

August 24, 2021

Mr. Christopher Cotta
Town Administrator
343 Highland Road
Tiverton, Rhode Island 02878

Dear Mr. Cotta:

An actuarial valuation of the Town of Tiverton Police Department Pension Plan (Plan) was performed as of July 1, 2021. The purpose of the valuation is to:

- Compare the current value of Trust assets with accrued liabilities to assess the funded condition of the Pension Plan,
- Compute the Town's recommended contribution rate for the Fiscal Year ending June 30, 2022, and
- Provide information which may be required by the Town's auditors under Governmental Accounting Standards.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The employee data and asset data were provided by the Plan Administrator. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. We found the information provided by the Plan Administrator to be reasonably consistent and comparable to information received for prior years' valuations. Valuation results are dependent upon the accuracy and integrity of the input data. If the data provided is subsequently found to be incorrect or incomplete, this valuation may need to be revised. Demographic data is snapshot data as of the valuation date.

The valuation was based on the provisions of the Plan as amended through the beginning of the Plan Year. Each actuarial assumption used in this valuation is reasonably related to the past experience of the Plan and represents reasonable expectations of future experience under the Plan. Actual future costs of the Plan will vary from those presented in this report to the extent that actual plan experience differs from that projected and assumed. The Trustees, with advice and approval of the actuary, set the assumptions and methods for the valuation.

The valuation calculations presented in this report have been made on a basis consistent with our understanding of the Plan's funding requirements and policies as well as the Governmental Accounting Standard Board Statement 67. Valuations and calculations for other purposes may differ significantly from the results contained in this report.

The consultants who worked on this assignment are pension actuaries. Advice from MCG Consulting Group is not intended to be a substitute for legal or accounting expertise. To the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.

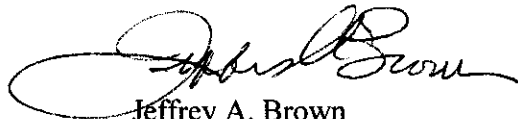
We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained in this report. We are available to answer any questions on the information contained in this report or to provide explanations or further details as needed.

Neither the signing actuary nor the firm of MCG Consulting Group has a conflict of interest that would impair the objectivity of our work. This report is intended for use by the Plan Trustees and should not be used for any purpose other than as stated herein. This report is only valid when presented in its entirety. It must not be reproduced without permission.

Respectfully submitted,



Traci M. Christian, EA, MAAA
Enrollment Number: 20-06694
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Jeffrey A. Brown
JD, LLM, QPA, ERPA
Compensation Planning

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Section One:

Valuation Summary

Liabilities and Funded Condition of Pension Plan

	<u>July 1, 2020</u>	<u>July 1, 2021</u>
Actuarial Accrued Liability	\$19,601,842	\$20,444,208
Actuarial Value of Assets	\$13,843,625	\$18,395,672
Funded Status of the Plan	70.6%	90.0%

Actuarial Value of Assets

The market value of assets including accrued contributions was used for the July 1, 2021 valuation.

Town’s Computed Contribution Rate

The Town’s recommended contribution rate was computed as a percentage of active member payroll and assumed to be payable at the end of the year.

	<u>July 1, 2020</u>	<u>July 1, 2021</u>
Normal Cost	18.8%	18.4%
Amortization of Unfunded Liability	22.7%	6.6%
Interest	3.1%	1.9%
Total Computed Contribution	44.6%	26.9%
Member portion	10.0%	10.0%
Net Computed Contribution Rate	34.6%	16.9%

Pension Fund Experience

Overall experience during the year ended June 30, 2021, was more favorable than expected. The plan assets earned a rate of return of approximately 34.7%, compared to an expected return of 7.5%, resulting in an investment gain of over \$3,773,000. Liability losses due to higher than expected pay increases partially offset the asset gains, resulting in a net actuarial gain for the year ended June 30, 2021 of \$3,626,657.

Benefit Provision Changes

There were no changes to the Plan provisions.

Assumption and Method Changes

The mortality projection scale was updated to MP-2020, from scale MP-2019 used in the prior valuation.

Participant Data

	<u>July 1, 2020</u>	<u>July 1, 2021</u>
Active Members	28	29
Active Member Payroll	\$1,889,588	\$1,947,756
Average Member Payroll	67,485	67,164
Retirees and Beneficiaries	34	36
Annual Pensions	\$1,113,157	\$1,194,665

Financial Data

Market Value of Assets	\$13,843,625	\$18,395,672
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Conclusion and Comments

The long-term viability of this plan is dependent on adherence to funding the actuarial recommended contribution each year. The Funding Improvement Plan, which required town contributions of at least \$700,000 each year, has run its course, but the town contributed at that level in the prior year. Large actuarial gains in the prior year due to high asset returns have significantly decreased the Town’s recommended contribution for the 2021-22 fiscal year. The plan’s projected contributions are expected to increase each year because, absent actuarial gains and losses, the funding method is intended to keep plan contributions relatively level as a percentage of payroll.



Section Two:

***Actuarial Calculations –
Funding***

Unfunded Actuarial Accrued Liability

	<u>July 1, 2020</u>	<u>July 1, 2021</u>
Actuarial Accrued Liability	\$19,601,842	\$20,444,208
Actuarial Value of Assets	<u>\$13,843,625</u>	<u>\$18,395,672</u>
Unfunded Actuarial Accrued liability	\$5,758,217	\$2,048,536
Funded Status of the Plan	70.6%	90.0%

Computed Contribution Rates

The normal cost represents the benefits earned in the current year.

Accrued liabilities exceeded accumulated assets as of July 1, 2012. The excess is being amortized as a level percent of payroll over 25 years (until June 30, 2037). Beginning with the July 1, 2017 valuation, annual changes to the unfunded liability due to assumption changes, actuarial gains and losses, etc. are amortized as a level percent of pay over fixed periods. The sum of the annual amortization charges and credits is a component of the recommended contribution. The following table sets forth the schedule of amortizations as of the current valuation date:

Date Estab.	Description	Rem. Years	Outstanding Balance	21-22 Payment
7/1/12	Unfunded Actuarial Liability	16	\$5,618,609	\$459,627
7/1/17	Change Mortality Table	16	665,700	54,457
7/1/17	Actuarial (Gain)/Loss	11	(462,455)	(50,454)
7/1/18	New Mortality Projection Scale	17	(82,816)	(6,485)
7/1/18	Actuarial (Gain)/Loss	12	(310,313)	(31,585)
7/1/19	Change Mortality Table	18	618,445	46,520
7/1/19	Actuarial (Gain)/Loss	13	49,173	4,701
7/1/20	Change Mortality Table	19	(39,062)	(2,831)
7/1/20	Actuarial (Gain)/Loss	14	(328,630)	(29,687)
7/1/21	Change Mortality Table	20	(53,458)	(3,742)
7/1/21	Actuarial (Gain)/Loss	15	(3,626,657)	(311,085)
	Total		\$2,048,536	\$129,436

Contribution Recommendation for Fiscal Year Beginning July 1, 2021:

	<u>Dollar Amount</u>	<u>As a Percent Of Current Payroll</u>
Total Normal Cost	\$358,218	18.4%
Amortization of Unfunded Liability	129,436	6.6%
Interest to End of Fiscal Year	36,574	1.9%
Total Computed Contribution	524,228	26.9%
Expected Member portion	(194,776)	(10.0)%

Town's Net Computed Contribution Rate	\$329,452	16.9%
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Projection of Funded Status and Recommended Contributions

Year	Total Normal Cost	Amortization of Unfunded	Recommended Contribution	Member Contribution	Town Contribution	Town Contribution as a % of Payroll	Benefit Payments	Assets	Accrued Liability	Unfunded Liability	Funded Ratio
Beginning											
2021	358,218	129,436	524,228	194,776	329,452	16.9%	1,200,140	18,395,672	20,444,208	2,048,536	90.0%
2022	370,756	133,967	542,577	201,593	340,984	16.9%	1,237,518	19,074,089	21,117,463	2,043,374	90.3%
2023	383,732	138,655	561,566	208,648	352,918	16.9%	1,310,585	19,783,644	21,815,910	2,032,266	90.7%
2024	397,163	143,509	581,222	215,951	365,271	16.9%	1,351,559	20,490,310	22,504,883	2,014,573	91.0%
2025	411,063	148,530	601,563	223,509	378,053	16.9%	1,536,579	21,227,859	23,217,457	1,989,598	91.4%
2026	425,451	153,729	622,618	231,332	391,286	16.9%	1,554,486	21,849,869	23,806,458	1,956,589	91.8%
2027	440,341	159,109	644,409	239,429	404,980	16.9%	1,572,446	22,521,796	24,436,523	1,914,727	92.2%
2028	455,753	164,677	666,963	247,809	419,154	16.9%	1,589,823	23,248,093	25,111,216	1,863,124	92.6%
2029	471,705	170,439	690,304	256,482	433,822	16.9%	1,607,609	24,034,232	25,835,051	1,800,819	93.0%
2030	488,214	176,405	714,466	265,459	449,007	16.9%	1,629,609	24,885,096	26,611,868	1,726,772	93.5%
2031	505,302	182,593	739,487	274,750	464,737	16.9%	1,646,198	25,802,017	27,441,869	1,639,852	94.0%
2032	522,987	262,628	844,537	284,366	560,170	19.7%	1,663,593	26,796,456	28,335,279	1,538,823	94.6%
2033	541,292	319,547	925,402	294,319	631,083	21.4%	1,704,867	27,956,419	29,296,658	1,340,239	95.4%
2034	560,237	323,376	949,884	304,620	645,264	21.2%	1,718,109	29,244,455	30,306,997	1,062,542	96.5%
2035	579,846	382,754	1,034,794	315,282	719,512	22.8%	1,715,337	30,640,756	31,399,739	758,983	97.6%
2036	600,140	917,272	1,631,218	326,317	1,304,901	40.0%	1,726,724	32,232,750	32,598,391	365,641	98.9%
2037	621,145	-	667,731	337,738	329,993	9.8%	1,794,840	34,551,119	33,896,945	(654,174)	101.9%
2038	642,885	-	691,101	349,559	341,542	9.8%	1,820,690	35,973,077	35,244,800	(728,277)	102.1%
2039	665,386	-	715,290	361,794	353,496	9.8%	1,851,952	37,499,110	36,690,296	(808,814)	102.2%
2040	688,675	-	740,325	374,456	365,869	9.8%	1,904,601	39,132,256	38,235,958	(896,299)	102.3%
2041	712,778	-	766,237	387,562	378,674	9.8%	1,987,087	40,859,239	39,867,956	(991,283)	102.5%

The results presented here are ESTIMATES. They are based on the data, assumptions, methods and plan provisions outlined in this report unless otherwise noted. These results are for **discussion purposes only** and should not be relied upon for purposes of making cash contributions to the Plan nor for any other purposes.

Recommended Town Contributions

Year Ended June 30	Computed Contribution	% of Payroll Contribution Rates
2009	711,225	47.0
2010	1,023,362	59.6
2011	1,067,884	60.6
2012	682,092	43.0
2013	590,573	40.1
2014	544,334	37.6
2015	536,634	36.9
2016	503,576	29.3
2017	559,740	33.2
2018	575,463	33.9
2019	583,132	30.9
2020	672,532	33.9
2021	653,478	34.6
2022	329,452	16.9

History of Assets and Accrued Liabilities

Valuation Date July 1	Valuation Assets	Actuarial Accrued Liabilities	Funded Ratio	Unfunded Actuarial Accrued Liabilities
2009	5,732,961	14,242,648	40.3	8,509,687
2010	5,632,552	14,529,430	38.8	8,896,878
2011	6,959,498	12,858,385	54.1	5,898,887
2012	6,694,416	13,228,181	50.6	6,533,765
2013	7,465,375	13,616,401	54.8	6,151,026
2014	8,848,568	14,002,853	63.2	5,154,285
2015	9,778,266	14,604,337	67.0	4,826,071
2016	9,556,569	15,266,488	62.6	5,709,919
2017	11,051,030	16,938,557*	65.2	5,887,527
2018	12,374,127	17,853,211	69.3	5,479,084
2019	13,182,526	19,331,488*	68.2	6,148,962
2020	13,843,625	19,601,842	70.6	5,758,217
2021	18,395,672	20,444,208	90.0	2,048,536

*Mortality was changed in the 2017 valuation from RP-2000 to tables reflecting generational improvements. The mortality projection scales are updated each year since 2017. In the 2019 valuation, the base table was changed to one newly developed for public safety workers.



Section Three:

***Retirement Plan
Benefit Provisions***

Benefit Provision Summary

Effective Date

July 1, 1978

Eligibility

All employees are eligible after completing their probationary service.

Monthly Compensation

Compensation includes regular base pay including longevity and incentive earnings.

Credited Service

Service measured from the date of employment (or one year prior to completing probationary service, if later.)

Final Average Earnings

Average of the highest three consecutive years of total Monthly Compensation in a ten-year period prior to retirement or termination of employment.

Normal Retirement Benefit

For retirements on or after June 1, 2000, a monthly benefit equal to 2.5% of Final Average Earnings multiplied by Credited Service for the first 20 years of Service, Plus 2% of Final Average Earnings multiplied by Credited Service in excess of 20 years subject to a maximum benefit of 75% of Final Average Earnings.

Normal Form

The Normal Form of payment is a Life Annuity.

Normal Retirement Date

All Members hired after June 30, 2007 must have at least 10 years of Credited Service or be at least 65 with 5 years of Credited Service in order to be able to retire. Members who satisfy the previous sentence or who were hired before July 1, 2007 may retire in accordance with the following rules:
A Member hired prior to July 1, 2012 may retire, with full benefits, on the earlier of his 55th birthday or upon completion of 20 years of Credited Service.
A Member hired on or after July 1, 2012 may retire, with full benefits, upon the earlier of his 55th birthday or upon completion of 25 years of Credited Service.

Disability Retirement

If the disability was duty-related, the benefit is 66 2/3% of Final Average Compensation. The non-duty-related Disability Benefit is 50% of final Compensation.

Pre-Retirement Death Benefit

The Beneficiary of a Participant who dies shall receive a benefit of \$400 for each year of service, subject to a minimum of \$2,000 and a maximum of \$8,000. After retirement, the benefit is reduced by 25% per year but not less than \$2,000.

Vesting

100% after 10 years.

Pre-Retirement Death Benefit

50% of Accrued Benefit at time of death payable to spouse until death or remarriage with additional benefits payable to surviving children under age 18 if no spouse survives.

Employee Contributions

10% of compensation

Post-Retirement COLA

Base Benefit increased 1% of the compensation each year for the position from which they retired. These increases are cumulative, not compounded.



Section Four:

***Actuarial Assumptions
And Methods***

Actuarial Assumptions

Economic Assumptions

- (i) Interest Rate 7.5% (net of administrative and investment expenses paid by the Trust)
- (ii) Salary Increases 3.5%

Demographic Assumptions

- (i) Mortality Public Safety 2010 base mortality, projected generationally using mortality improvement scale MP-2020. (Previously, scale MP-2019)
- (ii) Disability Sample disability rates are as follows:

Annual Rates of Disability		
Age	Males	Females
25	.03%	.05%
30	.04	.06
40	.07	.10
50	.18	.26
55	.36	.49
60	.90	1.21

- (iii) Turnover None Assumed
- (iv) Retirement The rate is 50% at first eligibility, then the rate is 10% per year thereafter with 100% at age 55 (or first eligible if later.)
- (v) Marital Status 80% of participants are assumed to be married with males 3 years older than their female spouses.
- (vi) COLA adjustments 1.3% increase each year.
- (vii) Asset Value Assets are valued at market, plus receivables.

Actuarial Methods Used for the Valuation

Normal Cost

Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry age actuarial cost method having the following characteristics:

- ❖ The annual normal costs for each individual active member, payable from date of hire to date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liability

The excess of actuarial accrued liabilities over accrued assets is amortized as a level percent-of-payroll in layers, with the original unfunded accrued liability being amortized over the remaining period that was previously established (ending June 30, 2037). New layers of amortization are established for changes in method, changes of assumptions, changes to the plan, and actuarial gains and losses. The annual net amount of amortization is added to the normal cost and increased with interest to compute the recommended contribution amount.

Assessment and Disclosure of Risk

The results presented in this report are based upon actuarial assumptions and methods. The assumptions represent the expected experience for the Plan and the methods allocate costs to past and future service. When the actual experience of the Plan is different from what is assumed in the valuation, volatility in the funded status of the Plan and the contribution requirements can result.

The Actuarial Standards of Practice require the plan's actuary to assess certain risks to the plan. Specifically, the impact of future events that may differ significantly from the assumptions used to produce the current actuarial valuation. The purpose of this information is to make the plan sponsor aware of such risks. For a more detailed analysis of any of these items, please contact our office.

Assumptions: Actuarial assumptions such as interest rates, rates of retirement and withdrawal as well as mortality tables used for calculating the actuarially recommended contribution are important factors. Each actuarial assumption used in this valuation is reasonably related to the past experience of the Plan and represents reasonable expectations of future experience under the Plan. With advice from the actuary, the trustees approve the assumptions for the valuation. When actual plan experience deviates from what is expected, the resulting gain or loss is amortized over future years and becomes part of the recommended contribution. If there is a decrease in the assumed future return on plan investments, the overall funding requirement,

barring other mitigating circumstances, will increase. Updates to mortality tables often extend life expectancies, which also results in an increase to plan liabilities.

Contribution Risk: Funding less than the actuarially recommended contribution will not typically fully fund the Plan on a long-term basis. If the Plan is underfunded, additional contributions may be required.

Investment Risk: Plan assets include contributions and asset earnings. The Plan's investment portfolio should take into consideration the funded status of the Plan, anticipated future contribution levels, and the expected future years of the Plan. Investment performance may have a significant impact on future required contributions to fully fund the Plan on a long-term basis.

Demographic Risk: Demographic changes from year to year can have a significant impact on valuation results.



Section Five:
Valuation Data

Summary of Asset Information Submitted for the Valuation

Statement of Assets

As of June 30, 2021, the net market value of Pension Plan assets was reported to be \$18,395,672.

Market Value of Assets as of July 1, 2020	\$13,843,625
a. Revenues	
(i) Member Contributions	\$196,230
(ii) Employer (Town) Contributions	700,000
(iii) Investment Income (Net of investment fees)	4,814,796
b. Disbursements	
(i) Benefits Paid	\$1,147,979
(ii) Administrative expenses	11,000
Market Value of Assets as of July 1, 2021	\$18,395,672

Actuarial Value of Assets

The market value of assets was used for the July 1, 2021 valuation.

Participant Summary

Retirees Included in the Valuation

There were 36 retirees and beneficiaries of deceased retirees included in the valuation, with annual pensions totaling \$1,194,665. The breakdown by age division is as follows:

Retirees and Beneficiaries

Age	Number	Average Annual Pensions
Under 40		
40-44	1	\$30,096
45-49	4	32,634
50-54	4	36,776
55-59	7	37,362
60-64	3	45,236
65-69	2	24,526
70-74	6	26,960
75-79	4	39,032
Over 80	5	24,549
Total	36	\$33,185

Active Members – Age and Service Distribution

Age	Service							Total
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	Over 30	
20 - 24	3							3
25 - 29	6							6
30 - 34	2	3						5
35 - 39	1	1	2					4
40 - 44		1		2	1			4
45 - 49				1				1
50 - 54		1			2	2		5
55 - 59				1				1
60 - 64								
65+								
Total	12	6	2	4	3	2		29

Total Active Participant Information

	2019	2020	2021
Active Members	31	28	29
Valuation Payroll	1,982,955	1,889,588	1,947,756
Average Compensation	63,966	67,485	67,164
Average Age (yrs.)	39.4	39.0	37.4
Average Service (yrs.)	12.0	11.2	10.4

Reconciliation with Prior Year

	Actives	Retirees
July 1, 2020 Participants	28	34
Corrections		
New Participants	3	
Returned to Active		
Retirements	(2)	2
Deaths		
New Beneficiaries		
Benefits Expire		
Terminations		
- Vested		
- Non-Vested		
- Lump-Sums	—	—
July 1, 2021 Participants	29	36



Section Six:

Accounting Disclosures

GASB Statement Nos. 67 and 68 Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation as well as the previous 10 years follows:

Valuation Date June 30	Total Pension Liability	Plan Assets	Net Pension Liability	Percent Funded	Annual Covered Payroll	NPL As a % Of Covered Payroll
2011	12.858	6.959	5.899	54.1	1.587	371.6
2012	13.228	6.694	6.534	50.6	1.473	443.5
2013	13.616	7.465	6.151	54.8	1.448	424.8
2014	14.003	8.849	5.154	63.2	1.455	354.3
2015	14.604	9.778	4.826	67.0	1.716	281.2
2016	15.266	9.556	5.710	62.6	1.686	338.6
2017	16.939	11.051	5.888	65.2	1.700	346.3
2018	17.853	12.374	5.479	69.3	1.888	290.1
2019	19.332	13.183	6.149	68.2	1.983	310.1
2020	19.602	13.844	5.758	70.6	1.890	304.7
2021	20.444	18.396	2.048	90.0	1.948	105.2

Dollar amounts in millions.

Schedule of Employer Contributions

Year Ended June 30	Annual Recommended Contribution	Percent Contributed
2012	682,092	81%
2013	590,573	119%
2014	544,334	152%
2015	536,634	149%
2016	503,576	139%
2017	559,740	116%
2018	575,463	122%
2019	583,132	120%
2020	672,532	104%
2021	653,478	107%

Schedule of Changes in Net Pension Liability

Year End June 30	Beginning of Year Net Pension Liability	Service Cost	Interest Cost	Expected Return On Assets	Employer Contrib.	Employee Contrib.	Plan Changes	Assumption Changes	(Gain)/ Loss	End of Year Net Pension Liability
2013	6,533,765	318,749	989,770	(507,331)	(700,000)	(143,389)	-	-	(340,538)	6,151,026
2014	6,151,026	285,815	1,016,416	(595,528)	(825,000)	(166,440)	-	-	(712,004)	5,154,285
2015	5,154,285	315,103	1,047,597	(699,268)	(800,000)	(179,257)	-	-	(12,389)	4,826,071
2016	4,826,071	322,696	1,091,027	(763,745)	(700,000)	(172,701)	-	-	1,106,571	5,709,919
2017	5,709,919	302,324	1,138,411	(741,343)	(650,000)	(186,677)	-	677,967	314,893	5,887,527
2018	5,887,527	289,431	1,257,599	(852,452)	(700,000)	(195,936)	-	(83,567)	(207,085)	5,479,084
2019	5,479,084	334,284	1,328,812	(950,560)	(700,000)	(193,790)	-	620,398	851,132	6,148,962
2020	6,148,962	364,994	1,437,861	(998,439)	(700,000)	(192,361)	-	(39,072)	(302,800)	5,758,217
2021	5,758,217	354,423	1,453,595	(1,034,147)	(700,000)	(193,952)	-	(53,458)	(3,589,600)	2,048,536

Schedule of Contributions

Year Ending June 30	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2011	1,067,884	452,407	615,477	1,762,244	25.67%
2012	682,092	550,000	132,092	1,587,328	34.65%
2013	590,573	700,000	(109,427)	1,473,196	47.52%
2014	544,334	825,000	(280,666)	1,448,086	56.97%
2015	536,634	800,000	(263,366)	1,454,719	54.99%
2016	503,576	700,000	(196,424)	1,716,424	40.78%
2017	559,740	650,000	(90,620)	1,686,288	38.55%
2018	575,463	700,000	(124,537)	1,700,026	41.18%
2019	583,132	700,000	(116,868)	1,888,393	37.07%
2020	672,532	700,000	(27,468)	1,982,955	35.30%
2021	653,478	700,000	(46,522)	1,889,588	37.05%

Pension Expense for Year Ended June 30, 2021

Service cost	\$ 354,423
Interest on the total pension liability	1,453,595
Employee contributions	(196,230)
Projected earnings on pension plan investments	(1,034,147)
Pension plan administrative expense	11,000
Outflows / (inflows) of resources recognized in the current year due to	
Difference between expected and actual experience	103,922
Changes of assumptions	191,476
Difference between projected and actual earnings on plan investments	(951,934)
Pension expense	<u>\$ (67,895)</u>

Long-term Expected Real Rates of Return

The long-term expected rate of return on pension plan investments was determined using a method in which the best-estimate ranges of expected future real rates of return (expected returns, net of investment expenses and inflation) are developed for each major asset class. These are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage as shown in the following table, and then adding expected inflation, which is 2.5%. The target allocation and

best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Equities	80%	6.0%
Fixed Income	17%	2.5%
Cash and Equivalents	3%	0.0%

Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at 6/30/20	\$ 19,601,842	\$ 13,843,625	\$ 5,758,217
Changes for the year			
Service cost	354,423		354,423
Interest	1,453,595		1,453,595
Difference between expected and actual experience	235,785		235,785
Contributions - employer		700,000	(700,000)
Contributions - employee		196,230	(196,230)
Net investment income		4,814,796	(4,814,796)
Changes of Assumptions	(53,458)		(53,458)
Benefit payments	(1,147,979)	(1,147,979)	--
Administrative expense		(11,000)	11,000
Other changes		--	--
Net changes	842,366	4,552,047	(3,709,681)
Balances at 6/30/21	\$ 20,444,208	\$ 18,395,672	\$ 2,048,536

Statement of Outflows and Inflows Arising During the Current Period

1. Difference between expected and actual experience of the TPL (gains) / losses	\$235,785
2. Assumption Changes (gains) / losses	(53,458)
3. Recognition period: Average of the expected remaining service lives of all plan participants (in years)	5.86
4. Difference between expected and actual return on plan investments	\$(3,780,649)
5. Outflow (inflow) of resources recognized in the current pension expense:	
a. for difference between expected and actual experience of the TPL, (1) / (3)	\$ 40,236
b. for assumption changes, (2) / (3)	(9,123)
c. for difference between expected and actual return on investments, (4) / 5	(756,130)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	1% Decrease 6.5%	Current Single Discount Rate Assumption 7.5%	1% Increase 8.5%
Total Pension Liability	\$ 22,933,173	\$ 20,444,208	\$ 18,386,314
Plan Fiduciary Net Position	18,395,672	18,395,672	18,395,672
Net Pension Liability / (Asset)	\$ 4,537,501	\$ 2,048,536	\$ (9,358)

Deferred Outflows and Deferred Inflows of Resources to be Recognized in Future Years

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 466,099	\$ 302,774
Changes in Assumptions	397,711	107,890
Net difference between projected and actual earnings on pension plan investments	--	2,987,168
Total	\$ 863,810	\$ 3,397,832

Year Ending June 30	Net Deferred Outflows of Resources
2022	\$ (597,291)
2023	(592,336)
2024	(610,003)
2025	(740,328)
2026	5,936
Thereafter	-
Total	\$ (2,534,022)



Section Seven:

Glossary of Terms

Glossary of Terms

Accrued Benefit

The benefit earned by a participant payable in the form of a monthly benefit commencing at normal retirement age.

Actuarial Accrued Liability

The actuarial present value of benefits earned as of the valuation date.

Actuarial Gain or Loss

The difference between the plan's actual experience and expected experience based on the actuarial assumptions used in the valuation.

Actuarial Value of Assets

The value of assets as determined by the actuary for the purpose of the valuation. This may or may not include a method of smoothing investment gains and losses over time.

Amortization

The spreading of liabilities or costs over a period of years. A plan's unfunded actuarial accrued liability is amortized over a period of years.

Entry Age Normal Actuarial Cost Method

An actuarial method for determining the annual normal cost and the actuarial accrued liability of a pension plan. Under this method, the annual normal cost is the level amount that would have to be contributed each year from the time each employee entered employment so that his pension will be fully funded by his assumed retirement age.

Normal Cost

That portion of the actuarial present value of plan benefits and expenses allocated to the valuation year.

Present Value

The value of a benefit payment or series of benefit payments determined as of the valuation date by the application of a particular set of actuarial assumptions. It is the single sum which reflects the time value of money (through discounts for investment yield) and the probabilities of payment (taking into account death, disability, withdrawal and age at retirement).

Unfunded Actuarial Accrued Liability

The excess of the actuarial accrued liability over the actuarial value of assets.

Vested Benefit

A benefit that is not forfeited if the participant leaves employment.