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April 19, 2018

Mr. James A. Potvin
Executive Director
Georgia Military Pension Fund
Two Northside 75, Suite 300
Atlanta, GA 30318-7701

Dear Mr. Potvin:

Enclosed is the "Georgia Military Pension Fund Report of the Actuary on the Valuation Prepared as of June 30, 2017".

The valuation indicates that employer contributions for the fiscal year ending June 30, 2020 of $2,611,590 or $200.32 per active member are sufficient to support the benefits of the Fund.

Please let us know if there are any questions concerning the report.

Sincerely yours,

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

Ben Mobley, ASA, FCA, MAAA
Senior Actuary

Enclosure

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EMPLOYEES'
RETIREMENT SYSTEM
OF GEORGIA

GEORGIA MILITARY PENSION FUND

REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2017

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April 19, 2018

Board of Trustees
Georgia Military Pension Fund
Two Northside 75, Suite 300
Atlanta, GA 30318

Attention: Mr. James A. Potvin, Executive Director

Members of the Board:

Section 47-24-22 of the law governing the operation of the Georgia Military Pension Fund provides that the actuary shall make periodic valuations of the contingent assets and liabilities of the Pension Fund on the basis of regular interest and the tables last adopted by the Board of Trustees. We have submitted the report giving the results of the actuarial valuation of the Fund prepared as of June 30, 2017. The report indicates that annual employer contributions of $2,611,590 or $200.32 per active member for the fiscal year ending June 30, 2020 are sufficient to support the benefits of the Fund.

Since the previous valuation, the Board has amended the funding policy to change the long-term assumed rate of return assumption. Effective with the June 30, 2017 valuation, the assumed rate of return will be reduced by 0.10% (10 basis points) from the immediate prior actuarial valuation, as long as the actual rate of return for the fiscal year ending with the current valuation date exceeds the assumed rate of return from the immediate prior actuarial valuation. The assumed rate of return may not decrease below 7.00% net of investment expenses. Since the actual rate of return for the year ending June 30, 2017 was greater than 7.50%, the assumed rate of return used in the current valuation was decreased from 7.50% to 7.40%.

In preparing the valuation, the actuary relied on data provided by the Fund. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. Our firm, as actuary, is responsible for all of the actuarial trend data in the financial section of the annual report and the supporting schedules in the actuarial section of the annual report.

In our opinion, the valuation is complete and accurate, and the methodology and assumptions are reasonable as a basis for the valuation. The valuation takes into account the effect of all amendments to the Fund enacted through the 2017 session of the General Assembly.

The Fund is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund. The assumptions and methods used for financial reporting purposes meet the parameters set by Actuarial Standards of Practice (ASOPS). The funding objective of the plan is that contribution rates over time will remain level as a dollar per active member. The valuation method used is the entry age normal cost method. The normal contribution rate to cover current cost has been determined as a dollar per active member. Gains and losses are reflected in the total unfunded accrued liability which is being amortized as a level dollar per active member in accordance with the funding policy adopted by the Board.

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The Plan and the employers are required to comply with the financial reporting requirements of GASB Statements No. 67 and 68. The necessary disclosure information is provided in separate supplemental reports.

We have provided the following information and supporting schedules for the Actuarial Section of the Comprehensive Annual Financial Report:

- Summary of Actuarial Assumptions
- Schedule of Active Members
- Schedule of Funding Progress
- Schedule of Retirees Added to and Removed from Rolls
- Analysis of Change in Unfunded Accrued Liability
- Solvency Test Results

The Fund is being funded in conformity with the minimum funding standard set forth in Code Section 47-20-10 of the Public Retirement Systems Standards Law and the funding policy adopted by the Board. In our opinion the Fund is operating on an actuarially sound basis. Assuming that contributions to the Fund are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the Fund may be safely anticipated.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience is performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Fund.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Use of these computations for purposes other than meeting these requirements may not be appropriate.

Sincerely yours,

Edward J. Koebel

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot

Cathy Turcot
Principal and Managing Director

Ben Mobley

Ben Mobley, ASA, FCA, MAAA
Senior Actuary

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Section I – Summary of Principal Results

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	**June 30, 2017**	**June 30, 2016**
Number of active members	13,037	13,850
Retired members:		
Number	985	913
Annual pensions	$ 1,066,260	$ 986,820
Former members entitled to deferred vested pensions:		
Number	2,921	2,720
Annual deferred pensions	$ 2,694,960	$ 2,489,556
Assets:		
Fair Value	$ 20,711,000	$ 17,717,000
Actuarial Value	20,604,000	18,414,000
Valuation Interest Rate	7.40%	7.50%
Unfunded actuarial accrued liability	$ 20,126,594	$ 19,796,803
Blended Amortization period (years)	16.5	17.3
Funded Ratio based on Actuarial Value of Assets	50.6%	48.2%
For Fiscal Year Ending	**June 30, 2020**	**June 30, 2019**
Actuarially Determined Employer Contribution (ADEC)		
Per active member:		
Normal*	$ 35.17	$ 33.23
Unfunded Actuarial Accrued Liability	165.15	149.97
Total	$ 200.32	$ 183.20
Annual Amount:		
Normal*	$ 458,511	$ 460,236
Unfunded Actuarial Accrued Liability	2,153,079	2,077,036
Total	$ 2,611,590	$ 2,537,272

*The normal contribution includes administrative expenses.

2. The major benefit and contribution provisions of the Fund as reflected in the valuation are summarized in Schedule H. The valuation takes into account the effect of amendments to the Fund enacted through the 2017 session of the General Assembly. There have been no changes since the previous valuation.
3. Schedule D of this report outlines the full set of actuarial assumptions used to prepare the current valuation. Since the previous valuation, the Board has amended the funding policy to change the long-term assumed rate of return assumption. Effective with the June 30, 2017 valuation, the assumed rate of return will be reduced by 0.10% (10 basis points) from the immediate prior actuarial valuation, as long as the actual rate of return for the fiscal year ending with the current valuation date exceeds the assumed rate of return from the immediate prior actuarial valuation. The assumed rate of return may not decrease below 7.00% net of investment expenses. Since the actual rate of return for the year ending June 30, 2017 was greater than 7.50%, the assumed rate of return used in the current valuation was decreased from 7.50% to 7.40%. The Board Funding Policy is shown in Schedule F.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
5. Comments on the valuation results as of June 30, 2017 are given in Section IV, and further discussion of the contributions is set out in Section V.
6. We have prepared the Solvency Test and Schedule of Retirants Added to and Removed from Rolls for the Fund's Comprehensive Annual Financial Report. These tables are shown in Schedule J.
7. The funded ratio shown in the Summary of Principal Results is the ratio of the actuarial value of assets to the accrued liability and would be different if based on fair value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward payment of the unfunded actuarial accrued liability. In addition, this funded ratio does not have any relationship to measuring sufficiency if the plan had to settle its liabilities.

Section II – Membership

1. Data for retired members of the Fund were furnished by the Retirement System. Data for active and deferred vested members of the Fund were furnished by the Defense Department. On this basis, the valuation includes 13,037 active National Guard members.

2. The following table shows the number of retired members and deferred vested members included in the valuation as of June 30, 2017, together with the amount of their annual retirement allowances payable under the Fund as of that date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND DEFERRED VESTED MEMBERS AS OF JUNE 30, 2017

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Retired Members, currently payable	985	$ 1,066,260
Former Members, deferred allowances	2,921	2,694,960

Section III – Assets

1. As of June 30, 2017 the total fair value of assets amounted to $20,711,000 as reported by the independent Auditor of the Fund. The actuarial value of assets as of June 30, 2017 was determined to be $20,604,000 based on a five year smoothing of investment gains and losses. Schedule B shows the development of the actuarial value of assets as of June 30, 2017.
2. Schedule C shows the receipts and disbursements of the Fund for the two years preceding the valuation date and a reconciliation of the fund balances.

Section IV – Comments on Valuation

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Fund as of June 30, 2017. The valuation was prepared in accordance with the actuarial assumptions and methods set forth in Schedule D and the actuarial cost method which is described in Schedule E.

2. The valuation balance sheet shows that the Fund has total prospective liabilities of $41,133,211, of which $28,867,136 is for the prospective benefits payable on account of present retired members, and members entitled to deferred vested benefits, and $12,266,075 is for the prospective benefits payable on account of present active members. Against these liabilities, the Fund has total present assets of $20,604,000 as of June 30, 2017. The difference of $20,529,211 between the total liabilities and the total present assets represents the present value of contributions to be made in the future.

3. The employer's contributions to the Fund consist of normal contributions and unfunded actuarial accrued liability (UAAL) contributions. The valuation indicates that annual employer normal contributions at the rate of $6.50 per active member are required to provide the currently accruing benefits of the Fund. An additional $28.67 per active member is required to fund the administrative expenses of the Fund.

4. Prospective normal contributions (net of expenses) at the rate of $6.50 have a present value of $402,617. When this amount is subtracted from $20,529,211, which is the present value of the total future contributions to be made by the employers, the result is a prospective unfunded actuarial accrued liability of $20,126,594.

5. The funding policy adopted by the Board, as shown in Schedule F, provides that the unfunded actuarial accrued liability as of June 30, 2013 (Transitional UAAL) will be amortized as a level dollar amount over a closed 20-year period. In each subsequent valuation all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation will determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level dollar amount over a closed 20-year period from the date it is established.

6. The total accrued liability contribution rate is $165.15 per active member, determined in accordance with the Board's funding policy.

7. Schedule G of this report shows the amortization schedules for the Transitional UAAL and New Incremental UAALs.

8. The following table shows the components of the total unfunded actuarial accrued liability (UAAL) and the derivation of the UAAL contribution rate in accordance with the funding policy.

TOTAL UAAL AND UAAL CONTRIBUTION RATE

	Remaining Balance UAAL	Remaining Amortization Period (years)	Amortization Payment
Transitional	$16,073,149	16	$1,746,834
New Incremental June 30, 2014	37,480	17	3,946
New Incremental June 30, 2015	1,581,935	18	161,834
New Incremental June 30, 2016	1,511,964	19	150,704
New Incremental June 30, 2017	922,066	20	89,761
Total UAAL	$20,126,594		$2,153,079
Blended Amortization Period (years)			16.5
UAAL Contribution Rate per active member			$165.15

Section V – Contributions Payable by the State

1. The employer's contributions to the Fund consist of a normal contribution and an unfunded actuarial accrued liability contribution (UAAL) as determined by actuarial valuation.
2. The normal contribution rate is calculated as the level dollar which, if applied for the average member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be $6.50 per active member, or $84,741 based on 13,037 active members as of June 30, 2017.
3. An additional $373,770, or $28.67 per active member, is required to fund the administrative expenses of the Fund.
4. The total normal contribution including administrative expenses is, therefore, $458,511, or $35.17 per active member.
5. The UAAL contribution is the level annual amount which will be sufficient to amortize the unfunded actuarial accrued liability in accordance with the Board's funding policy. The annual UAAL contribution determined on this basis by the June 30, 2017 valuation is $2,153,079, or $165.15 per active member.
6. The following table summarizes the employer contribution rates which were determined by the June 30, 2017 valuation and are recommended for use.

ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)
FOR FISCAL YEAR ENDING JUNE 30, 2020

CONTRIBUTION	PER ACTIVE MEMBER	ANNUAL AMOUNT
Normal	$ 35.17	$ 458,511
Unfunded Actuarial Accrued Liability	165.15	2,153,079
Total	$ 200.32	$ 2,611,590

Section VI – Accounting Information

The information required under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 will be issued in separate reports. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership:

NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF JUNE 30, 2017

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	985
Terminated plan members entitled to benefits but not yet receiving benefits	2,921
Active plan members	13,037
Total	16,943

2. The schedule of funding progress is shown below

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
6/30/2012	$ 10,087,000	$ 28,231,012	$ 18,144,012	35.73%	N/A	N/A
6/30/2013	12,131,000	30,055,570	17,924,570	40.36	N/A	N/A
6/30/2014	14,264,000	31,815,154	17,551,154	44.83	N/A	N/A
6/30/2015	16,446,000	35,212,807	18,766,807	46.70	N/A	N/A
6/30/2016	18,414,000	38,210,803	19,796,803	48.19	N/A	N/A
6/30/2017*	20,604,000	40,730,594	20,126,594	50.59	N/A	N/A

* Reflects change in assumed rate of return

Section VI – Accounting Information

3. The following shows the schedule of employer contributions:

Year Ending	Actuarially Determined Employer Contribution (ADEC)	Percentage Contributed
6/30/2012	$1,521,000	100%
6/30/2013	1,703,000	100
6/30/2014	1,892,000	100
6/30/2015	1,893,000	100
6/30/2016	1,990,000	100
6/30/2017	2,018,000	100

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2017. Additional information as of the latest actuarial valuation follows.

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Valuation date	6/30/2017
Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	16.5 years
Asset valuation method	5-year smoothed fair
Actuarial assumptions:	
Investment rate of return*	7.40%
Projected salary increases	N/A
Cost-of-living adjustments	None

* Includes inflation at 2.75%

Section VII – Experience

1. The last experience investigation was prepared for the five-year period ending June 30, 2014, and based on the results of the investigation various assumptions and methods were revised and adopted by the Board on December 17, 2015. The next experience investigation will be prepared for the period July 1, 2014 through June 30, 2019.

2. The following table shows the estimated gain or loss from various factors that resulted in an increase of $329,791 in the unfunded actuarial accrued liability (UAAL) from $19,796,803 to $20,126,594 during the fiscal year ending June 30, 2017.

3. The most significant item contributing to the $329.8 thousand increase in the UAAL was a $537.6 thousand increase due to the decrease in the assumed rate of return from 7.50% to 7.40%. There were also small losses for turnover and retirement, new entrants joining the System and data changes. These losses were somewhat offset by gains for pensioner mortality and for valuation asset growth more than expected.

ANALYSIS OF THE INCREASE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY
(in thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded actuarial accrued liability	$ 1,484.8
Accrued liability contribution	(1,747.5)
Experience:	
Valuation asset growth	(50.0)
Pensioners' mortality	(109.2)
Turnover and retirements	11.0
New entrants	138.9
Assumption changes	537.6
Miscellaneous/Data changes	64.2
Total	$ 329.8

Schedule A – Valuation Balance Sheet

VALUATION BALANCE SHEET

PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2017

ACTUARIAL LIABILITIES			
Present value of prospective benefits payable on account of:			
(1)	Present retired members		$ 9,778,029
(2)	Former members entitled to deferred benefits		19,089,107
(3)	Present active members		12,266,075
(4)	Total Actuarial Liabilities		$ 41,133,211
PRESENT AND PROSPECTIVE ASSETS			
(5)	Actuarial Value of Assets:		$ 20,604,000
(6)	Present value of total future contributions = (4) – (5)	$ 20,529,211	
(7)	Prospective normal contributions		402,617
(8)	Prospective unfunded actuarial accrued liability contributions = (6) – (7)		20,126,594
(9)	Total Present and Prospective Assets		$ 41,133,211

Schedule B – Development of Actuarial Value of Assets

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
($ in thousands)

(1)	Actuarial Value Beginning of Year		$	18,414
(2)	Fair Value End of Year		$	20,711
(3)	Fair Value Beginning of Year		$	17,717
(4)	Cash Flow			
	(a)	Contributions	$	2,018
	(b)	Benefit Payments		(1,042)
	(c)	Administrative Expenses		(244)
	(d)	Investment Expenses		(6)
	(e)	Net: (4)(a) + (4)(b) + 4(c) + 4(d)	$	726
(5)	Investment Income			
	(a)	Fair Total: (2) – (3) – (4)(e)	$	2,268
	(b)	Assumed Rate of Return for Current Year		7.50%
	(c)	Amount for Immediate Recognition: [(3) x (5)(b)] + {[(4)(a) +4(b) + 4(c)]x (5)(b) x 0.5} - 4(d)	$	1,362
	(d)	Amount for Phased-In Recognition: (5)(a) - (5)(c)		906
(6)	Phased-In Recognition of Investment Income			
	(a)	Current Year: (5)(d) / 5	$	181
	(b)	First Prior Year		(208)
	(c)	Second Prior Year		(118)
	(d)	Third Prior Year		247
	(e)	Fourth Prior Year		0
	(f)	Total Recognized Investment Gain	$	102
(7)	Actuarial Value End of Year: (1) + (4)(e) + (5)(c) + (6)(f)		$	20,604
(8)	Difference Between Fair & Actuarial Values: (2) – (7)		$	107
(9)	Rate of Return on Actuarial Value			7.76%

Schedule C – Summary of Receipts and Disbursements

SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Fair Value)

	YEAR ENDING	
Receipts for the Year	June 30, 2017 ($1,000's)	June 30, 2016 ($1,000's)
Contributions:		
Members	$ 0	$ 0
Employer	2,018	1,990
Subtotal	$ 2,018	$ 1,990
Investment Earnings (Net of Investment Expenses)	2,262	240
TOTAL	$ 4,280	$ 2,230
Disbursements for the Year		
Benefit Payments	$ 1,042	$ 963
Refunds to Members	0	0
Administrative Expenses	244	262
TOTAL	$ 1,286	$ 1,225
Excess of Receipts over Disbursements	$ 2,994	$ 1,005
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of Year	$ 17,717	$ 16,712
Excess of Receipts over Disbursements	2,994	1,005
Asset Balance as of the End of Year	$ 20,711	$ 17,717
Rate of Return	12.51%	1.40%

Schedule D – Outline of Actuarial Assumptions and Methods

Actuarial assumptions and methods adopted by the Board December 17, 2015. Valuation interest rate adopted by the Board March 15, 2018.

VALUATION INTEREST RATE: 7.40% per annum, compounded annually, net of investment expenses, composed of a 2.75% inflation assumption and a 4.65% real rate of investment return assumption.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of separation from active service are as follows:

RATES OF WITHDRAWAL FROM ACTIVE SERVICE	
SERVICE	**RATES**
2 & Under	13.0%
3-7	17.5
8-9	14.0
10-14	13.5
15-19	8.5
20 & Over	14.5

AGE	RATES OF RETIREMENT
60	75.0%
61	60.0
62	70.0
63	60.0
64	60.0
65 and over	100.0

AGE	RATES OF DEATH	
	Male	Female
25	0.0349%	0.0192%
30	0.0412	0.0245
35	0.0717	0.0441
40	0.1001	0.0655
45	0.1399	0.1043
50	0.1983	0.1555
55	0.2810	0.2228
60	0.4092	0.3058

Schedule D – Outline of Actuarial Assumptions and Methods

DEATHS AFTER RETIREMENT: Since the Fund has minimal post-retirement mortality experience, the Fund uses the same mortality tables used for the Employees' Retirement System of Georgia, which is the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward 2 years for both males and females. There is a margin for future mortality improvement in the tables used by the Fund. Based on the results of the most recent experience study adopted by the Board on December 17, 2015, the numbers of expected future deaths are 9-12% less than the actual number of deaths that occurred during the study period.

Representative values of the assumed annual rates of mortality are as follows:

Age	Men	Women	Age	Men	Women
40	0.1127%	0.0790%	65	1.1300%	0.8994%
45	0.1609	0.1230	70	1.8697	1.5281
50	0.2474	0.1872	75	3.2147	2.5220
55	0.4246	0.2918	80	5.5160	4.1628
60	0.6985	0.4923	85	9.5631	7.1239

ADMINISTRATIVE EXPENSES: Budgeted administrative expenses for the fiscal year are added to the normal cost.

AMORTIZATION METHOD: Level dollar amortization.

ASSET METHOD: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the fair value of assets and the expected value of assets, based on the assumed valuation rate of return. The actuarial value was set equal to the fair value as of June 30, 2013. The amount recognized each year beginning June 30, 2014 is 20% of the difference between fair value and expected actuarial value.

VALUATION METHOD: Entry age actuarial cost method. See Schedule E for a brief description of this method.

Schedule E – Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.40%), of each member's expected benefits at retirement or death is determined, based on age, service and sex. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members, beneficiaries and members entitled to deferred vested benefits to obtain the present value of all expected benefits payable from the Fund on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Fund are determined following a level funding approach, and consist of a normal contribution and an unfunded actuarial accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level amount which, if applied for the average member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded actuarial accrued liability contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets, from the present value of expected benefits to be paid from the Fund.

Schedule F – Board Funding Policy

FUNDING POLICY OF THE GMPF BOARD OF TRUSTEES

The purpose of this Funding Policy is to state the overall objectives for the Georgia Military Pension Fund (System), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks. It is the intent of the GMPF Board of Trustees that the Funding Policy outlined herein will remain unchanged until the objectives below are met.

I. Funding Objectives

The goal in requiring employer and member contributions to the System is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement. In meeting this objective, the System will strive to meet the following funding objectives:

- To develop a pattern of contributions expressed both as a total dollar amount and as a dollar amount per active member and measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board.
- To maintain an increasing funded ratio (ratio of actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to obtain a 100% funded ratio over a reasonable period of future years.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demand for liquidity.
- To promote intergenerational equity for taxpayers with respect to contributions required for the benefits provided by the System.

II. Measures of Funding Progress

To track progress in achieving the System's funding objectives, the following measures will be determined annually as of the actuarial valuation date (with due recognition that a single year's results may not be indicative of long-term trends):

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial adjustments. The target funded ratio will be 100 percent within 20 years of the valuation date for the first valuation conducted following the adoption of this Policy (i.e. the June 30, 2013 valuation date).
- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL** – The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL.
  - **New Incremental UAAL** – Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuations.
- **UAAL Amortization Period**
  - The transitional UAAL will be amortized over a closed 20 year period beginning on the initial valuation date for which this funding policy is adopted.
  - Each New Incremental UAAL shall be amortized over a closed 20 year period beginning with the year it is incurred.

Schedule F – Board Funding Policy

- **Employer Contributions**
  - **Employer Normal Contributions** – the contribution determined as of the valuation date each year to fund the employer portion of the annual normal cost of the System based on the assumptions and methods adopted by the Board.
  - In each valuation subsequent to the adoption of this funding policy the required employer contributions will be determined as the summation of the employer Normal Contribution, a contribution for administrative expenses, the amortization cost for the Transitional UAAL and the individual amortization cost for each of the New Incremental UAAL bases.
  - Employer Contributions will be expressed as both a total dollar amount and as a dollar amount per active member. In no event shall the employer contributions be less than $0.
  - The valuation methodology, including the amortization of the Unfunded Actuarial Accrued Liability (UAAL), would be expected to maintain reasonably stable contributions as a dollar per active member.

III. Methods and Assumptions

The annual actuarial valuations providing the measures to assess funding progress will utilize the actuarial methods and assumptions last adopted by the Board based upon the advice and recommendations of the actuary. These include the following primary methods and assumptions:

- The actuarial cost method used to develop the benchmarks will be the Entry Age Normal (EAN) actuarial cost method.
- The long-term annual investment rate of return assumption will be:
  - Effective with the June 30, 2013 valuation date, 7.50% net of investment expenses.
  - Effective with the June 30, 2017 valuation date, reduced by 0.10% (10 basis points) from the immediate prior actuarial valuation, as long as the following conditions are met:
    - The actual rate of return for the fiscal year ending with the current valuation date exceeds the assumed rate of return from the immediate prior actuarial valuation, and
    - The assumed rate of return does not decrease below 7.00% net of investment expenses.
- The actuarial value of assets will be determined by recognizing the annual differences between actual and expected market value of assets over a five-year period, beginning with the June 30, 2013 actuarial valuation.
  - Prior to the June 30, 2013 valuation, the differences between actual and expected market value of assets were recognized over a seven-year period. For the June 30, 2013 valuation, all then-current deferred gains and losses will be recognized immediately, and the initial new five-year period will begin immediately thereafter.

The employer contributions determined in an annual actuarial valuation will be at least sufficient to satisfy the annual normal cost of the System and amortize the UAAL as a level dollar amount over a period not to exceed 20 years (for the UAAL as of the June 30, 2013 valuation date, and for each successive year of gains and losses incurred in years following the June 30, 2013 valuation date). However in no event shall the employer contributions be less than $0.

Schedule F – Board Funding Policy

The actuary shall conduct an investigation into the System's experience at least every five years and utilize the results of the investigation to form the basis for recommended assumptions and methods. Any changes to the recommended assumptions and methods that are approved by the Board will be reflected in this Policy.

IV. Funding Policy Progress

The Board will periodically have actuarial projections of the valuation results performed to assess the current and expected future progress towards the overall funding goals of the System. These periodic projections will provide the expected valuation results over at least a 30-year period. The projected measures of funding progress and the recent historical trend provided in valuations will provide important information for the Board's assessment of the System's funding progress.

Adopted: March 15, 2018

Schedule G – Amortization of UAAL

AMORTIZATION OF TRANSITIONAL UAAL

Valuation Date	Amortization Period	Balance of Transitional UAAL	Annual Amortization Payment
6/30/2013	20	$17,924,570	$1,758,260
6/30/2014	19	17,510,653	1,758,260
6/30/2015	18	17,065,691	1,758,260
6/30/2016	17	16,587,358	1,758,260
6/30/2017	**16**	**16,073,149**	**1,746,834**
6/30/2018	15	15,515,728	1,746,834
6/30/2019	14	14,917,059	1,746,834
6/30/2020	13	14,274,087	1,746,834
6/30/2021	12	13,583,536	1,746,834
6/30/2022	11	12,841,884	1,746,834
6/30/2023	10	12,045,350	1,746,834
6/30/2024	9	11,189,872	1,746,834
6/30/2025	8	10,271,089	1,746,834
6/30/2026	7	9,284,316	1,746,834
6/30/2027	6	8,224,521	1,746,834
6/30/2028	5	7,086,302	1,746,834
6/30/2029	4	5,863,855	1,746,834
6/30/2030	3	4,550,947	1,746,834
6/30/2031	2	3,140,883	1,746,834
6/30/2032	1	1,626,475	1,746,834
6/30/2033	0	0	0

Schedule G – Amortization of UAAL

AMORTIZATION OF 2014 INCREMENTAL UAAL

Valuation Date	Amortization Period	Balance of New Incremental UAAL 6/30/2014	Annual Amortization Payment
6/30/2014	20	$40,501	$3,973
6/30/2015	19	39,566	3,973
6/30/2016	18	38,560	3,973
6/30/2017	**17**	**37,480**	**3,946**
6/30/2018	16	36,307	3,946
6/30/2019	15	35,048	3,946
6/30/2020	14	33,696	3,946
6/30/2021	13	32,243	3,946
6/30/2022	12	30,683	3,946
6/30/2023	11	29,008	3,946
6/30/2024	10	27,209	3,946
6/30/2025	9	25,276	3,946
6/30/2026	8	23,201	3,946
6/30/2027	7	20,972	3,946
6/30/2028	6	18,578	3,946
6/30/2029	5	16,007	3,946
6/30/2030	4	13,246	3,946
6/30/2031	3	10,280	3,946
6/30/2032	2	7,095	3,946
6/30/2033	1	3,674	3,946
6/30/2034	0	0	0

Schedule G – Amortization of UAAL

AMORTIZATION OF 2015 INCREMENTAL UAAL

Valuation Date	Amortization Period	Balance of New Incremental UAAL 6/30/2015	Annual Amortization Payment
6/30/2015	20	$1,661,550	$162,985
6/30/2016	19	1,623,181	162,985
6/30/2017	**18**	**1,581,935**	**161,834**
6/30/2018	17	1,537,164	161,834
6/30/2019	16	1,489,081	161,834
6/30/2020	15	1,437,439	161,834
6/30/2021	14	1,381,976	161,834
6/30/2022	13	1,322,408	161,834
6/30/2023	12	1,258,433	161,834
6/30/2024	11	1,189,723	161,834
6/30/2025	10	1,115,929	161,834
6/30/2026	9	1,036,674	161,834
6/30/2027	8	951,555	161,834
6/30/2028	7	860,136	161,834
6/30/2029	6	761,952	161,834
6/30/2030	5	656,503	161,834
6/30/2031	4	543,251	161,834
6/30/2032	3	421,618	161,834
6/30/2033	2	290,984	161,834
6/30/2034	1	150,683	161,834
6/30/2035	0	0	0

Schedule G – Amortization of UAAL

AMORTIZATION OF 2016 INCREMENTAL UAAL

Valuation Date	Amortization Period	Balance of New Incremental UAAL 6/30/2016	Annual Amortization Payment
6/30/2016	20	$1,547,704	$151,818
6/30/2017	**19**	**1,511,964**	**150,704**
6/30/2018	18	1,473,145	150,704
6/30/2019	17	1,431,453	150,704
6/30/2020	16	1,386,677	150,704
6/30/2021	15	1,338,586	150,704
6/30/2022	14	1,286,937	150,704
6/30/2023	13	1,231,466	150,704
6/30/2024	12	1,171,891	150,704
6/30/2025	11	1,107,906	150,704
6/30/2026	10	1,039,187	150,704
6/30/2027	9	965,382	150,704
6/30/2028	8	886,116	150,704
6/30/2029	7	800,985	150,704
6/30/2030	6	709,553	150,704
6/30/2031	5	611,356	150,704
6/30/2032	4	505,892	150,704
6/30/2033	3	392,623	150,704
6/30/2034	2	270,973	150,704
6/30/2035	1	140,321	150,704
6/30/2036	0	0	0

Schedule G – Amortization of UAAL

AMORTIZATION OF 2017 INCREMENTAL UAAL

Valuation Date	Amortization Period	Balance of New Incremental UAAL 6/30/2017	Annual Amortization Payment
6/30/2017	**20**	**$922,066**	**$89,761**
6/30/2018	19	900,538	89,761
6/30/2019	18	877,417	89,761
6/30/2020	17	852,585	89,761
6/30/2021	16	825,916	89,761
6/30/2022	15	797,273	89,761
6/30/2023	14	766,510	89,761
6/30/2024	13	733,471	89,761
6/30/2025	12	697,988	89,761
6/30/2026	11	659,878	89,761
6/30/2027	10	618,948	89,761
6/30/2028	9	574,990	89,761
6/30/2029	8	527,778	89,761
6/30/2030	7	477,073	89,761
6/30/2031	6	422,616	89,761
6/30/2032	5	364,128	89,761
6/30/2033	4	301,313	89,761
6/30/2034	3	233,850	89,761
6/30/2035	2	161,394	89,761
6/30/2036	1	83,576	89,761
6/30/2037	0	0	0

SUMMARY OF MAIN FUND PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

MEMBERSHIP

All persons who are members of the Georgia National Guard on and after July 1, 2002 are Members of the Fund.

BENEFITS

Retirement Allowance

Condition for Allowance	A member who has attained age 60 and has completed 20 or more years of creditable service, including at least 15 years, 10 of which immediately precede discharge, of Georgia National Guard duty, and who has received an honorable discharge, is entitled to a monthly allowance.
Amount of Allowance	The amount of the allowance is equal to $50 per month for 20 years' creditable service with an additional $5 per month for each additional year of creditable service, provided that the total allowance shall not exceed $100 per month. The allowance is payable for the life of the member.

Deferred Retirement Allowance

Condition for Allowance	A member whose service is terminated after he has 20 years of creditable service, including at least 15 years, 10 of which immediately precede discharge, of Georgia National Guard duty, and who has received an honorable discharge, is eligible to receive a deferred retirement allowance commencing at age 60.
Amount of Allowance	The amount is the same as that for a service retirement.

CONTRIBUTIONS

The State makes annual contributions sufficient to meet the cost of the benefits under the Fund.

Schedule I – Tables of Membership Data

NUMBER OF ACTIVE MEMBERS
BY AGE AND SERVICE AS OF JUNE 30, 2017

Age	*Years of Service*									
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	Total
Under 20	308	452	0	0	0	0	0	0	0	760
20 to 24	181	2,407	711	0	0	0	0	0	0	3,299
25 to 29	43	716	1,776	343	0	0	0	0	0	2,878
30 to 34	15	230	591	819	288	0	0	0	0	1,943
35 to 39	0	100	213	289	725	150	0	0	0	1,477
40 to 44	1	14	70	102	208	458	105	0	0	958
45 to 49	0	4	39	57	93	143	419	141	0	896
50 to 54	0	0	4	12	35	49	100	284	77	561
55 to 59	0	0	3	1	5	11	24	60	148	252
60 & Over	0	0	0	0	2	1	1	2	7	13
Total	548	3,923	3,407	1,623	1,356	812	649	487	232	13,037

Average Age: 31.2
Average Service: 10.3

**NUMBER OF RETIRED MEMBERS
AND THEIR BENEFITS BY AGE**

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 60	0	$ 0	$ 0
60 – 64	280	298,560	1,066
65 – 69	423	458,640	1,084
70 – 74	267	293,400	1,099
75 & Over	15	15,660	1,044
Total	985	$ 1,066,260	$ 1,082

Schedule J – CAFR Schedules

GA Military: Solvency Test

Actuarial Valuation as of 6/30	Actuarial Accrued Liability for: Active Member Contributions (1)	Retirants & Beneficiaries (2)	Active Members (Employer Funded Portion) (3)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets (1)	(2)	(3)
2017	$0	$28,867	$11,864	$20,604	N/A	71.4%	0.0%
2016	0	26,337	11,874	18,414	N/A	69.9%	0.0%
2015	0	24,075	11,138	16,446	N/A	68.3%	0.0%
2014	0	21,389	10,426	14,264	N/A	66.7%	0.0%
2013	0	19,396	10,660	12,131	N/A	62.5%	0.0%
2012	0	17,518	10,713	10,087	N/A	57.6%	0.0%
2011	0	15,379	11,388	8,702	N/A	56.6%	0.0%
2010	0	14,015	9,758	7,558	N/A	53.9%	0.0%
2009	0	12,742	8,279	6,413	N/A	50.3%	0.0%
2008	0	9,449	9,675	5,269	N/A	55.8%	0.0%

All dollar amounts are in thousands.

GA Military: Schedule of Retirants Added to and Removed from Rolls

Year Ended	Added to Rolls: Number	Added to Rolls: Annual Allowances (in thousands)	Removed from Rolls: Number	Removed from Rolls: Annual Allowances (in thousands)	Roll End of Year: Number	Roll End of Year: Annual Allowances (in thousands)	% Increase in Annual Allowances	Average Annual Allowances
June 30, 2017	83	$90	11	$11	985	$1,066	8.0%	$1,082
June 30, 2016	79	82	9	9	913	987	8.0%	1,081
June 30, 2015	54	55	6	5	843	914	5.8%	1,084
June 30, 2014	62	68	5	6	795	864	7.7%	1,087
June 30, 2013	83	87	5	5	738	802	11.4%	1,087
June 30, 2012	95	106	3	3	660	720	16.7%	1,091
June 30, 2011	94	101	3	4	568	617	18.7%	1,086
June 30, 2010	92	100	1	1	477	520	23.5%	1,090
June 30, 2009	85	91	3	4	386	421	26.0%	1,091
June 30, 2008	71	76	2	2	304	334	28.5%	1,099