

**STATE OF ALASKA
NATIONAL GUARD AND
NAVAL MILITIA RETIREMENT SYSTEM**
(A Component Unit of the State of Alaska)

UNAUDITED

Financial Statements and Supplemental Schedules

June 30, 2017 and 2016

(With Independent Auditors' Report Thereon)

**STATE OF ALASKA
NATIONAL GUARD AND
NAVAL MILITIA RETIREMENT SYSTEM**
(A Component Unit of the State of Alaska)

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Management's Discussion and Analysis (Unaudited)

June 30, 2017 and 2016

This section presents management's discussion and analysis (MD&A) of the State of Alaska National Guard and Naval Militia Retirement System's (the Plan) financial position and performance for the years ended June 30, 2017 and 2016. This section is presented as a narrative overview and analysis. Please read the MD&A in conjunction with the financial statements, notes to financial statements, required supplementary information, notes to required supplementary information, and supplemental schedules to better understand the financial condition and performance of the Plan during the fiscal years ended June 30, 2017 and 2016. Information for fiscal year 2016 and 2015 is presented for comparative purposes.

Financial Highlights

The Plan's financial highlights as of June 30, 2017 were as follows:

- The Plan's fiduciary net position restricted for pension benefits as of June 30, 2017 increased by \$ 2,305,833 during fiscal year 2017.
- The State of Alaska, Department of Military and Veterans' Affairs directly appropriated \$866,905 during fiscal year 2017.
- The Plan earned net investment income of \$3,181,993 during fiscal year 2017.
- Plan pension benefit expenditures totaled \$1,485,669 during fiscal year 2017.

Overview of the Financial Statements

The discussion and analysis is intended to serve as an introduction to the Plan's financial statements. The Plan's financial statements are composed of three components: (1) statement of fiduciary net position, (2) statement of changes in fiduciary net position, and (3) notes to financial statements. This report also contains required supplementary information and other supplemental schedules.

Statement of Fiduciary Net Position – This statement presents information regarding the Plan's assets, liabilities, and resulting net position restricted for pension benefits. This statement reflects the Plan's investments at fair value, along with cash and short-term investments, receivables, and other assets less liabilities at June 30, 2017 and 2016.

Statement of Changes in Fiduciary Net Position – This statement presents how the Plan's net position restricted for pension benefits changed during the fiscal years ended June 30, 2017 and 2016. This statement presents contributions and investment income during the period. Deductions for pension benefits and operating deductions are also presented.

The above statements represent resources available for investment and payment of benefits as of June 30, 2017 and 2016, and the sources and uses of those funds during fiscal years 2017 and 2016.

Notes to Financial Statements – The notes to financial statements are an integral part of the financial statements and provide additional detailed information and schedules that are essential to a full understanding of the Plan's financial statements.

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Required Supplementary Information and Related Notes – The required supplementary information consists of three schedules and related notes concerning the funded status of the Plan, as well as actuarial assumptions and methods used in the actuarial valuation.

Supplemental Schedules – Supplemental schedules include detailed information on administrative and investment deductions incurred by the Plan and payments to consultants (other than investment advisors) for professional services.

Condensed Financial Information

Fiduciary net position					
Description	2017	2016	Increase (decrease)		2015
			Amount	Percentage	
Assets:					
Cash and cash equivalents	\$ 289,944	867,684	(577,740)	(66.6)%	\$ 1,173,043
Due from State of Alaska General Fund	—	—	—	—	23,518
Other receivables	431	431	—	—	431
Investments, at fair value	38,119,402	34,998,897	3,120,505	8.9	35,771,737
Total assets	38,409,777	35,867,012	2,542,765	7.1	36,968,729
Liabilities:					
Accrued expenses	17,020	29,304	(12,284)	(41.9)	52,738
Securities lending collateral payable	258,153	—	258,153	100.0	—
Due to State of Alaska General Fund	2,617	11,554	(8,937)	(77.3)	36,151
Total liabilities	277,790	40,858	236,932	579.9	88,889
Net position	\$ 38,131,987	35,826,154	2,305,833	6.4%	\$ 36,879,840
Changes in fiduciary net position					
Description	2017	2016	Increase (decrease)		2015
			Amount	Percentage	
Net position, beginning of year	\$ 35,826,154	36,879,840	(1,053,686)	(2.9)%	\$ 37,467,105
Additions:					
Contributions – DMVA	866,905	734,500	132,405	18.0	627,300
Net investment income	3,181,993	181,711	3,000,282	1,651.1	589,856
Other	—	582	(582)	(100.0)	145
Total additions	4,048,898	916,793	3,132,105	341.6	1,217,301
Deductions:					
Pension benefits	1,485,669	1,728,729	(243,060)	(14.1)	1,563,816
Administrative	257,396	241,750	15,646	6.5	240,750
Total deductions	1,743,065	1,970,479	(227,414)	(11.5)	1,804,566
Increase (decrease) in net position	2,305,833	(1,053,686)	3,359,519	(318.8)	(587,265)
Net position, end of year	\$ 38,131,987	35,826,154	2,305,833	6.4%	\$ 36,879,840

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Financial Analysis of the Plan

The statements of fiduciary net position as of June 30, 2017 and 2016 show net position restricted for pension benefits of \$38,131,987 and \$35,826,154, respectively. The entire amount is available to cover the Plan's obligations to pay benefits to its members and their beneficiaries, as well as administrative costs. These amounts represent an increase of \$2,305,833 or 6.4% in plan net position restricted for pension benefits from fiscal year 2016 and a decrease of \$1,053,686 or 2.9% in plan net position restricted for pension benefits from fiscal year 2015. Over the long term, employer contributions and investment income are projected to sufficiently fund the pension costs of the Plan.

The investment of pension funds is a long-term undertaking. On an annual basis, the Alaska Retirement Management Board (Board) reviews and adopts an asset allocation strategy to ensure the asset mix will remain at an optimal risk/return level given the Plan's constraints and objectives.

During fiscal years 2017 and 2016, the Board adopted the following asset allocations:

	2017	
	Allocation	Range
Broad domestic equity	29.0%	± 6%
Global equity ex-U.S.	19.0	± 4
Fixed composite	52.0	± 10
Cash equivalents	—	+ 3
Total	100.0%	
Expected ten-year median return	5.60%	
Standard deviation	9.50	
	2016	
	Allocation	Range
Broad domestic equity	29.0%	± 6%
Global equity ex-U.S.	20.0	± 4
Fixed composite	48.0	± 10
Cash equivalents	3.0	± 3
Total	100.0%	
Expected five-year median return	5.80%	
Standard deviation	9.60	

For fiscal years 2017 and 2016, the Plan's investments generated a 9.11% and a 0.76% rate of return, respectively.

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Contributions and Investment Income

The additions required to fund retirement benefits are accumulated through a combination of employer contributions, investment income, and other additions are as follows:

	Additions				2015
	2017	2016	Increase (decrease)		
			Amount	Percentage	
Contributions – DMVA	\$ 866,905	734,500	132,405	18.0%	\$ 627,300
Net investment income	3,181,993	181,711	3,000,282	1,651.1	589,856
Other	—	582	(582)	(100.0)	145
Total	<u>\$ 4,048,898</u>	<u>916,793</u>	<u>3,132,105</u>	<u>341.6%</u>	<u>\$ 1,217,301</u>

The Plan's employer contributions from the Department of Military and Veterans Affairs (DMVA) increased from \$734,500 during fiscal year 2016 to \$866,905 during fiscal year 2017, an increase of \$132,405, or 18.0%. There was an increase between the actuarially determined contribution amounts from fiscal year 2016 of \$734,500 and the actuarial roll-forward determined contribution amount for fiscal year 2017 of \$866,905. A full actuarial valuation is completed for the Plan biennially with the actuarial roll-forward being completed in the interim years.

The Plan's net investment income in fiscal year 2017 increased by \$3,000,282 or 1,651.1% from amounts recorded in fiscal year 2016 and net investment income in fiscal year 2016 decreased by \$408,145 or 69.2% from amounts recorded in fiscal year 2015. Over the long term, investment income is a major component of additions to Plan assets. During fiscal year 2017, the Plan experienced investment returns of 9.11%, well above the actuarially assumed rate of return of 7.00%. The resulting impact will be lower contribution amounts to the Plan.

The Plan's investment rates of return at June 30 are as follows:

	Year ended		
	2017	2016	2015
System returns	9.11%	0.76%	1.87%
Domestic equities	18.54	0.60	7.93
International equities	20.46	(8.85)	(3.30)
Fixed income	0.29	4.23	0.32
Actuarially assumed rate of return	7.00	7.00	7.00

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Benefits and Other Deductions

The primary deduction of the Plan is the payment of pension benefits. These benefit payments and the costs of administering the Plan comprise the costs of operations as follows:

	Deductions				
	2017	2016	Increase (decrease)		2015
			Amount	Percentage	
Pension benefits	\$ 1,485,669	1,728,729	(243,060)	(14.1)%	\$ 1,563,816
Administrative	257,396	241,750	15,646	6.5	240,750
Total	\$ 1,743,065	1,970,479	(227,414)	(11.5)%	\$ 1,804,566

The decrease in pension benefits is due to the decrease in number of retirees, and a related decrease in the number of lump-sum payouts from the Plan. The slight increase in administrative deductions is related to the increase in data processing consultant fees charged to the Plan.

Net Pension Liability

Governmental Accounting Standards Board Statement (GASB) No. 67, requires the Plan to report the Total Pension Liability (TPL), Fiduciary Net Position (FNP), and Net Pension Liability (NPL). The TPL determines the total obligation for the Defined Benefit Pension (DB) Plan's pension benefits related to costs incurred as a result of years of service, changes in benefit terms, changes in actuarial assumptions, and any differences between the actuarial assumptions and actual experience. The Plan's FNP determines the assets available to pay the Plan's future payment stream. The assets are derived from contributions received from participating employers, plan members, and nonemployer contributions, as well as investment earnings, less benefit payments during the year and the related costs to administer the Plan. The difference between the TPL and FNP is the NPL, or the unfunded portion of the TPL.

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

	2017	2016
Total pension liability	\$ 32,479,574	39,847,896
Plan fiduciary net position	(38,131,981)	(35,826,154)
Employers' net pension (asset) liability	\$ (5,652,407)	4,021,742
Plan fiduciary net position as a percentage of the total pension liability	117.40%	89.91%

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Funding

Retirement benefits are financed by accumulations from DMVA annual contributions, periodic State of Alaska appropriations, and investment income earned on plan investments.

- The actuarially determined employer contribution amounts are determined by the Plan's consulting actuary and approved by the Board. Contributions are determined on an annual basis.
- The Board works with an external consultant to determine the proper asset allocation strategy.

Legislation

During fiscal year 2017, the Thirtieth Alaska State Legislature enacted one law that affects the Plan:

- Conference Committee Substitute, House Bill (CCS HB) 57, sections 41 (d) and (e) appropriate \$907,231 from the general fund to the DMVA for deposit in the Plan's defined benefit pension fund as retirement funding for fiscal year ending June 30, 2018.

Economic Conditions, Future Contribution Amounts, and Funding Status

Fiscal year 2017 was a positive investment return year, exceeding the 7% expected rate of return. Net investment income increased from \$181,711 in fiscal year 2016 to \$3,181,993 in fiscal year 2017, an increase of \$3,000,282 or 1,651.1%. The Plan earned 9.11% returns in fiscal year 2017, slightly higher than the projected actuarial rate of return adopted by the Board of 7.00%, and more than the 0.76% earned in fiscal year 2016. The Board continues to monitor the portfolio of the Plan to maintain an optimal risk/return ratio. Although net investment income for fiscal year 2017 was positive, actual investment returns greater than the assumed investment return continue to remain the objective. Maintaining this objective would have a positive impact on both the annual actuarially determined contribution amount and the Plan's funded level.

The consulting actuary recommended an increase from the Plan's actuarially determined contribution amount of \$734,560 in fiscal year 2016 to \$866,900 in fiscal year 2017. The fiscal year 2018 contribution amount has been actuarially determined to be \$907,231 and was subsequently appropriated by the State of Alaska as noted above.

The actuarial valuation report for fiscal year 2016 reports a funding ratio that of 123.3%, which is significantly higher than the actuarial valuation as of June 30, 2014. The primary reason for the increase was a reflection of lump-sum payments that were not reported in the census data, thus causing the consulting actuary to value these as continuing payments. This correction of census data resulted in a decrease to the actuarial accrued liability, which in turn changed the funding level. The actuarial valuation reports for the Plan are conducted biennially, and the June 30, 2016 report was completed and presented to the Board in June 2017. The actuarial valuation report as of June 30, 2016 is available and posted to the Plan's web page.

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Requests for Information

This financial report is designed to provide a general overview of the Plan's financial condition for those with interest in the Plan's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

State of Alaska National Guard and Naval Militia Retirement System
Division of Retirement and Benefits, Finance Section
P.O. Box 110203
Juneau, Alaska 99811-0203

Questions concerning any of the investment information provided in this report or requests for additional investment information should be addressed to:

State of Alaska
Department of Revenue, Treasury Division
P.O. Box 110405
Juneau, Alaska 99811-0405

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Statements of Fiduciary Net Position (Unaudited)

June 30, 2017 and 2016

	2017	2016
Assets:		
Cash and cash equivalents (notes 3 and 4):		
Short-term fixed income pool	\$ 31,791	867,684
Securities lending collateral	258,153	—
Total cash and cash equivalents	289,944	867,684
Receivables:		
Accounts receivable	431	431
Total receivables	431	431
Investments (note 3) at fair value:		
Fixed income securities:		
U.S. Treasury fixed income pool	15,084,541	13,262,076
Taxable municipal bond pool	319,273	404,941
High-yield fixed income pool	1,893,056	1,654,193
International fixed income pool	1,890,437	1,687,770
Tactical fixed income pool	339,559	493,131
Emerging markets debt pool	252,289	243,939
Total fixed income securities	19,779,155	17,746,050
Broad domestic equity:		
Large cap pool	9,218,536	8,576,985
Small cap pool	1,889,610	1,824,519
Total broad domestic equity	11,108,146	10,401,504
Broad international equity:		
International equity pool	5,842,139	5,654,674
International equity small cap pool	438,029	384,034
Emerging markets equity pool	951,932	812,635
Total broad international equity	7,232,100	6,851,343
Total investments	38,119,401	34,998,897
Total assets	38,409,776	35,867,012
Liabilities:		
Accrued expenses	17,019	29,304
Securities lending collateral payable (note 4)	258,153	—
Due to State of Alaska General Fund	2,617	11,554
Total liabilities	277,789	40,858
Fiduciary net position restricted for pension benefits	\$ 38,131,987	35,826,154

See accompanying notes to financial statements.

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Statements of Changes in Fiduciary Net Position (Unaudited)

Years ended June 30, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Additions:		
Contributions – State of Alaska, DMVA	\$ 866,905	734,500
Investment income:		
Net appreciation (depreciation) in fair value	2,391,219	(551,031)
Interest	436,085	397,753
Dividends	366,760	402,121
Total investment income	3,194,064	248,843
Less investment expense	13,770	67,132
Net investment income before securities lending activities	3,180,294	181,711
Securities lending income (note 4)	2,053	—
Less securities lending expense (note 4)	354	—
Net income from securities lending activities	1,699	—
Net investment income	3,181,993	181,711
Other additions	—	582
Total additions	4,048,898	916,793
Deductions:		
Pension benefits	1,485,669	1,728,729
Administrative	257,396	241,750
Total deductions	1,743,065	1,970,479
Net decrease	2,305,833	(1,053,686)
Fiduciary net position restricted for pension benefits:		
Balance, beginning of year	35,826,154	36,879,840
Balance, end of year	\$ 38,131,987	35,826,154

See accompanying notes to financial statements.

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(1) Description

The State of Alaska National Guard and Naval Militia Retirement System (the Plan) is a component unit of the State of Alaska (the State). The Plan is a defined benefit, single-employer retirement system established and administered by the State to provide pension benefits for eligible members of the Alaska National Guard and Alaska Naval Militia (Alaska Guard). The Plan is governed by the Alaska Retirement Management Board, which consists of nine trustees as follows: two members, consisting of the commissioner of administration and the commissioner of revenue; two trustees, who are members of the general public; one trustee, who is employed as a finance officer for a political subdivision participating in either the Public Employees' Retirement System (PERS) or Teachers' Retirement System (TRS); two trustees, who are members of PERS; and two trustees, who are members of TRS. Benefit and contribution provisions are established by State law and may be amended only by the State Legislature.

Plan membership as of valuation year ended June 30 is as follows:

	Valuation as of	
	2016	2014
Retirees and beneficiaries currently receiving benefits	676	639
Terminated plan members entitled to future benefits	1,427	1,756
Total current and future benefits	2,103	2,395
Active plan members:		
Alaska Air National Guard	2,174	2,164
Alaska Army National Guard	1,820	1,911
Alaska Naval Militia	60	64
Total active plan members	4,054	4,139
Total members	6,157	6,534

Pension Benefits

Members who voluntarily retire from the Alaska National Guard or Alaska Naval Militia after at least five years of Alaska Guard service and a total of at least 20 years of U.S. military service or members who involuntarily leave the Alaska Guard service due to federal standards imposed on the Alaska Guard, regardless of length of service, are eligible for a retirement pension. The retirement pension is \$100 per month for each month of Alaska Guard service and may be paid to the member monthly or in a one-time lump sum.

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Death Benefits

Upon the death of an eligible member, as previously described, the member's designated beneficiary is entitled to a lump-sum benefit equal to the original pension amount less any payments already paid to the member.

Contributions

The Plan's funding policy provides for annual employer contributions by the State of Alaska, Department of Military and Veterans' Affairs (Department) at actuarially determined contribution amounts that are sufficient to accumulate assets to pay benefits when due. For fiscal years 2017 and 2016, the actuarially determined contribution amounts were \$866,900 and \$734,560, respectively. Some officials of the Department may be members of the Plan. Plan members make no contributions to the Plan.

(2) Summary of Significant Accounting Policies

Basis of Accounting

The Plan's financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Contributions are recognized in the period they are due. Benefits are recognized when due and payable.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Investments

The Plan owns shares in various investment pools that are administered by the State of Alaska, Department of Revenue, Division of Treasury (Treasury). The Plan's investment in the pools, except for the Short-term Fixed Income Pool, is reported at fair value based on the net asset value reported by the Treasury. The Short-term Fixed Income Pool maintains a share price of \$1. Each participant owns shares in the pool, the number of which fluctuates daily with contributions and withdrawals.

Administrative Costs

Administrative costs are paid from investment earnings.

Due from (to) State of Alaska General Fund

Amounts due from (to) the State of Alaska General Fund represent the amounts paid by the Plan on behalf of others and amounts paid by others on behalf of the Plan.

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Federal Income Tax Status

The Plan is a qualified plan under Section 401(a) of the Internal Revenue Code and is exempt from federal income taxes under Section 501(a).

GASB Statement No. 67

Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*. Requires the disclosures of the total pension liability, fiduciary net position, and net pension liability for single-employer and cost-sharing multiple-employer defined benefit pension plans. GASB Statement No. 67 also requires certain additional note disclosures for defined benefit pension plans, including the annual money-weighted rate of return on plan investments. GASB Statement No. 67 revised the reporting requirements for required supplementary information to include schedules that provide trend information related to (1) changes in the net pension liability, (2) the actuarially and contractually determined contributions of employer contributing entities, and (3) the annual money-weighted rate of return on plan investments.

(3) Investments

The Alaska Retirement Management Board (Board) is the investment oversight authority of the Plan's investments. As the fiduciary, the Board has the statutory authority to invest the assets under the Prudent Investor Rule. Fiduciary responsibility for the Board's invested assets is pursuant to Alaska Statutes 37.10.210–390.

Alaska Statute 37.10.071 provides that investments shall be made with the judgment and care under circumstances then prevailing that an institutional investor of ordinary professional prudence, discretion, and intelligence exercises in managing large investment portfolios.

Treasury provides staff for the Board. Treasury has created a pooled environment by which it manages investments of the Board.

Actual investing is performed by investment officers in Treasury or by contracted external investment managers. The Board has developed investment guidelines, policies, and procedures for Treasury staff and external investment managers to adhere to when managing investments. Specifically, Treasury manages the U.S. Treasury Fixed Income Pool and cash holdings of certain external managers in addition to acting as oversight manager for all externally managed investments. All other investments are managed by external management companies.

The Short-term Fixed Income Pool is a State pool managed by Treasury that holds investments on behalf of the Board as well as other State funds.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The annual money-weighted rate of return, net of investment expense, for the year ended June 30, 2017 for the defined benefit pension plan is 8.99%.

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For additional information on securities lending, interest rate risk, credit risk, foreign exchange, derivatives, fair value, and counterparty credit risk, see the separately issued report on the Invested Assets of the State of Alaska Retirement and Benefits Plans at <http://treasury.dor.alaska.gov/armb/Reports-and-Policies/Annual-Audited-Financial-Schedules.aspx>.

(4) Net Pension (Asset) Liability

The components of the net pension liability at June 30, 2017, were as follows:

Total pension liability	\$	32,479,574
Plan fiduciary net position		<u>(38,131,981)</u>
Employers' net pension (asset) liability	\$	<u>(5,652,407)</u>
Plan fiduciary net position as a percentage of the total pension liability		117.40%

Actuarial Assumptions

The total pension liability was determined by actuarial valuations as of June 30, 2016, which were rolled forward to June 30, 2017, using the following actuarial assumptions, applied to all periods in the measurement.

Inflation	3.12%
Salary increases	N/A
Investment rate of return	7.00%, net of pension plan investment expenses. This is based on an average inflation rate of 3.12% and a real rate of return of 3.88%

Post-termination mortality rates were based on 96% of all rates of the RP-2000 Combined Mortality, 2000 Base Year projected to 2018 with Projection Scale BB. The rates for pre-termination mortality were 60% of the male and 65% of female rates of the post-termination healthy mortality rates.

The actuarial assumptions used in the June 30, 2016 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2009 to June 30, 2013, resulting in changes in actuarial assumptions adopted by the Alaska Retirement Management Board to better reflect future experience.

The long-term expected rate of return on pension plan investments was 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 expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates

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of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset class	Expected real rate of return
Domestic Equity	8.33%
Global Equity (non-U.S.)	7.79%
Fixed Income Composite	1.36%
Cash equivalents	0.63%

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that State contributions will continue to follow the current funding policy, which meets State statutes. Based on those assumptions, the 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.

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

The following presents the net pension liability of the Plan calculated using the discount rate of 7%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6%) or one percentage point higher (8%) than the current rate:

	1% decrease (6%)	Current discount rate (7%)	1% increase (8%)
Net pension (asset) liability	\$ (3,989,094)	(5,652,407)	(7,155,971)

REQUIRED SUPPLEMENTARY INFORMATION

(Unaudited)

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Required Supplementary Information (Unaudited)

Schedule of Changes in Employer Net Pension Liability and Related Ratios

	2017	2016	2015	2014	2013	2012
Total pension liability:						
Service cost	\$ 610,686	603,495	603,495	654,797	631,921	605,097
Interest	2,170,196	2,659,657	2,553,940	2,359,276	2,277,228	2,235,069
Changes of benefit terms	—	—	—	—	—	—
Differences between expected and actual experience	(8,663,535)	4,565	1,258,332	—	—	(13,687)
Changes of assumptions	—	—	145,422	—	—	—
Benefit payments	(1,485,669)	(1,728,729)	(1,563,816)	(1,610,506)	(1,772,198)	(1,379,919)
Net change in total pension liability	(7,368,322)	1,538,988	2,997,373	1,403,567	1,136,951	1,446,560
Total pension liability – beginning	39,847,896	38,308,908	35,311,535	33,907,968	32,771,017	31,324,457
Total pension liability – ending (a)	32,479,574	39,847,896	38,308,908	35,311,535	33,907,968	32,771,017
Plan fiduciary net position:						
Contributions – employer	866,905	734,500	627,300	740,100	739,100	895,611
Total net investment income	3,181,987	181,711	589,856	4,527,672	2,593,463	287,726
Other miscellaneous income	—	582	145	21	4	25
Benefit payments	(1,485,669)	(1,728,729)	(1,563,816)	(1,610,506)	(1,772,198)	(1,334,018)
Administrative expenses	(257,396)	(241,750)	(240,750)	(223,334)	(165,651)	(123,725)
Net change in plan fiduciary net position	2,305,827	(1,053,686)	(587,265)	3,433,953	1,394,718	(274,381)
Plan fiduciary net position – beginning	35,826,154	36,879,840	37,467,105	34,033,152	32,638,434	32,912,815
Plan fiduciary net position – ending (b)	38,131,981	35,826,154	36,879,840	37,467,105	34,033,152	32,638,434
Plan's net pension (asset) liability (a) - (b)	\$ (5,652,407)	4,021,742	1,429,068	(2,155,570)	(125,184)	132,583
Plan fiduciary net position as a percentage of the total pension liability	117.40%	89.91%	96.27%	106.10%	100.37%	99.60%
Covered-employee payroll	\$ N/A	N/A	N/A	N/A	N/A	N/A
Net pension liability as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

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 Required Supplementary Information (Unaudited)
 Schedule of Employer Contributions
 Last 10 Fiscal Years

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Actuarially determined contribution	\$ 666,900	734,560	627,327	474,791	431,367	895,565	965,329	2,415,077	2,473,282
Contributions in relation to the actuarially determined contribution	<u>866,905</u>	<u>734,500</u>	<u>627,300</u>	<u>740,100</u>	<u>739,100</u>	<u>895,611</u>	<u>965,375</u>	<u>2,603,300</u>	<u>2,473,300</u>
Contribution deficiency (excess)	\$ <u>(5)</u>	<u>60</u>	<u>27</u>	<u>(265,309)</u>	<u>(307,733)</u>	<u>(46)</u>	<u>(46)</u>	<u>(188,223)</u>	<u>(18)</u>
Covered-employee payroll	\$ N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Contributions as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Required Supplementary Information (Unaudited)

Schedule of Investment Returns

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return, net of investment expense	8.99%	(0.16)%	1.63%	13.53%

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

**STATE OF ALASKA
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Notes to Required Supplementary Information (Unaudited)

June 30, 2017

(1) Description of Schedule of Funding Progress

Each time a new benefit is added, which applies to service already rendered, an unfunded actuarial accrued liability (UAAL) is created. Laws governing the Plan require that these additional liabilities be financed systematically over a period of future years. Also, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to the UAAL.

(2) Actuarial Methods and Assumptions

The actuarial valuation was prepared by Conduent Human Resource Services. The significant actuarial methods and assumptions used in the valuation as of June 30, 2016 are as follows:

- (a) Actuarial cost method – Entry Age Normal Actuarial Cost Method, any funding surpluses or UAAL amortized over 20 years less the average total military service of active members.
- (b) Valuation of assets – Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method was initialized as of June 30, 2006, at market value and was phased in over the next five years. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.
- (c) Investment return – 7.00% per year (geometric), compounded annually, net of investment expenses.
- (d) Mortality (pre-termination) – 60% of the male and 65% of the female rates of the post-termination healthy mortality. The mortality assumption includes an allowance for future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 115%.
- (e) Mortality (post-termination) – 96% of all rates of RP-2000, 2000 Base Year projected to 2018 with Projection Scale BB. The mortality assumption includes an allowance for future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 115%.
- (f) Disability mortality: RP-2000 Disabled Retiree Mortality Table projected to 2018 with Projection Scale BB. The mortality assumption includes an allowance for future mortality improvement. The mortality table used was set in 2014 with an Actual Deaths to Expected Deaths ratio of 115%.
- (g) Total inflation – Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.12% annually.
- (h) Administrative expenses – The expense load is equal to the average of the prior two years actual administrative expenses rounding to the nearest \$1,000.
- (i) Turnover – Assumed at 20.00% in the first year, and at 10.00% in the second through fifth year. The ultimate rate of turnover assumption after the first five years of employment is 7.40% at age 30, 6.06% at age 40, and 3.26% at age 50.

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June 30, 2017

- (j) Disability rate – Assumed incidence rates based upon 2009–2013 actual experience of the State of Alaska Public Employees’ Retirement System.
- (k) Retirement age – Active members are assumed to retire beginning at the earliest eligible retirement age according to the following rates:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
<51	10%	58	35%
51	10	59	40
52	10	60	45
53	12	61	50
54	15	62	50
55	20	63	50
56	25	64	50
57	30	65+	100

- (l) Vested terminated members are assumed to retire at current age or age 50, whichever is later.
- (m) Form of payment – 100% of members are assumed to elect benefits paid in the form of a lump sum. Lump sums are calculated based on a 7% discount rate using post-termination health mortality.

The assumptions and methods, when applied in combination, fairly represent past and anticipated future experience of the Plan. The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated benefits.

Changes in Actuarial Methods from the Last Actuarial Valuation – June 30, 2014 to June 30, 2016

There have been no changes in assets or valuation methods since the prior valuation.

Changes in Actuarial Assumptions from the Last Actuarial Valuation – June 30, 2014 to June 30, 2016

There have been no changes in the assumptions since the prior valuation (other than the expense load which is updated bi-annually).

Changes in Benefit Provisions from the Last Actuarial Valuation – June 30, 2014 to June 30, 2016

There have been no changes in benefit provisions since the prior valuation.

SUPPLEMENTAL SCHEDULES

**STATE OF ALASKA
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Schedule of Administrative and Investment Deductions (Unaudited)

Years ended June 30, 2017 and 2016

	Administrative	Investment	Total	
			2017	2016
Personal services:				
Wages	\$ 86,099	730	86,829	92,528
Benefits	41,460	(129)	41,331	53,638
Total personal services	<u>127,559</u>	<u>601</u>	<u>128,160</u>	<u>146,166</u>
Travel:				
Transportation	138	31	169	278
Per diem	564	170	734	292
Total travel	<u>702</u>	<u>201</u>	<u>903</u>	<u>570</u>
Contractual services:				
Management and consulting	59,922	10,085	70,007	111,975
Accounting and auditing	18,031	123	18,154	13,596
Data processing	30,018	1,996	32,014	14,379
Communications	4,562	90	4,652	3,927
Advertising and printing	199	6	205	259
Rental/leases	6,979	179	7,158	7,630
Legal	6,520	113	6,633	5,517
Transportation	20	7	27	396
Securities lending	—	354	354	—
Other services	1,571	96	1,667	3,374
Total contractual services	<u>127,822</u>	<u>13,049</u>	<u>140,871</u>	<u>161,053</u>
Other:				
Equipment	535	13	548	—
Supplies	778	260	1,038	1,093
Total other	<u>1,313</u>	<u>273</u>	<u>1,586</u>	<u>1,093</u>
Total administrative and investment deductions	<u>\$ 257,396</u>	<u>14,124</u>	<u>271,520</u>	<u>308,882</u>

**STATE OF ALASKA
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Schedule of Payments to Consultants Other than Investment Advisors (Unaudited)

Years ended June 30, 2017 and 2016

<u>Firm</u>	<u>Services</u>	<u>2017</u>	<u>2016</u>
Conduent Human Resource Services	Actuarial services	\$ 54,380	22,550
KPMG LLP	Auditing services	17,770	13,376
State Street Bank and Trust	Custodian banking services	1,978	1,921
Alaska IT Group	Data processing consultants	8,695	7,011
Applied Microsystems Incorporated	Data processing consultants	6,884	8,830
Interactive Intelligence Group	Data processing consultants	1,480	—
SHI International Corporation	Data processing consultants	8,092	—
State of Alaska, Department of Law	Legal services	6,602	—
		<u>\$ 105,881</u>	<u>53,688</u>

This schedule presents payments to contractors receiving greater than \$1,000.