Buck

The Town of Middletown Pension Plan

GASB 67 and 68 Information

For Fiscal Year Ending June 30, 2018

November 2018

Buck
420 Lexington Ave.
Suite 2220
New York, NY 10170

November 2018

Mr. Marc W. Tanguay
Finance Director
Town Hall
Town of Middletown
350 East Main Road
Middletown, Rhode Island 02842

Dear Mr. Tanguay:

Buck was retained to issue a report presenting the disclosure requirements under Statement Nos. 67 and 68 of the Governmental Accounting Standards Board. This report presents the results for the Town of Middletown Pension Plan for the fiscal year ending June 30, 2018.

Purpose of this Report

The plan sponsor may use this report to prepare the plan's and the plan sponsor's audited financial statements.

Use of this report for any other purpose or by anyone other than the plan sponsor or the auditor may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting it to perform an advance review of any statement, document, or filing based on information contained in this report. Buck will accept no liability for any such statement, document or filing made without prior review by Buck.

Where presented, references to "net pension liability" and "fiduciary net position as a percentage of the total pension liability" may be appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the Fund if the Fund were to settle (i.e., purchase annuities to cover) a portion or all of its liabilities.

Future actuarial measurements

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions, applicable law or regulations. Buck performed no analysis of the potential range of such future differences other than the sensitivity to possible changes in the discount rate, as an analysis of the potential range of such future differences is beyond the scope of this valuation.

Data Used

Buck performed the calculations using participant data as of July 1, 2017, and financial data as of June 30, 2018 both supplied by the Town and John Hancock. Buck did not audit the data, although they were reviewed for reasonableness and consistency with the prior year data. The accuracy of the results of the valuation is dependent on the accuracy of the data.

Actuarial Certification

The plan sponsor selected the assumptions used for the accounting results and funding policy calculations in the report with our advice and these reflect the experience study performed in 2018. All assumptions represent an estimate of future experience. We believe that these assumptions are reasonable and comply with the requirements of GASB 67 and 68. We prepared this report's accounting exhibits in accordance with the requirements of these standards.

Based on the individually reasonable assumptions used in the preparation of this report, and on the data furnished us, we certify that projection of the costs under this plan has been made using generally accepted actuarial principles and practices.

The valuation was prepared under the supervision of Prakash Sankaran, a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries and Aaron Shapiro, a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. Mr. Sankaran and Mr. Shapiro have both met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Buck Global, LLC

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CK/DLD/JD
Middletown GASB 67 68 Template

Table of Contents

Section 1 – GASB 67 and 68 Information

Summary of Significant Accounting Policies

Method used to value investments

Investments are reported at fair value.

Actuarial cost method

Entry Age Normal—Level Percent of Pay.

Plan Description

Plan administration

The Town of Middletown (Town) administers the Town of Middletown Pension Plan (Plan), a defined benefit pension plan that provides pensions for all full-time employees of the Town. Employees hired after July 1, 2001 become members of the State plan and do not participate in this plan. Plan administrators are the Town Administrator, the Finance Director and the Deputy Finance Director. The Town has the exclusive authority to amend the plan.

Plan membership

This valuation is a roll forward valuation in that the liabilities have been prepared based on census data as of June 30, 2017 and projected to June 30, 2018 according to the valuation's demographic assumptions. As of June 30, 2017, pension plan membership consisted of the following:

Membership Status	Count	Total Expected Future Working Lifetime	Average Expected Future Working Lifetime
Inactive plan members or beneficiaries currently receiving	138	0.00	
Inactive plan members entitled to but not yet receiving	3	0.00	
Active plan members	10	39.80	
Total	151	39.80	0.26

Benefits provided

Please see Section 4 of the report for a summary of plan provisions.

Contributions

The Town establishes contributions based on an actuarially determined contribution recommended by an independent actuary. The actuarially determined contribution is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2018, the Town contributed $2,403,830 to the Plan.

Investments

Rate of return

For the year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.61%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Receivables

An employer receivable contribution on behalf of the Library was made on August 21, 2018 and was also included in the plan assets.

Section 1 – GASB 67 and 68 Information (continued)

Net Pension Liability

The components of the net pension liability at June 30, 2018 were as follows:

Components of Net Pension Liability	
Total pension liability	$ 58,217,854
Plan fiduciary net position	(60,206,214)
Town's net pension liability	(1,988,360)
Plan fiduciary net position as a percentage of the total pension liability	103.42%

Pension Expense as of June 30, 2018

Pension Expense	Fiscal Year Ending June 30, 2018
Service Cost	$ 140,071
Interest Cost on Total Pension Liability	4,133,704
Differences between Expected and Actual Experience	1,444,275
Changes of Assumptions	0
Contributions-Member	(59,952)
Projected Earnings on Plan Investments	(4,248,135)
Differences between Projected and Actual Earnings	644,118
Administrative Expenses	161,654
Other	0
Total Pension Expense	$ 2,215,735

The difference between projected and actual investment earnings is recognized over five years, in accordance with the provisions of GASB 68. The differences between expected and actual experience and the effect of changes in assumptions are recognized over the average expected remaining service of all participants, which is 0.26 years. This means that the differences between expected and actual experience and the effect of changes in assumptions are effectively recognized immediately.

Actuarial assumptions

The June 30, 2018 total pension liability was determined by using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Assumptions	
Inflation	3.00%
Salary increases	5.00%
Investment rate of return	7.50%, net of pension plan investment expenses. This is based on an average inflation rate of 3.00% and a real rate of return of 4.50%.

Census data was collected as of June 30, 2017 and projected to June 30, 2018 according to the valuation's demographic assumptions.

Mortality rates were based on 115% of RP-2000 Combined Mortality for Males with White Collar adjustments, projected generationally with Scale AA from 2000 and 95% of RP-2000 Combined Mortality for Females with White

Section 1 – GASB 67 and 68 Information (continued)

Collar adjustments, projected generationally with Scale AA from 2000. The Society of Actuaries is working on a Public Plan Mortality Study and they are expected to release final public plan mortality table based on this study by the end of the year. Therefore, we have deferred making a change in the mortality assumption until the next valuation.

The valuation interest rate was determined through a forecast of the expected return of the plan's assets over the next 30 years. Forecast values were generated using the GEMS Economic Scenario Generator, which Buck leases from Conning and Company. The GEMS model is a multifactor economic model that uses basic macroeconomic variables (GDP growth, employment levels, expected and actual inflation) to generate simulations of the economy over the period. A total of 1,000 stochastic forecast paths were generated, and the simulated geometric mean portfolio return (based on the plan's current asset allocation) over 30 years was computed on each path. The valuation interest rate is based on the average return computed on these 1,000 paths, rounded to the nearest half percent.

Over a 20-year period, the 50th percentile annual rate of return forecast for such a portfolio is approximately 7.71%. The 75th and 25th percentiles of the distributions of annual rate of return forecasts over 20 years are 9.44% and 6.02%, respectively. Based on these results, the rate of return assumption used in the valuation was set to be 7.50% per year.

The above analysis was based on the following planned asset allocation for the Plan as of July 2017:

Asset Class	Allocation
Equity	57.3%
Investment Grade Bonds	6.6%
High Yield / Convertible Bonds	14.9%
Money Market	1.1%
Hancock IPG	20.1%
Total	100.0%

The 50th percentile of the 20-year projection of inflation from GEMS is 2.78%, which forms the basis of the underlying inflation assumption of 3.00% per year.

Discount rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that Town contributions will continue to follow the current funding policy. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Had there been a point where assets were projected to be depleted, a municipal bond rate of 2.98% would have been used in the development of the blended GASB discount rate after that point. The 2.98% rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index.

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

The following presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the Town's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net Pension Liability	$ 3,619,921	$ (1,988,360)	$ (6,748,172)

Section 1 – GASB 67 and 68 Information (continued)

Schedules of Required Supplementary Information

Schedule of Changes in Town's Net Pension Liability and Related Ratios

	2018
Total pension liability	
Service cost	$ 140,071
Interest	4,133,704
Changes of benefit terms	0
Differences between expected and actual experience	1,444,275
Changes of assumptions	0
Benefit payments	(4,864,424)
Net change in total pension liability	$ 853,626
Total pension liability-beginning	$ 57,364,228
Total pension liability-ending (a)	$ 58,217,854
Plan fiduciary net pension	
Contributions-employer	$ 2,403,830
Contributions-employee	59,952
Net investment income	4,868,722
Benefit payments, including refunds of employee contributions	(4,864,424)
Administrative expense	(161,654)
Other	0
Net change in plan fiduciary net position	$ 2,306,426
Plan fiduciary net position-beginning	$ 57,899,788
Plan fiduciary net position-ending (b)	$ 60,206,214
Town's net pension liability-ending (a)-(b)	$ (1,988,360)
Plan fiduciary net position as a percentage of the total pension liability	103.42%
Covered-employee payroll	$ 887,727
Net pension liability as a percentage of covered-employee payroll	(223.98%)

Notes to Schedule:

Benefit changes

None.

Changes of assumptions

There were no changes in assumptions since the prior year.

Section 1 – GASB 67 and 68 Information (continued)

Schedules of Required Supplementary Information (continued)

Schedule of Town Contributions

	2018
Actuarially determined contribution	$ 1,132,150
Contributions related to the actuarially determined contribution	(2,403,830)
Contribution deficiency (excess)	$ (1,271,680)

Notes to Schedule:

Valuation date

Actuarially determined contribution rates are calculated as of July 1, in the fiscal year in which contributions are reported. That is, the contribution calculated as of July 1, 2018 will be made during the fiscal year ended June 30, 2019.

Methods and assumptions used to determine contribution rates:

Actuarial cost method:

Entry Age Normal, Level Percent of Payroll

Amortization method

Level dollar

Amortization period

Closed six-year period beginning with the July 1, 2012 valuation.

Asset valuation method

Actuarial Value of Assets based on 5-year phase-in of investment gains and losses.

Inflation

3.00%

Salary increases

5.00%

Investment rate of return

7.50%, net of pension plan investment expenses. This is based on an average inflation rate of 3.00% and a real rate of return of 4.50%.

Retirement age

Assumptions related to age, service, and department are used for participants not yet receiving payments.

Mortality

115% of RP-2000 Combined Mortality for Males with White Collar adjustments, projected generationally with Scale AA from 2000 and 95% of RP-2000 Combined Mortality for Females with White Collar adjustments, projected generationally with Scale AA from 2000.

Other information

Please see Section 3 of the report.

Schedule of Investment Returns

	2017	2018
Annual money-weighted rate of return, net of investment expenses	10.85%	8.61%

Section 2 – Plan Participant Data

Reconciliation of Participant Data

	Actives	Terminated Vesteds	Retirees and Beneficiaries	Disabled Participants	Total
Participants as of July 1, 2016	11	4	134	5	154
New entrants	0	0	0	0	0
Rehires	0	0	0	0	0
Vested terminations	0	0	0	0	0
Non-vested terminations	0	0	0	0	0
Lump sum distributions	0	0	0	0	0
Retirements	(1)	(1)	2	0	0
Deaths	0	0	(6)	0	(6)
New beneficiaries	0	0	3	0	3
Benefits expired	0	0	0	0	0
Data corrections	0	0	0	0	0
Participants as of July 1, 2017	10	3	133	5	151

Inactive Participant Statistics – Average Annual Benefits

	July 1, 2016	July 1, 2017
Terminated Vested Participants	$ 9,013	$ 6,825
Retirees	$ 38,991	$ 40,065
Beneficiaries	$ 10,675	$ 10,409
Disabled Participants	$ 32,372	$ 32,372

Section 3 – Actuarial Assumptions and Methods

Actuarial Funding Assumptions

Funding valuation interest rate

7.50% per annum

Interest rate for accounting

7.50% per year, compounded annually. Projected benefit payments that are expected to be paid from available plan assets are discounted at the valuation interest rate of 7.50%. After the point where plan assets are not available to pay benefits, projected benefit payments are discounted at the municipal bond rate. The valuation rate for accounting purposes is the effective rate resulting from this process.

Municipal bond rate

2.98%. This rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index.

Compensation increase rate

5.00% per annum

Retirement age:

Police and Fire Department

Rates according to the following table:

Years of Service	Percent Retiring
Less than 20	0%
20	25%
21 – 24	50%
25 or more	100%

All Others

100% at the age at which unreduced benefits are first available.

Mortality

115% of RP-2000 Combined Mortality for Males with White Collar adjustments, projected generationally with Scale AA from 2000 and 95% of RP-2000 Combined Mortality for Females with White Collar adjustments, projected generationally with Scale AA from 2000.

Disability Incidence

United Auto Workers 1955 Table

Turnover

Sarason Table T-1 Table

Marriage Assumption

90% of males and 75% of females are married, with males four years older than their female spouse.

Section 3 – Actuarial Assumptions and Methods (continued)

Actuarial Funding Assumptions (continued)

Expenses

Prior year's expenses, rounded to the nearest thousand dollars.

Participant Data

Retiree census data was supplied by John Hancock. All other employee data used in these calculations was supplied by the employer.

The experience study performed in 2018 represents the most recent comprehensive review of the actuarial assumptions noted above.

Section 3 – Actuarial Assumptions and Methods (continued)

Funding Methods

Actuarial Cost Method

Entry age normal. The actuarial present value of projected benefits of each individual is allocated on a level basis over the covered salary of the individual between date of hire and assumed date they cease active employment. The portion of this actuarial present value not provided for at the valuation date by the actuarial present value of future entry age normal cost is called the accrued liability.

Assets

Funding

General Account assets are determined at book value. Separate Account assets are determined at market value.

The Actuarial Value of assets is determined using a method that spreads over a period of five years the difference between the actual investment income and the expected income (based on the valuation interest rate applied to the prior year's market value of assets). Resulting value constrained to be within corridor from 80% to 120% of market value.

Accounting

Market value of assets

Amortization Period

The unfunded accrued liability is amortized over a closed six-year period beginning with the July 1, 2012 valuation.

Changes since the Prior Valuation

There were no changes in assumptions.

Section 4 – Summary of Plan Provisions

	Fire Department	Police Department	School Custodial, Town Hall, and School Clerical	Public Works
Eligibility	The later of the date the employee elects to make contributions to the plan, or the first day of the month coincident with or following the date of hire. Elected employees and Certified employees of the School Department are not eligible to participate. Employees hired after July 1, 2001 become members of the State plan and do not participate in this plan.			
Average Annual Compensation (AAC)	Average earnings during the three-consecutive year period in which the average is the highest.			
Normal Retirement Date	20 years of service.	20 years of service.	Age 65 with five years of service.	Earlier of age 65 or 30 years of service.
Normal Retirement Benefit	2.75% of AAC multiplied by the number of completed years and months of service. Maximum benefit is 75% of AAC.	3.00% (2.50% if less than 20 years of service) of AAC multiplied by the number of completed years and months of service. Maximum benefit for employees hired after 7/1/1986 is 70% of AAC.	2.00% of AAC multiplied by the number of completed years and months of service. Maximum benefit for employees hired after 7/1/1986 is 70% of AAC.	2.50% of AAC multiplied by the number of completed years and months of service. Maximum benefit for employees hired after 7/1/1986 is 70% of AAC.
Normal Form of Annuity	67½% Contingent Annuity, payable to the later of the date the spouse dies, or if she remarries, to the participant's dependent children until they attain age 18.	67½% Contingent Annuity, payable to the later of the date the spouse dies, or if she remarries, to the participant's dependent children until they attain age 18.	Modified Cash Refund	Modified Cash Refund
Employee Contributions	9% of Compensation	7% of Compensation	4% of Compensation	6% of Compensation
Interest on Employee Contributions	5% per year	5% per year	5% per year	5% per year

	Fire Department	Police Department	School Custodial, Town Hall, and School Clerical	Public Works
Early Retirement Date	None.	None.	Within five years of normal retirement date and completion of ten years of service.	Within five years of normal retirement date and completion of ten years of service.
Early Retirement Benefit	None.	None.	Accrued annuity reduced by 0.5% for each month by which the Early Retirement Date precedes the Normal Retirement Date.	Accrued annuity reduced by 0.5% for each month by which the Early Retirement Date precedes the Normal Retirement Date.
Disability Eligibility	Totally disabled for six months and eligible to receive disability payments under Social Security after completion of 10 years of service.	Totally disabled for six months and eligible to receive disability payments under Social Security after completion of 10 years of service.	Totally disabled for six months and eligible to receive disability payments under Social Security after completion of 10 years of service.	Totally disabled for six months and eligible to receive disability payments under Social Security after completion of 10 years of service.
Disability Benefit	Accrued benefit at date of disability, payable immediately, unreduced for early commencement. If disability incurred in the line of duty, the benefit is ⅔ of final compensation.	Accrued benefit at date of disability, payable immediately, unreduced for early commencement.	Accrued benefit at date of disability, payable immediately, unreduced for early commencement.	Accrued benefit at date of disability, payable immediately, unreduced for early commencement.

Section 4 – Summary of Plan Provisions (continued)

	Fire Department	Police Department	School Custodial, Town Hall, and School Clerical	Public Works
Pre-Retirement Spouse's Benefit Eligibility (In-Service Death While Married)	Completion of 20 years of service.	Completion of 20 years of service.	Within five years of Normal Retirement Date after completion of 10 years of service.	Within five years of Normal Retirement Date after completion of 10 years of service.
Pre-Retirement Spouse's Benefit	67½% of accrued benefit, payable to the later of the date the spouse dies, or if she remarries, to the participant's dependent children until they attain age 18.	67½% of accrued benefit, payable to the later of the date the spouse dies, or if she remarries, to the participant's dependent children until they attain age 18.	50% of accrued benefit reduced for early commencement and adjusted for payment over spouse's lifetime.	50% of accrued benefit reduced for early commencement and adjusted for payment over spouse's lifetime.
Death Benefit (Not Eligible for Spouse's Benefit)	Refund of accumulated employee contributions.	Refund of accumulated employee contributions.	Refund of accumulated employee contributions.	Refund of accumulated employee contributions.
Vesting Provisions	Participant is fully vested in accumulated employee contributions. Participant is 100% vested in Employer provided portion of the benefit after completion of 10 years of service.	Participant is fully vested in accumulated employee contributions. Participant is 100% vested in Employer provided portion of the benefit after completion of 10 years of service.	Participant is fully vested in accumulated employee contributions. Participant is 100% vested in Employer provided portion of the benefit after completion of 10 years of service.	Participant is fully vested in accumulated employee contributions. Participant is 100% vested in Employer provided portion of the benefit after completion of 10 years of service.

Section 5 – Deferred Outflows/Inflows

Table 1: Amortization of Differences between Expected and Actual Liability Experience

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Amount Established	$ 615,865	$ 152,749	$ -	$ 1,444,275				
Recognition Period	0.41	0.32	0.32	0.26				
Amount Recognized in FY:								
2015	$ 615,865	$ -	$ -	$ -	$ -	$ 615,865	$ -	$ 615,865
2016	-	152,749	-	-	-	152,749	-	152,749
2017	-	-	-	-	-	-	-	-
2018	-	-	-	1,444,275	-	1,444,275	-	1,444,275
2019	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Deferred Balance at 6/30:								
2015	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-

Section 5 – Deferred Outflows/Inflows (continued)

Table 2: Amortization of Changes in Assumptions

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Amount Established	$ 199,475	$ -	$ -	$ -				
Recognition Period	0.41	0.32	0.32	0.26				
Amount Recognized in FY:								
2015	$ 199,475	$ -	$ -	$ -	$ -	$ 199,475	$ -	$ 199,475
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Deferred Balance at 6/30:								
2015	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2016	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-

Section 5 – Deferred Outflows/Inflows (continued)

Table 3: Amortization of Differences between Projected and Actual Earnings

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Amount Established	$ 2,453,379	$ 3,130,717	$ (1,742,919)	$ (620,587)				
Recognition Period	5.00	5.00	5.00	5.00				
Amount Recognized in FY:								
2015	$ 490,676	$ -	$ -	$ -	$ -	$ 490,676	$ -	$ 490,676
2016	490,676	626,144	-	-	-	1,116,820	-	1,116,820
2017	490,676	626,144	(348,584)	-	-	1,116,820	(348,584)	768,236
2018	490,676	626,144	(348,584)	(124,118)	-	1,116,820	(472,702)	644,118
2019	490,675	626,144	(348,584)	(124,118)	-	1,116,819	(472,702)	644,117
2020	-	626,141	(348,584)	(124,118)	-	626,141	(472,702)	153,439
2021	-	-	(348,583)	(124,118)	-	-	(472,701)	(472,701)
2022	-	-	-	(124,115)	-	-	(124,115)	(124,115)
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-

Measurement Date 6/30	2015	2016	2017	2018	2019	Outflows	Inflows	Total
Deferred Balance at 6/30:								
2015	$ 1,962,703	$ -	$ -	$ -	$ -	$ 1,962,703	$ -	$ 1,962,703
2016	1,472,027	2,504,573	-	-	-	3,976,600	-	3,976,600
2017	981,351	1,878,429	(1,394,335)	-	-	2,859,780	(1,394,335)	1,465,445
2018	490,675	1,252,285	(1,045,751)	(496,469)	-	1,742,960	(1,542,220)	200,740
2019	-	626,141	(697,167)	(372,351)	-	626,141	(1,069,518)	(443,377)
2020	-	-	(348,583)	(248,233)	-	-	(596,816)	(596,816)
2021	-	-	-	(124,115)	-	-	(124,115)	(124,115)
2022	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-