



Addendum No. 1

NJSDA
32. E. Front Street
Trenton, NJ 08625
Phone: 609-858-2981
Fax: 609-656-2647

DATE: July 8, 2016

PROJECT #: GP-0234-R01
Actuary Services

DESCRIPTION: Addendum No. 1

This addendum shall be considered part of the Bid Documents issued in connection with the referenced project. Should information conflict with the Bid Documents, this Addendum shall supersede the conflicting information in the Bid Documents.

A. CHANGES TO THE PROCUREMENT PROCESS:

NOTE: for the following items, additions to existing language shall be denoted in **bold and underlined** text; deletions in *strikethrough and italics*.

1. Revisions to the Advertisement to Change Date for Delivery of Report:

- a. The first paragraph of page one of the Advertisement shall be modified in pertinent part to change the date for delivery of the GASB 75 Report, as follows:

...The NJSDA currently plans to early adopt GASB 75 as of and for the year ending December 31, 2016, using a measurement date of January 1, 2016. [Underline in original] This report will be due to the NJSDA within sixty (60) days of ~~engagement~~ **the selected firm's receipt from the NJSDA of the employee and retiree census data that is required for preparation of the report.**

2. Revisions to the Request for Proposals to Change Date for Delivery of Report:

- a. The first paragraph of the Introduction on Page 2 shall be modified in pertinent part to change the date for delivery of the GASB 75 Report, as follows:

...The NJSDA currently plans to early adopt GASB 75 as of and for the year ending December 31, 2016, using a measurement date of January 1, 2016.

[Underline in original] This report will be due to the NJSDA within sixty (60) days of ~~engagement~~ **the selected firm's receipt from the NJSDA of the employee and retiree census data required for preparation of the report.**

- b. Section 1.1 on Page 4 shall be modified as follows:

Present a statement that indicates that your firm can produce the required actuarial valuation report within sixty (60) days of ~~engagement~~ **your receipt from the NJSDA of the employee and retiree census data required for preparation of the report.**

- c. Attachment A to the RFP (Actuary Services Agreement) shall be modified as follows:

i. **Section 4.0 on page 11 of Attachment A:**

Unless terminated sooner under Section 6 of this Agreement, the Term of this Agreement shall extend from the Effective Date for sixty (60) days **after Actuary's receipt from the Authority of the employee and retiree census data required for preparation of the report** or to such extended time when all obligations of the Actuary to deliver Services pursuant to this Agreement have been performed to the satisfaction of the SDA, unless at the sole option of the SDA, it is extended for the 2017 report and 2018 report, in which case the Term shall extend from the Effective Date through such additional period or until all obligations of the Actuary to deliver Services pursuant to this Agreement have been performed to the satisfaction of the SDA, whichever occurs later.

ii. **Third paragraph of Appendix B to Attachment A:**

Deliverable: [Bold in Original] The Actuary shall provide a report of the GASB 75 retiree post-employment benefit liability for the active and retired employees for the NJSDA within sixty (60) days of **the Actuary's receipt from the NJSDA of the Notice to Proceed the employee and retiree census data required for preparation of the report.**

B. BIDDER'S QUESTIONS, REQUESTS FOR INFORMATION AND RESPONSES:

1. **QUESTION:** Can NJSDA provide the prior actuarial GASB 45 valuation report?

ANSWER: Please see Attachment 1.1. Bidders are reminded that the RFP requires the ultimate awardee to prepare and provide a GASB 75 report.

2. **QUESTION:** Can NJSDA provide the prior annual winning cost for the GASB actuarial valuations?

ANSWER: The winning cost for the prior procurement was: 2013: \$6,000 for full GASB 45 Valuation; 2014: \$1,500 for Roll Forward Calculation and \$6,000 if full GASB 45 Valuation; and 2015: \$1,500 for Roll Forward Calculation and

\$6,000 if full GASB 45 Valuation. Bidders are reminded that the RFP requires the ultimate awardee to prepare and provide a GASB 75 report.

3. **QUESTION:** Who is the current actuary?

ANSWER: There is no current actuary. The most recent actuary was Aquarius Capital.

4. **QUESTION:** Can you provide a copy of the most recent GASB 45 valuation report?

ANSWER: Please see Attachment 1.1. Bidders are reminded that the RFP requires the ultimate awardee to prepare and provide a GASB 75 report.

5. **QUESTION:** Are results required only in aggregate for the NJSDA or are there groups that require separate accounting? If so, for how many?

ANSWER: The results are in aggregate form.

6. **QUESTION:** Is there any flexibility in the 60 day delivery timeframe depending on the quality of the data received?

ANSWER: See Section A, Changes to the Procurement Process, above. The 60 day timeframe begins when the ultimate awardee receives the employee and retiree census data that is required for preparation of the report. There is no flexibility in that timeframe.

7. **QUESTION:** May contract exceptions be submitted for approval prior to the award of the engagement?

ANSWER: The NJSDA is unclear as to the meaning and intent of the term “contract exceptions” as used in this question. To the extent that the question is inquiring about proposed modifications to the form of the Agreement provided with the RFP, see Introduction to RFP, which provides, “Upon award, the NJSDA shall forward the Agreement for Actuary Services (the “Agreement”) to the selected firm for immediate execution, **without modification.**” (Emphasis in original). Accordingly, in the interest of bidding fairness, no modifications to the Agreement outside of the addendum process will be contemplated or considered by the NJSDA prior to the award of the engagement and execution of the Agreement by the ultimate awardee.

8. **QUESTION:** If you could please supply us with a copy of your last actuarial valuation report that would be greatly appreciated. If that is not available, could we please get the following information:

- 1) Employee count
- 2) Retiree count
- 3) General description of the OPEB plan
- 4) Pricing for the last actuarial valuation

ANSWER: Please see Attachment 1.1. Bidders are reminded that the RFP requires the ultimate awardee to prepare and provide a GASB 75 report.

9. **QUESTION:** Who is the incumbent for this work.

ANSWER: There is presently no incumbent for this work. The most recent actuary was Aquarius Capital.

10. **QUESTION:** Is the incumbent also permitted to submit a proposal?

ANSWER: All firms qualified to perform the services are invited to submit a proposal.

11. **QUESTION:** What was the total project value for previous years?

ANSWER: The services performed and payments rendered during the prior actuary contract are as follows:

<u>Year</u>	<u>Service</u>	<u>Payment</u>
2015	Roll-forward	\$1,500
2014	Valuation	\$6,000
2013	Roll-forward	\$1,500

12. **QUESTION:** Can you provide the prior actuarial report ?

ANSWER: Please see Attachment 1.1. Bidders are reminded that the RFP requires the ultimate awardee to prepare and provide a GASB 75 report.

13. **QUESTION:** If you cannot provide the prior actuarial report, how many planned participants are included within the scope of work?

ANSWER: See answer to Question 12 above.

C. CHANGES TO PREVIOUS ADDENDA:

Not Applicable.

D. ATTACHMENTS:

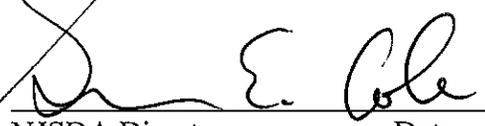
1. Attachment 1.1 GASB 45 valuation report
2. Attachment 1.2 "Notice of Intent to Participate" Contact List

E. SUPPLEMENTAL INFORMATION:

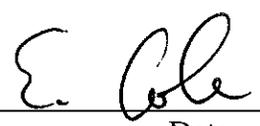
Not Applicable.

Any bidder attempting to contact government officials (elected or appointed), including NJSDA Board members, NJSDA Staff, and Selection Committee members in an effort to influence the selection process may be immediately disqualified.

End of Addendum No. 1



NJSDA Director



Date

7/8/16



Addendum No. 1

NJSDA
32 E. Front Street
Trenton, NJ 08625
Phone: 609-858-2981
Fax: 609-656-2647

DATE: July 8, 2016
PROJECT #: GP-0234-R01
Actuary Services
DESCRIPTION: Addendum No. 1

Acknowledgement of Receipt of Addendum

Consultant must acknowledge the receipt of the Addendum by signing in the space provided below and returning a scanned copy via fax (609-656-2647) or email (aperry@njsda.gov). Signed acknowledgement must be received **prior to the Bid Due Date. Bidders are also requested to include a signed copy of this addendum acknowledgement form with its Technical Proposal submission.**

Signature

Print Name

Company Name

Date

Actuary Services

GP-0234-R01

Addendum 1

Attachment 1.1

**NEW JERSEY SCHOOLS DEVELOPMENT
AUTHORITY**

**OTHER POSTEMPLOYMENT BENEFITS (OPEB)
REPORTING IN ACCORDANCE WITH GASB 45
FISCAL YEAR
JANUARY 1, 2014 TO DECEMBER 31, 2014**

**Prepared by: AQUARIUS CAPITAL SOLUTIONS GROUP LLC
Date: September 14, 2014**



September 14, 2014

Mr. Sherman Cole
Controller
New Jersey Schools Development Authority
1 West State Street
3rd Floor
Trenton, NJ 08625-0991

Re: Report - GASB 43 & 45 for Fiscal Year January 1, 2014 to December 31, 2014

Dear Mr. Cole:

Enclosed is an analysis of estimated costs for postemployment benefits valuation under Government Accounting Standards Board (GASB) No. 43 & 45 for the New Jersey Schools Development Authority (the "Company"). The valuation was done for fiscal year January 1, 2014 to December 31, 2014 for the Company. The attached report was completed in accordance with generally accepted actuarial principles and practices.

Financial Results

Included in the analysis is a Table of Contents. Sections I-III of the report includes the financial forecast for GASB 45 for the Company. As an example, the unfunded accrued liability (UAL), which is the accrued liability less assets, is \$18,641,861 as of January 1, 2014 and the projected annual other postemployment benefits (OPEB) cost is \$2,298,245.

The projected Net OPEB Obligation as of fiscal year ending December 31, 2014 is \$15,961,870 based on the projected pay-as-you-go results for fiscal year January 1, 2014 to December 31, 2014.

Pages 1-2 of the report illustrate the financial projections for the plan as of fiscal year-end December 31, 2014 to assist your auditors with accounting for the respective plan year. Although the auditors may only require pages 1-2, we recommend forwarding the report in its entirety.

Results for this valuation are based on census information provided by your organization in July 2014. This is based on a total of 253 active employees and retirees, reflecting the sum of 243 active employees and 10 retirees.

The active population reflects approximately 84.8% of the unfunded accrued liability above, with eight (8) of these active employees (3.3%) being eligible for retirement. Details of census demographic information are illustrated further in the report.

Covered Benefits and Claim Cost Assumptions

Medical including prescription drugs are offered to certain pre-65 and post-65 retirees on a fully insured basis through New Jersey State Health Benefits Program. Retirees and spouses that are eligible for Medicare receive reimbursements for their Medicare Part B. No subsidized coverage is available for dental, vision or life insurance. Retirees that are Medicare eligible do not receive reimbursements for Medicare Part D premium payments.

Base plan costs for 2013 and 2014 for pre-65 and post-65 retirees are illustrated in detail in Section VII, page 13 of this report.

Sensitivity Analysis

Section II of the report includes a sensitivity analysis based on varying the discount interest rate and the healthcare cost inflation rate (trend). The discount rate used was 4.5%, which is consistent with discount rates in the market and the same discount rate as the prior valuation. We have not performed a review of the Company's investments. If a different discount rate is preferred, then please contact us.

Increasing the discount rate by 1% (a discount rate of 5.5%) would lower the UAL by approximately 18.9%. Conversely, *lowering* the discount rate by 1% (a discount rate of 3.5%) would *increase* the UAL by approximately 25.1%. See page 3 of the report for details of both scenarios.

Section II of the report also includes a sensitivity analysis based on varying the healthcare cost inflation rate (trend). A 1% trend factor increase would increase the UAL by approximately 28.6%. Our forecast applied the 1% increase beginning January 1, 2015, since 2014 costs are treated as fixed since premium rates are fully insured and known.

Detail of this scenario is illustrated on page 3 of the attached report. Please contact us if you desire additional scenarios.

Healthcare Reform

The Patient Protection and Affordable Care Act (PPACA) enacted in March 2010 (Healthcare Reform) includes several fees and/or taxes levied on employer groups either directly (e.g., self-funded employer groups which calculates and pays the fees directly) or indirectly (e.g., fully insured groups in which the health insurer pays and passes on to the group in their premium rates.) The fees contemplated in this valuation are 1) Comparative Effectiveness Research fee, 2) Health Insurance Industry fee, 3) Reinsurance Assessment, and 4) High Cost Plans Excise Tax ("Cadillac tax").

For valuation purposes, all plans are treated as fully insured for conservatism.

The Comparative Effectiveness Research fee runs through 2019 and is tax deductible. The initial fee is \$1 per participant per year increasing to \$2 in the next year. Subsequent years are increased based on medical inflation. The fee applies to post-65 retirees where Medicare is the primary payer.

The Health Insurance Industry fee is based on targeted fixed fees to be paid by the health insurance industry and is not tax deductible. The total fee amount to be paid by health insurers starts at \$8 billion in 2014 and increases to \$14.3 billion in 2018. After 2018, the fee increases annually based on premium growth. Starting in 2014, the fee is estimated to be approximately 2.0% to 2.5% of premium increasing to approximately 3.0% to 4.0% in future years. The fee applies to fully insured plans including Medicare Advantage plans and excludes self-funded employer sponsored group health plans.

The Reinsurance Assessment is a short term fee levied on fully insured and self-funded employer groups between 2014 and 2016 and is tax deductible. The 2014 fee is \$63 per member per year. The 2015 fee is estimated to be between \$40 and \$45 PMPY and the 2016 fee is estimated at \$25 to \$30 PMPY. The fee applies to pre-65 group retiree plans and post-65 plans where Medicare is the secondary payer. Post-65 retirees where Medicare is the primary payer are excluded from this fee.

The High Cost Plans Excise tax includes a 40% tax ("Cadillac tax") on high cost health plans that will be levied on insurers and third party administrators (TPAs) beginning 2018 and will not be tax deductible. It is to be calculated separately for single and family coverage and will be equal to 40% of the excess of per employee plan costs, net of patient cost sharing, over the 2018 stated cost limits of:

- \$10,200 single / \$28,500 family
- \$11,850 single / \$30,950 family for retirees age 55-64

The 2018 limits may be increased if higher than expected trends are realized from 2010 through 2018 in the benchmark plan. The benchmark plan is the Federal Employees Health Benefits Plan (FEHBP) Blue Cross/Blue Shield standard option.

The limits will be adjusted to the extent per employee costs in the benchmark plan increase by more than 55% from 2010 to 2018 (for example, if the benchmark plan increase is 60% between 2010 and 2018, the cost limits will increase by the excess over 55% or 5%.) The final 2018 limits will be increased by CPI + 1% for 2019 and by CPI thereafter. For this valuation, it is assumed that CPI will be 3% for 2019 and beyond.

For valuation purposes, it is assumed the trend adjustments to the cost limits in the benchmark plan (FEHBP) are equal to *actual* premium increases in the FEHBP plan for 2010 through 2014 and *projected* increases in costs from 2015 through 2018 as listed in the "Health Care Cost Trend Assumption" in Section V, page 8 of the report.

For each year from 2018 and beyond, the excess of projected future premiums over future adjusted cost limits are multiplied by 40% and then adjusted (grossed up) for the assumed marginal tax rate of 35%. It is assumed that any excise tax payable by an insurer/TPA will be passed on to the entity through increased premiums/costs (whether billed separately or not.)

Demographic Information

Section IV, pages 5-7 of the report illustrates additional information pertaining to the underlying census information including age and sex analysis for active and retired employees along with summaries of the active population by age and years of service. Census analysis is illustrated separately for actives and retirees. Some highlights of census demographic information as of the January 1, 2014 valuation date are as follows:

- For retirees, the overall average age is 66.1 years with 40.0% of the retirees over age 65.
- For actives, the average age is 50.9 years and average years of service of 8.5.
- Of the active population, eight (8) of the employees (3.3%) are eligible to retire.
- 43.2% actives and 50.0% retirees valued were female.

Page 7 includes a comparison of census to the prior valuation report (January 1, 2012 valuation).

Assumptions & Definitions

As part of this report, we included supporting documentation such as a summary of assumptions, key definitions (glossary) and plan costs, which are provided in Sections V thru VII, respectively. This includes assumptions for health care costs, contribution rates, healthcare inflation, decrement tables (e.g., probability of death, turnover, disability and retirement) and other provisions. This also includes details on the descriptions of fees due to healthcare reform (PPACA), which is described previously in this document. The decrement tables used for this valuation are based on the July 1, 2012 Annual Report of the Actuary for the New Jersey Public Employees' Retirement System (PERS).

The mortality table used for the current valuation was the RP 2000 Healthy Male and Female Tables based on the Combined Healthy Table for both pre and post-retirement without mortality improvement. The current valuation reflects a projection for mortality improvements using Projection Scale AA projecting from the date of the table to the date of the valuation. This is consistent with practices done in the industry for GASB45 valuations with 2012 effective dates and later in the actuarial profession.

The management team at Aquarius Capital recently conducted market research as Professors at Columbia University, Masters in Actuarial Science program of the most common mortality table and mortality improvements table used in the market for GASB45 valuations. Based on our findings, the tables used for the Company's valuation are consistent with the most common tables used in the market.

For additional details on assumptions and definitions, see pages 8-14.

Overview of Actuarial Gain/Loss

On page 4 (Section III) of the valuation report, we illustrate an actuarial gain of \$1,819,005 (or 8.9% decrease in the UAL as of December 31, 2013), which is part of the calculation of OPEB costs. This reflects the decrease in the UAL as of January 1, 2014 as compared to the UAL as reported in the prior year valuation report with the UAL rolled forward to yearend December 31, 2013. The factors contributing to the actuarial gain is due to a combination of a reduction in employee counts and changes in demographics of the underlying population.

The liability decrease is partially offset by changes in healthcare costs due to reflecting the additional fees associated with healthcare reform (PPACA) as illustrated in page 9 of the report.

For additional details including financial impact of the above, see page 4 of the valuation report.

Information Reviewed

We based our analysis on reviewing electronic census information (record-by-record review), retiree plan information, cost information (premium rates through 2014), the prior actuarial reports, year-end audited financial statements, and other summary information of retiree benefits and eligibility.

We also gathered additional information from the company through emails and other correspondence in order to confirm retiree benefit information, census confirmations, and assumptions. Census information was provided in July 2014.

Data Reliance & Limitations

In our review, we have relied on the information provided by the Company. We have not audited or verified the accuracy of the information provided. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

This report and all attachments contained herein are for the internal use of the Company. It may not be provided to other parties without prior consent. If consent is granted, the report must be provided in its entirety. We understand the Company intends to distribute this letter and attachments to its auditor and fee accountant in connection with the reporting of results of this report for the sole use of preparation of audited financial statements. Aquarius consents to this distribution as long as the report is provided in its entirety and the auditor is advised to have an actuary review the work.

This report is provided to the Company for the purpose of calculation results under GASB 45. Information in this report may not be appropriate to use for other purposes. Aquarius does not intend to benefit from the overall results of the report and we assume no duty, liability or obligation to parties that use this work for other reasons other than its intention, i.e., reporting of GASB 45 for financial statements.

Audit Report Review & Additional Certifications

In connection with the audit of the financial statements of the New Jersey Schools Development Authority (the "Authority") as of prior years from your auditor, Ernst & Young LLP, below is the following confirmation pertaining to our organization in the identical format as past years.

- That Aquarius Capital and its employees are independent of the Authority and free of any conflicts-of-interest as it relates to the services performed on behalf of the Authority in the preparation of the actuary valuation of the Other Post-Employment Benefit Obligation in accordance with Governmental Accounting Standard No. 45, "Accounting and Financial Reporting by Employers for Post-employment Benefit Plans Other Than Pension Plans."

- That Aquarius Capital has the qualifications and the capabilities based on its significant experience in the actuary field.

Furthermore, below are comments based on our review of the prior audit report for the Company with suggested corrections for the 2014 year. Please note that these changes do not impact the reported results, so your organization probably will not need to restate the prior audit report, but suggest making corrections for yearend December 31, 2014. Suggested corrections are as follows:

- On page 27 of the December 31, 2013 audit report, the amortization basis is listed as an open basis on a level percentage of payroll. Please note that this valuation and the past valuation was based on a level dollar (not percentage of payroll) and closed basis amortization. The valuation report includes illustration of results as a percentage of payroll as previously requested, but the amortization basis is a level dollar approach.
- On page 28 of the December 31, 2013 audit report, the mortality improvement table was based on Scale AA not BB.

Furthermore, for illustrative purposes based on your prior year auditor's request, we have added a generational scenario for mortality improvement. The current valuation reflects the impact of mortality improvements for fourteen (14) years, which reflects the date of the mortality table (RP-2000) to the date of the valuation (i.e., 2014). Mortality improvement is based on Scale AA.

If we increase the mortality improvement to twenty one (21) years as compared to the fourteen (14) years in the valuation report, to reflect the impact of a generational mortality improvement, the changes in the Unfunded Accrued Liability, Annual OPEB Cost and Net OPEB Obligation would be as follows:

	<u>21 Years</u>	<u>14 Years</u>	<u>Change</u>	<u>% Change</u>
UAL as of 1/1/14	\$ 19,123,429	\$ 18,641,861	\$ 481,568	2.6%
2014 Annual OPEB Cost	\$ 2,374,361	\$ 2,298,245	\$ 76,116	3.3%
Net OPEB Obligation, 12/31/14	\$ 16,037,785	\$ 15,961,870	\$ 75,915	0.5%

The projected Net OPEB Obligation as of December 31, 2014 is based on the fourteen (14) years above.

Actuarial Opinion

I, Michael L. Frank, ASA, FCA, MAAA, am President and Actuary of Aquarius Capital Solutions Group LLC. I am an Associate of the Society of Actuaries, Fellow of Conference of Consulting Actuaries, and Member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

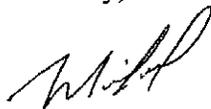
The attached report was completed in accordance with generally accepted actuarial principles and practices. Our organization and its employees are independent of the Company and do not have any conflicts of interest as it relates to the services performed on behalf of the Company in the preparation of this report.

September 14, 2014

Page 7

We hope that this report is beneficial. When convenient, please contact me so that we can schedule a call or meeting to review report in more detail. In addition, please extend thanks to you and your team for assistance in the gathering of information to help us complete this analysis. Their assistance was much appreciated. We look forward to working with you in the future.

Sincerely,



Michael L. Frank, A.S.A., M.A.A.A., F.C.A.
President & Actuary

Cc: Donald Rusconi – Aquarius Capital

Enclosure



Client: New Jersey Schools Development Authority
Valuation Estimates under GASB No. 43 & 45 valued as of January 1, 2014

NEW JERSEY SCHOOLS DEVELOPMENT AUTHORITY

GASB NO. 43 & 45

VALUATION AS OF JANUARY 1, 2014

Prepared by: Aquarius Capital Solutions Group LLC
September 14, 2014



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SECTION I: FINANCIAL RESULTS AS OF JANUARY 1, 2014 VALUATION FOR YEAR END DISCLOSURE

(First Year of Implementation is Fiscal Year January 1, 2007 to December 31, 2007)

1 Discount Rate		4.50%
<u>Section 1: Development of Service Cost for Fiscal Year January 1, 2014 to December 31, 2014</u>		
2 Service Cost at Beginning of Year as of January 1, 2014	\$	1,420,183
3 Interest on Service Cost (2) x (1)	\$	63,908
4 Service Cost with Interest to Year End - Period January 1, 2014 to December 31, 2014 (2) + (3)	\$	1,484,091
<u>Section 2: Projected Unfunded Accrued Liability to Year End December 31, 2014</u>		
5 Accrued Liability (AL) as of January 1, 2014	\$	18,641,861
6 Assets	\$	-
7 Unfunded Accrued Liability (UAL) as of January 1, 2014 (5) - (6)	\$	18,641,861
8 Service Cost with Interest to Year End (4)	\$	1,484,091
9 Pay-As-You-Go Benefits - Projected	\$	217,142
10 Interest on Unfunded Accrued Liability (7) x (1) - (9) x (1) / 2	\$	833,998
11 Projected Unfunded Accrued Liability (UAL) as of December 31, 2014 (7) + (8) - (9) + (10)	\$	20,742,808
<u>Section 3: Amortization of Initial Unfunded Accrued Liability</u>		
12 Initial Unfunded Accrued Liability at Implementation (January 1, 2007 Valuation Report) (Same as Prior Year Valuation)	\$	8,922,100
13 Amortization Factor (Same as Prior Valuation)		30
14 Amortization of Unfunded Accrued Liability as of April 1, 2009 (12) / (13), (Level Dollar & Closed Amortization Basis)	\$	297,403
15 Interest on Amortization of Unfunded Accrued Liability (1) x (14)	\$	13,383
16 Total Amortization of Unfunded Accrued Liability w/ Interest (14) + (15)	\$	310,786
17 # of Years of Amortization of Initial UAL, including Current Valuation (First Year of Implementation was January 1, 2007 to December 31, 2007)		8



SECTION I: FINANCIAL RESULTS AS OF JANUARY 1, 2014 VALUATION FOR YEAR END DISCLOSURE (CONTINUED)

Section 4: Adjustments to Annual Required Contribution (ARC)

	Total
18 Unfunded Accrued Liability (UAL) as of January 1, 2014 (7)	\$ 18,641,861
19 Projected Unfunded Accrued Liability as of December 31, 2013 (Prior Roll Forward Calculation to Year End March 31, 2013)	\$ 20,460,866
20 Experience (Gain)/Loss on Unfunded Accrued Liability as of January 1, 2014 (18) - (19)	\$ (1,819,005)
21 Net OPEB Obligation as of December 31, 2013 (Audit Report for Year End December 31, 2013, Page 26)	\$ 13,880,767
22 Total (Gain)/Loss since Prior Valuation	
a. Calculation of Experience (Gain)/Loss on UAL as of January 1, 2014: (20)	\$ (1,819,005)
b. Amortization of (Gain)/Loss	15
c. Amortization for (Gain)/Loss for Current Period: (22a) / (22b)	\$ (121,267)
23 Adjustment to ARC - Amortization of (Gain)/Loss (22c); Assume no amortization of prior gain/loss based on prior valuations	\$ (121,267)

Section 5: Summary of Annual OPEB Cost & Net OPEB Obligation as of December 31, 2014

24 Annualize Payroll Information (Results based on Valuation Census File - Annualized Snapshot based on Provided Census Information)	\$ 18,224,900	
25 Unfunded Accrued Liability (UAL) as of January 1, 2014 (7)	\$ 18,641,861	<u>% Payroll (Line 24)</u> 102.3%
26 Total Service Cost with Interest - January 1, 2014 to December 31, 2014 (4)	\$ 1,484,091	8.1%
27 Total Amortization of Initial Unfunded Accrued Liability w/ Interest (16)	\$ 310,786	1.7%
28 Annual Required Contribution (ARC) (26) + (27)	\$ 1,794,877	9.8%
29 Interest on Net OPEB Obligation as of January 1, 2014 (1) x (21)	\$ 624,635	3.4%
30 Adjustment to ARC (23)	\$ (121,267)	-0.7%
31 Annual OPEB Cost (28) + (29) + (30)	\$ 2,298,245	12.6%
32 Contributions Made (Pay-As-You-Go Costs) - Projected (9)	\$ 217,142	1.2%
33 Net OPEB Expense Cost at December 31, 2014 (31) - (32)	\$ 2,081,103	11.4%
34 Net OPEB Obligation as of December 31, 2013 (21)	\$ 13,880,767	76.2%
35 Net OPEB Obligation as of December 31, 2014 (33) + (34)	\$ 15,961,870	87.6%



SECTION II - SUMMARY OF FINANCIAL INFORMATION INCLUDING SENSITIVITY ANALYSIS

Summary of Financial Results with Sensitivity Analysis (January 1, 2014 Valuation Date)	Base Scenario	Sensitivity Analysis	Sensitivity Analysis	Healthcare Cost
	Val. Discount Rate of <u>4.50%</u>	Val. Discount Rate of <u>5.50%</u>	Val. Discount Rate of <u>3.50%</u>	Trend Rate Assumptions <u>Increased 1%</u>
	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>
I Total Employee Lives				
a. Actives	243	243	243	243
b. Retirees	11	11	11	11
c. Subtotal	254	254	254	254
2 Present Value of Future Benefits (PVFB) as of January 1, 2014				
a. Actives	\$ 38,526,920	\$ 29,834,111	\$ 50,389,784	\$ 52,332,482
b. Retirees	\$ 2,837,672	\$ 2,558,968	\$ 3,172,609	\$ 3,168,893
c. Subtotal	\$ 41,364,592	\$ 32,393,079	\$ 53,562,393	\$ 55,501,375
d. % Actives as ratio of Subtotal	93.1%	92.1%	94.1%	94.3%
e. Sensitivity Analysis of Subtotal: Ratio to Base Scenario for PVFB		78.3%	129.5%	134.2%
3 Accrued Liability (AL) as of January 1, 2014				
a. Actives	\$ 15,804,189	\$ 12,563,062	\$ 20,149,311	\$ 20,797,395
b. Retirees	\$ 2,837,672	\$ 2,558,968	\$ 3,172,609	\$ 3,168,893
c. Subtotal	\$ 18,641,861	\$ 15,122,030	\$ 23,321,920	\$ 23,966,288
d. % Actives as ratio of Subtotal	84.8%	83.1%	86.4%	86.8%
e. Sensitivity Analysis of Subtotal: Ratio to Base Scenario for AL		81.1%	125.1%	128.6%
4 Assets	\$ -	\$ -	\$ -	\$ -
5 Unfunded Accrued Liability (UAL) (3c) - (4)	\$ 18,641,861	\$ 15,122,030	\$ 23,321,920	\$ 23,966,288
6 Service Cost with Interest				
a. Service Cost at Year End:	\$ 1,484,091	\$ 1,148,180	\$ 1,940,693	\$ 2,039,536
b. Ratio to Valuation Results for Service Cost		77.4%	130.8%	137.4%
7 Pay-As-You-Go Benefits - Illustrated as Projected	\$ 217,142	\$ 217,142	\$ 217,142	\$ 217,142
8 Ratio of AL to Pay-As-You-Go: (3c) / (7)	85.85	69.64	107.40	110.37
9 Ratio of Service Cost to Pay-As-You-Go: (6a) / (7)	6.83	5.29	8.94	9.39
10 Average Annual Pay-As-You-Go Benefit per Retiree (7) / (1b)	\$ 19,740	\$ 19,740	\$ 19,740	\$ 19,740
11 Three Year Projection of Pay-As-You-Go Costs				
a. Year 1: January 1, 2014 to December 31, 2014	\$ 217,142	\$ 217,142	\$ 217,142	\$ 217,142
b. Year 2: January 1, 2015 to December 31, 2015	\$ 261,568	\$ 261,568	\$ 261,568	\$ 261,568
c. Year 3: January 1, 2016 to December 30, 2016	\$ 275,019	\$ 275,019	\$ 275,019	\$ 277,561

Note: All costs are net of retiree contributions. See pages 1-2 for financial statement information.



SECTION III - SUMMARY OF FINANCIAL INFORMATION INCLUDING GAIN/LOSS ANALYSIS

Summary of Experienced (Gain)/Loss as of January 1, 2014

1	Calculation of Experience (Gain)/Loss on Unfunded Accrued Liability as of January 1, 2014 (See Page 2, Line 20 of Report)	\$ (1,819,005)	
2	Prior Valuation Unfunded Accrued Liability as of December 31, 2013 (See Page 2, Line 19 of Report)	\$ 20,460,866	
3	Ratio of (Gain)/Loss to Prior Valuation Unfunded Accrued Liability (1) / (2)	-8.9%	
4	Distribution of Experience (Gain)/Loss as of January 1, 2014		<u>% Total</u>
a.	Impact due to the incremental fees and costs of healthcare reform/PPACA	\$ 941,181	-51.7%
b.	Impact due to change in demographics (e.g., years of service for active population)	\$ (1,187,273)	65.3%
c.	Impact due to change (reduction) in employee headcounts	\$ (882,642)	48.5%
d.	Impact due to changes in health plan costs, medical plan migration, and other valuation assumptions	<u>\$ (690,271)</u>	<u>37.9%</u>
e.	Subtotal: (a) + (b) + (c) + (d)	\$ (1,819,005)	100.0%



SECTION IV - SUMMARY OF CENSUS INFORMATION

Summary of Retiree Enrollment by Age Band, calculated as of January 1, 2014

<u>Age Band</u>	<u>Female</u>	<u>Male</u>	<u>Subtotal</u>	<u>% Female</u>
Under 50	-	-	-	n/a
50 to 54	-	-	-	n/a
55 to 59	2	1	3	66.7%
60 to 64	-	1	1	0.0%
65 to 69	2	1	3	66.7%
70 to 74	-	2	2	0.0%
75 to 79	1	-	1	100.0%
80 to 84	-	-	-	n/a
85 to 89	-	-	-	n/a
90 to 94	-	-	-	n/a
95 +	-	-	-	n/a
Subtotal	5	5	10	50.0%

	<u>Female</u>	<u>Male</u>	<u>Subtotal</u>	<u>% Female</u>
Pre 65	2	2	4	50.0%
Post 65	3	3	6	50.0%
Subtotal	5	5	10	50.0%

	<u>Female</u>	<u>Male</u>	<u>Subtotal</u>
Average Age - Total	65.2	67.0	66.1
Average Age - Pre 65	58.0	60.5	59.3
Average Age - Post 65	70.0	71.3	70.7

Note: One active employee retired after the valuation date so counted as an active employee in this valuation report, so excluded above.



SECTION IV - SUMMARY OF CENSUS INFORMATION (CONTINUED)

Summary of Census for Actives by Age Band and Years of Service, calculated as of January 1, 2014

<u>Age Band</u>	<u>Years of Service</u>								<u>Subtotal</u>	<u>% Subtotal</u>
	<u>0 to 4</u>	<u>5 to 9</u>	<u>10 to 14</u>	<u>15 to 19</u>	<u>20 to 24</u>	<u>25 to 29</u>	<u>30 to 34</u>	<u>35 +</u>		
Under 25	1	-	-	-	-	-	-	-	1	0.4%
25 to 29	1	2	-	-	-	-	-	-	3	1.2%
30 to 34	3	3	1	-	-	-	-	-	7	2.9%
35 to 39	7	13	6	-	-	-	-	-	26	10.7%
40 to 44	3	12	9	1	-	-	-	-	25	10.3%
45 to 49	11	16	19	-	1	-	-	-	47	19.3%
50 to 54	3	15	15	1	1	2	-	-	37	15.2%
55 to 59	4	16	26	-	-	3	1	-	50	20.6%
60 to 64	5	11	8	1	1	1	-	1	28	11.5%
Age 65 +	2	9	8	-	-	-	-	-	19	7.8%
Subtotal	40	97	92	3	3	6	1	1	243	100.0%
% Subtotal	16.5%	39.9%	37.9%	1.2%	1.2%	2.5%	0.4%	0.4%	100.0%	

<u>Actives</u>	<u>Total</u>
Average Age:	50.9
Average Years of Service:	8.5

<u>% by Gender</u>	<u>Total</u>
Female	105 43.2%
Male	138 56.8%
Total	243 100.0%

<u>Actives by Service Category</u>	<u>Total</u>
Actives Not Yet Eligible for Benefits	235 96.7%
Actives Eligible for Benefits	8 3.3%
Total	243 100.0%

Note:

- Thirty six (36) individuals that elected opt outs (i.e., buy outs) as actives are assumed to enroll in medical at retirement. Waivers are assumed to elect the Direct 15 plan (most common plan design).
- Nine (9) terminated participants were reflected in the valuation since termination occurred after the valuation date.



SECTION IV - SUMMARY OF CENSUS INFORMATION (CONTINUED)

Comparison of Census Information with Prior Valuation Report (January 1, 2012)

	<u>January 1, 2014</u>	<u>January 1, 2012</u>	<u>Difference</u>	<u>% Difference</u>
<u>Summary of Counts</u>				
Actives	243	253	(10)	-4.0%
Retirees	<u>10</u>	<u>11</u>	<u>(1)</u>	<u>-9.1%</u>
Total	253	264	(11)	-4.2%
Retiree Counts - % Pre-65	40.0%	54.5%	-14.5%	-26.6%
<u>Average Age</u>				
Actives - Current Age	50.9	49.5	1.4	2.8%
Actives - Hire Age	42.4	42.2	0.2	0.5%
Retirees				
o Pre-65	59.3	58.7	0.6	1.0%
o Post-65	70.7	69.8	0.9	1.3%
o Total	66.1	63.7	2.4	3.8%
<u>Average Years of Service</u>				
Actives - Average Years of Service	8.5	7.3	1.2	16.4%
Actives Eligible for Benefits	8	6	2	33.3%
% Actives Eligible for Benefits	3.3%	2.4%	0.9%	37.5%
<u>Gender</u>				
% Female - Actives	43.2%	57.3%	-14.1%	-24.6%
% Female - Retirees	50.0%	45.5%	4.5%	9.9%



SECTION V - SUMMARY OF ASSUMPTIONS

Company	New Jersey Schools Development Authority		
Valuation Date	January 1, 2014		
Initial Implementation Year	January 1, 2007 to December 31, 2007		
Discount Rate	4.5%		
Purpose of Work	This report is provided to the company for the purpose of calculation results under GASB 45. Information in this report may not be appropriate to use for other purposes. Aquarius does not intend to benefit from the overall results of the report and we assume no duty, liability or obligation to parties that use this work for other reasons other than its intention, i.e., reporting of GASB 45 for financial statements.		
Information for Valuation	All information was provided by the company.		
Retirement Assumptions	Valuation of active and retired population		
Retirement Benefits	Coverage for pre-65 and post-65 coverage.		
Covered Benefits	Coverage for medical including prescription drug coverage as part of medical plan. Reimbursements provided for Medicare Part B premium for Medicare eligible participants. Company does not subsidize dental, vision and life insurance coverage for retirees.		
Insurance Coverage and Funding Basis	Medical, including prescription drugs, are fully insured with the New Jersey State Health Benefits Program for Local Government Employer Groups. The State offers a variety of plan options for retirees.		
Assets	Not valued since benefit is unfunded. Assets are zero.		
Actuarial Cost Method	Projected Unit Credit.		
Health Care Cost Trend Assumption	The following assumptions are used for annual healthcare cost inflation (trend):		
	<u>Year</u>	<u>Pre-65</u>	<u>Post 65</u>
	Year 1 Trend	8.0%	8.0%
	Ultimate Trend	5.0%	5.0%
	Grading Per Year	0.5%	0.5%
Starting Claim Cost	Base plan costs are based on premium rates for the New Jersey State Health Benefits Program for Local Government Employer Groups for calendar years 2013-2014. Monthly premium rates are illustrated in more detail by coverage tier and plan on page 13 of this report. Premium rates for 2014 plan year is based on premium rates. Future plan years (2015 & later) are based on the healthcare cost inflation increases as illustrated above.		
	The above costs are based on 100% before retiree contributions. These costs are valued as fully insured premium rates and include administrative costs.		
Projected Benefit Costs	All costs are not adjusted for aging since underlying premium rates are assumed to be community rated, since underlying plan is fully insured for medical and prescription drugs and in the state plan This is consistent with Actuarial Standards of Practice No. 6.		
Medicare Part B Reimbursements	The valuation reflects the reimbursement of Medicare Part B premium rates to retirees & spouses since this benefit over age 65 is reimbursed by the company. This includes reimbursement for higher income adjustment premium rates to retirees and spouses.		
Medicare Part D Reimbursements	The company does not reimburse for Medicare Part D premium for employees or spouses that are Medicare eligible.		



SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

Healthcare Reform Impact

The Patient Protection and Affordable Care Act (PPACA) enacted in March 2010 (Healthcare Reform) includes several fees and/or taxes levied on employer groups either directly (e.g., self-funded employer groups which calculates and pays the fees directly) or indirectly (e.g., fully insured employer groups in which the health insurer pays and passes on to the group in their premium rates.) The fees contemplated in this valuation are 1) Comparative Effectiveness Research fee, 2) Health Insurance Industry fee, 3) Reinsurance Assessment, and 4) High Cost Plans Excise Tax ("Cadillac tax"). For this valuation, all plans are treated as fully insured for conservatism.

The Comparative Effectiveness Research fee runs through 2019 and is tax deductible. The initial fee is \$1 per participant per year increasing to \$2 in the next year. Subsequent years are increased based on medical inflation. The fee applies to post-65 retirees where Medicare is the primary payer.

The Health Insurance Industry fee is based on targeted fixed fees to be paid by the health insurance industry and is not tax deductible. The total fee amount to be paid by health insurers starts at \$8 billion in 2014 and increases to \$14.3 billion in 2018. After 2018, the fee increases annually based on premium growth. Starting in 2014, the fee is estimated to be approximately 2.0% to 2.5% of premium increasing to approximately 3.0% to 4.0% in future years. The fee applies to fully insured plans including Medicare Advantage plans and excludes self-funded employer sponsored group health plans.

The Reinsurance Assessment is a short term fee levied on fully insured and self-funded employer groups between 2014 and 2016 and is tax deductible. The 2014 fee is \$63 per member per year. The 2015 fee is estimated to be between \$40 and \$45 PMPY and the 2016 fee is estimated at \$25 to \$30 PMPY. The fee applies to pre-65 group retiree plans and post-65 plans where Medicare is the secondary payer. Post-65 retirees where Medicare is the primary payer are excluded from this fee.

The High Cost Plans Excise tax includes a 40% tax ("Cadillac tax") on high cost plans that will be levied on insurers and third party administrators (TPA) beginning in 2018 and will not be tax deductible. It will be calculated separately for single and family coverage and will be equal to 40% of the excess of per employee plan costs, net of patient cost sharing, over the 2018 stated cost limits of:

- o - \$10,200 single / \$27,500 family
- o - \$11,850 single / \$30,950 family for retirees age 55-64

The 2018 limits above may be increased if higher than expected trends are realized from 2010 through 2018 in the benchmark plan. The benchmark plan is the Federal Employees Health Benefits Plan (FEHBP) Blue Cross/Blue Shield standard option. The limits will be adjusted to the extent per employee costs in the benchmark plan increase by more than 55% from 2010 to 2018 (for example, if the benchmark plan increase is 60% between 2010 and 2018, the cost limits will increase by the excess over 55% or 5%). The final 2018 limits will be increased by CPI + 1% for 2019 and by CPI thereafter. For this valuation, it is assumed that CPI will be 3% in 2019 and beyond.

For valuation purposes, it is assumed the trend adjustments to the cost limits in the benchmark plan (FEHBP) are equal to actual premium increases in the FEHBP plan for 2010 through 2014 and projected increases in costs from 2015 through 2018 as listed in the "Health Care Cost Trend Assumption" above. For each year from 2018 and beyond, the excess of projected future premiums over future adjusted cost limits are multiplied by 40% and then adjusted (grossed up) for the assumed marginal tax rate of 35%. It is assumed that any excise tax payable by an insurer/TPA will be passed on to the entity through increased premiums/costs (whether billed separately or not.)

Plan Design Changes

Valuation assumes no changes in future plan designs (e.g., deductibles, coinsurance, etc.) from current benefits offered for the current plan year. It is assumed that the current level of benefits will remain, with no modifications to avoid the potential excise "Cadillac" tax imposed by the Patient Protection and Affordable Care Act (PPACA) described in detail above.

% Future Retirees Opting Out

None, assume 100% participation for those covered as actives. All eligible active and retiree employee records provided by client were valued.

Retirement System

Valuation is based on the most recent New Jersey Public Employees' Retirement System (PERS) decrement tables based on the valuation from the July 1, 2012 Annual Report of the Actuary for PERS.



SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

Mortality	RP 2000 Healthy Male and Female Tables are based on the Combined Healthy Table for both pre and post-retirement projected with mortality improvements using Projection Scale AA for fourteen (14) years, i.e., from date of table to valuation date.
Turnover Assumptions	This reflects rate of separation from the active plan and excludes retirement and disability. Turnover table varies by age and years of service with rates of turnover based on the NJ Public Employees' Retirement System (PERS).
Disability Assumptions	This reflects disability assumptions from the active plan for ordinary and accidental disability and is based on age. This is the assumption used for the NJ Public Employees' Retirement System (PERS).
Retirement Assumptions	This reflects rate of retirement from the active plan and is based on age and years of service. This is the assumption used for the NJ Public Employees' Retirement System (PERS).
Retirement Eligibility Assumptions	Eligibility for retirement is based on a minimum of age and/or years of service (YOS). Subsidized benefits are available for employees that obtain a minimum of twenty five (25) years of service. For new hires after June 28, 2011, retirement eligibility will be a minimum of age 65 with thirty (30) years of service.
Retiree Contribution Rates	Contribution rates for future retirees will be based on New Jersey State's new contribution formula per implementation of Chapter 78. Contributions are calculated using a varying formula based on the retirees' base salary at retirement with a minimum contribution of 1.5% of base salary. Active employees hired prior to implementation of Chapter 78 (June 28, 2011) will have their contribution phased in over a four (4) year period. Employees hired on or after June 28, 2011 will have their contribution set at the highest year four contribution level. Section VIII on page 14 illustrates the Chapter 78 contribution rate tables. Current retiree contributions are \$0 (i.e., the Company pays 100% of the benefit cost.)
Payroll Information	Payroll information was supplied for all active employees. Contribution rates for future retirees with less than twenty (20) years of service prior to implementation of Chapter 78 on June 28, 2011 will have their contribution for healthcare benefits based on base salary at retirement with a minimum of 1.5% of base salary.
Valuation of Spouses & Marital Status	Spouses are valued for benefits similar to retired employees. Current retirees with spouses are assumed to be married to those spouses at and throughout retirement while those without spouses (or not covering a spouse) are assumed to be single at and throughout retirement. Spousal information on actives and retirees were valued when provided in the census. Spouse information was solely provided for retirees, not actives.
Spouse Age Assumptions	For active employees and current retirees, actual spousal dates of birth were provided and valued. When spousal information was not provided, it is assumed that female spouses are three years younger than male employees and male spouses are three years older than female employees. Spouse information was solely provided for retirees, so assumptions were made for active employees.
Surviving Spouses & Dependents	Surviving dependents of retirees do receive subsidized health insurance.
Census Information	Participant data was provided by the company in July 2014. We relied on information as being accurate and we have not conducted any data audits.
New Hires	This valuation is based on a closed group and does not reflect the impact of future new entrants (e.g., new hires after date of data collection, i.e., July 2014) into the plan.
Excluded Population	Nine (9) terminated participants were reflected in the valuation since termination occurred after the valuation date.



SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

Waivers (Opt Outs)	Thirty six (36) individuals that elected opt outs (i.e., buy outs) as actives are assumed to enroll in medical at retirement. Waivers are assumed to elect the Direct 15 plan (most common plan design).
Vesteds & Leave of Absence	There were no individuals listed as vested or on leave of absence.
COBRA Participants	There were no individuals listed on COBRA.
Special Handling of Terminations	Employees listed as terminated after the valuation date were treated as active employees for valuation purposes.
Missing Census Information	
o Dates of Birth	No employees were missing date of birth, so no special adjustments were needed.
o Dates of Hire	No active employees were missing date of hire, so no special adjustments were needed. Hire date was based on enrollment date into PERS.
o Gender	No employees were missing gender, so no special adjustments were needed.
o Coverage Tier	Coverage election tiers were provided for all covered employees so no adjustments were required for this valuation.
Special Adjustments	No other special adjustments were provided since client data was complete for purposes of completing the valuation. All active and retired employees provided were valued.
Medicare Tax Subsidy	The Medicare tax subsidy is not reflected in valuation. There is no offset in premium rates charged to employer and post-65 costs are illustrated gross of subsidy.
Eligible Population	Population reflects all benefit eligible employees provided. Any new hires after date of data collection are not reflected in the valuation.
Amortization of Initial UAL	Initial unfunded accrued liability (UAL) is amortized over thirty (30) years on a level dollar closed basis. This is the same as the prior valuation report.
Rounding of Results	Results are illustrated to the nearest dollar. In using unrounded results (exact dollars), no implication is made as to the degree of precision in those results. Clients and their auditors should apply their own judgment as to the desirability of rounding when transferring results from this valuation report to the client's financial statements.
Initial Year of Recognition of GASB 43 & 45	We have not reviewed the audited financials of client so are not providing an opinion on when client should recognize and comply with GASB 43 & 45. We rely on the opinion of the client and its auditor for this determination.
Employee Contracts & Collective Bargaining Agreements	Employee contracts and collective bargaining agreements specific to retiree benefits were not reviewed. Results based on information as provided by client.
Other Comments	Actuarial methods, considerations, and analyses used in forming this certification conform to the appropriate Standards of Practice and guidelines of the Actuarial Standards Board (ASB).
Report Consent	This report and all attachments contained herein are for the internal use of the Company. It may not be provided to other parties without prior consent. If consent is granted, the report must be provided in its entirety. We understand the Company intends to distribute this letter and attachments to its auditor in connection with the reporting of results of this report for the sole use of preparation of audited financial statements. Aquarius consents to this distribution as long as the report is provided in its entirety and the auditor is advised to have an actuary review the work.
Certification of Opining Actuary	I, Michael L. Frank, ASA, FCA, MAAA, am President and Actuary of Aquarius Capital Solutions Group LLC. I am an Associate of the Society of Actuaries, Fellow of Conference of Consulting Actuaries, and Member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



SECTION VI - DEFINITIONS & GLOSSARY

Actuarial Present Value of Future Benefits (PVFB)	Present value of all benefits expected to be paid by the employer, net of expected retiree contributions, based on actuarial assumptions used in the valuation.
Accrued Liability (AL)	This is the past service liability or present value of all benefits earned to date. Since retiree medical benefits are not accrued based on a specific formula like a pension plan, the accounting standard (GASB 45) requires the benefits to be earned ratably from date of hire to date of full eligibility for benefits. For retirees and actives that are immediately eligible to retire and receive full benefits, the AL equals the PVFB. For actives not yet eligible to retire, it equals a pro-rata portion of the PVFB based on past services to total service for that employee.
Unfunded Accrued Liability (UAL)	This is the excess of the AL over assets.
Annual Required Contribution (ARC)	The employer's periodic required contribution to a defined benefit OPEB plan. The portion, as determined by a particular Actuarial Method, of the Actuarial Present Value of the benefits and expenses, which is provided for by future Normal Costs.
Service Cost (Normal Cost)	The proportion of the PVFB of a plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method used in the valuation. This is the cost of OPEB attributed to the current year of service.
Amortization Payment	The portion of the pension plan contribution (ARC) which is designated to pay interest on and to amortize the Actuarial Unfunded Accrued Liability (UAL)
Adjustment to ARC	For this valuation, the adjustment to the ARC reflects the gain/loss for the current valuation, similar to the prior valuations. The current gain/losses are amortized over fifteen (15) years on a level dollar basis.
Pay-As-You-Go	This is a method of financing a postretirement benefit plan under which the contributions to the plan are generally made at about the same time and amount as benefits and expenses become due.
Closed Group Valuation	This means that it does not consider the Actuarial PVFB associated with future entrants.
Decrement Rates	This is mortality, turnover, disability and retirement rate assumptions. This is used to determine likelihood of employee qualifying for OPEB and when benefits will commence. Mortality is also used to determine probability of individuals to live and continue to receive benefits.
Discount Rate	Assumption used for converting present value of future benefits less future contributions into today's dollar amounts.
Projected Unit Credit	This is an actuarial cost method whereby the costs of benefits earned is funded each year and the value of the accrued liability reflects the benefits earned to date.
Plan Members	The individuals covered by the terms of an OPEB plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.
Other Post Employment Benefits (OPEB)	Medical, dental, vision, life and other health benefits provided to terminated or retired employees including their dependents and beneficiaries.
Substantive Plan	The terms of the OPEB plan as understood by the employer and its plan members.
Recognition Year for GASB No. 43 & 45	2007-08 Fiscal Year: This impacts public agencies with total annual revenue of \$100 million or more must comply in the fiscal year after December 15, 2006. 2008-09 Fiscal Year: This impacts public agencies with total annual revenue between \$10 million and \$100 million must comply in the fiscal year after December 15, 2007. 2009-10 Fiscal Year: This impacts public agencies with total annual revenue less than \$10 million must comply in the fiscal year after December 15, 2008.



SECTION VII - SUMMARY OF CLAIM COST ASSUMPTIONS

Medical - Monthly Rates for 2013:

<u>Coverage Tier</u>	Aetna	NJ Direct 10	NJ Direct 15
Single - No Medicare	\$ 990.02	\$ 1,092.29	\$ 1,040.22
Single - On Medicare	523.82	479.41	456.36
Employee + Spouse (No Medicare)	2,158.66	2,381.27	2,267.67
Employee + Spouse (One Medicare)	1,500.36	1,556.45	1,482.05
Employee + Spouse (Two Medicare)	1,047.64	958.83	912.72
Family - No Medicare	2,455.99	2,708.95	2,579.73
Family - One Medicare	1,788.94	1,875.54	1,785.92
Family - Two Medicare	1,303.64	1,243.25	1,183.46
Employee + Child(ren) - No Medicare	1,386.47	1,529.23	1,456.31
Employee + Child(ren) - Medicare	767.99	759.06	722.56

Medical - Monthly Rates for 2014:

<u>Coverage Tier</u>	Aetna	NJ Direct 10	NJ Direct 15
Single - No Medicare	\$ 1,059.33	\$ 1,146.50	\$ 1,092.23
Single - On Medicare	535.67	486.32	462.58
Employee + Spouse (No Medicare)	2,309.76	2,500.34	2,381.06
Employee + Spouse (One Medicare)	1,578.13	1,611.65	1,534.28
Employee + Spouse (Two Medicare)	1,071.34	972.65	925.15
Family - No Medicare	2,627.91	2,844.40	2,708.72
Family - One Medicare	1,882.55	1,942.55	1,849.34
Family - Two Medicare	1,333.13	1,261.17	1,199.58
Employee + Child(ren) - No Medicare	1,483.53	1,605.69	1,529.12
Employee + Child(ren) - Medicare	785.37	770.00	732.40

Notes:

- The above rates are based on the Local Retired Group - Local Government Employers. These three plan options are provided for illustrative purposes, since other options are available for retirees and valued accordingly.*
- The rates above are for the New Jersey State Health Benefits Program for Local Government Employer Groups. They are included in the 2013 and 2014 Rate Renewal Recommendation Reports published on the state's website.*



SECTION VIII - SUMMARY OF NEW RETIREE CONTRIBUTION RATES

Below is a summary of contribution rates for individuals with less than twenty years of service as of implementation. Individuals with more than twenty years of service will be grandfathered and retiree contribution rates will be equivalent to contracted contribution amount. Individuals with less than twenty years of service as of implementation, will have the following contribution rates with a minimum contribution rate of 1.5% of compensation (base salary).

Section I - Single Coverage: Health Insurance Premium Rates as a Percentage of Premium

Salary Range	Year 1	Year 2	Year 3	Year 4
less than 20,000	1.13%	2.25%	3.38%	4.50%
20,000-24,999.99	1.38%	2.75%	4.13%	5.50%
25,000-29,999.99	1.88%	3.75%	5.63%	7.50%
30,000-34,999.99	2.50%	5.00%	7.50%	10.00%
35,000-39,999.99	2.75%	5.50%	8.25%	11.00%
40,000-44,999.99	3.00%	6.00%	9.00%	12.00%
45,000-49,999.99	3.50%	7.00%	10.50%	14.00%
50,000-54,999.99	5.00%	10.00%	15.00%	20.00%
55,000-59,999.99	5.75%	11.50%	17.25%	23.00%
60,000-64,999.99	6.75%	13.50%	20.25%	27.00%
65,000-69,999.99	7.25%	14.50%	21.75%	29.00%
70,000-74,999.99	8.00%	16.00%	24.00%	32.00%
75,000-79,999.99	8.25%	16.50%	24.75%	33.00%
80,000-94,999.99	8.50%	17.00%	25.50%	34.00%
95,000 and over	8.75%	17.50%	26.25%	35.00%

Section II - Family Coverage: Health Insurance Premium Rates as a Percentage of Premium

Salary Range	Year 1	Year 2	Year 3	Year 4
less than 25,000	0.75%	1.50%	2.25%	3.00%
25,000-29,999.99	1.00%	2.00%	3.00%	4.00%
30,000-34,999.99	1.25%	2.50%	3.75%	5.00%
35,000-39,999.99	1.50%	3.00%	4.50%	6.00%
40,000-44,999.99	1.75%	3.50%	5.25%	7.00%
45,000-49,999.99	2.25%	4.50%	6.75%	9.00%
50,000-54,999.99	3.00%	6.00%	9.00%	12.00%
55,000-59,999.99	3.50%	7.00%	10.50%	14.00%
60,000-64,999.99	4.25%	8.50%	12.75%	17.00%
65,000-69,999.99	4.75%	9.50%	14.25%	19.00%
70,000-74,999.99	5.50%	11.00%	16.50%	22.00%
75,000-79,999.99	5.75%	11.50%	17.25%	23.00%
80,000-84,999.99	6.00%	12.00%	18.00%	24.00%
85,000-89,999.99	6.50%	13.00%	19.50%	26.00%
90,000-94,999.99	7.00%	14.00%	21.00%	28.00%
95,000-99,999.99	7.25%	14.50%	21.75%	29.00%
100,000-109,999.99	8.00%	16.00%	24.00%	32.00%
110,000 and over	8.75%	17.50%	26.25%	35.00%

Section III - Member/Spouse/Partner or Parent/Child Coverage: Health Insurance Premium Rates as a Percentage of Premium

Salary Range	Year 1	Year 2	Year 3	Year 4
less than 25,000	0.88%	1.75%	2.63%	3.50%
25,000-29,999.99	1.13%	2.25%	3.38%	4.50%
30,000-34,999.99	1.50%	3.00%	4.50%	6.00%
35,000-39,999.99	1.75%	3.50%	5.25%	7.00%
40,000-44,999.99	2.00%	4.00%	6.00%	8.00%
45,000-49,999.99	2.50%	5.00%	7.50%	10.00%
50,000-54,999.99	3.75%	7.50%	11.25%	15.00%
55,000-59,999.99	4.25%	8.50%	12.75%	17.00%
60,000-64,999.99	5.25%	10.50%	15.75%	21.00%
65,000-69,999.99	5.75%	11.50%	17.25%	23.00%
70,000-74,999.99	6.50%	13.00%	19.50%	26.00%
75,000-79,999.99	6.75%	13.50%	20.25%	27.00%
80,000-84,999.99	7.00%	14.00%	21.00%	28.00%
85,000-99,999.99	7.50%	15.00%	22.50%	30.00%
100,000 and over	8.75%	17.50%	26.25%	35.00%

Actuary Services

GP-0234-R01

Addendum 1

Attachment 1.2

Attachment 1.2

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