

RETIREMENT PLAN FOR EMPLOYEES OF
GREATER ORLANDO AVIATION AUTHORITY

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2021

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 31, 2019

Retirement Plan Committee
Greater Orlando Aviation Authority

Re: Retirement Plan for Employees of Greater Orlando Aviation Authority

Dear Committee Members:

We are pleased to present to the Retirement Plan Committee this report of the annual actuarial valuation of the Retirement Plan for Employees of Greater Orlando Aviation Authority. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapter 112, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Retirement Plan Committee, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Human Resources faculty, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

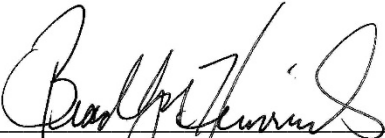
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

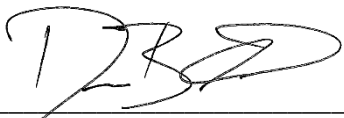
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Greater Orlando Aviation Authority, nor does anyone at Foster & Foster, Inc. act as a member of the Retirement Plan Committee of the Retirement Plan for Employees of Greater Orlando Aviation Authority. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By: 
Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #17-6901

By: 
Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Retirement Plan for Employees of Greater Orlando Aviation Authority, performed as of October 1, 2019, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2021.

The contribution requirements, compared with those set forth in the October 1, 2018 actuarial valuation report, are as follows:

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>
Minimum Required Contribution	\$2,009,381	\$2,215,878

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial gain was inactive mortality experience. This gain was offset in part by a loss associated with an investment return of 6.49% (Actuarial Asset Basis) which fell short of the 7.00% assumption.

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	68	75
Service Retirees	312	304
Beneficiaries	26	30
Terminated Vested	<u>85</u>	<u>90</u>
 Total	 491	 499
 Total Annual Payroll	 \$6,179,222	 \$6,425,266
Payroll Under Assumed Ret. Age	5,216,734	5,620,870
 Annual Rate of Payments to:		
Service Retirees	8,956,124	8,787,973
Beneficiaries	385,279	451,289
Terminated Vested	870,098	915,824
 B. Assets		
Actuarial Value (AVA)	139,349,945	137,500,444
Market Value (MVA)	139,594,665	142,871,166
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	41,601,005	42,338,486
Death Benefits	616,939	746,964
Vested Benefits	25,984	41,197
Refund of Contributions	0	0
Service Retirees	96,388,857	95,170,297
Beneficiaries	3,718,694	4,288,412
Terminated Vested	<u>5,205,440</u>	<u>5,310,972</u>
 Total	 147,556,919	 147,896,328

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	18,082,087	22,201,054
Normal Cost (Retirement)	791,405	853,517
Normal Cost (Death)	27,350	31,668
Normal Cost (Vesting)	6,411	7,925
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	825,166	893,110
Present Value of Future Normal Costs	2,658,774	3,335,329
Accrued Liability (Retirement)	39,044,222	39,137,304
Accrued Liability (Death)	534,041	637,502
Accrued Liability (Vesting)	6,891	16,512
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	<u>105,312,991</u>	<u>104,769,681</u>
Total Actuarial Accrued Liability (EAN AL)	144,898,145	144,560,999
Unfunded Actuarial Accrued Liability (UAAL)	5,548,200	7,060,555
Funded Ratio (AVA / EAN AL)	96.2%	95.1%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives	105,312,991	104,769,681
Actives	35,996,285	35,179,768
Member Contributions	<u>0</u>	<u>0</u>
Total	141,309,276	139,949,449
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Accrued Benefits (PVAB)	141,309,276	139,949,449
Funded Ratio (MVA / PVAB)	98.8%	102.1%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	1,249,523	
Benefits Paid	(9,358,606)	
Interest	9,468,910	
Other	<u>0</u>	
Total	1,359,827	

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2021</u>	<u>9/30/2020</u>

E. Pension Cost

Normal Cost ¹	\$890,344	\$963,655
Administrative Expenses ¹	44,507	41,778
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 10 years (as of 10/1/2019) ¹	1,074,530	1,210,445
Minimum Required Contribution	2,009,381	2,215,878

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
Employer Required Contribution	2,536,989
Actual Contributions Made:	
Members (excluding buyback)	0
Employer	<u>2,536,989</u>
Total	2,536,989

G. Net Actuarial (Gain)/Loss (376,513)

¹ Contributions developed as of 10/1/2019 displayed above have been adjusted to account for assumed salary increase and interest components.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2019	5,548,200
2020	4,870,994
2021	4,146,384
2023	2,541,446
2025	703,952
2029	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2019	5.21%	4.25%
Year Ended	9/30/2018	5.82%	4.25%
Year Ended	9/30/2017	5.30%	4.25%
Year Ended	9/30/2016	4.06%	5.00%
Year Ended	9/30/2015	5.30%	5.00%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

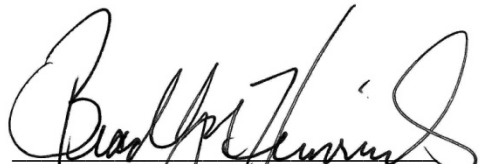
		<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended	9/30/2019	2.57%	6.49%	7.00%
Year Ended	9/30/2018	9.73%	7.57%	7.00%
Year Ended	9/30/2017	13.06%	7.60%	7.00%
Year Ended	9/30/2016	7.91%	8.00%	7.25%
Year Ended	9/30/2015	-1.89%	7.55%	7.25%

ESTIMATED PROJECTION OF BENEFIT PAYMENTS
(Next 30 Years)

<u>Valuation Date</u>	<u>Estimated Annual Benefits</u>
2019	10,490,000
2020	11,120,000
2021	11,500,000
2022	11,990,000
2023	12,270,000
2024	12,670,000
2025	12,710,000
2026	12,720,000
2027	12,670,000
2028	12,570,000
2029	12,480,000
2030	12,270,000
2031	12,050,000
2032	11,780,000
2033	11,470,000
2034	11,160,000
2035	10,850,000
2036	10,480,000
2037	10,100,000
2038	9,710,000
2039	9,370,000
2040	8,950,000
2041	8,530,000
2042	8,100,000
2043	7,660,000
2044	7,210,000
2045	6,760,000
2046	6,320,000
2047	5,870,000
2048	5,430,000

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #17-6901

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability as of October 1, 2018	\$7,060,555
(2) Sponsor Normal Cost developed as of October 1, 2018	893,110
(3) Expected administrative expenses for the year ended September 30, 2019	38,720
(4) Expected interest on (1), (2) and (3)	558,112
(5) Sponsor contributions to the System during the year ended September 30, 2019	2,536,989
(6) Expected interest on (5)	88,795
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	5,924,713
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(376,513)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2019	5,548,200

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2019 Amount</u>	<u>Amortization Amount</u>
Method Change	10/1/2016	7	6,514,888	1,129,774
Actuarial Loss	10/1/2017	8	65,326	10,224
Actuarial Gain	10/1/2018	9	(655,501)	(94,029)
Actuarial Gain	10/1/2019	10	<u>(376,513)</u>	<u>(50,100)</u>
			5,548,200	995,869

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2018	\$7,060,555
(2) Expected UAAL as of October 1, 2019	5,924,713
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	686,949
Salary Increases	187,107
Active Decrements	(30,573)
Inactive Mortality	(1,178,277)
Other	<u>(41,719)</u>
Increase in UAAL due to (Gain)/Loss	(376,513)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2019	\$5,548,200

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: RP2000 Generational, 100% White Collar, Scale BB

Male: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years

Male: 100% RP2000 Disabled Male setback four years

The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class. In our professional judgment, we believe this is within a reasonable range, does not contain a significant bias and is appropriate for the purpose of the measurement.

Salary Increases

4.25% per year until the assumed retirement age. This was approved in conjunction with an actuarial experience study dated September 29, 2016.

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$41,249 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are established according to the following amortization periods:

Experience: 10 Years.
Assumption/Method Changes: 10 Years.
Benefit Changes: 10 Years.

Normal Retirement Age

Below are the rates assumed once the Member has attained normal retirement eligibility:

Number of Years Following NR Age	Age 65 and 7 Years of Service	25 Years of Service
0	20.0%	60.0%
1	20.0%	30.0%
2	20.0%	10.0%
3	20.0%	10.0%
4	20.0%	10.0%
5	100.0%	100.0%

The assumed rates of normal retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Early Retirement Age

Below are the rates assumed once the Member has attained early retirement eligibility:

Number of Years Following ER Age	Rate
0	2.0%
1	2.0%
2	5.0%
3	5.0%
4	5.0%
5	5.0%
6	5.0%
7	10.0%
8	15.0%
9	15.0%

The assumed rates of early retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Termination Rate

<u>Service</u>	<u>Rate</u>
<15	2.5%
15-19	2.0%
20-24	0.5%

The assumed rates of termination were approved in conjunction with an actuarial experience study dated September 29, 2016.

Marital Status

100% of the active members are assumed to be married. Additionally, male spouses are assumed to be three years older than female spouses.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are utilized for purposes of determining the Total Required Contribution:

- Interest – A half-year, based on the current 7.00% assumption.
- Salary – A full-year, based on the current 4.25% assumption.

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

GLOSSARY

Total Annual Payroll is the annual rate of pay as of the valuation date of all covered Members.

Payroll Under Assumed Retirement Age is the annual rate of pay for all Members who are not subject to a 100% probability of retirement as of the valuation date.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

Total Required Contribution is equal to the Normal Cost plus Administrative Expenses plus an amount sufficient to amortize the UAAL over no more than 10 years. The required amount is adjusted for assumed interest and salary increase components.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 26.2% on October 1, 2016 to 16.1% on October 1, 2019, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 72.7%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 90.9% on October 1, 2016 to 96.2% on October 1, 2019, primarily due to the normal operation of the plan, including funding at least the minimum required contribution, and net favorable experience realized by the plan during the period.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from -1.0% on October 1, 2016 to -4.9% on October 1, 2019. The current Net Cash Flow Ratio of -4.9% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	106	91	75	68
Total Inactives ¹	405	415	424	423
Actives / Inactives ¹	26.2%	21.9%	17.7%	16.1%
<u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	122,964,257	135,935,032	142,871,166	139,594,665
Total Annual Payroll	8,028,946	7,149,834	6,425,266	6,179,222
MVA / Total Annual Payroll	1,531.5%	1,901.2%	2,223.6%	2,259.1%
<u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	91,914,900	99,716,958	104,769,681	105,312,991
Total Accrued Liability (EAN)	139,465,445	142,827,047	144,560,999	144,898,145
Inactive AL / Total AL	65.9%	69.8%	72.5%	72.7%
<u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	126,822,928	133,573,143	137,500,444	139,349,945
Total Accrued Liability (EAN)	139,465,445	142,827,047	144,560,999	144,898,145
AVA / Total Accrued Liability (EAN)	90.9%	93.5%	95.1%	96.2%
<u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	(1,281,755)	(2,783,662)	(5,958,741)	(6,848,870)
Market Value of Assets (MVA)	122,964,257	135,935,032	142,871,166	139,594,665
Ratio	-1.0%	-2.0%	-4.2%	-4.9%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	3,727,081.27	3,727,081.27
Prepaid Benefits	780,991.49	780,991.49
Total Cash and Equivalents	4,508,072.76	4,508,072.76
Receivables:		
From Broker for Investments Sold	251,452.57	251,452.57
Investment Income	230,298.32	230,298.32
Total Receivable	481,750.89	481,750.89
Investments:		
U. S. Bonds and Bills	6,496,033.61	7,502,065.95
Federal Agency Guaranteed Securities	5,560,754.89	5,556,434.54
Corporate Bonds	20,906,919.40	21,025,404.52
Stocks	46,895,771.25	54,484,273.75
Mutual Funds:		
Fixed Income	13,548,673.70	12,858,621.36
Equity	11,146,720.19	24,242,590.85
Pooled/Common/Commingled Funds:		
Equity	6,401,250.82	9,108,517.86
Total Investments	110,956,123.86	134,777,908.83
Total Assets	115,945,947.51	139,767,732.48
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	103,944.03	103,944.03
To Broker for Investments Purchased	69,123.38	69,123.38
Total Liabilities	173,067.41	173,067.41
NET POSITION RESTRICTED FOR PENSIONS	115,772,880.10	139,594,665.07

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Employer 2,536,989.00

Total Contributions 2,536,989.00

Investment Income:

Miscellaneous Income 31,196.00

Net Realized Gain (Loss) 3,691,744.80

Unrealized Gain (Loss) (2,355,643.05)

Net Increase in Fair Value of Investments 1,367,297.75

Interest & Dividends 2,814,136.58

Less Investment Expense¹ (609,065.43)

Net Investment Income 3,572,368.90

Total Additions 6,109,357.90

DEDUCTIONS

Distributions to Members:

Benefit Payments 9,358,606.44

Total Distributions 9,358,606.44

Administrative Expense 27,252.86

Total Deductions 9,385,859.30

Net Increase in Net Position (3,276,501.40)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 142,871,166.47

End of the Year 139,594,665.07

¹Investment related expenses include investment advisory, custodial and performance monitoring fees

ACTUARIAL ASSET VALUATION
September 30, 2019

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/(Losses) Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2019	2020	2021	2022	2023
09/30/2015	(10,684,473)	0	0	0	0	0
09/30/2016	726,522	145,306	0	0	0	0
09/30/2017	7,244,367	2,897,748	1,448,875	0	0	0
09/30/2018	3,587,980	2,152,788	1,435,192	717,596	0	0
09/30/2019	(6,188,902)	(4,951,122)	(3,713,342)	(2,475,562)	(1,237,782)	0
Total		244,720	(829,275)	(1,757,966)	(1,237,782)	0

Development of Investment Gain/(Loss)

Market Value of Assets, 09/30/2018	142,871,166
Contributions Less Benefit Payments & Admin Expenses	(6,848,870)
Expected Investment Earnings*	9,761,271
Actual Net Investment Earnings	3,572,369
2019 Actuarial Investment Gain/(Loss)	<u>(6,188,902)</u>

*Expected Investment Earnings = $0.07 * [142,871,166 + 0.5 * (6,848,870)]$

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2019	139,594,665
(2) Gain/(Loss) Not Yet Recognized	244,720
(3) Actuarial Value of Assets, 09/30/2019, (1) - (2)	<u>139,349,945</u>
(A) 09/30/2018 Actuarial Assets:	137,500,444
(I) Net Investment Income:	
1. Interest and Dividends	2,845,333
2. Realized Gain (Loss)	3,691,745
3. Unrealized Gain (Loss)	(2,355,643)
4. Change in Actuarial Value	5,126,002
5. Investment Expenses	(609,065)
Total	<u>8,698,371</u>
(B) 09/30/2019 Actuarial Assets:	139,349,945
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	6.49%
Market Value of Assets Rate of Return:	2.57%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(686,949)
10/01/2019 Limited Actuarial Assets:	139,349,945

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2019
Actuarial Asset Basis

REVENUES

Contributions:		
Employer	2,536,989.00	
Total Contributions		2,536,989.00
Earnings from Investments:		
Interest & Dividends	2,814,136.58	
Miscellaneous Income	31,196.00	
Net Realized Gain (Loss)	3,691,744.80	
Unrealized Gain (Loss)	(2,355,643.05)	
Change in Actuarial Value	5,126,002.47	
Total Earnings and Investment Gains		9,307,436.80
EXPENDITURES		
Distributions to Members:		
Benefit Payments	9,358,606.44	
Total Distributions		9,358,606.44
Expenses:		
Investment related ¹	609,065.43	
Administrative	27,252.86	
Total Expenses		636,318.29
Change in Net Assets for the Year		1,849,501.07
Net Assets Beginning of the Year		137,500,444.00
Net Assets End of the Year ²		139,349,945.07

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2019

(1) Required Contributions	\$2,536,989.00
(2) Less 2018 Prepaid Contribution	0.00
(3) Less Actual Contributions	<u>(2,536,989.00)</u>
(4) Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	\$0.00

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives</u>				
Number	106	91	75	68
Average Current Age	58.0	58.8	58.7	59.5
Average Age at Employment	36.0	36.2	35.5	35.4
Average Past Service	22.0	22.6	23.2	24.1
Average Annual Salary	\$75,745	\$78,570	\$85,670	\$90,871
<u>Service Retirees</u>				
Number	274	293	304	312
Average Current Age	66.0	66.4	67.0	67.7
Average Annual Benefit	\$27,322	\$28,399	\$28,908	\$28,706
<u>Beneficiaries</u>				
Number	27	25	30	26
Average Current Age	65.5	65.9	67.6	69.3
Average Annual Benefit	\$13,886	\$14,587	\$15,043	\$14,818
<u>Terminated Vested</u>				
Number	104	97	90	85
Average Current Age	55.6	56.3	57.0	57.7
Average Annual Benefit	\$9,816	\$9,655	\$10,176	\$10,236

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0-4	5-9	10-14	15-19	20	21	22	23	24	25+	Total
15 - 39											0
40 - 44					1		1				2
45 - 49					1					1	2
50 - 54					4	1		1		3	9
55 - 59					2	2	3	3	3	6	19
60					2	3	1			1	7
61					2	1				4	7
62							1			2	3
63					1				1		2
64							2	1		1	4
65+			1		4	1	1		1	5	13
Total	0	0	1	0	17	8	9	5	5	23	68

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	75
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	(1)
d. Disabled	0
e. Retired	(6)
f. Continuing participants	68
g. New entrants	<u>0</u>
h. Total active life participants in valuation	68

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	<u>Total</u>
a. Number prior valuation	304	30	0	90	424
Retired	11	0	0	(5)	6
Vested (Deferred Annuity)	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0
Death, With Survivor	(1)	1	0	0	0
Death, No Survivor	(2)	(3)	0	0	(5)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	(2)	0	0	(2)
Data Corrections	0	0	0	0	0
b. Number current valuation	312	26	0	85	423

SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	Full-time employees who had completed 12 months of employment. Effective October 1, 1999, the Plan was closed to all future new hires.
<u>Credited Service</u>	Total years and nearest fully completed months of employment, including vacation and other paid leaves of absence. However, unpaid leaves of absence greater than 30 days are not included.
<u>Salary</u>	Basic rate of pay, excluding bonuses, commissions, overtime and other items of additional pay.
<u>Final Average Compensation</u>	Average Salary for the 3 best years of the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	None.
<u>Employer Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII, Chapter 112, Florida Statutes.
<u>Normal Retirement</u>	
Date	Earlier of: 1) age 65 and 7 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.
Benefit	3.0% of Final Average Compensation <u>times</u> Credited Service (subject to a maximum benefit of 75.0% of Final Average Compensation).
Form of Benefit	Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 55 and 7 years of Credited Service.
Benefit	Accrued benefit, reduced 3.0% per year that the benefit commencement date precedes Age 65.
<u>Vesting</u>	All members are currently 100% vested in their accrued benefit. If a member terminates employment prior to retirement eligibility, the member will receive their accrued benefit payable at Early (reduced) or Normal Retirement Age.
<u>Disability</u>	Not Applicable.

Death Benefits

Pre-Retirement

Eligible for Retirement

If Beneficiary is member's spouse: Benefit payable as if Member retired on the date of death, selected a 50% Joint and Survivor annuity, and then passed away, with the benefit then continuing to the survivor for life.

If Beneficiary is not member's spouse: Distribution shall commence within one year of the member's death, and shall occur over a 5-year period in equal amounts that in the aggregate are the actuarial equivalent of the survivor's annuity otherwise payable.

Vested (not eligible for retirement)

Same as described above if eligible for retirement, and commencing at the earliest possible date (reduced for early retirement).

Post-Retirement

Benefits payable in accordance with option selected at retirement.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	3,727,081
Prepaid Benefits	780,991
Total Cash and Equivalents	4,508,072
Receivables:	
From Broker for Investments Sold	251,453
Investment Income	230,298
Total Receivable	481,751
Investments:	
U. S. Bonds and Bills	7,502,066
Federal Agency Guaranteed Securities	5,556,435
Corporate Bonds	21,025,404
Stocks	54,484,274
Mutual Funds:	
Fixed Income	12,858,621
Equity	24,242,591
Pooled/Common/Commingled Funds:	
Equity	9,108,518
Total Investments	134,777,909
Total Assets	139,767,732
 <u>LIABILITIES</u>	
Payables:	
Investment Expenses	103,944
To Broker for Investments Purchased	69,123
Total Liabilities	173,067
 NET POSITION RESTRICTED FOR PENSIONS	 139,594,665

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Employer	2,536,989	
Total Contributions		2,536,989
Investment Income:		
Net Increase in Fair Value of Investments	1,367,298	
Interest & Dividends	2,814,137	
Less Investment Expense ¹	(609,066)	
Net Investment Income		3,572,369
Total Additions		6,109,358

DEDUCTIONS

Distributions to Members:

Benefit Payments	9,358,606	
Total Distributions		9,358,606
Administrative Expense		27,253
Total Deductions		9,385,859
Net Increase in Net Position		(3,276,501)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		142,871,166
End of the Year		139,594,665

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2019)

Plan Administration

The Plan is a single employer defined benefits pension plan administered by a Retirement Benefits Committee comprised of:

- Senior Director of Human Resources and Risk Management, Chair
- Chief Operating Officer
- Chief Financial Officer
- Senior Director, Airport Operations
- Director, Internal Audit, Vice Chair
- Assistant Director, Airport Affairs
- Assistant Director, Purchasing

Serving in an advisory

- Human Resources Manager

Full-time employees who had completed 12 months of employment. Effective October 1, 1999, the Plan was closed to all future new hires.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	334
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	90
Active Plan Members	75
	499

Benefits Provided

The Plan provides retirement, termination, and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Retirement Plan for Employees of Greater Orlando Aviation Authority prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: None.

Employer Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2019:

Asset Class	Target Allocation
Domestic Equity	45.00%
International Equity	15.00%
Fixed Income (Core)	25.00%
Fixed Income (Non-Core)	10.00%
GTAA	5.00%
Total	100.00%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2019, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.57 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2019 were as follows:

Total Pension Liability	\$ 145,436,760
Plan Fiduciary Net Position	\$ (139,594,665)
Sponsor's Net Pension Liability	<u>\$ 5,842,095</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	<u>95.98%</u>

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.25%
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% White Collar, Scale BB.
 Male: RP2000 Generational, 50% White Collar/ 50% Blue Collar, Scale BB.

Mortality Rate Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.
 Male: RP2000 Generational, 50% Annuitant White Collar/ 50% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.
 Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated September 29, 2016.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

These ranges 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 and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Fixed Income (Core)	2.50%
Fixed Income (Non-Core)	2.50%
GTAA	3.50%

GASB 67

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. 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. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 19,899,302	\$ 5,842,095	\$ (6,161,829)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2019</u>	<u>09/30/2018</u>	<u>09/30/2017</u>
Total Pension Liability			
Service Cost	1,029,631	1,095,023	1,233,772
Interest	9,822,972	9,647,407	9,541,561
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(35,086)	997,666	(533,554)
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(9,358,606)</u>	<u>(8,974,646)</u>	<u>(8,207,238)</u>
Net Change in Total Pension Liability	1,458,911	2,765,450	2,034,541
Total Pension Liability - Beginning	<u>143,977,849</u>	<u>141,212,399</u>	<u>139,177,858</u>
Total Pension Liability - Ending (a)	<u><u>\$145,436,760</u></u>	<u><u>\$143,977,849</u></u>	<u><u>\$ 141,212,399</u></u>
Plan Fiduciary Net Position			
Contributions - Employer	2,536,989	3,071,149	5,445,771
Contributions - Other	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	3,572,369	12,894,875	15,754,437
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	(8,974,646)	(8,207,238)
Administrative Expense	<u>(27,253)</u>	<u>(55,244)</u>	<u>(22,195)</u>
Net Change in Plan Fiduciary Net Position	(3,276,501)	6,936,134	12,970,775
Plan Fiduciary Net Position - Beginning	<u>142,871,166</u>	<u>135,935,032</u>	<u>122,964,257</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$139,594,665</u></u>	<u><u>\$142,871,166</u></u>	<u><u>\$ 135,935,032</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 5,842,095</u></u>	<u><u>\$ 1,106,683</u></u>	<u><u>\$ 5,277,367</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	95.98%	99.23%	96.26%
Covered Payroll	\$ 6,179,222	\$ 6,425,266	\$ 7,149,834
Net Pension Liability as a percentage of Covered Payroll	94.54%	17.22%	73.81%

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2016</u>	<u>09/30/2015</u>
Total Pension Liability		
Service Cost	1,405,308	1,605,600
Interest	9,209,738	8,964,502
Changes of benefit terms	464,777	-
Differences between Expected and Actual Experience	1,788,823	(651,260)
Changes of assumptions	4,868,298	-
Benefit Payments, including Refunds of Employee Contributions	<u>(7,439,739)</u>	<u>(6,161,788)</u>
Net Change in Total Pension Liability	10,297,205	3,757,054
Total Pension Liability - Beginning	<u>128,880,653</u>	<u>125,123,599</u>
Total Pension Liability - Ending (a)	<u><u>\$139,177,858</u></u>	<u><u>\$128,880,653</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	7,197,911	5,969,704
Contributions - Other	-	-
Contributions - Employee	-	-
Net Investment Income	9,033,002	(2,199,971)
Benefit Payments, including Refunds of Employee Contributions	(7,439,739)	(6,161,788)
Administrative Expense	<u>(39,926)</u>	<u>(37,171)</u>
Net Change in Plan Fiduciary Net Position	8,751,248	(2,429,226)
Plan Fiduciary Net Position - Beginning	<u>114,213,009</u>	<u>116,642,235</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$122,964,257</u></u>	<u><u>\$114,213,009</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 16,213,601</u></u>	<u><u>\$ 14,667,644</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.35%	88.62%
Covered Payroll	\$ 8,079,594	\$ 11,587,300
Net Pension Liability as a percentage of Covered Payroll	200.67%	126.58%

Notes to Schedule:*Changes of benefit terms:*

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from the October 13, 2016 Actuarial Impact Statement, the Committee approved a benefit enhancement for Philip Brown's benefit formula.

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from an actuarial experience study dated September 29, 2016, the following changes were made:

- The actuarial cost method was changed from the Aggregate Actuarial Cost Method to the Entry Age Normal Actuarial Cost Method.
- The investment return assumption was lowered from 7.25% to 7.00% per year, net of investment related expenses.
- The salary increased assumption was lowered from 5.00% to 4.25% per year until the assumed retirement age.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables (projected to valuation date using Scale AA) to the mortality tables for other than special risk employees used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation.
- The assumed rates of early and normal retirement were amended.
- The assumed rates of termination were amended.
- The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	<u>09/30/2014</u>	<u>09/30/2013</u>
Total Pension Liability		
Service Cost	1,674,946	1,561,721
Interest	8,641,988	8,296,030
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(5,436,436)</u>	<u>(4,961,864)</u>
Net Change in Total Pension Liability	4,880,498	4,895,887
Total Pension Liability - Beginning	<u>120,243,101</u>	<u>115,347,214</u>
Total Pension Liability - Ending (a)	<u><u>\$125,123,599</u></u>	<u><u>\$120,243,101</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	7,565,201	7,366,076
Contributions - Other	-	4,336
Contributions - Employee	-	113,179
Net Investment Income	9,698,478	12,220,872
Benefit Payments, including Refunds of Employee Contributions	<u>(5,436,436)</u>	<u>(4,961,864)</u>
Administrative Expense	<u>(24,107)</u>	<u>(47,007)</u>
Net Change in Plan Fiduciary Net Position	11,803,136	14,695,592
Plan Fiduciary Net Position - Beginning	<u>104,839,099</u>	<u>90,143,507</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$116,642,235</u></u>	<u><u>\$104,839,099</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 8,481,364</u></u>	<u><u>\$ 15,404,002</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	93.22%	87.19%
Covered Payroll	\$ 10,708,838	\$ 10,827,820
Net Pension Liability as a percentage of Covered Payroll	79.20%	142.26%

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 2,536,989	\$ 2,536,989	\$ -	\$ 6,179,222	41.06%
09/30/2018	\$ 3,071,149	\$ 3,071,149	\$ -	\$ 6,425,266	47.80%
09/30/2017	\$ 4,445,771	\$ 5,445,771	\$ (1,000,000)	\$ 7,149,834	76.17%
09/30/2016	\$ 5,197,911	\$ 7,197,911	\$ (2,000,000)	\$ 8,079,594	89.09%
09/30/2015	\$ 5,969,704	\$ 5,969,704	\$ -	\$ 11,587,300	51.52%
09/30/2014	\$ 6,565,201	\$ 7,565,201	\$ (1,000,000)	\$ 10,708,838	70.64%
09/30/2013	\$ 6,469,656	\$ 7,366,076	\$ (896,420)	\$ 10,827,820	68.03%

Notes to Schedule

Valuation Date: 10/01/2017

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rate:

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 50% Combined Healthy White Collar / 50% Combined Healthy Blue Collar, Scale BB.

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida.

This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2016 FRS valuation report for other than special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

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Normal Retirement Age:

Below are the rates assumed once the Member has attained normal retirement eligibility:

Number of Years Following NR Age	Age 65 with 7 Years of Service	25 Years of Service
0	20.0%	60.0%
1	20.0%	30.0%
2	20.0%	10.0%
3	20.0%	10.0%
4	20.0%	10.0%
5	100.0%	100.0%

The assumed rates of normal retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Early Retirement Age:

Below are the rates assumed once the Member has attained early retirement eligibility:

Number of Years Following ER Age	Rate
0	2.0%
1	2.0%
2	5.0%
3	5.0%
4	5.0%
5	5.0%
6	5.0%
7	10.0%
8	15.0%
9	15.0%

The assumed rates of early retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Salary Increases:

4.25% per year until the assumed retirement age. This was approved in conjunction with an actuarial experience study dated September 29, 2016.

Payroll Growth:

N/A.

Termination Rate:

Service	Rate
<15	2.5%
15-19	2.0%
20-24	0.5%

The assumed rates of termination were approved in conjunction with an actuarial experience study dated September 29, 2016.

Marital Status:

100% of the active members are assumed to be married. Additionally, male spouses are assumed to be three years older than female spouses.

Funding Method:

Entry Age Normal Actuarial Cost Method. The following loads are utilized for purposes of determining the Total Required Contribution:

- Interest – A half-year, based on the current 7.00% assumption.
- Salary – A full-year, based on the current 4.25% assumption.

Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	2.57%
09/30/2018	9.73%
09/30/2017	13.06%
09/30/2016	7.91%
09/30/2015	-1.89%
09/30/2014	9.21%
09/30/2013	13.40%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2020)

General Information about the Pension Plan

Plan Description

The Plan is a single employer defined benefits pension plan administered by a Retirement Benefits Committee comprised of:

- Senior Director of Human Resources and Risk Management, Chair
- Chief Operating Officer
- Chief Financial Officer
- Senior Director, Airport Operations
- Director, Internal Audit, Vice Chair
- Assistant Director, Airport Affairs
- Assistant Director, Purchasing

Serving in an advisory capacity:

- Human Resources Manager

Full-time employees who had completed 12 months of employment. Effective October 1, 1999, the Plan was closed to all future new hires.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	334
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	90
Active Plan Members	75
	499

Benefits Provided

The Plan provides retirement, termination, and death benefits.

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Retirement Plan for Employees of Greater Orlando Aviation Authority prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: None.

Employer Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019.

The reporting period is October 1, 2019 through September 30, 2020.

The Sponsor's Net Pension Liability was measured as of September 30, 2019.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	4.25%
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% White Collar, Scale BB.

Male: RP2000 Generational, 50% White Collar/ 50% Blue Collar, Scale BB.

Mortality Rate Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 50% Annuitant White Collar/ 50% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated September 29, 2016.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2019 the inflation rate assumption of the investment advisor was 2.50%.

These ranges 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 and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	45.00%	7.50%
International Equity	15.00%	8.50%
Fixed Income (Core)	25.00%	2.50%
Fixed Income (Non-Core)	10.00%	2.50%
GTAA	5.00%	3.50%
Total	100.00%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. 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. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2019	\$ 143,977,849	\$ 142,871,166	\$ 1,106,683
Changes for a Year:			
Service Cost	1,029,631	-	1,029,631
Interest	9,822,972	-	9,822,972
Differences between Expected and Actual Experience	(35,086)	-	(35,086)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	2,536,989	(2,536,989)
Net Investment Income	-	3,572,369	(3,572,369)
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	(9,358,606)	-
Administrative Expense	-	(27,253)	27,253
Net Changes	1,458,911	(3,276,501)	4,735,412
Reporting Period Ending September 30, 2020	\$ 145,436,760	\$ 139,594,665	\$ 5,842,095

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 19,899,302	\$ 5,842,095	\$ (6,161,829)

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2019**

For the year ended September 30, 2019, the Sponsor has recognized a Pension Expense of \$1,894,797.

On September 30, 2019, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	5,392,466
Employer contributions subsequent to the measurement date	2,536,989	-
Total	\$ 2,536,989	\$ 5,392,466

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2019.

Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:		
2020		\$ (189,378)
2021		\$ (2,319,023)
2022		\$ (2,166,469)
2023		\$ (717,596)
2024		\$ -
Thereafter		\$ -

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2020**

For the year ended September 30, 2020, the Sponsor will recognize a Pension Expense of \$2,131,903.

On September 30, 2020, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	251,968
Employer contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ 251,968

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2020.

Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:					
2021			\$	(1,081,243)	
2022			\$	(928,689)	
2023			\$	520,184	
2024			\$	1,237,780	
2025			\$	-	
Thereafter			\$	-	

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Reporting Period Ending	09/30/2020	09/30/2019	09/30/2018
Measurement Date	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	1,029,631	1,095,023	1,233,772
Interest	9,822,972	9,647,407	9,541,561
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(35,086)	997,666	(533,554)
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	(8,974,646)	(8,207,238)
Net Change in Total Pension Liability	1,458,911	2,765,450	2,034,541
Total Pension Liability - Beginning	143,977,849	141,212,399	139,177,858
Total Pension Liability - Ending (a)	<u>\$ 145,436,760</u>	<u>\$ 143,977,849</u>	<u>\$141,212,399</u>
Plan Fiduciary Net Position			
Contributions - Employer	2,536,989	3,071,149	5,445,771
Contributions - Other	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	3,572,369	12,894,875	15,754,437
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	(8,974,646)	(8,207,238)
Administrative Expense	(27,253)	(55,244)	(22,195)
Net Change in Plan Fiduciary Net Position	(3,276,501)	6,936,134	12,970,775
Plan Fiduciary Net Position - Beginning	142,871,166	135,935,032	122,964,257
Plan Fiduciary Net Position - Ending (b)	<u>\$ 139,594,665</u>	<u>\$ 142,871,166</u>	<u>\$135,935,032</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 5,842,095</u>	<u>\$ 1,106,683</u>	<u>\$ 5,277,367</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	95.98%	99.23%	96.26%
Covered Payroll	\$ 6,179,222	\$ 6,425,266	\$ 7,149,834
Net Pension Liability as a percentage of Covered Payroll	94.54%	17.22%	73.81%

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2017 09/30/2016	09/30/2016 09/30/2015	09/30/2015 09/30/2014
Total Pension Liability			
Service Cost	1,405,308	1,605,600	1,674,946
Interest	9,209,738	8,964,502	8,641,988
Changes of benefit terms	464,777	-	-
Differences between Expected and Actual Experience	1,788,823	(651,260)	-
Changes of assumptions	4,868,298	-	-
Benefit Payments, including Refunds of Employee Contributions	(7,439,739)	(6,161,788)	(5,436,436)
Net Change in Total Pension Liability	10,297,205	3,757,054	4,880,498
Total Pension Liability - Beginning	128,880,653	125,123,599	120,243,101
Total Pension Liability - Ending (a)	<u>\$139,177,858</u>	<u>\$128,880,653</u>	<u>\$125,123,599</u>
Plan Fiduciary Net Position			
Contributions - Employer	7,197,911	5,969,704	7,565,201
Contributions - Other	-	-	-
Contributions - Employee	-	-	-
Net Investment Income	9,033,002	(2,199,971)	9,698,478
Benefit Payments, including Refunds of Employee Contributions	(7,439,739)	(6,161,788)	(5,436,436)
Administrative Expense	(39,926)	(37,171)	(24,107)
Net Change in Plan Fiduciary Net Position	8,751,248	(2,429,226)	11,803,136
Plan Fiduciary Net Position - Beginning	114,213,009	116,642,235	104,839,099
Plan Fiduciary Net Position - Ending (b)	<u>\$122,964,257</u>	<u>\$114,213,009</u>	<u>\$116,642,235</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 16,213,601</u>	<u>\$ 14,667,644</u>	<u>\$ 8,481,364</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.35%	88.62%	93.22%
Covered Payroll	\$ 8,079,594	\$ 11,587,300	\$ 10,708,838
Net Pension Liability as a percentage of Covered Payroll	200.67%	126.58%	79.20%

Notes to Schedule:*Changes of benefit terms:*

For measurement date 09/30/2016, amounts reported as changes of benefit terms resulted from the October 13, 2016 Actuarial Impact Statement, the Committee approved a benefit enhancement for Philip Brown's benefit formula.

Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from an actuarial experience study dated September 29, 2016, the following changes were made:

- The actuarial cost method was changed from the Aggregate Actuarial Cost Method to the Entry Age Normal Actuarial Cost Method.
- The investment return assumption was lowered from 7.25% to 7.00% per year, net of investment related expenses.
- The salary increased assumption was lowered from 5.00% to 4.25% per year until the assumed retirement age.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables (projected to valuation date using Scale AA) to the mortality tables for other than special risk employees used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation.
- The assumed rates of early and normal retirement were amended.
- The assumed rates of termination were amended.
- The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

Reporting Period Ending	09/30/2014	09/30/2013
Measurement Date	<u>09/30/2013</u>	<u>09/30/2012</u>
Total Pension Liability		
Service Cost	1,561,721	1,456,150
Interest	8,296,030	7,934,049
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(4,961,864)</u>	<u>(4,043,996)</u>
Net Change in Total Pension Liability	4,895,887	5,346,203
Total Pension Liability - Beginning	<u>115,347,214</u>	<u>110,001,011</u>
Total Pension Liability - Ending (a)	<u><u>\$120,243,101</u></u>	<u><u>\$115,347,214</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	7,366,076	5,313,517
Contributions - Other	4,336	-
Contributions - Employee	113,179	-
Net Investment Income	12,220,872	13,828,379
Benefit Payments, including Refunds of Employee Contributions	<u>(4,961,864)</u>	<u>(4,043,996)</u>
Administrative Expense	<u>(47,007)</u>	<u>(45,066)</u>
Net Change in Plan Fiduciary Net Position	14,695,592	15,052,834
Plan Fiduciary Net Position - Beginning	<u>90,143,507</u>	<u>75,090,673</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$104,839,099</u></u>	<u><u>\$ 90,143,507</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 15,404,002</u></u>	<u><u>\$ 25,203,707</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.19%	78.15%
Covered Payroll	\$ 10,827,820	\$ 11,443,116
Net Pension Liability as a percentage of Covered Payroll	142.26%	220.25%

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 2,536,989	\$ 2,536,989	\$ -	\$ 6,179,222	41.06%
09/30/2018	\$ 3,071,149	\$ 3,071,149	\$ -	\$ 6,425,266	47.80%
09/30/2017	\$ 4,445,771	\$ 5,445,771	\$ (1,000,000)	\$ 7,149,834	76.17%
09/30/2016	\$ 5,197,911	\$ 7,197,911	\$ (2,000,000)	\$ 8,079,594	89.09%
09/30/2015	\$ 5,969,704	\$ 5,969,704	\$ -	\$ 11,587,300	51.52%
09/30/2014	\$ 6,565,201	\$ 7,565,201	\$ (1,000,000)	\$ 10,708,838	70.64%
09/30/2013	\$ 6,469,656	\$ 7,366,076	\$ (896,420)	\$ 10,827,820	68.03%
09/30/2012	\$ 5,313,517	\$ 5,313,517	\$ -	\$ 11,443,116	46.43%

Notes to Schedule

Valuation Date: 10/01/2017

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Mortality Rate:

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 50% Combined Healthy White Collar / 50% Combined Healthy Blue Collar, Scale BB.

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman’s July 1, 2016 FRS valuation report for other than special risk participants. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

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Normal Retirement Age:

Below are the rates assumed once the Member has attained normal retirement eligibility:

Number of Years Following NR Age	Age 65 with 7 Years of	25 Years of Service
0	20%	60%
1	20%	30%
2	20%	10%
3	20%	10%
4	20%	10%
5	100%	100%

The assumed rates of normal retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Early Retirement Age:

Below are the rates assumed once the Member has attained early retirement eligibility:

Number of Years Following ER	Rate
0	2.0%
1	2.0%
2	5.0%
3	5.0%
4	5.0%
5	5.0%
6	5.0%
7	10.0%
8	15.0%
9	15.0%

The assumed rates of early retirement were approved in conjunction with an actuarial experience study dated September 29, 2016.

Salary Increases:

4.25% per year until the assumed retirement age. This was approved in conjunction with an actuarial experience study dated September 29, 2016.

Payroll Growth:

N/A.

Termination Rate:

Service	Rate
<15	2.5%
15-19	2.0%
20-24	0.5%

The assumed rates of termination were approved in conjunction with an actuarial experience study dated September 29, 2016.

Marital Status:

100% of the active members are assumed to be married. Additionally, male spouses are assumed to be three years older than female spouses.

Funding Method:

Entry Age Normal Actuarial Cost Method. The following loads are utilized for purposes of determining the Total Required Contribution:

- Interest – A half-year, based on the current 7.00% assumption.
- Salary – A full-year, based on the current 4.25% assumption.

Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 5,277,367	\$ 6,657,424	\$ 7,330,439	\$ -
Employer Contributions made after September 30, 2018	-	-	2,536,989	-
Total Pension Liability Factors:				
Service Cost	1,095,023	-	-	1,095,023
Interest	9,647,407	-	-	9,647,407
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	997,666	-	997,666	-
Current year amortization of experience difference	-	-	(997,666)	997,666
Benefit Payments, including Refunds of Employee Contributions	(8,974,646)	-	-	-
Net change	<u>2,765,450</u>	<u>-</u>	<u>2,536,989</u>	<u>11,740,096</u>
Plan Fiduciary Net Position:				
Contributions - Employer	3,071,149	-	(3,071,149)	-
Projected Net Investment Income	9,306,896	-	-	(9,306,896)
Difference between projected and actual earnings on Pension Plan investments	3,587,979	3,587,979	-	-
Current year amortization	-	(2,723,292)	(2,129,645)	(593,647)
Benefit Payments, including Refunds of Employee Contributions	(8,974,646)	-	-	-
Administrative Expenses	(55,244)	-	-	55,244
Net change	<u>6,936,134</u>	<u>864,687</u>	<u>(5,200,794)</u>	<u>(9,845,299)</u>
Ending Balance	<u>\$ 1,106,683</u>	<u>\$ 7,522,111</u>	<u>\$ 4,666,634</u>	<u>\$ 1,894,797</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 1,106,683	\$ 7,522,111	\$ 4,666,634	\$ -
Employer Contributions made after September 30, 2019	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,029,631	-	-	1,029,631
Interest	9,822,972	-	-	9,822,972
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(35,086)	35,086	-	-
Current year amortization of experience difference	-	(35,086)	-	(35,086)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	-	-	-
Net change	<u>1,458,911</u>	<u>-</u>	<u>-</u>	<u>10,817,517</u>
Plan Fiduciary Net Position:				
Contributions - Employer	2,536,989	-	(2,536,989)	-
Projected Net Investment Income	9,761,271	-	-	(9,761,271)
Difference between projected and actual earnings on Pension Plan investments	(6,188,902)	-	6,188,902	-
Current year amortization	-	(2,319,023)	(3,367,427)	1,048,404
Benefit Payments, including Refunds of Employee Contributions	(9,358,606)	-	-	-
Administrative Expenses	(27,253)	-	-	27,253
Net change	<u>(3,276,501)</u>	<u>(2,319,023)</u>	<u>284,486</u>	<u>(8,685,614)</u>
Ending Balance	<u>\$ 5,842,095</u>	<u>\$ 5,203,088</u>	<u>TBD</u>	<u>\$ 2,131,903</u>

* Employer Contributions subsequent to the measurement date made after September 30, 2019 but made on or before September 30, 2020 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2019	\$ 6,188,902	5	\$ -	\$ 1,237,782	\$ 1,237,780	\$ 1,237,780	\$ 1,237,780	\$ 1,237,780	\$ -	\$ -	\$ -	\$ -
2018	\$ (3,587,979)	5	\$ (717,595)	\$ (717,596)	\$ (717,596)	\$ (717,596)	\$ (717,596)	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (7,244,367)	5	\$ (1,448,873)	\$ (1,448,873)	\$ (1,448,873)	\$ (1,448,873)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (762,772)	5	\$ (152,554)	\$ (152,554)	\$ (152,554)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 10,648,223	5	\$ 2,129,645	\$ 2,129,645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ (2,021,349)	5	\$ (404,270)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (593,647)	\$ 1,048,404	\$ (1,081,243)	\$ (928,689)	\$ 520,184	\$ 1,237,780	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ (35,086)	1	\$ -	\$ (35,086)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 997,666	1	\$ 997,666	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 997,666	\$ (35,086)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -