
Investment rate of return	7.60 percent, net of pension plan investment and administrative expenses, including inflation
Retirement age	Rates vary by participant age
Mortality	RP-2000 tables for males (two-year setback) and females. The RP-2000 Disabled Retiree table is used for disabled members, with a five-year setback for females

Schedule of Differences between Projected and Actual Earnings on Pension Plan Investments

In conformity with paragraph 33b of Statement 68, the effects of differences between projected and actual earnings on pension plan investments are recognized in pension expense using a systematic and rational method over a closed five-year period, beginning in the current reporting period. The following table illustrates the application of this requirement.

			Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments								
Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2011	2012	2013	2014	2015	2016	2017	2018	2019
2011	$ -	5	$ -	$ -	$ -	$ -	$ -				
2012	-	5		-	-	-	-	$ -			
2013	-	5			-	-	-	-	$ -		
2014	-	5				-	-	-	-	$ -	
2015	(3,938,427)	5					(787,685)	(787,685)	(787,685)	(787,685)	$ (787,687)
Net increase (decrease) in pension expense			$ -	$ -	$ -	$ -	$ (787,685)	$ (787,685)	$ (787,685)	$ (787,685)	$ (787,687)

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Projected and Actual Earnings on Pension Plan Investments

				Balances at June 30, 2015	
Year	Investment Earnings Less than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Pension Expense Through June 30, 2015 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2012	$ -	$ -	$ -	$ -	$ -
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	3,938,427	787,685	-	3,150,742
				$ -	$ 3,150,742

Schedule of Differences between Expected and Actual Experience

In conformity with paragraph 33a of Statement 68, the effects of differences between projected and actual experience are recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

			Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments											
Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2010	$ -	1	$ -											
2011	-	1		$ -										
2012	-	1			$ -									
2013	-	1				$ -								
2014	-	7					$ -	-	-	-	-	-	-	
2015	(19,621,279)	7						$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,039)
Net increase (decrease) in pension expense			$ -	$ -	$ -	$ -	$ -	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,040)	$ (2,803,039)

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Expected and Actual Experience

				Balances at June 30, 2015	
Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2015 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2011	$ -	$ -	$ -	$ -	$ -
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	19,621,279	2,803,040	-	16,818,239
				$ -	$ 16,818,239

Schedule of Changes of Assumptions

In conformity with paragraph 33a of Statement 68, the effects of the effects of changes of assumptions should be recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

			Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions											
Year	Changes of Assumptions	Recognition Period (Years)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2010	$ -	1	$ -											
2011	-	1		$ -										
2012	-	1			$ -									
2013	-	1				$ -								
2014	-	7					$ -	-	-	-	-	-	-	
2015	53,480,106	7						$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,016
Net increase (decrease) in pension expense			$ -	$ -	$ -	$ -	$ -	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,015	$ 7,640,016

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions

				Balances at June 30, 2015	
Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense Through June 30, 2015 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2011	$ -	$ -	$ -	$ -	$ -
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	53,480,106	-	7,640,015	45,840,091	-
				$ 45,840,091	$ -

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Projection of Contributions
(Dollar amounts in thousands)

	Projected Covered-Employee Payroll			Projected Contributions			
Year	Payroll for Current Employees (a)	Payroll for Future Employees (b)	Total Employee Payroll[1] (c) = (a) + (b)	Contributions from Current Employees (d)	Employer Contributions for Current Employees (e)	Contributions Related to Payroll of Future Employees[2] (f)	Total Contributions (g) = (d) + (e) + (f)
1	$ 137,680	$ -	$ 137,680	$ -	$ 40,907	$ -	$ 40,907
2	136,654	5,845	142,499	-	39,258	1,417	40,675
3	135,457	12,030	147,487	-	37,627	2,818	40,445
4	133,649	18,999	152,649	-	35,897	4,300	40,196
5	131,342	26,649	157,991	-	23,634	3,701	27,335
6	128,771	34,750	163,521	-	22,412	4,663	27,075
7	125,550	43,694	169,244	-	21,136	5,665	26,801
8	122,427	52,741	175,168	-	19,936	6,607	26,543
9	118,954	62,345	181,299	-	18,736	7,546	26,282
10	115,115	72,529	187,644	-	17,538	8,482	26,020

Note: Years subsequent to year 10 have been omitted from this table.

[1] Total covered-employee payroll increases 3.50% per year.
[2] Contributions related to future employees that are above service costs and, therefore, can be allocated to payment of benefits of current employees

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Projection of Pension Plan's Fiduciary Net Position
(Dollar amounts in thousands)

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions[1] (b)	Projected Benefit Payments (c)	Projected Administrative Expense[2] (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
1	$ 228,261	$ 40,907	$ 35,651	$ 1,484	$ 18,987	$ 251,020
2	251,020	40,675	37,861	1,632	20,758	272,961
3	272,961	40,445	40,171	1,774	22,457	293,917
4	293,917	40,196	42,598	1,910	24,070	313,675
5	313,675	27,335	45,115	2,039	25,061	318,917
6	318,917	27,075	47,773	2,073	25,371	321,518
7	321,518	26,801	50,366	2,090	25,467	321,330
8	321,330	26,543	52,942	2,089	25,335	318,176
9	318,176	26,282	55,604	2,068	24,955	311,741
10	311,741	26,020	58,307	2,026	24,303	301,731

Note: Years subsequent to year 10 have been omitted from this table.

[1] From Projection of Contributions table; Column (g)
[2] Pension plan administrative expense equal to 0.65% of Projected Beginning Net Position

Maryland Transit Administration Pension Plan
Actuarial Information to Include in the Financial Statements
for the June 30, 2015 Measurement Date

Actuarial Present Value of Projected Benefit Payments
(Dollar amounts in thousands)

Year (a)	Projected Beginning Fiduciary Net Position[1] (b)	Projected Benefit Payments (c)	"Funded" Portion of Benefit Payments (d)	"Unfunded" Portion of Benefit Payments (e)	Present Value of "Funded" Benefit Payments (f) = (d) / (1 + 8.25%)[(a)]		Present Value of "Unfunded" Benefit Payments (g) = (e) / (1 + 3.80%)[(a)]		Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1 + 4.75%)[(a)]
1	$ 228,261	$ 35,651	$ 35,651	$ -	$ 32,934		$ -		$ 34,034
2	251,020	37,861	37,861	-	32,310		-		34,503
3	272,961	40,171	40,171	-	31,669		-		34,948
4	293,917	42,598	42,598	-	31,023		-		35,377
5	313,675	45,115	45,115	-	30,352		-		35,768
6	318,917	47,773	47,773	-	29,690		-		36,156
7	321,518	50,366	50,366	-	28,916		-		36,389
8	321,330	52,942	52,942	-	28,079		-		36,515
9	318,176	55,604	55,604	-	27,243		-		36,610
10	311,741	58,307	58,307	-	26,390		-		36,648
18	91,060	76,253	76,253	-	18,304		-		33,057
19	34,800	77,716	-	77,716	-		38,261		32,162
20	-	78,783	-	78,783	-		37,367		31,125
91	-	1	-	1	-		0		0
92	-	0	-	0	-		0		0
Total					$ 474,558	+	$ 675,797	=	$ 1,150,355

Note: Years 11-17 and 21-90 have been omitted from this table

[1] From Projection of Pension Plan's Fiduciary Net Position table; Column (a)