The Philadelphia Parking Authority
701 Market Street, Suite 5400
Philadelphia, PA 19106

RFP No. 18-10
Actuarial Services
Addendum One

To: See Email Distribution List

From: Mary Wheeler
Manager of Contract Administration

Date: March 5, 2018

No Pages: 2 plus attachments

This addendum is issued on March 5, 2018 prior to the question due date and the proposal due date to add, delete, modify, clarify and/or to respond to questions submitted by prospective offerors regarding the work included in the above referenced solicitation.

CLARIFICATIONS, CHANGES AND ADDITIONS TO THE RFP DOCUMENTS

1. The following documents have been posted to the Authority's website, http://www.philapark.org/2018/02/rfp-no-18-10-actuarial-services/ :
   - Electronic version of the proposal form
   - Contract with the current actuary

QUESTIONS

1. **Question:** If we are a publicly-traded company and have financials on our website, it is okay to provide a link to access the statements?
   Response: Yes.

2. **Question:** Is the most recent actuarial valuation report available for review?
   Response: Yes, please see attached.

3. **Question:** Please provide a copy of the current contract with the current actuary.
   Response: This has been posted to the Authority's website, http://www.philapark.org/2018/02/rfp-no-18-10-actuarial-services/.

4. **Question:** Please provide the most recent actuarial experience study?
   Response: See attached.

5. **Question:** Please provide the current funding policy?
   Response: The PPA funds the Projected Net OPEB Obligation as of the most recently completed actuarial study.

6. **Question:** Please provide the Investment Policy Statement for the OPEB trust?
   Response: See attached.

7. **Question:** What are the fixed fees billed in the last three years?
   Response: $5,000 flat per year.

8. **Question:** What special and/or out of scope services has been billed for in the last two years, in additional to the fixed fees? Also, how many hours were billed for these services?
   Response: None

9. **Question:** Are there any service concerns and/or limitations with the current actuary**?**
   Response: None

10. **Question:** How long has the current actuary been providing actuarial services?
    Response: 2013-2017, five years.

11. **Question:** Is the Authority interested in hearing about other, related capabilities of the respondents like investment consulting or investment management.
    Response: No.

12. **Question:** Is the Authority open to accepting mutually-agreeable contract terms, which include some limitation of liability on the work performed by the contracting actuarial firm?
    Response: Any proposed language provided in the Company's proposal will be reviewed and considered by the Evaluation Committee.

13. **Question:** Are there any statutory requirements regarding limitation of liability of which we should be aware?
    Response: Not that we are aware of.

14. **Question:** Have you ever sued or threatened to sue your actuarial services vendor? If yes, please provide the dates and circumstances of such suits.
    Response: No.

END OF ADDENDUM ONE

PHILADELPHIA PARKING AUTHORITY

OTHER POSTEMPLOYMENT BENEFITS (OPEB)

REPORTING IN ACCORDANCE WITH GASB 45

FISCAL YEAR

APRIL 1, 2016 TO MARCH 31, 2017

Prepared by: AQUARIUS CAPITAL SOLUTIONS GROUP LLC
Date: April 6, 2017

AQUARIUS CAPITAL

April 6, 2017

Mr. Jonathan J. McGuire
Assistant Controller
Philadelphia Parking Authority
Mellon Independence Center
701 Market Street – Suite 5400
Philadelphia, PA 19106

Re: Report - GASB 43 & 45 for Fiscal Year April 1, 2016 to March 31, 2017

Dear Mr. McGuire:

Enclosed is an analysis of estimated costs for post employment benefits valuation under Government Accounting Standards Board (GASB) No. 45 for the Philadelphia Parking Authority (the "PPA"). The valuation was done for fiscal year April 1, 2016 to March 31, 2017 for the PPA. The attached report was completed in accordance with generally accepted actuarial principles and practices.

Please note the calculations contained herein are done for the sole purpose of reporting GASB 45 results for the audited financial statements. This report does not reflect the impact of GASB 75, and we recommend having a discussion with you and your auditors to review the impact to your financial statements, including but not limited to, the amount of the Net OPEB Obligation to be reported on your financial statements, the selected actuarial cost method, discount rate selection and your disclosures in your audited financial statements.

Financial Results

Included in the analysis is a Table of Contents. Sections I-IV of the report includes the financial forecast for GASB 45 for the PPA. As an example, the unfunded accrued liability (UAL), which is the accrued liability less assets, is $21,547,372 as of April 1, 2016 and the projected annual other postemployment benefits (OPEB) cost is $2,926,271. The projected Net OPEB Obligation as of fiscal year ending March 31, 2017 is $15,065,915.

Pages 1-2 of the report illustrate the financial projections for the plan as of fiscal year-end March 31, 2017 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 April 2017. This is based on a total of 581 active employees and retirees, reflecting the sum of 537 active employees and 44 retirees. Employee class was not provided in the underlying census for this valuation, so results were not illustrated by employee class in this report. Details of census demographic information are illustrated further in the report.

Covered Benefits and Claim Cost Assumptions

Employees who retire from the PPA may be eligible for postemployment medical, prescription drugs, dental and vision benefits for a limited period of time in retirement. PPA subsidized coverage is provided for sixty (60) months upon retirement and can be extended one (1) additional month for each 2.5 unused sick leave days accumulated at time of retirement. Based on the census of current retirees provided by the PPA, the average number of additional years of coverage accumulated based on unused sick leave days is approximately four to five (4-5) years. For valuation purposes, it is assumed that current active employees will receive a total of ten (10) years of subsidized health & welfare coverage upon retirement from the PPA.

Medical plans for pre-65 retirees include an HMO, POS and PPO option and a Medicare Supplement plan for post-65 retirees. The medical plans are provided on a self-insured basis through Independence Blue Cross (IBC). Post-65 medical coverage is fully insured with the Hartford. Prescription drug benefits for both pre-65 and post-65 retirees are provided on a self-funded basis and administered through Express Scripts. Dental and vision benefits are provided on a fully insured basis through MetLife dental and Vision Benefits of America.

Base plan costs used in this valuation are based on a combination of fully insured equivalency rate basis for medical including prescription drugs based on rates provided by the Company. Enrollment was not provided by health plan so rates were based on a weighted average enrollment for pre-65 retirees by tier and post-65 retirees by tier. Dental & vision rates by coverage tier were based on rates reported by individual for the most common plans.

A summary of base plan costs effective April 1, 2016 is illustrated in section VII, page 13 of the report.

The Company incorporated a benefit enhancement, which was similar to the prior valuation. The Company offered a reimbursement for Medicare Part B premium for those retirees and dependents that are Medicare eligible with the duration of benefits similar to the costs above.

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 4.0%, which is a decrease in rates from the prior valuation discount rate, and consistent with discount rates in the market. We have not performed a review of the PPA's investments. If a different discount rate is preferred, then please contact us.

Increasing the discount rate by 1% (a discount rate of 5.0%) would lower the UAL by approximately 9.0%. Conversely, lowering the discount rate by 1% (a discount rate of 3.0%) would increase the UAL by approximately 10.3%. 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 11.2%. Our forecast applied the 1% increase beginning April 1, 2017 consistent with the PPA's plan years. 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 included 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").

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. Effective with recent legislation passed on December 18, 2015, this fee will be suspended for the 2017 plan year and will resume in 2018.

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 the 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 2020 and will 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 2020 stated cost limits of:

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

The 2020 limits may be increased if higher than expected trends are realized from 2010 through 2020 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 2020 (for example, if the benchmark plan increase is 60% between 2010 and 2020, the cost limits will increase by the excess over 55% or 5%.) The final 2020 limits will be increased by CPI + 1% for 2021 and by CPI thereafter. For this valuation, it is assumed that CPI will be 3% for 2021 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 2017 and *projected* increases in costs from 2018 through 2020 as listed in the "Health Care Cost Trend Assumption" in Section V, page 8 of the report.

For each year from 2020 and beyond, the excess of projected future premiums over future adjusted cost limits are multiplied by 40%. It is assumed that any excise tax payable by an insurer/TPA will be passed on to the Town through increased premiums (whether billed separately or not.)

This valuation includes the latest changes to the Cadillac tax based on the newly passed legislation on December 18, 2015, which delays the implementation of the tax to January 1, 2020 as well as allowing the tax payments to be deductible for federal tax purposes. As stated previously, it is assumed the provided plan cost rates are inclusive of the applicable PPACA fees due at this time with the exception of the High Cost Plans Excise Tax ("Cadillac tax") as described above.

The above fees are assumed to continue for valuation purposes, but these fees are subject to change in the future depending on which healthcare reform bills are passed.

Overview of Actuarial Gain/Loss

On page 4 (section III) of the valuation report, we illustrate an actuarial gain of $2,986,974 (or 12.17% decrease in the March 31, 2016 UAL), which is part of the calculation of OPEB costs. This reflects the decrease in the UAL as of April 1, 2016 as compared to the UAL as reported in the audited financial statements as of year-end March 31, 2016.

Items contributing to the actuarial gain is a due to favorite plan costs compared to projections from the prior valuation plus change in demographics (e.g., reduction in average years of service) for the active population. The UAL decrease is partially offset by changes in the discount rate from 4.5% (prior valuation) to 4.0% (current valuation) and increases in the employee population (e.g., actives) from the prior valuation. See page 4 of the report for details of the actuarial gain/loss including financial estimates of each component of the gain/loss.

Demographic Information

Section IV 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.

As part of the report, we also included a comparison of census demographic information to the prior valuation report, i.e., April 1, 2014. This is highlighted on pages 5 through 7 of the report.

Some highlights of census demographic information as of the April 1, 2016 valuation date are as follows:

- For retirees, the overall average age is 67.2 years, which reflects an average age of 58.9 for pre-65 retirees and 69.1 for post-65 retirees with 18.2% of retirees under age 65.
- For actives, the average age is 44.1 years and average years of service of 9.1.
- Of the active population, 18.6% of the population (100 employees) is eligible to retire.
- 40.2% actives and 40.9% retirees valued were female.

Assumptions & Definitions

As part of this report, we included supporting documentation such as a summary of assumptions and key definitions (glossary), which are provided in Sections V through VII of the report. 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.

Eligibility for subsidized health & welfare coverage from the PPA in retirement is based on meeting a minimum age and minimum years of service requirement. These requirements are based on the City of Philadelphia Municipal Retirement System and vary based on employee classification and date of hire. Retirement criteria are described in more detail on page 10 of this report. The valuation is based on the most recent decrement tables from the City of Philadelphia Municipal Retirement System's July 1, 2012 Actuarial Valuation report, Appendix C.

The mortality table used for the current valuation was the RP 2014 Healthy Male and Female Tables based on the Combined Healthy Table for both pre and post-retirement with mortality improvement based on Scale AA projected to the valuation date similar to the previous valuation, plus an additional seven years mortality projection consistent with current industry trends in the market. The RP 2014 table replaces the RP 2000 table, which was used for the prior valuation

Information Reviewed

We based our analysis on reviewing electronic census information (record-by-record review), retiree plan information, cost information for fiscal year April 1, 2016 to March 31, 2017, the prior actuarial valuation report, year-end audited financial statements through March 31, 2016, and other summary information of retiree benefits and eligibility. We also gathered additional information from the PPA through emails and other correspondence in order to confirm retiree benefit information, census confirmations, and assumptions.

Census information was provided in April 2017. One census file was provided combining actives and retirees.

Data Reliance & Limitations

In our review, we have relied on the information provided by the PPA. 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 PPA. 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 PPA 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 PPA 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.

As stated previously, this report does not reflect the impact of GASB 75. We recommend having a call and/or meeting with you and your auditors to discuss the impact to your financial statements. Impact includes, but not limited to, the amount of the Net OPEB Obligation to be reported on your financial statements, the selected actuarial cost method, discount rate selection and your disclosures in your audited financial statements.

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 your organization and do not have any conflicts of interest as it relates to the services performed on behalf of your organization in the preparation of this report.

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
American Academy of Actuaries ID 21342

Cc: Donald Rusconi – Aquarius Capital

Enclosure

PHILADELPHIA PARKING AUTHORITY

GASB NO. 45

VALUATION AS OF APRIL 1, 2016

Prepared by: Aquarius Capital Solutions Group LLC
April 6, 2017

TABLE OF CONTENTS

SECTION I: FINANCIAL RESULTS AS OF APRIL 1, 2016 VALUATION FOR YEAR END DISCLOSURE

(First Year of Implementation is Fiscal Year April 1, 2007 to March 31, 2008)

			Total
1	Discount Rate		4.00%
	Section 1: Development of Service Cost		
2	Service Cost at Beginning of Year as of April 1, 2016	$	1,605,826
3	Interest on Service Cost (2) x (1)	$	64,233
4	Service Cost with Interest to Year End - Period April 1, 2016 to March 31, 2017 (2) + (3)	$	1,670,059
	Section 2: Projected Unfunded Accrued Liability to Year End March 31, 2017		
5	Accrued Liability (AL) as of April 1, 2016	$	21,547,372
6	Assets	$	-
7	Unfunded Accrued Liability (UAL) as of April 1, 2016 (5) - (6)	$	21,547,372
8	Service Cost with Interest to Year End (4)	$	1,670,059
9	Pay-As-You-Go Benefits - Projected for fiscal year April 1, 2016 to March 31, 2017	$	477,816
10	Interest on Unfunded Accrued Liability (7) x (1) - (9) x (1) / 2	$	852,339
11	Projected Unfunded Accrued Liability (UAL) as of March 31, 2017 (7) + (8) - (9) + (10)	$	23,591,954
	Section 3: Amortization of Initial Unfunded Accrued Liability		
12	Initial Unfunded Accrued Liability at Implementation - April 1, 2016 Valuation (7), (Open Amortization Basis)	$	21,547,372
13	30 Year Amortization Factor (PV Amortization factor, 30 yrs at 4.0%, Beginning of Period)		17.9837
14	Amortization of Unfunded Accrued Liability as of April 1, 2016 (12) / (13), (Open Amortization Basis)	$	1,198,161
15	Interest on Amortization of Unfunded Accrued Liability (1) x (14)	$	47,926
16	Total Amortization of Unfunded Accrued Liability w/ Interest (14) + (15)	$	1,246,087
17	# of Years of Amortization of Initial UAL, including Current Valuation		10

SECTION I: FINANCIAL RESULTS AS OF APRIL 1, 2016 VALUATION FOR YEAR END DISCLOSURE (CONTINUED)

Section 4: Adjustments to Annual Required Contribution (ARC)		Total
18 Unfunded Accrued Liability (UAL) as of April 1, 2016 (7)	$	21,547,372
19 Projected Unfunded Accrued Liability as of March 31, 2016 (Projection from Prior Year Roll Forward to March 31, 2016, page 1, line 11)	$	24,534,346
20 Experience (Gain)/Loss on Unfunded Accrued Liability as of April 1, 2016 (18) - (19)	$	(2,986,974)
21 Net OPEB Obligation as of March 31, 2016 (Audited Financial Statements as of year-end March 31, 2016, Note 9, Page 26 - Matches prior roll forward calculation)	$	12,617,460
22 Total (Gain)/Loss since Prior Valuation		
a. Calculation of Experience (Gain)/Loss on UAL as of April 1, 2016: (20)	$	(2,986,974)
b. Amortization Period for (Gain)/Loss (PV amortization factor over 30 years)		17.9837
c. Amortization for (Gain)/Loss for Current Period: (22a) / (22b)	$	(166,093)
23 Amortization of (Gain)/Loss based on Prior Valuation (Projection from Prior Year Roll Forward to March 31, 2016, Page 2, Line 24)	$	(328,480)
24 Adjustment to ARC - Amortization of (Gain)/Loss (22c) + (23)	$	(494,573)
Section 5: Summary of Annual OPEB Cost & Net OPEB Obligation as of March 31, 2017		
25 Unfunded Accrued Liability (UAL) as of April 1, 2016 (7)	$	21,547,372
26 Total Service Cost with Interest - April 1, 2016 to March 31, 2017 (4)	$	1,670,059
27 Total Amortization of Initial Unfunded Accrued Liability w/ Interest (16)	$	1,246,087
28 Annual Required Contribution (ARC) (26) + (27)	$	2,916,146
29 Interest on Net OPEB Obligation as of April 1, 2016 (1) x (21)	$	504,698
30 Adjustment to ARC (24)	$	(494,573)
31 Annual OPEB Cost (28) + (29) + (30)	$	2,926,271
32 Contributions Made (Pay-As-You-Go Costs) - Projected (9)	$	477,816
33 Net OPEB Expense Cost at March 31, 2017 (31) - (32)	$	2,448,455
34 Net OPEB Obligation as of March 31, 2016 (21)	$	12,617,460
35 Net OPEB Obligation as of March 31, 2017 (33) + (34)	$	15,065,915

SECTION II - SUMMARY OF FINANCIAL INFORMATION INCLUDING SENSITIVITY ANALYSIS

Summary of Financial Results with Sensitivity Analysis (April 1, 2016 Valuation Date)	Base Scenario Val. Discount Rate of 4.00% Total	Sensitivity Analysis Val. Discount Rate of 5.00% Total	Sensitivity Analysis Val. Discount Rate of 3.00% Total	Healthcare Cost Trend Rate Assumptions Increased 1% Total
1 Total Employee Lives				
a. Actives	537	537	537	537
b. Retirees	44	44	44	44
c. Subtotal	581	581	581	581
2 Present Value of Future Benefits (PVFB) as of April 1, 2016				
a. Actives	$ 35,194,195	$ 30,958,977	$ 40,308,075	$ 40,976,341
b. Retirees	$ 420,494	$ 402,939	$ 439,611	$ 440,756
c. Subtotal	$ 35,614,689	$ 31,361,916	$ 40,747,685	$ 41,417,096
d. % Actives as ratio of Subtotal	98.8%	98.7%	98.9%	98.9%
e. Sensitivity Analysis of Subtotal: Ratio to Base Scenario for PVFB		88.1%	114.4%	116.3%
3 Accrued Liability (AL) as of April 1, 2016				
a. Actives	$ 21,126,879	$ 19,206,201	$ 23,333,986	$ 23,541,192
b. Retirees	$ 420,494	$ 402,939	$ 439,611	$ 440,756
c. Subtotal	$ 21,547,372	$ 19,609,141	$ 23,773,597	$ 23,981,948
d. % Actives as ratio of Subtotal	98.0%	97.9%	98.2%	98.2%
e. Sensitivity Analysis of Subtotal: Ratio to Base Scenario for AL		91.0%	110.3%	111.3%
4 Assets	$ -	$ -	$ -	$ -
5 Unfunded Accrued Liability (UAL) (3c) - (4)	$ 21,547,372	$ 19,609,141	$ 23,773,597	$ 23,981,948
6 Service Cost with Interest				
a. Service Cost at Year End:	$ 1,670,059	$ 1,465,215	$ 1,914,008	$ 1,965,760
b. Ratio to Valuation Results for Service Cost		87.7%	114.6%	117.7%
7 Pay-As-You-Go Benefits - Illustrated as Projected	$ 477,816	$ 477,816	$ 477,816	$ 477,816
8 Ratio of AL to Pay-As-You-Go: (3c) / (7)	45.10	41.04	49.75	50.19
9 Ratio of Service Cost to Pay-As-You-Go: (6a) / (7)	3.50	3.07	4.01	4.11
10 Average Annual Pay-As-You-Go Benefit per Retiree (7) / (1b)	$ 10,859	$ 10,859	$ 10,859	$ 10,859
11 Three Year Projection of Pay-As-You-Go Costs				
a. Year 1: April 1, 2016 to March 31, 2017	$ 477,816	$ 477,816	$ 477,816	$ 477,816
b. Year 2: April 1, 2017 to March 31, 2018	$ 591,852	$ 591,852	$ 591,852	$ 597,232
c. Year 3: April 1, 2018 to March 31, 2019	$ 799,141	$ 799,141	$ 799,141	$ 813,691

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 April 1, 2016

1	Calculation of Experience (Gain)/Loss on Unfunded Accrued Liability as of April 1, 2016 (See Page 2, Line 20 of Report)	$ (2,986,974)
2	Prior Valuation Unfunded Accrued Liability as of March 31, 2016 (See Page 2, Line 19 of Report)	$ 24,534,346
3	Ratio of (Gain)/Loss to Prior Valuation Unfunded Accrued Liability (1) / (2)	-12.17%
4	Distribution of Experience (Gain)/Loss as of April 1, 2016	
	a. Impact due to change in discount rate from 4.5% (prior valuation) to 4.0% (current valuation)	$ 1,002,003
	b. Impact due to changes in employee counts for actives and retirees since the prior valuation	$ 4,146,829
	c. Impact due to changes in plan costs since the prior valuation projections	$ (2,286,699)
	d. Impact due to changes in active population demographics (e.g., average years of service) since the prior valuation	$ (4,175,149)
	e. Impact due to changes in other census demographics and assumptions since the prior valuation	$ (1,673,958)
	f. Subtotal: (4a) + (4b) + (4c) + (4d) + (4e)	$ (2,986,974)

SECTION IV - SUMMARY OF CENSUS INFORMATION

Summary of Retiree Enrollment by Age Band and Employee Group, calculated as of April 1, 2016

Age Band	Female	Male	Subtotal	% Subtotal
Under 50	-	-	-	0.0%
50 to 54	-	2	2	4.5%
55 to 59	1	-	1	2.3%
60 to 64	3	2	5	11.4%
65 to 69	9	13	22	50.0%
70 to 74	4	8	12	27.3%
75 to 79	1	1	2	4.5%
80 to 84	-	-	-	0.0%
85 to 89	-	-	-	0.0%
90 to 94	-	-	-	0.0%
95 +	-	-	-	0.0%
Subtotal	18	26	44	100.0%
% Subtotal	40.9%	59.1%	100.0%	

	Female	Male	Subtotal	% Subtotal
Pre 65	4	4	8	18.2%
Post 65	14	22	36	81.8%
Subtotal	18	26	44	100.0%

	Female	Male	Subtotal
Average Age - Total	66.9	67.5	67.2
Average Age - Pre 65	60.0	57.8	58.9
Average Age - Post 65	68.9	69.3	69.1

SECTION IV - SUMMARY OF CENSUS INFORMATION (CONTINUED)

Summary of Census for Actives by Age Band and Years of Service, calculated as of April 1, 2016

	Years of Service									
Age Band	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 +	Subtotal	% Subtotal
Under 25	44	3	-	-	-	-	-	-	47	8.8%
25 to 29	39	13	5	-	-	-	-	-	57	10.6%
30 to 34	29	6	17	-	-	-	-	-	52	9.7%
35 to 39	21	5	30	6	-	-	-	-	62	11.5%
40 to 44	7	5	19	5	-	-	-	-	36	6.7%
45 to 49	19	7	27	4	2	5	1	-	65	12.1%
50 to 54	19	13	21	5	6	9	4	-	77	14.3%
55 to 59	16	5	28	3	4	7	4	1	68	12.7%
60 to 64	6	7	27	1	-	3	3	-	47	8.8%
Age 65 +	2	5	16	1	-	-	2	-	26	4.8%
Subtotal	202	69	190	25	12	24	14	1	537	100.0%
% Subtotal	37.6%	12.8%	35.4%	4.7%	2.2%	4.5%	2.6%	0.2%	100.0%	

Actives	Total
Average Age:	44.1
Average Years of Service:	9.1

% by Gender	Total	
Female	216	40.2%
Male	321	59.8%
Total	537	100.0%

Actives by Service Category	Total	
Actives Not Yet Eligible for Benefits	437	81.4%
Actives Eligible for Benefits	100	18.6%
Total	537	100.0%

SECTION IV - SUMMARY OF CENSUS INFORMATION (CONTINUED)

Comparison of Census Information with Prior Valuation Report

	April 1, 2016	April 1, 2014	Difference	% Difference
Summary of Counts				
Actives	537	447	90	20.1%
Retirees	44	59	(15)	-25.4%
Total	581	506	75	14.8%
Retiree Counts - % Pre-65	18.2%	54.2%	-36.0%	-66.4%
Average Age				
Actives	44.1	45.0	(0.9)	-2.0%
Retirees				
o Pre-65	58.9	60.9	(2.0)	-3.3%
o Post-65	69.1	68.7	0.4	0.6%
o Total	67.2	64.5	2.7	4.2%
Average Years of Service				
Actives - Average Years of Service	9.1	9.6	(0.5)	-5.2%
Actives Eligible for Benefits	100	80	20	25.0%
% Actives Eligible for Benefits	18.6%	17.9%	0.7%	3.9%
Gender				
% Female - Actives	40.2%	40.9%	-0.7%	-1.7%
% Female - Retirees	40.9%	61.0%	-20.1%	-33.0%

SECTION V - SUMMARY OF ASSUMPTIONS

Valuation Date	April 1, 2016
Initial Implementation Year	April 1, 2007 to March 31, 2008
Discount Rate	4.0%
Purpose of Work	This report is provided to Philadelphia Parking Authority (PPA) 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. This report does not reflect the impact of GASB Statements 74 & 75 effective for fiscal years beginning after June 15, 2017. The impact to financial statements as a result of these new GASB Statements include, but are not limited to, the amount of the Net OPEB Obligation to be reported on the financial statements, the selected actuarial cost method, discount rate used, and disclosures in the audited financial statements.
Retirement Assumptions	Valuation of active and retired population
Retirement Benefits	Coverage for pre-65 and post-65 coverage.
Covered Benefits	Employees who retire from the PPA may be eligible for postemployment medical, prescription drugs, dental and vision benefits for a limited period of time in retirement. PPA subsidized coverage is provided for sixty (60) months upon retirement and can be extended one (1) additional month for each 2.5 unused sick leave days accumulated at time of retirement. Based on the census of current retirees provided by the PPA, the average number of additional years of coverage accumulated based on unused sick leave days is approximately four to five (4-5) years. For valuation purposes, it is assumed that current active employees will receive a total of ten (10) years of subsidized health & welfare coverage upon retirement from the PPA.
Insurance Coverage Funding Basis	Medical plans for pre-65 and post-65 retirees with Independence Blue Cross and Express Scripts for prescription drugs for the current valuation. Both plans are self-insured. The medical plan was self-insured for the prior valuation. The plan was fully insured for the April 1, 2012 valuation. Dental and vision benefits are provided on a fully insured basis through MetLife dental and Vision Benefits of America for fiscal year April 1, 2016 to March 31, 2017.
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):

	Year	Pre-65	Post 65
Initial Trend	April 1, 2017	10.0%	10.0%
Ultimate Trend	April 1, 2027 & Later	5.0%	5.0%
Grading Per Year		0.5%	0.5%

Starting Claim Cost	Base plan costs are based on a combination of fully insured premium rates for dental and vision, and self-funded fully insured equivalency rates for medical and prescription drugs. All cost information is illustrated as of April 1, 2016 to March 31, 2017 in Section VII, page 13 of this report. For medical and prescription drug coverages, premium rates are based on fully insured equivalency rates as developed by our organization for the self-insured plans. Post-65 medical coverage with Hartford/Benistar is provided on a fully insured basis.
Projected Benefit Costs	Base plan costs listed on page 13 of this report are experience rated and therefore adjusted for aging, consistent with Actuarial Standards of Practice No. 6. The aging factor assumes 2.5% per year.
Medicare Part B and Part D Reimbursements	Valuation does not reflect the reimbursement of Medicare Part D premium to retirees or spouses spouses as this benefit is not provided to retirees over age 65 by the PPA. Retirees and spouses that are eligible for Medicare are eligible for reimbursements for Medicare Part B premium based on the formula as it applies for medical and other coverages.

SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

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.
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.
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 included 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").

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. Effective with recent legislation passed on December 18, 2015, this fee will be suspended for the 2017 plan year and will resume in 2018.

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 2020 and will 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 2020 stated cost limits of:

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

The 2020 limits above may be increased if higher than expected trends are realized from 2010 through 2020 in the benchmark plan. The benchmark plan is the Federal Employees Health Benefits Plan (FEHBP) Blue 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 2020 (for example, if the benchmark plan increase is 60% between 2010 and 2020, the cost limits will increase by the excess over 55% or 5%.) The final 2020 limits will be increased by CPI + 1% for 2021 and by CPI thereafter. For this valuation, it is assumed that CPI will be 3% in 2021 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 2017 and projected increases in costs from 2018 through 2020 as listed in the "Health Care Cost Trend Assumption" above. For each year from 2020 and beyond, the excess of projected future premiums over future adjusted cost limits are multiplied by 40%. 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.)

This valuation includes the latest changes to the Cadillac tax based on the newly passed legislation on December 18, 2015, which delays the implementation of the tax to January 1, 2020 as well as allowing the tax payments to be deductible for federal tax purposes. As stated previously, it is assumed the provided plan cost rates are inclusive of the applicable PPACA fees due at this time with the exception of the High Cost Plans Excise Tax ("Cadillac tax") as described above.

SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

Census Information	Participant data provided by the PPA in April 2017. We relied on information provided as being accurate and we have not conducted any data audits. Census information included records for active employees and retirees.
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., April 2017) into the plan.
Mortality	RP 2014 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 2.25 years, (i.e., from the date of table to valuation date), plus seven (7) years generational improvement. The valuation table used for the prior valuation, i.e., April 1, 2014 was the RP2000 mortality table with mortality improvement using Projection Scale AA for 14 years (i.e., from the date of the table to the valuation date), plus 7 years of mortality improvement beyond the valuation date. This table was updated to reflect a more current mortality table released since the last valuation report.
Turnover Assumptions	This reflects rate of separation from the active plan and excludes retirement and disability. Turnover table varies by age and gender with rates of turnover based on the City of Philadelphia Municipal Retirement System, July 1, 2012 Actuarial Valuation report. Turnover rates are provided separately for retirees in the 1967 Plan (Plan J) and Plan 87 (Plan Y) depending on date of hire.
Disability Assumptions	This reflects disability assumptions from the active plan for ordinary and accidental disability and is based on age and gender. Rates of disability are based on the City of Philadelphia Municipal Retirement System, July 1, 2012 Actuarial Valuation report. Disability rates for Plans J and Y are the same.
Retirement Assumptions	This reflects rate of retirement from the active plan and is based on age and years of service. Rates of retirement are based on the City of Philadelphia Municipal Retirement System, July 1, 2012 Actuarial Valuation report. Retirement rates are provided separately for retirees in the 1967 Plan (Plan J) and Plan 87 (Plan Y) depending on date of hire.
Retirement System	Valuation is based on the City of Philadelphia Municipal Retirement System. Decrement tables used in this valuation are from the July 1, 2012 Actuarial Valuation report Appendix C.
Retirement Eligibility Assumptions	Eligibility for subsidized health & welfare coverage from the PPA is based on meeting a minimum age and minimum years of service requirement. Requirements are based on the City of Philadelphia Municipal Retirement System and vary based on employee classification and date of hire. Retirement criteria by plan is provided below:

Retirement Plan	Criteria
1967 Plan (Plan J)	o Minimum retirement age - 55; Minimum years of service - 10 o Municipal employees represented by AFSCME District Councils 33 and 47, Locals 2186 and 2187, hired before October 2, 1992. o Civil Service-Exempt, Appointed, and Non-Represented employees hired before January 8, 1987.
Plan 87 (Plan Y)	o Minimum retirement age - 60; Minimum years of service - 10 o Municipal employees represented by AFSCME District Councils 33 and 47, Locals 2186 and 2187, hired on or after October 2, 1992. o Civil Service-Exempt, Appointed, and Non-Represented employees hired on or after January 8, 1987.

Retiree Contribution Rates	In general, postemployment health & welfare benefits are non-contributory (zero cost to the retiree) with the exception of pre-65 retirees who elect the POS or PPO medical plan who must pay the incremental cost with the HMO plan. There is no cost to the retiree (PPA pays 100%) for post-65 benefits, prescription drugs, dental, or vision benefits.
Future Contributions for Medical	Retiree contributions as a percentage of premium for pre-65 retirees enrolled in the POS or PPO plan remain constat over the valuation. No benefit cost cap changes other than increases due to inflation and the PPACA fees and taxes as projected in the valuation.

SECTION V - SUMMARY OF ASSUMPTIONS (CONTINUED)

% 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.
Valuation of Spouses & Marital Status	Spouses are valued for benefits similar to retired employees. Employees with spouses are assumed to be married to those spouses at and throughout retirement. Employees that are without spouses (or not covering a spouse) are assumed to be single at and throughout retirement.
Spouse Age Assumptions	It is assumed that female spouses are three years younger than male employees and male spouses are three years older than female employees unless actual spouse date of birth information is provided. Spousal dates of birth were not provided so the above assumption was used.
Surviving Spouses & Dependents	Surviving dependents receive the same coverage until the unused time period for retirement benefits expires.
Waivers (Opt Outs)	Thirty two (32) active employees waived coverage and these individuals are assumed to elect medical medical coverage in retirement with individual electing the single coverage tier.
Vesteds, COBRA & Leave of Absence	There were no individuals listed as vested, COBRA or on leave of absence.
Reporting by Employee Class	Company did not provide reporting by employee class so these splits were not included in this valuation report.
Payroll Information	Payroll information was not reflected or valued for this analysis. Benefit and retiree contribution rates were not based on payroll so this information was not necessary for this valuation.
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 needed.
o Dates of Retirement	No retired employees were missing date of retirement, so no special adjustments needed.
o Gender	No employees were missing gender, so no special adjustments were needed.
o Coverage Tier	No employees were missing coverage tier election, so no special adjustments were needed.
Excluded Population	Population reflects all benefit eligible employees provided. Any new hires after date of data collection are not reflected in the valuation. The Teamsters 115 group was excluded from the census file since these individuals are not eligible for the Company's retirement health plans.
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.
Amortization of UAL	Initial unfunded accrued liability (UAL) was amortized over thirty (30) years on a level dollar open basis.
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).

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 from the prior valuation. Cumulative gain/losses are amortized over thirty (30) 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

Summary of Benefit Plan Costs by Coverage Tier

Benefit Plan	Tier	Plan Year 4/16 to 3/17
Medical/Rx for Pre-65 Retirees (HMO)	EE Only	$ 784.44
	EE + Spouse	1,190.10
	EE + Child	1,717.25
	EE + Children	1,796.90
	Family	2,302.45
Medical/Rx for Pre-65 Retirees (POS)	EE Only	$ 831.49
	EE + Spouse	1,261.49
	EE + Child	1,820.28
	EE + Children	1,904.72
	Family	2,440.59
Medical/Rx for Pre-65 Retirees (PPO)	EE Only	$ 847.19
	EE + Spouse	1,285.29
	EE + Child	1,854.62
	EE + Children	1,940.66
	Family	2,486.65
Combined Medical/Rx for Post-65 Retirees		
Medical for Post-65 Retirees (Hartford/Benistar)	Rate per Member	$ 187.54
Prescription Drug (Rx) for Post-65 Retirees	Rate per Member	$ 368.15
Subtotal Medical/Rx for Post-65 Retirees	Rate per Member	$ 555.69
Dental	EE Only	$ 29.84
	EE + Spouse	79.53
	EE + Child(ren)	58.50
	Family	115.12
Vision	EE Only	$ 4.00
	EE + 1	6.80
	Family	9.40

1. Medical and prescription drug costs are based on self-insured fully insured equivalency rates as developed by our organization. Costs are assumed to include administrative expenses. Based on gross costs (100% before retiree contributions).
2. Costs for Hartford/Benistar for post-65 medical coverage are fully insured. Post-65 prescription drug coverage is based on a projection of post-65 costs based on experience. The plan design for post-65 prescription drugs is the same plan design as the active and pre-65 retiree population.
3. Dental and vision costs are based on fully insured premium rates as provided by the Parking Authority in the current census listing including plan and coverage tier selection. Based on gross costs (100% before retiree contributions).

PHILADELPHIA PARKING AUTHORITY
INVESTMENT POLICY STATEMENT

I. Introduction

The intent of the Investment Policy of the Philadelphia Parking Authority (the “Authority”) is to define the parameters within which funds are to be managed. In methods, procedures and practices, the policy formalizes the framework for the Authority investment activities that must be exercised to ensure effective and judicious fiscal and investment management of the Authority’s funds. The guidelines are intended to be broad enough to allow the investment officers to function properly within the parameters of responsibility and authority, yet specific enough to adequately safeguard the investment assets.

II. Governing Authority

The investment program shall be operated in conformance with federal, state, and other legal requirements, including Pennsylvania Title 53, Chapter 55.

III. Scope

This policy applies to activities of the Authority with regard to investing the financial assets of all funds. In addition, funds held by trustees or fiscal agents are excluded from these rules; however, all funds are subject to regulations established by the state of Pennsylvania.

Except for funds in certain restricted and special funds, the Authority commingles its funds to maximize investment earnings and to increase efficiencies with regard to investment pricing, safekeeping and administration. Investment income will be allocated to the various funds based on their respective participation and in accordance with generally accepted accounting principles. *[This paragraph refers to the pooling of funds within a single governmental entity and implies no reference to local government investment pools]*

IV. General Objectives

The primary objectives, in priority order, of investment activities shall be:

1. *Safety*
Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The goal will be to mitigate credit risk and interest rate risk.

2. *Liquidity*
The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

3. *Return*
The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints of safety and liquidity needs.

V. Standards of Care

1. *Prudence*
The standard of prudence to be used by investment officials shall be the "prudent person" standard and shall be applied in the context of managing an overall portfolio. Investment officers acting in accordance with written procedures and this investment policy and exercising due diligence shall be relieved of personal liability for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

The "prudent person" standard states that,

> "Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived."

2. *Ethics and Conflicts of Interest*
Officers and employees involved in the investment process shall refrain from personal activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial investment decisions. Employees and investment officials shall disclose any material interests in financial institutions with which they conduct business. Disclosure shall be made to the Authority's Board. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking any personal investment transactions with the same individual with whom business is conducted on behalf of the Authority.

3. *Delegation of Authority and Responsibilities*

Governing Body
The Authority's Board will retain ultimate fiduciary responsibility for the portfolios. The Authority's Board will receive quarterly reports, designate investment officers and annually review the investment policy making any changes necessary by adoption.

Investment Officers
Authority to manage the investment program is granted to the Executive Director and Director of Finance hereinafter referred to as investment officers as designated by the Board of Trustees of the Philadelphia Parking Authority.

Responsibility for the operation of the investment program is hereby delegated to the Investment Officers who shall act in accordance with established written procedures and internal controls for the operation of the investment program consistent with this Investment Policy. Officers will prepare quarterly investment reports and other special reports as may be deemed necessary.

All participants in the investment process shall seek to act responsibly as custodians of the public trust. No officer or designee may engage in an investment transaction except as provided under the terms of this policy and supporting procedures.

VI. Authorized Investments

The authorized types of investments for authority funds shall be any of the following:

(1) Government obligations.

(2) Debt obligations issued by any of the following Federal agencies or such other like Federal agencies which may be designated by the board: Bank for Cooperatives, Federal Farm Credit Banks, Federal Financing Bank, Federal Home Loan Bank System, Federal National Mortgage Association, Export-Import Bank of the United States, Farmers Home Administration, Resolution Funding Corporation, Small Business Administration, Student Loan Marketing Association, Inter-American Development Bank, International Bank for Reconstruction and Development, Federal Land Banks or Government National Mortgage Association, and their predecessor or successor agencies.

(3) Short-term or long-term debt obligations of any state or political subdivision thereof or any agency or instrumentality of such a state or political subdivision or of any municipal corporation, provided that the obligations are rated by a rating agency in any of the three highest rating categories, without reference to subcategories, assigned by the rating agency.

(4) Rights to receive the principal of or the interest on obligations of states, political subdivisions, agencies or instrumentalities meeting the requirements set forth in paragraphs (2) and (3), whether through direct ownership as evidenced by physical possession of the obligations or un-matured interest coupons or by registration as to ownership on the books of the issuer or its duly authorized paying agent or transfer agent or through the purchase of certificates or other instruments evidencing an undivided ownership interest in payments of the principal of or interest on the obligations.

(5) Negotiable and nonnegotiable certificates of deposit, time deposits or other similar banking arrangements which are issued by banks, bank and trust companies, trust companies or savings and loan associations, provided that, unless issued by a qualified financial institution, any such certificate, deposit or other arrangement shall be continuously secured as to principal in the manner and to the extent provided in subsection (d).

(6) Repurchase agreements for investment securities described in paragraph (1) or (2) with a qualified financial institution or with dealers in government bonds which report to, trade with and are recognized as primary dealers by a Federal Reserve Bank and are members of the Securities Investors Protection Corporation, provided that the repurchase price payable under any agreement shall be continuously secured in the manner and to the extent provided in subsection (d).

(7) Investment agreements with qualified financial institutions.

(8) Commercial paper rated in the highest rating category, without reference to subcategories, by a rating agency.

(9) Shares or certificates in any short-term investment fund rated in the highest rating category, without reference to subcategories, by a rating agency, which short-term investment fund invests solely in obligations described in paragraphs (1) and (2).

(10) Debt obligations of any foreign government or political subdivision thereof or any agency or instrumentality of foreign government or political subdivision, provided that the obligations are rated by a rating agency, without reference to subcategories, in the highest rating category assigned by the rating agency.

(11) Such other investments which at the time of the acquisition thereof shall be listed as permissible investments for trust funds in an indenture or resolution with respect to indebtedness which is incurred under this chapter.

VII. Investment Parameters

1. Mitigating credit risk in the portfolio:
Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. The Authority shall mitigate credit risk by adopting the following:

A. Diversification

The investments shall be diversified by:
• limiting investments to avoid overconcentration in securities from a specific issuer or business sector (excluding U.S. Treasury securities)
• limiting investment in securities that have higher credit risks
• investing in securities with varying maturities

B. Mitigating market risk in the portfolio:

Market risk is the risk that the portfolio value will fluctuate due to changes in the general level of interest rates. The Authority recognizes that, over time, longer-term/core portfolios have the potential to achieve higher returns. On the other hand, longer-term portfolios have higher volatility of return. The Authority shall mitigate market risk by providing adequate liquidity for short-term cash needs, and by making longer-term investments only with funds that are not needed for current cash flow purposes. The Authority, therefore, adopts the following strategies to control and mitigate its exposure to market risk:

• The Authority shall maintain a minimum of three months of budgeted operating expenditures in short term investments to provide sufficient liquidity for expected disbursements;
• The maximum stated final maturity of individual securities in the portfolio shall be five years, except as otherwise stated in this policy; and,
• Longer term/Core funds will be the defined as the funds in excess of liquidity requirements. The investments in this portion of the portfolio will have maturities between 1 day and 5 years and will be only invested in higher quality and liquid securities.

i) Exception to 5-year maturity maximum: Reserve or Capital Improvement Project monies may be invested in securities exceeding five (5) years if the maturities of such investments are made to coincide as nearly as practicable with the expected use of the funds.

ii) Due to fluctuations in the aggregate surplus funds balance, maximum percentages for a particular issuer or investment type may be exceeded at a point in time subsequent to the purchase of a particular issuer or investment type may be exceeded at a point in time subsequent to the purchase of a particular security. Securities need not be liquidated to realign the portfolio; however, consideration should be given to this matter when future purchases are made.

VIII. Performance Standards/ Evaluation

The investment portfolio will be managed in accordance with the parameters specified within this policy. The portfolio should obtain a market average rate of return during a market/economic environment of stable interest rates. A series of appropriate benchmarks shall be established against which portfolio performance shall be compared on a regular basis. The benchmarks shall be reflective of the actual securities being purchased and risks undertaken and the benchmarks shall have a similar weighted average maturity and credit profile as the portfolio.

IX. Reporting/Disclosure

The investment officers shall prepare an investment report quarterly, including a management summary that provides an analysis of the status of the current investment portfolio and the individual transactions executed over the last quarter. This management summary will be prepared in a manner which will allow the Authority to ascertain whether investment activities during the reporting period have conformed to the investment policy. The report should be provided to the Authority's Board. The report will include, at a minimum, the following:

a. An asset listing showing par value, cost and accurate and complete market value of each security, type of investment, issuer, and interest rate;
b. Average maturity of the portfolio and modified duration of the portfolio;
c. Maturity distribution of the portfolio;
d. Average portfolio credit quality; and,
e. Time-weighted total rate of return for the portfolio for the prior one month, three months, twelve months, year to date, and since inception compared to the Benchmark Index returns for the same periods;
f. Average weighted yield to maturity of portfolio on investments as compared to applicable Benchmarks
g. Distribution by type of investment.

Annual reports

1. The investment policy shall be reviewed at least annually within 120 days of the end of the fiscal year to ensure its consistency with the overall objectives of preservation of principal, liquidity and return, and its relevance to current law and financial and economic trends.

2. A comprehensive annual report shall be presented in conjunction with the investment policy review. This report shall include comparisons of Authority's return to the Benchmark Index return, shall suggest policies and improvements that might enhance the investment program, and shall include an investment plan for the coming year.