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September 28, 2017

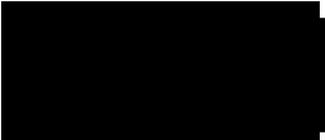
Internal Revenue Service
Employee Plans Compliance Unit
Group 7602 (TEGE: EP: EPCU)
230 S. Dearborn Street
Room 1700, 17th Floor
Chicago, IL 60604

Re: Pension Protection Act (PPA) Actuarial Certification
for the Plan Year Beginning July 1, 2017 – Alaska Ironworkers Pension Plan

In accordance with IRC Section 432(b)(3)(A), we have prepared and attached an actuarial certification for the Plan Year beginning July 1, 2017 for the Alaska Ironworkers Pension Plan.

In our opinion, the assumptions used for the actuarial certification are individually reasonable based on the experience of the Plan and on reasonable expectations of anticipated experience under the Plan. The projections in this report are dependent on the assumptions used. Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in these projections. Actual results will differ from projected amounts to the extent that actual experience is better or worse than expected.

On the basis of the foregoing and as members of the American Academy of Actuaries (AAA) who meet the Qualification Standards of the AAA to render the actuarial opinion contained herein, we hereby certify that, to the best of our knowledge and belief, this letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices.



Josh Goodwin, ASA, EA, MAAA
Consulting Actuary

JG/cmh

Enclosures

cc: Board of Trustees
Mr. Charles Dunnagan (w/ Enclosures)
Ms. Donna Whitford (w/ Enclosures)
Mr. Mark Olleman (w/ Enclosures)

ALASKA IRONWORKERS PENSION PLAN

PPA Actuarial Certification for Plan Year Beginning July 1, 2017

Funding Status Projection Results

- **Projection of Credit Balance**

Plan Year Beginning	Funded Percentage	Credit Balance at End of Year
7/1/2017	54%	Projected Funding Deficiency
7/1/2018	52%	Projected Funding Deficiency
7/1/2019	48%	Projected Funding Deficiency
7/1/2020	45%	Projected Funding Deficiency
7/1/2021	43%	Projected Funding Deficiency
7/1/2022	41%	Projected Funding Deficiency
7/1/2023	38%	Projected Funding Deficiency

Conclusion: The Plan currently has an accumulated funding deficiency.

- **Funded Percentage**

The funded percentage as of July 1, 2017 is expected to be 54%.

Conclusion: The funded percentage is less than 65% as of July 1, 2017.

- **Projected Insolvency**

As of July 1, 2017, the Plan is projected to become insolvent during the Plan Year beginning July 1, 2031.

Conclusion: The Plan is in critical and declining status according to 432(b)(6).

Status Certification

Based on the actuarial assumptions and methods, financial and participant data, and Plan provisions, as described in the actuarial report for the Plan year ended June 30, 2017, I hereby certify that the Alaska Ironworkers Pension Plan is considered "critical and declining" for the Plan Year beginning July 1, 2017, as defined in the Pension Protection Act of 2006 and amended by the Multiemployer Pension Reform Act of 2014.

Further, I hereby certify that to the best of my knowledge and belief, the actuarial assumptions employed in preparing this certification are individually reasonable and represent my best estimate of future experience. Further, the "projected industry activity" assumption, as required under IRC Section 432(b)(3)(B)(iii), has been provided by the Board of Trustees.


 Joseph Goodwin
 Enrolled Actuary Number 

September 28, 2017

Date

September 28, 2017

Alaska Ironworkers Pension Plan
PPA Actuarial Certification



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ALASKA IRONWORKERS PENSION PLAN

PPA Actuarial Certification for Plan Year Beginning July 1, 2017

Scheduled Progress Certification

IRC Section 432 requires the actuary to certify whether the Plan is making scheduled progress in meeting the requirements of its Rehabilitation Plan. The Rehabilitation Plan for the Alaska Ironworkers Pension Plan, which was adopted on August 30, 2010 and revised July 29, 2014, reduced certain benefits and increased the Plan's contribution rates. At this point, it has been determined using reasonable actuarial assumptions and methods that the Rehabilitation Plan will not enable the Plan to emerge from critical status by the end of the 10-year Rehabilitation Period on July 1, 2021, which began on July 1, 2011. The Rehabilitation Plan is now considered a "fore stall insolvency plan" as defined in IRC Section 432(e)(3)(A)(ii).

The Trust submitted an application to suspend benefits on March 30, 2017. This application is still in review as of September 28, 2017. As required under the PPA, the Trustees have been and will continue to review the Rehabilitation Plan annually. Since the Rehabilitation Plan is a "fore stall insolvency plan" it does not provide for annual standards and a scheduled progress certification is not applicable.

September 28, 2017

Date

 Josh Goodwin
 Enrolled Actuary Number _____

September 28, 2017

Alaska Ironworkers Pension Plan
 PPA Actuarial Certification



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ALASKA IRONWORKERS PENSION PLAN

PPA Actuarial Certification for Plan Year Beginning July 1, 2017

Summary of Plan Provisions/Assumptions/Methods

- Our forecast of future minimum funding requirements is based on:
 - July 1, 2016 participant data and July 1, 2016 actuarial valuation results, as provided in our actuarial report dated March 7, 2017.
 - June 30, 2017 unaudited market value of assets, 2016/17 contributions, and benefit payments provided by the trust office, and administration expenses equal to the amounts assumed in our July 1, 2016 actuarial valuation. In combination, these values reflect an actual return on plan assets of 11.6% for 2016/17 (net of investment-related expenses). Our forecast is also based on an assumed rate of return on market assets of 6.0% (net of investment-related expenses) for every year after the Plan Year ended June 30, 2017, and no future asset gains or losses other than the gains or losses related to the asset smoothing method are reflected.
 - The future activity assumption is 165,000 hours a year through the plan year ending June 30, 2021 and 190,000 hours thereafter and is based on Trustees' anticipated industry levels in the near future.
 - Estimated base contributions assuming an average hourly contribution rate of \$4.75 per hour for each plan year after June 30, 2017.
 - Funding only employer contributions due to the rehabilitation plan are reflected for all CBAs.
 - An assumption that the active population will remain stable for each plan year after June 30, 2017.
 - All other actuarial assumptions and methods are the same as those used to determine July 1, 2016 actuarial valuation results.
 - Plan provisions are those used in the July 1, 2016 actuarial valuation.
- This actuarial certification is based on 1) our understanding of actuarial certification requirements under the Internal Revenue Code Section 432 as of June 30, 2017, 2) the December 2007 Practice Note issued by the Multiemployer Plans Subcommittee of the Pension Committee of the American Academy of Actuaries, and 3) action taken by the Board of Trustees on or before September 28, 2017.

September 28, 2017

Alaska Ironworkers Pension Plan
PPA Actuarial Certification



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ALASKA IRONWORKERS PENSION PLAN**PPA Actuarial Certification for Plan Year Beginning July 1, 2017****Plan Identification**

Name: Alaska Ironworkers Pension Plan
EIN/PN: 91-6123695
Plan Year: July 1, 2017
Plan Number: 001
Address: P.O. Box 93870
Anchorage, AK 99509-3870
Telephone Number: (907) 561-5119

Enrolled Actuary Identification

Name: Mr. Josh Goodwin
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September 28, 2017

Alaska Ironworkers Pension Plan
PPA Actuarial Certification





Alaska Ironworkers Pension Plan

July 1, 2016 Actuarial Valuation

Prepared by:

Mark C. Olleman

FSA, EA, MAAA

Kelly S. Coffing

FSA, EA, MAAA

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July 1, 2016 Actuarial Valuation of the Alaska Ironworkers Pension Plan

The 2016 actuarial valuation of the Alaska Ironworkers Pension Plan (the “Plan”) has been completed in accordance with our understanding of IRS minimum funding requirements as amended by the Pension Protection Act of 2006 (PPA), reflecting all regulations and guidance issued to date. The results are contained in this report, including a summary of the underlying actuarial assumptions (Appendix A), a description of the principal plan provisions (Appendix B), and a summary of actuarial methods (Appendix C).

Purpose of the Valuation

In general, the annual actuarial valuation determines the current level of employer contributions which, considering prior funding, will accumulate assets sufficient to meet benefit payments when due under the terms of the Plan. More specifically, the valuation determines the minimum contribution for the current plan year required to support the Plan under the funding requirements of the Employee Retirement Income Security Act of 1974 (ERISA) and the maximum deductible contribution for the current fiscal year. The valuation also includes:

- Operational information that is required either for inclusion in financial statements or in forms to be filed with regulatory governmental agencies.
- A review of plan experience for the plan year ending on June 30, 2016.
- An assessment of the relative funded position of the Plan through a comparison of plan assets and projected plan liabilities.

Limited Distribution

Milliman’s work is prepared solely for the internal business use of the Trustees of the Plan, and may not be provided to third parties without our prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman’s consent to release its work product to any third party may be conditioned on the third party signing a release, subject to the following exceptions:

- The Plan may provide a copy of Milliman’s work, in its entirety, to the Plan’s professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman’s work for any purpose other than to benefit the Plan.
- The Plan may distribute certain work product that Milliman and the Plan Sponsor mutually agree is appropriate as may be required by the Pension Protection Act of 2006.

Third party recipients of Milliman’s work product should engage their own qualified professionals for advice appropriate to their specific needs.

Reliance

In preparing the report, we relied, without audit, on information (some oral and some in writing) supplied by the Plan’s administrator and auditor. This information includes, but is not limited to, plan documents and provisions, participant data, and draft financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is incomplete or inaccurate, our results may be different and our calculations may need to be revised.

Milliman Actuarial Valuation

Limited Use

Actuarial computations under ERISA are for the purposes of determining the minimum required and maximum deductible funding amounts for an ongoing plan. Actuarial computations under FASB ASC Topic 960 are to fulfill plan financial accounting requirements. The calculations in this report are based on our understanding of:

- ERISA and the related sections of the tax code.
- IRS minimum funding requirements as amended by subsequent legislation, including the Pension Protection Act of 2006, and reflecting all regulations and guidance issued to date.
- FASB ASC Topic 960.

Determinations for other purposes may be significantly different than the results in this report. Other calculations may be needed for other purposes, such as judging benefit security at termination.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, 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. Due to the limited scope of the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

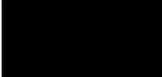
The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

Certification

In our opinion, each assumption used (other than those assumptions mandated directly by the Internal Revenue Code and its regulations) is individually reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, offer our best estimate of anticipated experience under the Plan.

On the basis of the foregoing, we hereby certify that to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Respectfully submitted,


 Mark C. Olleman, FSA, EA, MAAA
 Principal and Consulting Actuary
 Enrolled Actuary Number 

March 7, 2017
 Date


 Kelly S. Coffing, FSA, EA, MAAA
 Principal and Consulting Actuary
 Enrolled Actuary Number 

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Summary of Results

Milliman Actuarial Valuation

A. Overview

	Actuarial Valuation for Plan Year Beginning	
	July 1, 2015	July 1, 2016
Assets		
Market Value of Assets (MVA)	\$56,786,143	\$49,524,313
Actuarial Value of Assets (AVA)	\$55,701,125	\$52,450,498
Return for Prior Plan Year		
Market Value of Assets	0.9%	-2.9%
Actuarial Value of Assets	10.5%	4.6%
Funded Status		
Present Value of Accrued Benefits	\$94,886,295	\$94,638,324
Market Funded Percentage	59.8%	52.3%
Actuarial (Pension Protection Act) Funded Percentage	58.7%	55.4%
Withdrawal Liability		
Present Value of Vested Benefits for Withdrawal Liability	\$91,352,139	\$91,287,921
Value of Unamortized Affected Benefit Reductions	1,728,363	1,598,768
Market Value of Assets for Withdrawal Liability	<u>(56,786,143)</u>	<u>(49,524,313)</u>
Unfunded Present Value of Vested Benefits (UVB)	\$36,294,359	\$43,362,376
Credit Balance and Contribution Requirements		
Actuarial Accrued Liability	\$94,886,295	\$94,638,324
Reserve for Expenses	\$0	\$0
Actuarial Value of Assets	\$(55,701,125)	\$(52,450,498)
Unfunded Actuarial Accrued Liability	\$39,185,170	\$42,187,826
Credit Balance at End of Prior Plan Year	\$(4,792,391)	\$(11,858,124)
Normal Cost (including expenses)	\$781,860	\$750,409
Plan Year Employer Contributions	\$2,276,515	Not Available
Maximum Deductible Contribution	\$123,204,751	\$124,442,419
Participant Data		
Active participants	160	153
Inactive participants with deferred benefits	95	101
Retired participants	461	457
Disabled participants	31	32
Beneficiaries	<u>77</u>	<u>80</u>
Total participants	824	823
Certification		
PPA Zone Status	Critical (Red)	Critical & Declining
Scheduled Progress	Forestall Insolvency	Forestall Insolvency

B. Purpose of This Report

This report has been prepared for the Alaskan Ironworkers Pension Plan as of July 1, 2016 to:

- Review the experience for the plan year ending June 30, 2016, including the investment return on the Plan's assets and changes in the Plan's participant demographics that impact liabilities.
- Review the Plan's funded status.
- Calculate the Plan's funding requirements under ERISA for the plan year beginning July 1, 2016.
- Determine the Plan's unfunded vested benefit liability as of June 30, 2016 for withdrawal liability purposes calculated in accordance with the requirements of the Multiemployer Pension Plan Amendments Act of 1980.
- Determine the actuarial present value of accumulated plan benefits as of June 30, 2016 for purposes of disclosing the Plan's liabilities under FASB ASC Topic 960.
- Provide operational information required for governmental agencies and other interested parties.

C. Changes to Plan Provisions

The valuation reflects the plan provisions in effect on July 1, 2016. There were no changes to the plan provisions during the 2015-2016 plan year that impacted the Plan's liabilities.

See Appendix B for a detailed description of the plan provisions.

D. Changes to Actuarial Methods and Assumptions

Other than the assumptions mandated by the IRS, the following changes were made for this valuation:

- The interest rate used for funding and withdrawal liability was updated from 6.25% to 6.00% to better reflect anticipated future experience.
- The Trustees changed the activity assumption from 200,000 hours to 165,000 hours to better reflect anticipated industry activity.
- The method used to spread the activity assumption over the active population was changed. We now assume all actives work the same number of hours. Previously, we assumed actives would work hours that are proportional to the hours worked in the prior year.
- Effective July 1, 2016, the current liability interest rate was re-established within the statutory interest rate corridor.
- Effective July 1, 2016, the statutory current liability mortality basis was re-established based on the RP-2000 Combined Mortality Table projected as set forth in Treasury Regulation §1.412(l)(7)-1.
- The annual operating expense assumption was changed from \$490,000 to \$520,000 to better reflect expected future expenses.

Details on the assumptions and methods can be found in Appendices A and C of this report.

Milliman Actuarial Valuation

E. Plan Assets

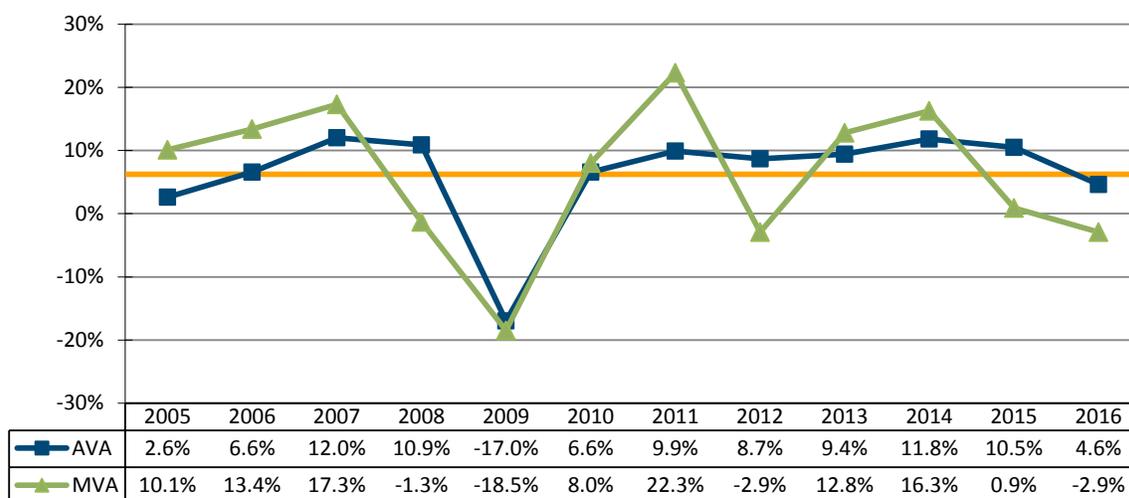
The Plan's Market Value of Assets (MVA) is the net asset value available for benefits as shown on the Plan's financial statements. For funding calculations under ERISA, the Plan uses an asset-smoothing method, which recognizes market value investment gains and losses over a period of five years. The resulting asset value is called the Actuarial Value of Assets (AVA), and is used for determining the Pension Protection Act funded percentage and the minimum and maximum contributions under ERISA. The table below shows these values along with the Plan's rate of investment return, net of investment expenses, over the past five years.

July 1,	Prior Year Rate of Return		Market Value of Assets (in millions)	Actuarial Value of Assets (in millions)	Gain / (Loss) on Market Value (in millions)
	Market	Actuarial			
2012	-2.9%	8.7%	\$57.0	\$55.8	\$(5.7)
2013	12.8	9.4	57.9	54.7	3.6
2014	16.3	11.8	61.3	55.2	5.5
2015	0.9	10.5	56.8	55.7	(3.1)
2016	-2.9	4.6	49.5	52.5	(4.9)

The Plan's investment return of -2.92% last year was 9.17% less than anticipated by the actuarial assumption of 6.25%.

Over the past 10 years, the Plan's assets have averaged a 4.5% return on a market-value basis, net of investment expenses. The graph below shows the Plan's annual returns over this time period, compared to the Plan's current 6.00% investment return assumption. Returns on both the Actuarial Value of Assets (AVA) and the Market Value of Assets (MVA) are shown.

Returns in Plan Years Ended June 30



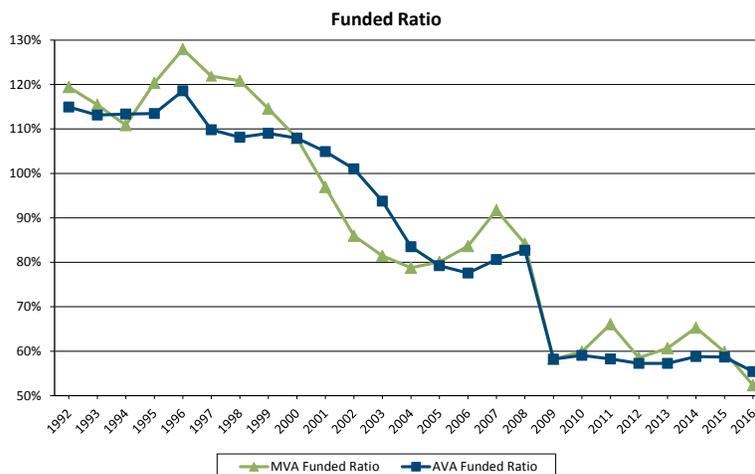
Milliman Actuarial Valuation

F. Funded Status

An important indicator of the Plan’s funded status is the ratio of the Plan’s market value of assets to the Plan’s liability for all benefits earned to date, called the present value of accrued benefits. For purposes of determining the Plan’s zone status under the Pension Protection Act, the Plan’s actuarial value of assets is compared to this liability measurement. The table below shows these measurements, along with the comparable figures for previous valuations.

	(A)	(B)	(C)	(A) - (C)	(A) / (C)	(B) - (C)	(B) / (C)	
July 1,	Prior Year Investment Return	Market Value of Assets (MVA)	Actuarial Value of Assets (AVA)	Present Value of Accrued Benefits*	MVA Funding Reserve/ (Shortfall)	MVA Funded Ratio	AVA Funding Reserve/ (Shortfall)	AVA Funded Ratio
1992	11.8%	50,680,603	48,766,817	42,438,445	8,242,158	119.4%	6,328,372	114.9%
1993	7.7%	52,611,578	51,568,871	45,578,859	7,032,719	115.4%	5,990,012	113.1%
1994	2.8%	51,854,710	53,031,846	46,781,764	5,072,946	110.8%	6,250,082	113.4%
1995	19.0%	59,359,652	55,940,940	49,301,462	10,058,190	120.4%	6,639,478	113.5%
1996	14.5%	65,490,745	60,685,228	51,180,077	14,310,668	128.0%	9,505,151	118.6%
1997	21.7%	76,776,012	69,195,291	62,997,164	13,778,848	121.9%	6,198,127	109.8%
1998	19.2%	87,168,448	77,982,682	72,122,771	15,045,677	120.9%	5,859,911	108.1%
1999	9.5%	91,751,351	87,270,758	80,064,024	11,687,327	114.6%	7,206,734	109.0%
2000	3.3%	89,456,389	89,456,389	82,879,180	6,577,209	107.9%	6,577,209	107.9%
2001	-2.7%	82,167,419	88,908,815	84,765,653	(2,598,234)	96.9%	4,143,162	104.9%
2002	-5.1%	72,744,957	85,494,836	84,614,473	(11,869,516)	86.0%	880,363	101.0%
2003	4.2%	71,109,460	81,822,944	87,282,994	(16,173,534)	81.5%	(5,460,050)	93.7%
2004	11.2%	73,590,426	78,023,604	93,435,180	(19,844,754)	78.8%	(15,411,576)	83.5%
2005	10.1%	75,539,302	74,774,121	94,344,998	(18,805,696)	80.1%	(19,570,877)	79.3%
2006	13.4%	80,119,881	74,300,010	95,787,476	(15,667,595)	83.6%	(21,487,466)	77.6%
2007	17.3%	87,908,584	77,263,935	95,845,630	(7,937,046)	91.7%	(18,581,695)	80.6%
2008	-1.3%	81,279,274	79,830,278	96,550,409	(15,271,135)	84.2%	(16,720,131)	82.7%
2009	-18.5%	60,775,802	60,775,802	104,391,737	(43,615,935)	58.2%	(43,615,935)	58.2%
2010	8.0%	59,320,761	58,536,169	99,086,581	(39,765,820)	59.9%	(40,550,412)	59.1%
2011	22.3%	65,393,938	57,622,322	98,935,066	(33,541,128)	66.1%	(41,312,744)	58.2%
2012	-2.9%	57,001,715	55,750,892	97,360,483	(40,358,768)	58.5%	(41,609,591)	57.3%
2013	12.8%	57,890,426	54,654,071	95,423,016	(37,532,590)	60.7%	(40,768,945)	57.3%
2014	16.3%	61,268,718	55,193,938	93,844,780	(32,576,062)	65.3%	(38,650,842)	58.8%
2015	0.9%	56,786,143	55,701,125	94,886,295	(38,100,152)	59.8%	(39,185,170)	58.7%
2016	-2.9%	49,524,313	52,450,498	94,638,324	(45,114,011)	52.3%	(42,187,826)	55.4%

* Present Value of Accrued Benefits are valued at a 6.25% discount rate beginning in 2009. From 1997 to 2008, a 7.00% discount rate was used. For 1996 and before, a discount rate of 7.25% was used.



The annual funding notice to participants must be distributed within 120 days of the end of the plan year (October 28, 2017) and will include the AVA funded ratio for 2014, 2015, and 2016, as shown above.

G. Plan Experience

Impact of Plan Experience during Prior Plan Year

The following table shows how the Plan's experience affected the unfunded present value of accrued benefits on a market value of assets basis during the prior plan year.

Prior Year Changes in the Funding Reserve/(Shortfall)		
(all values in millions)		
July 1, 2015 Funding Reserve / (Shortfall)		\$ (38.10)
Interest on Unfunded	\$(2.38)	
Contributions with Interest	2.35	
Value of Benefit Accruals with Interest	(0.27)	
Expenses with Interest	<u>(0.53)</u>	
Expected Change in the Reserve / (Shortfall)		(0.83)
Asset Gain / (Loss)	\$ (4.94)	
Assumption Changes	(2.29)	
Experience Gain / (Loss) on Liabilities (Experience different than assumed)	<u>1.05</u>	
Combined Impact of Gains, Losses, and Changes		<u>\$ (6.18)</u>
July 1, 2016 Funding Reserve / (Shortfall)		\$ (45.11)

The funding shortfall was expected to increase by \$0.83 million due to the value of benefit accruals, expenses, and interest on the beginning of year funding shortfall being more than contributions. Combined with the net impact of earning 9.17% less than the actuarial assumption of 6.25% and a liability increase due to assumption changes, resulted in an increase in the shortfall. In total, the Plan now has a funding shortfall of \$45.11 million.

Expected Plan Experience in Next Plan Year

The following table shows how the Plan's unfunded accrued liability on a market value of assets basis is projected to change in the next year.

Projected Changes in the Funding Reserve/(Shortfall)		
(all values in millions)		
July 1, 2016 Funding Reserve / (Shortfall)		\$ (45.11)
Interest on Unfunded	\$(2.71)	
Expected Contributions with Interest	2.34	
Value of Benefit Accruals with Interest	(0.26)	
Expenses with Interest	<u>(0.54)</u>	
Expected Change in the Reserve / (Shortfall)		<u>\$ (1.17)</u>
Projected January 1, 2017 Funding Reserve / (Shortfall)		\$ (46.28)

The table above shows that if the actuarial assumptions are realized, the Plan's funding shortfall is projected to increase by \$1.17 million during the plan year. This means that the contributions expected to come into the Plan during 2016/2017 are less than the expected cost of benefit accruals, expenses, and interest on the funding shortfall.

Milliman Actuarial Valuation

H. Withdrawal Liability

The Plan's unfunded vested benefit liability for withdrawal liability is determined by subtracting the Plan's assets for withdrawal liability purposes (market value of assets) from the liability for all vested benefits earned to date. The table below shows the Plan's unfunded vested benefit liability used to determine withdrawal liability for withdrawing employers June 30, 2015 and the preceding four plan year ends.

June 30,	Vested Benefit Liability (VBL)	Value of "Affected Benefits" Removed by Rehab Plan	Market Assets for Withdrawal Liability	Unfunded Vested Benefit Liability
2012	\$93,132,576	\$2,073,178	\$(57,001,715)	\$38,204,039
2013	91,387,290	1,965,133	(57,890,426)	35,461,997
2014	89,968,699	1,850,336	(61,268,718)	30,550,317
2015	91,352,139	1,728,363	(56,786,143)	36,294,359
2016	91,287,921	1,598,768	(49,524,313)	43,362,377

As of June 30, 2016, the interest assumption for determining vested benefit liability is based on the valuation rate of 6.00%.

I. Zone Status

The following chart shows the Plan's zone status that was reported in the actuarial certification for the past several years.

Year	Zone Status
2012	Critical (Red)
2013	Critical (Red)
2014	Critical (Red)
2015	Critical (Red)
2016	Critical and Declining

As shown above, the Plan is critical and declining for the plan year beginning July 1, 2016. Please see our separate certification letters for details.

J. Contributions for the 2016/2017 Plan Year

Minimum Required Contribution and Credit Balance

The Plan's minimum required contribution, prior to the application of the credit balance, consists of two components:

- Gross normal cost, which consists of the cost of benefits allocated to the next plan year and administrative expenses expected to be paid in the next plan year (see Exhibit 8 for details).
- Amortization payment to pay for past liabilities (see Exhibit 12 for details).

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If contributions do not meet these costs, the Plan's credit balance, which was built up through contributions in excess of the minimum required contributions in past years, may be used to offset the costs.

The Plan's contribution requirements and expected contributions for the current year and preceding plan years are shown below:

Plan Year Beginning July 1,	Normal Cost at End of Plan Year	Net Amortization Payment at End of Plan Year	Minimum Required Contribution		Employer Contributions (Actual)	Credit Balance at End of Plan Year
			Before Credit Balance	After Credit Balance		
2009	\$ 761,571	\$ 5,094,130	\$ 5,855,701	\$ 0	\$ 1,749,934	\$ 17,344,573
2010	443,310	4,456,879	4,900,189	0	1,933,723	15,511,254
2011	334,018	4,489,272	4,823,290	0	1,810,073	13,513,642
2012	245,044	9,257,168	9,502,212	0	2,166,310	7,077,361
2013	231,499	9,053,946	9,285,445	1,765,749	2,663,353	965,246
2014	805,194	8,215,967	9,021,161	7,995,587	3,123,859	(4,792,391)
2015	830,726	8,270,042	14,192,683	14,192,683	2,276,515	(11,858,124)
2016	797,310	8,270,019	21,615,603	21,615,603	2,268,750*	(19,300,000)*

* Expected based on hours assumption of 165,000 in 2016/2017 and average contribution rates.

The contribution of \$2,276,515 for the plan year ended June 30, 2016 did not satisfy ERISA minimum funding standards and is allowable in full by the IRS as a tax deduction. The Plan has a funding deficiency.

K. Summary

Investment Return: At July 1, 2015, the Plan's market assets covered 59.8% of the value of its accrued benefits. Due primarily to investment return during 2015/2016 of -2.92%, which was 9.17% below the 6.25% investment return assumption, and lowering the investment return assumption from 6.25% to 6.00% the funded ratio has decreased from 59.8% to 52.3% at July 1, 2016.

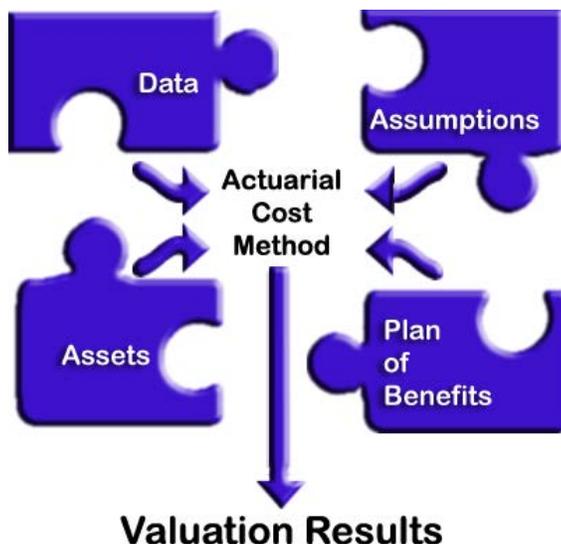
Uncertain Future: Despite a rehabilitation plan that is designed to take all reasonable measures by making large contribution increases and benefit reductions, the Plan still needs experience more favorable than assumed to return to health. Based on experience through July 1, 2016, the Plan is projected to become insolvent in 2030.

Volatility: The Plan's funding remains heavily dependent on future contributory hours and investment returns.

Actuarial Valuation Process

A. Four Necessary Elements of an Actuarial Valuation

There are four necessary elements of an actuarial valuation: data, assumptions, assets, and a plan of benefits. Those elements, combined with an actuarial cost method, produce the actuarial valuation results.



B. Purpose of the Actuarial Valuation

The purpose of the actuarial valuation is to take the four elements above and determine whether the Plan’s resources and liabilities are in balance for purposes of benefit security and legal funding standards.

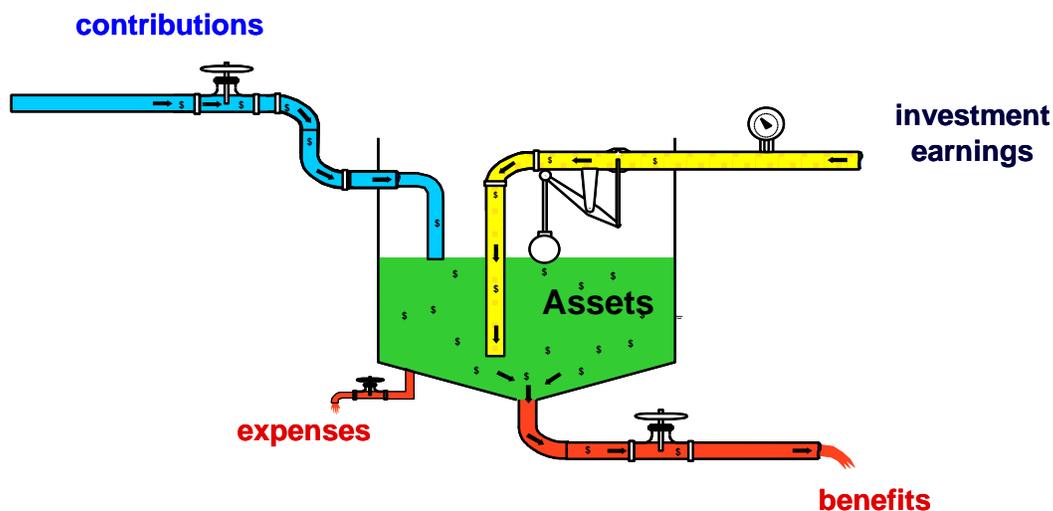
This report compares:

<p>The Plan’s Liability: the value of earned and unearned benefits</p>
TO
<p>The Plan’s Resources: current Trust assets, future contributions, and anticipated investment returns</p>

In the actuarial valuation, we start by projecting the future benefit payments that will be made from the Trust for current participants. These are used to determine the value of the Plan’s liability. We then determine the value of the Plan’s resources based on the current asset information and the actuarial assumptions. The rest of this section briefly describes how we make the projections of future benefit payments and determine the value of the Plan’s resources based on the data provided by the Trust Office and the actuarial assumptions.

C. Plan Assets

The illustration below represents the financial function of a pension trust. Ultimately, all benefits and expenses must be provided for by current assets, future contributions, and future investment returns.



The chart below shows the change in the net assets available for benefits for the prior two plan years.

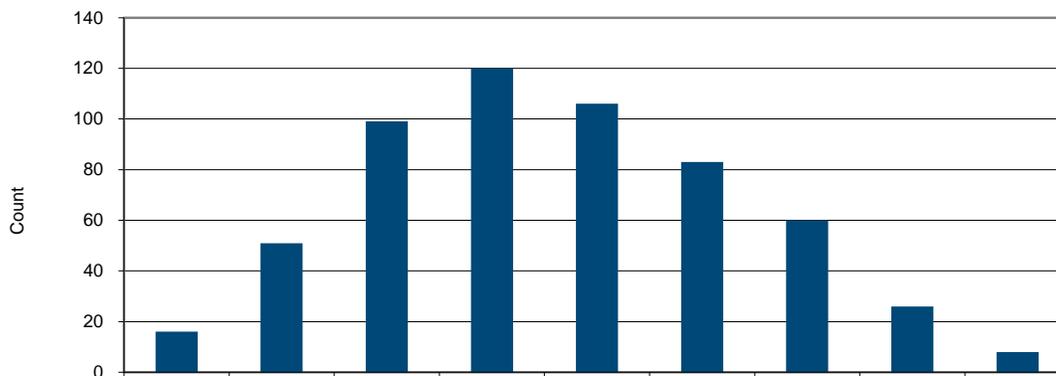
Change in Net Assets Available for Benefits		
	June 30, 2015	June 30, 2016
Beginning of Year Market Value	\$61,268,718	\$56,786,143
Contributions	3,123,859	2,276,515
Investment Earnings	534,270	(1,573,264)
Benefit Payments	(7,654,800)	(7,451,069)
Operating Expenses	<u>(485,904)</u>	<u>(514,012)</u>
Net Change in Assets	\$(4,482,575)	\$(7,261,830)
End of Year Market Value	\$56,786,143	\$49,524,313
Market Value Investment Return	0.9%	-2.9%

D. Retirees and Beneficiaries

To place a value on the liability for current retirees, disabilities, and beneficiaries we started with the data provided by the Trust and used actuarial assumptions for mortality to project future benefit payments for this group.

Data

Distribution of Retirees, Disabilities, and Beneficiaries



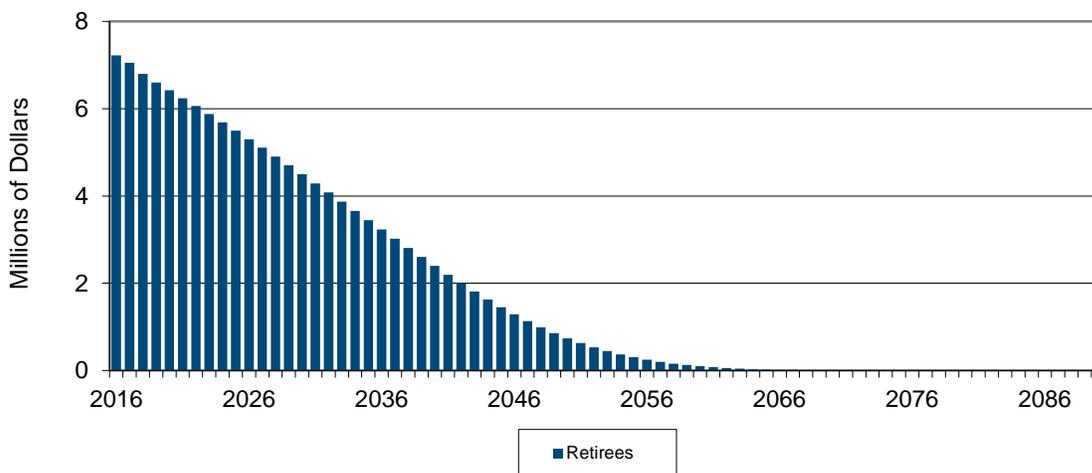
Age	54 & Less	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90 & Over	Total
Count	16	51	99	120	106	83	60	26	8	569
Avg Mo Ben	1,147	909	1,702	1,146	933	728	815	622	1,813	1,072

Assumptions

Mortality: Benefit payments are projected based on the probability that the participant or his beneficiary is still alive. Detail is provided in Appendix A.

Projected Benefit Payments for Retirees

Based on the data and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to current retirees (including disabilities and beneficiaries).

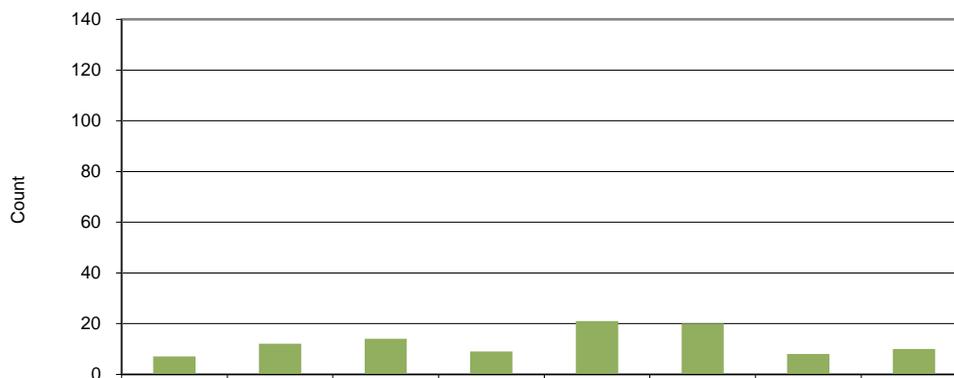


E. Terminated and Inactive Participants

This group includes vested terminated participants. To place a value on their liabilities, we started with the data provided by the Trust and used actuarial assumptions to project future benefit payments for this group.

Data

Distribution of Vested Terminated Participants



Age	34 & Less	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	Total
Count	7	12	14	9	21	20	8	10	101
Avg Mo Ben	541	630	1,232	1,286	2,053	982	539	187	1,080

In addition to the 101 vested terminated participants represented above, there are 710 non-vested participants who may still vest due to reciprocity or returning as an active.

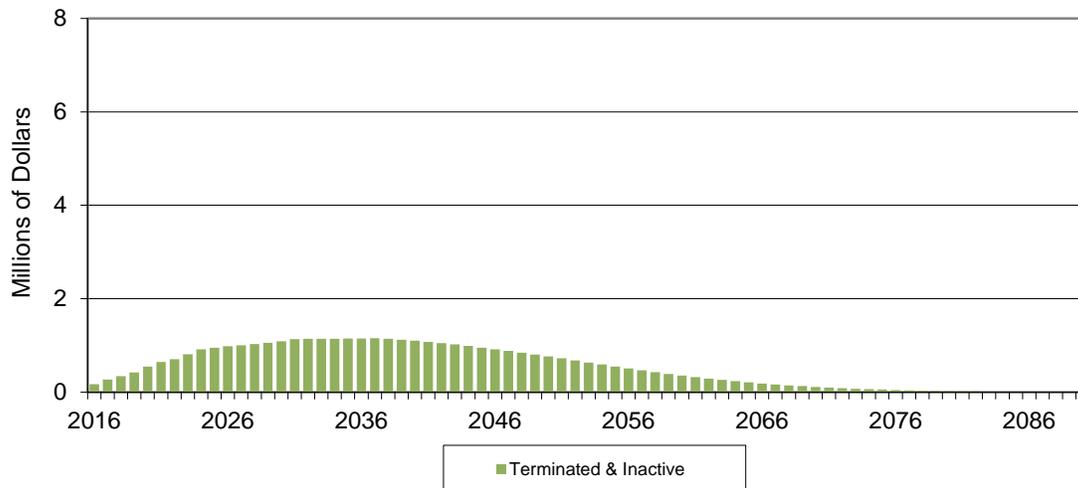
Assumptions

Benefit payments are projected based on the following assumptions. Detail is in Appendix A.

- **Benefit Commencement** – Participants who have 10 or more years of service are assumed to retire between the ages of 50 and 62 according to rates in Appendix A. All other participants are assumed to retire at “Normal Retirement Age.”
- **Mortality** – Participants receive benefits as long as they are alive.
- **Vesting** – We assume 45% of the non-vested participants under age 65 will eventually become vested.

Projected Benefit Payments for Terminated and Inactive Participants

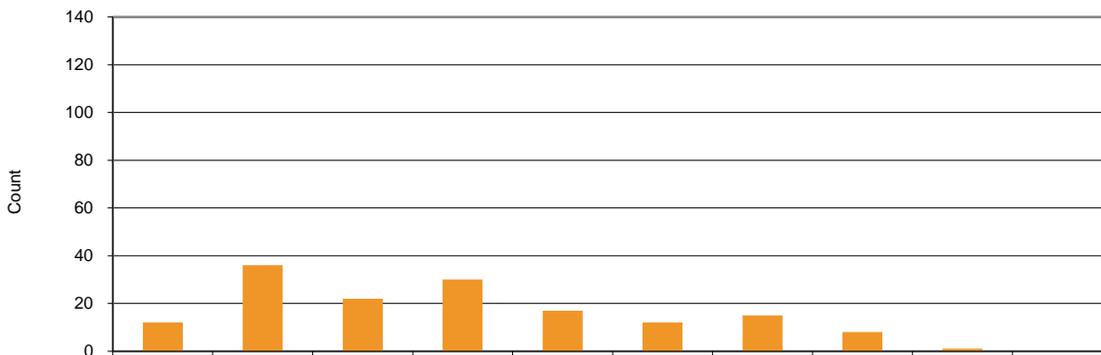
Based on the data and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to terminated and inactive participants.



F. Active Participants

To place a value on the liability for the active participants, we started with the data provided by the Trust and used actuarial assumptions to project future benefit payments for this group.

Data



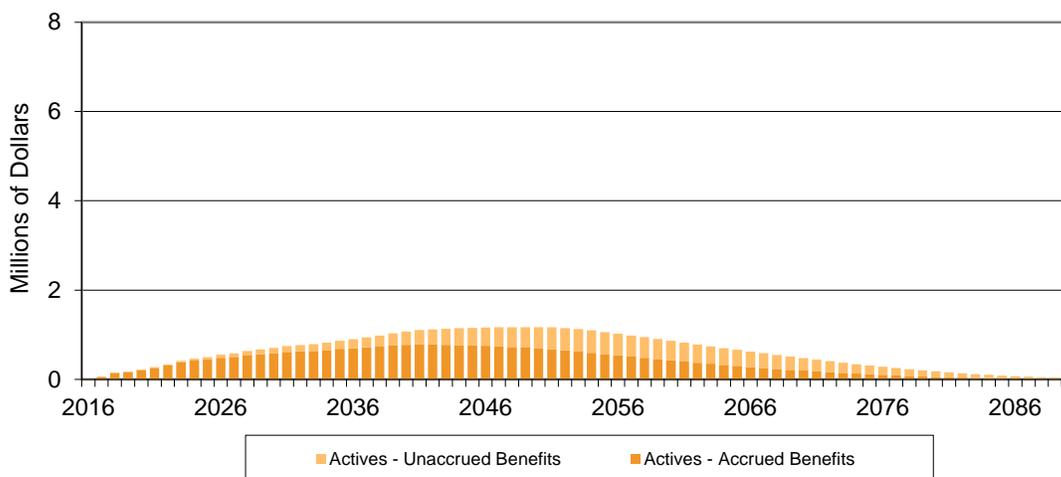
Age	24 & Less	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	Total
Count	12	36	22	30	17	12	15	8	1	0	153
Avg Mo Ben	75	229	438	745	967	1,151	1,936	1,761	57	0	749
Avg Svc Credit	1.4	3.2	5.6	8.2	8.2	9.5	12.8	12.2	1.0	0.0	6.9

Assumptions

Benefit payments are projected based on the Plan of benefits and the assumptions for future contributions, termination, retirement, death, and disability. Detail is provided in Appendix A.

Projected Benefit Payments for Active Participants

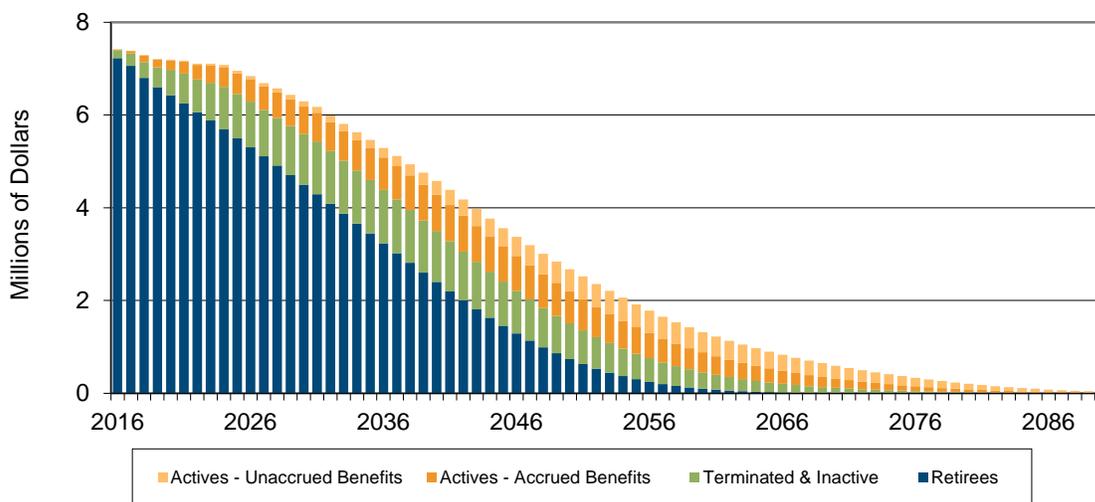
Based on the data, plan of benefits, and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to the participants that are currently active. Benefits earned in the past and anticipated to be earned in the future are both included.



G. Plan Requirements

Projected Benefit Payments for All Current Participants

We estimate that the following stream of payments will be made on account of all benefits defined in the Plan for the current active, retired, terminated and inactive members. This includes benefits earned in the past and future for current actives. Our calculations are based on the participant data provided by the Trust, and the assumptions shown in this report.



The Investment Return Assumption and Actuarial Present Values

The investment return assumption used in the actuarial valuation is 6.00%. If a fund of investments earned a level annual return of 6.00%, net of investment expenses, a balance of \$97.0 million on July 1, 2016 would be sufficient to provide for all benefit payments shown above; the Actuarial Present Value of Future Benefits is \$97.0 million (see Exhibit 7 for details). Current assets plus the present value of future contributions must provide for this requirement.

The actuarial valuation also measures the Actuarial Present Value of Accrued Benefits. In this case, the active participants' unearned benefits (benefits that will be credited for future contributions) are excluded. If a fund of investments earned a level annual return of 6.00%, net of all expenses, a balance of \$94.6 million on July 1, 2016 would be sufficient to provide for all accrued benefits.

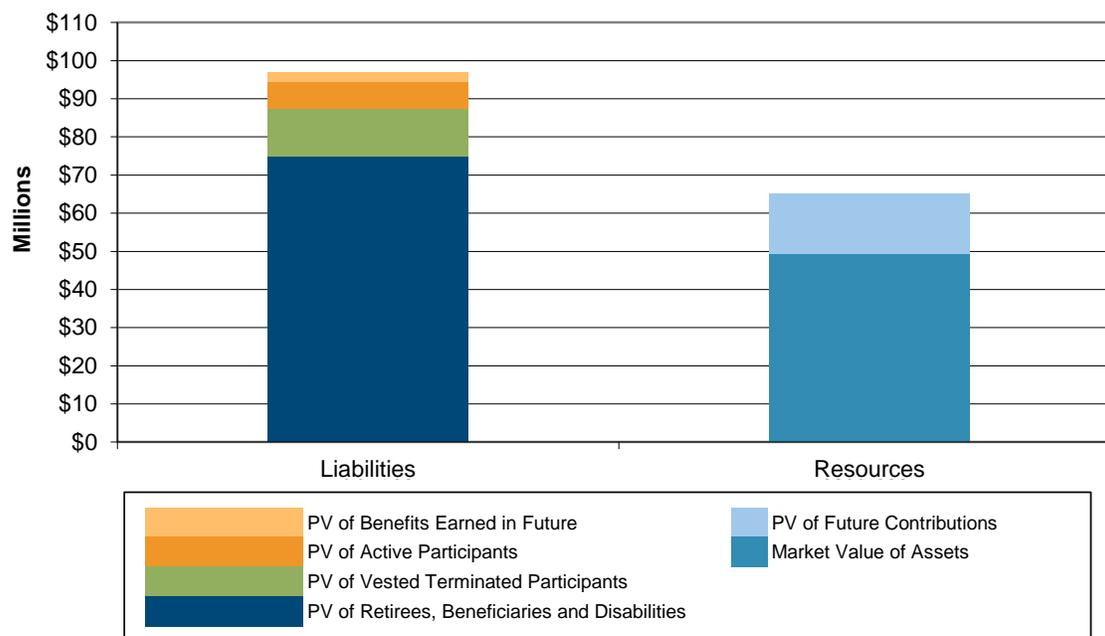
Summary of Plan Requirements	
Actuarial Present Value of All Future Benefits (all benefits shown above)	\$97.0 million
Actuarial Present Value of Accrued Benefits (Retirees, Terminated Vested, and Active Accrued)	\$94.6 million
Actuarial Value of Assets	\$52.5 million
Market Value of Assets	\$49.5 million

H. Actuarial Methodology and Results

Detail of Actuarial Present Value of Future Benefits		
	July 1, 2015 (in millions)	July 1, 2016 (in millions)
Retired Participants, Disabilities, and Beneficiaries	\$ 75.5	\$ 74.9
Terminated Vested Participants	9.1	9.3
Parity and Reciprocity Reserves	<u>3.3</u>	<u>3.2</u>
Total Inactive Liability	\$ 87.9	\$ 87.4
Active Accrued Benefits	7.0	7.2
Active Unaccrued Benefits	<u>2.8</u>	<u>2.4</u>
Total Active Liability	\$ 9.8	\$ 9.6
Total Plan Requirements	\$ 97.7	\$ 97.0

Comparing Liabilities to Resources as of July 1, 2016

- The Plan's liabilities, \$97.0 million, are the sum of the actuarial present value of accrued benefits, \$94.6 million, and the actuarial present value of unaccrued benefits, \$2.4 million.
- The Plan's resources, \$65.1 million, are the sum of the market value of assets, \$49.5 million, and the actuarial present value of future contributions for current participants, \$15.6 million.



- The Plan's resources of \$65.1 million are less than the Plan's liabilities of \$97.0 million.

Funding Benefits

Funding can be examined by focusing on benefits. There are two primary measures:

1. Does the market value of assets cover the Actuarial Present Value of Accrued Benefits?
2. Does the market value of assets cover the Actuarial Present Value of Vested Benefits (sometimes called Vested Benefit Liability)?

Funding as of		
	July 1, 2015	July 1, 2016
Present Value of Accrued Benefits	\$94.9 million	\$94.6 million
Vested Benefit Liability	\$91.4 million	\$91.3 million
Market Value of Assets (MVA)	\$56.8 million	\$49.5 million
MVA / Present Value of Accrued Benefits	59.8%	52.3%
MVA / Vested Benefit Liability	62.2%	54.2%

Historical Statistics and Projections

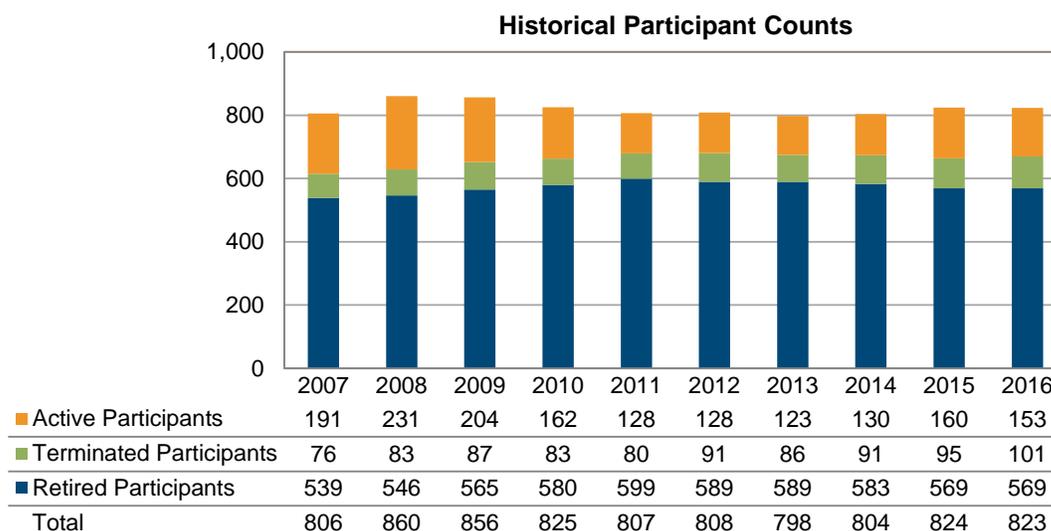
A. Historical Investment Return

Period Ended	1 Year	5 Years ⁽¹⁾	10 Years ⁽¹⁾	Since 1992 ⁽¹⁾
6/30/2016	-2.9	4.5	4.5	7.2
6/30/2015	0.9	9.5	6.1	
6/30/2014	16.3	11.0	7.1	
6/30/2013	12.8	3.3	6.6	
6/30/2012	-2.9	0.6	5.8	
6/30/2011	22.3	4.5	5.5	
6/30/2010	8.0	2.9	3.1	
6/30/2009	-18.5	3.3	2.7	
6/30/2008	-1.3	10.0	5.8	
6/30/2007	17.3	11.2	7.8	
6/30/2006	13.4	6.5	8.2	
6/30/2005	10.1	3.3	8.3	
6/30/2004	11.2	2.0	9.1	
6/30/2003	4.2	1.7	8.3	
6/30/2002	-5.1	4.5	8.6	
6/30/2001	-2.7	9.8	10.4	
6/30/2000	3.3	13.4		
6/30/1999	9.5	16.7		
6/30/1998	19.2	15.2		
6/30/1997	21.7	12.9		
6/30/1996	14.5	11.0		
6/30/1995	19.0			
6/30/1994	2.8			
6/30/1993	7.7			
6/30/1992	11.8			

(1) Annualized time weighted average based on market value.

B. Historical Participant Statistics

The following chart shows the participant counts by status over the last several plan years.



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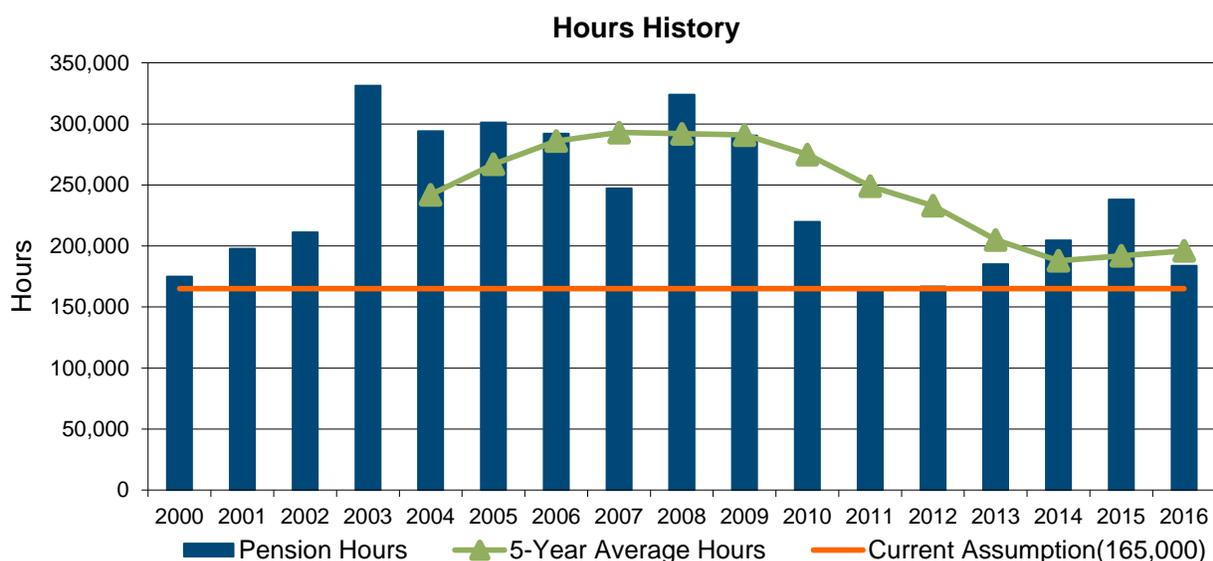
C. Historical Hours and Contributions

The following table shows the total contributory hours as reported by the Trust Office.

Plan Year Ending June 30,	Number of Actives at Plan Year End	Total Contributory Hours ⁽¹⁾	Rounded 5-Year Average Hours	Reciprocal Hours ⁽¹⁾	Total Contribution ⁽²⁾
2000	181	174,901			\$737,730
2001	173	197,788			863,228
2002	174	211,183			895,003
2003	256	331,406			1,361,630
2004	234	294,046	242,000		1,132,752
2005	216	301,025	267,000		1,218,698
2006	227	292,005	286,000		1,286,458
2007	191	247,228	293,000	23,526	1,239,139
2008	231	323,913	292,000	32,606	1,607,470
2009	204	290,399	291,000	34,888	1,607,445
2010	162	219,681	275,000	33,099	1,749,934
2011	128	163,184	249,000	25,302	1,933,723
2012	128	166,922	233,000	31,901	1,810,073
2013	123	185,055	205,000	28,825	2,166,310
2014	130	204,616	188,000	37,150	2,663,353
2015	160	238,039	192,000	32,433	3,123,859
2016	153	183,745	196,000	11,920	2,276,515

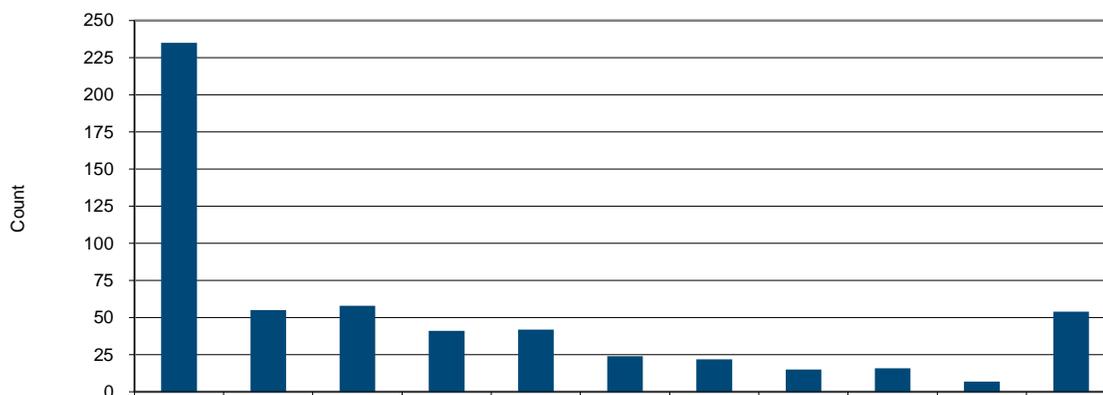
(1) Based on total hours reported in WPAS summary reports.

(2) Includes withdrawal liability payments.



D. Retired Participant Statistics

Current Distribution of Retirees, Beneficiaries, and Disabilities by Monthly Benefit Amount



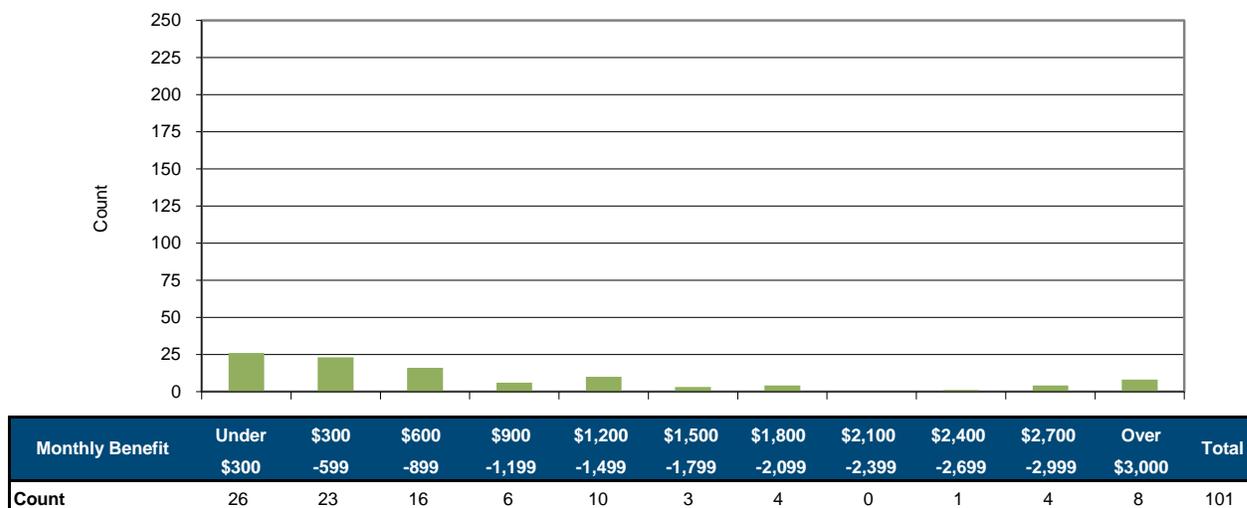
Monthly Benefit	Under \$300	\$300 - 599	\$600 - 899	\$900 - 1,199	\$1,200 - 1,499	\$1,500 - 1,799	\$1,800 - 2,099	\$2,100 - 2,399	\$2,400 - 2,699	\$2,700 - 2,999	Over \$3,000	Total
Count	235	55	58	41	42	24	22	15	16	7	54	569

Retired Participant Historical Information

Plan Year	Number of Retirees	Total Annual Benefits	Average Annual Benefits
2006	522	\$6,156,726	\$11,794
2007	539	6,471,346	12,006
2008	546	6,790,124	12,436
2009	565	7,067,791	12,509
2010	580	7,290,239	12,569
2011	599	7,839,631	13,088
2012	589	7,739,241	13,140
2013	589	7,677,765	13,035
2014	583	7,616,676	13,065
2015	569	7,434,968	13,067
2016	569	7,316,405	12,858

E. Vested Terminated Participant Statistics

Current Distribution of Vested Terminated Participants by Monthly Benefit Amount

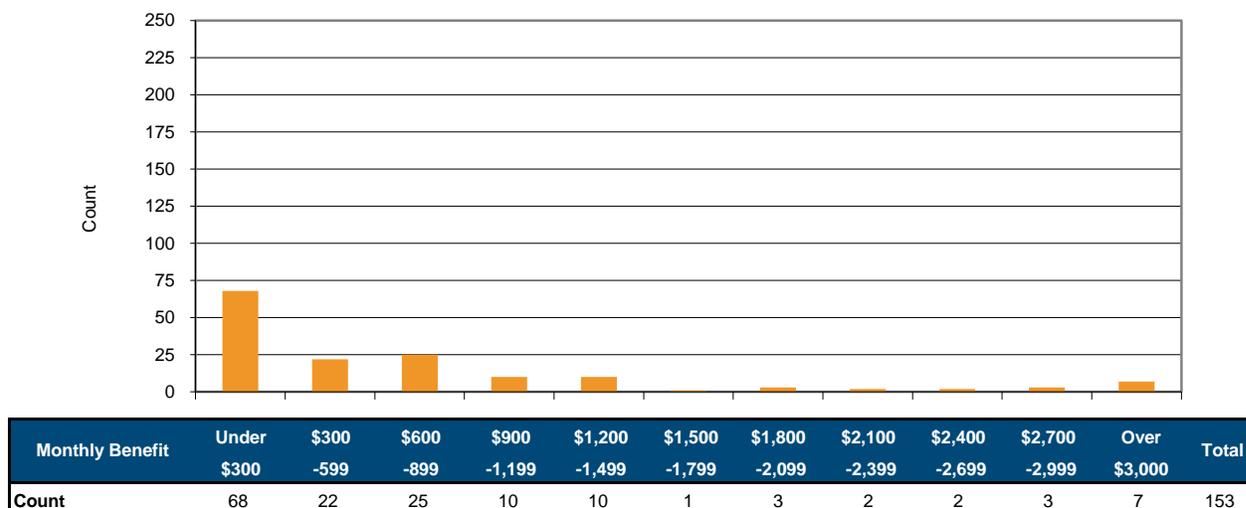


Vested Terminated Participant Historical Information

Plan Year	Number of Vested Terminates	Total Annual Benefits	Average Annual Benefits
2006	73	\$1,818,346	\$24,909
2007	76	1,618,003	21,290
2008	83	1,454,495	17,524
2009	87	1,449,813	16,665
2010	83	1,494,187	18,002
2011	80	1,229,970	15,375
2012	91	1,302,353	14,312
2013	86	1,269,715	14,764
2014	91	1,253,941	13,780
2015	95	1,351,187	14,223
2016	101	1,309,198	12,962

F. Active Participant Statistics

Current Distribution of Active Participants by Accrued Monthly Benefit Amount



Active Participant Historical Information

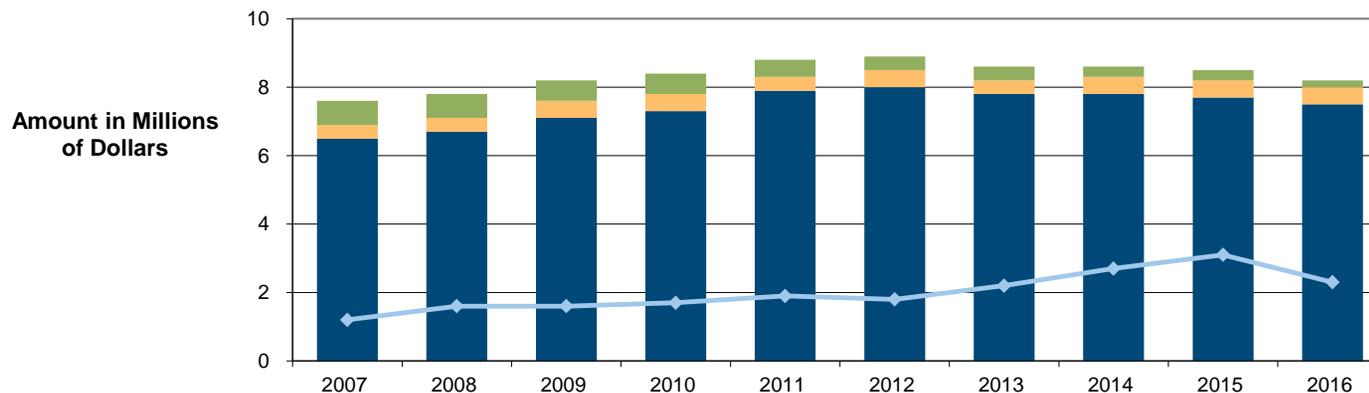
Plan Year Beginning July 1,	Number of Actives	Average Age	Average Years of Service
2006	227	40.7	6.4
2007	191	40.4	7.1
2008	231	38.5	6.1
2009	204	38.0	6.3
2010	162	37.0	7.0
2011	128	37.6	7.0
2012	128	38.1	7.4
2013	123	38.1	7.8
2014	130	38.0	7.7
2015	160	36.2	6.4
2016	153	37.3	6.9

G. Historical Net Cash Flow ⁽¹⁾

The chart shows the relationship between contributions, investment management expenses, operating expenses, and benefit payments for the past 10 plan years. Net cash flow is equal to contributions minus benefit payments, operating expenses, and investment management expenses.

The amounts shown are based on the Auditor's Report for 2007-2016.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
 (A) Contributions	1.2	1.6	1.6	1.7	1.9	1.8	2.2	2.7	3.1	2.3
 (B) Investment Management Expenses	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.2
 (C) Operating Expenses	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5
 (D) Benefit Payments without 13th Check	6.5	6.7	7.1	7.3	7.9	8.0	7.8	7.8	7.7	7.5
(E) Net Cashflow (A-B-C-D)	(6.4)	(6.2)	(6.6)	(6.7)	(6.9)	(7.1)	(6.4)	(5.9)	(5.4)	(5.9)

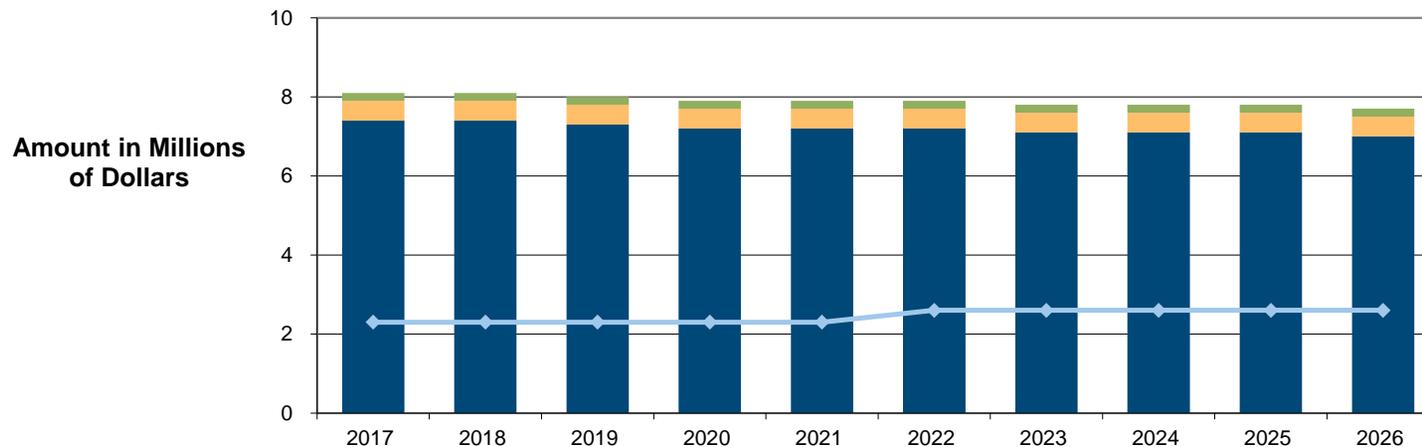


(1) Based on draft Auditor's Report.

H. Projected Net Cash Flow

The following chart shows the relationship between contributions⁽¹⁾, investment management expenses⁽²⁾, operating expenses⁽³⁾, and benefit payments⁽⁴⁾ on a projected basis for 10 plan years. Net cash flow is equal to contributions minus benefit payments, operating expenses, and investment management expenses.

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
◆ (A) Contributions ⁽¹⁾	2.3	2.3	2.3	2.3	2.3	2.6	2.6	2.6	2.6	2.6
■ (B) Investment Management Expenses ⁽²⁾	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
■ (C) Operating Expenses ⁽³⁾	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
■ (D) Benefit Payments without 13th Check ⁽⁴⁾	7.4	7.4	7.3	7.2	7.2	7.2	7.1	7.1	7.1	7.0
(E) Net Cashflow (A-B-C-D)	(5.8)	(5.8)	(5.7)	(5.6)	(5.6)	(5.3)	(5.2)	(5.2)	(5.2)	(5.1)



(1) The contribution assumption used in the valuation is projected forward with no inflation.
 (2) Investment expenses are projected as last year's actual amount with no inflation.
 (3) Operating expenses are projected as last year's actual amount with no inflation.
 (4) Benefit payments are projected based on the actuarial valuation calculations and assume no 13th check.

Milliman Actuarial Valuation

I. Historical Summary of Hourly Employer Contribution Rates

Effective Date		Master Hourly Contribution Rate		
Year	Month	Included in Benefits	Funding Only	Total Contribution
1966	July	\$0.15	\$0.00	\$0.15
1968	July	0.55	0.00	0.55
1969	August	0.70	0.00	0.70
1970	August	0.85	0.00	0.85
1971	August	1.00	0.00	1.00
1973	August	1.25	0.00	1.25
1975	February	1.75	0.00	1.75
1977	February	2.25	0.00	2.25
1977	August	2.75	0.00	2.75
1978	August	3.00	0.00	3.00
1983	August	3.25	0.00	3.25
1991	August	3.75	0.00	3.75
1997	March	3.90	0.00	3.90
1997	August	4.40	0.00	4.40
2005	August	4.75	0.00	4.75
2006	August	4.75	1.00	5.75
2007	September	4.75	2.00	6.75
2009	July	4.75	3.00	7.75
2009	August	4.75	4.00	8.75
2010	August	4.75	5.00	9.75
2011	August	4.75	6.00	10.75
2012	August	4.75	7.00	11.75
2013	August	4.75	8.00	12.75
2015	August	4.75	9.00	13.75

Appendix A

Summary of Actuarial Assumptions

The following details the principal actuarial assumptions used in our valuation. The rationale for all significant economic assumptions is noted below. All significant demographic assumptions are based on analysis of the Plan's experience, in particular, a study of all demographic assumptions was performed in conjunction with our July 1, 2015 Actuarial Valuation

Investment Return (Interest)

Funding: 6.00% per year (adopted July 1, 2016). The investment return assumption represents the expected long-term return on assets based on the Plan's investment policy, asset allocation, and the capital market assumptions.

Withdrawal Liability: 6.00% per year (adopted July 1, 2016).

Current Liability: 3.18% per year (adopted July 1, 2016).

Inflation

No explicit assumption.

Administrative Expenses

The annual operating expense assumption is \$520,000 (adopted July 1, 2016).

Pay Increases

Not applicable.

Rates for Active Participants

Death: The RP-2014 Mortality Table with Blue Collar adjustment, adjusted to factor out Scale MP-2014 from the 2006 base year, then projected forward using Scale MP-2015 on a generational basis, with gender-specific Employee rates (adopted July 1, 2015):

Age	Sex	Future Life Expectancy (in years)			
		2015	2025	2035	2045
60	Male	24.2	25.2	26.1	27.0
65	Male	19.9	20.7	21.6	22.5

Withdrawal: Sample termination rates are shown in the following table (adopted July 1, 2015).

Duration from Hire	Termination Rate
0	25.00%
1	25.00
2	15.00
3	12.00
4	10.00
7	8.00
12	7.00
17	7.00
22	5.00
27+	3.00

Retirement: Sample retirement rates are shown in the following table (adopted July 1, 2011). These rates apply for those retiring from active and vested terminated status.

Age	Retirement	
	Pre-July, 1 2011 Benefits	Post-July, 1 2011 Benefits
20	0.00%	0.00%
25	0.00	0.00
30	0.00	0.00
35	0.00	0.00
40	0.00	0.00
45	0.00	0.00
50	5.00	5.00
51	5.00	5.00
52	5.00	5.00
53	5.00	5.00
54	5.00	5.00
55	5.00	5.00
56	10.00	10.00
57	15.00	10.00
58	20.00	10.00
59	20.00	15.00
60	100.00	20.00
61	100.00	20.00
62	100.00	100.00

Marriage: Survivor benefits are provided for all Plan participants. 100% of active and terminated vested participants are assumed to be married. Wives are assumed to be three years younger than husbands.

Lump Sum – A lump-sum distribution option is provided upon retirement for benefits valued under \$5,000. However, there is no explicit assumption for this. These benefits are valued as annuities.

Weighted Average Retirement Age

The weighted average retirement age for participants' benefits earned prior to July 1, 2011 is 57. This equals the sum, over all retirement ages, of the retirement age multiplied by the probability of retiring at that age, as shown below.

(a)	(b)	(c)	(b) x (c) = (d)	(a) x (d) = (e)
Possible Retirement Age "r"	Assumed Rate of Retirement at Age "r"	Probability of Person Age 55 Still Working at "r"	Probability of Person Age 55 Retiring at "r"	Component of Weighted Average Retirement Age
50	0.0500	1.0000	0.0500	2.5000
51	0.0500	0.9500	0.0475	2.4225
52	0.0500	0.9025	0.0451	2.3465
53	0.0500	0.8574	0.0429	2.2720
54	0.0500	0.8174	0.0407	2.1992
55	0.0500	0.7738	0.0387	2.1279
56	0.1000	0.7351	0.0735	4.1165
57	0.1500	0.6616	0.0992	5.6565
58	0.2000	0.5623	0.1125	6.5232
59	0.2000	0.4499	0.0900	5.3085
60	1.0000	0.3599	0.3599	21.5941
Weighted Average Retirement Age:				57.0670
Rounded to Nearest Age:				57

The weighted average retirement age for participants' benefits earned after July 1, 2011 is 58. This equals the sum, over all retirement ages, of the retirement age multiplied by the probability of retiring at that age, as shown below.

(a)	(b)	(c)	(b) x (c) = (d)	(a) x (d) = (e)
Possible Retirement Age "r"	Assumed Rate of Retirement at Age "r"	Probability of Person Age 55 Still Working at "r"	Probability of Person Age 55 Retiring at "r"	Component of Weighted Average Retirement Age
50	0.0500	1.0000	0.0500	2.5000
51	0.0500	0.9500	0.0475	2.4225
52	0.0500	0.9025	0.0451	2.3465
53	0.0500	0.8574	0.0429	2.2720
54	0.0500	0.8145	0.0407	2.1992
55	0.0500	0.7738	0.0387	2.1279
56	0.1000	0.7351	0.0735	4.1165
57	0.1000	0.6616	0.0662	3.7710
58	0.1000	0.5954	0.0595	3.4535
59	0.1500	0.5359	0.0804	4.7426
60	0.2000	0.4555	0.0911	5.4660
61	0.2000	0.3644	0.0729	4.4457
62	0.1750	0.2915	0.2915	18.0742
Weighted Average Retirement Age:				57.9376
Rounded to Nearest Age:				58

Assumed Form of Payment

Future retirees are assumed to elect a single life annuity form of payment.

Mortality Rates after Leaving Active Participation

Healthy and Disabled Lives: The RP-2014 Mortality Table with Blue Collar adjustment, adjusted to factor out Scale MP-2014 from the 2006 base year, then projected forward using Scale MP-2015 on a generational basis, with gender-specific Healthy Annuitant rates (adopted July 1, 2015).

Mortality for Current Liability

RP-2000 Combined Mortality Table projected as set forth in Treasury Regulation §1.412(l)(7)-1.

Postretirement Benefit Increases

None. (The Plan does not provide for any future postretirement benefit increases.)

Inactive Partially Vested Members

No liability was retained for contingently vested former participants currently age 65 or over, based on the assumption that they are either currently retired or will never apply for benefits; 45% of the liability was retained for those under age 65 to account for reciprocity agreements with related trusts. The retained contingent liability is reflected in the present value of accrued nonvested benefits.

Records with No Birth Date

New records with no birth date are assumed to be 41 years old. Records that are not new and have no birth date used the same birth date as the prior year's valuation.

Activity Assumption

This valuation uses an hours assumption provided by the Trustees of 165,000 and currently negotiated hourly contribution rates. The hourly base contribution rate is assumed to be \$4.75, so the assumed contribution is \$783,750. This assumption is spread evenly over all active participants (adopted July 1, 2016).

Benefits Not Valued

None.

Changes in Actuarial Assumptions Since Prior Valuation

- The interest rate used for funding and withdrawal liability was updated from 6.25% to 6.00% to better reflect anticipated future experience.
- The Trustees changed the activity assumption from 200,000 hours to 165,000 hours to better reflect anticipated industry activity.
- The method used to spread the activity assumption over the active population was changed. We now assume all actives work the same number of hours. Previously, we assumed actives would work hours that are proportional to the hours worked in the prior year.
- Effective July 1, 2016, the current liability interest rate was re-established within the statutory interest rate corridor, effective July 1, 2016.
- Effective July 1, 2016, the statutory current liability mortality basis was re-established based on the RP-2000 Combined Mortality Table projected as set forth in Treasury Regulation §1.412(I)(7)-1.
- The annual operating expense assumption was changed from \$490,000 to \$520,000 to better reflect expected future expenses.

Appendix B

Summary of Basic Benefit Structure

Plan Identification

EIN: 91-6123695
Plan Number: 001
Plan Year: July 1 to June 30

Normal Retirement Benefits

Pre-July 1, 2011

Benefits: 1.2% x contributions made for the participant as a monthly benefit
= 14.4% x contributions per year

Eligibility: Normal Retirement Age is age 60 with five pension credits.

Post-July 1, 2011

Benefits: 1.0% x contributions made for the participant as a monthly benefit
= 12.0% x contributions per year

Eligibility: Normal Retirement Age is age 62 with five pension credits.

Early Retirement Benefits

Benefits: The normal retirement benefit (based on contributions to date) reduced by age according to the following scale:

Age at Retirement	Benefits earned prior to July 1, 2011	Benefits earned on or after July, 2011
62	1.0000	1.0000
61	1.0000	0.9200
60	1.0000	0.8400
59	0.9200	0.7600
58	0.8400	0.6800
57	0.7600	0.6000
56	0.6800	0.5600
55	0.6000	0.5200
54	0.5600	0.4800
53	0.5200	0.4400
52	0.4800	0.4000
51	0.4400	0.3600
50	0.4000	0.3200

Eligibility: Age 50 with five pension credits.

Vesting (Withdrawal before Retirement)

A participant who leaves with five pension credits is 100% vested in his normal and early retirement benefits based on contributions to date.

Disability Benefits

Benefits: None.

Eligibility: N/A.

Death Benefits

Benefits: A 50% joint and survivor annuity payable any time after the participant's early retirement date.

Eligibility: Five pension credits and married at death.

Forms of Pension Payment

The normal form of payment for a single employee is a life annuity. A participant may elect to receive a reduced benefit payable for life with 50%, 66⅔%, 75%, or 100% of such reduced benefit continued to his or her spouse upon the death of the employee. In addition, a participant may elect to receive a further reduced benefit in order to receive the normal form benefit amount if the spouse predeceases the employee.

Plan Changes Since Prior Valuation

None.

Ad Hoc Benefit Increases

(Improvements that do not change the "Basic Benefit Structure")

None.

Benefit Structure of the Plan

Effective Date	Description
Prior to July 1, 1974	\$37.56 per year of pension credit.
July 1, 1974	5.4% of yearly contributions for benefits.
July 1, 2001	2.1% of yearly contributions for benefits.
July 1, 2003	1.2% of yearly contributions for benefits.
July 1, 2011	1.0% of yearly contributions for benefits. The normal retirement age was also changed to 62 on a prospective basis.

Appendix C

Summary of Actuarial Cost Methods

Background

Before we explain our cost method, we must first define the term "actuarial present value".

An actuarial present value is the value, on a given date, of a series of future benefit payments, future compensation payments or future contributions, where each amount in the series is:

- adjusted for the probability of increase (or decrease) due to such events as death, changes in marital status, etc.;
- multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, retirement, death, disability, termination of employment, etc.; and
- discounted at an assumed rate of investment return.

Our actuarial assumptions estimate these probabilities and the investment return.

Actuarial Cost Method

The actuarial cost method used to calculate the funding requirements of the Plan is called the **traditional unit credit** actuarial cost method.

The actuarial cost method is used to calculate the normal cost and unfunded actuarial accrued liability, which in turn determine the funding requirements of the Plan (minimum amount required and maximum amount deductible). The cost method allocates the total cost of the Plan over time: the **normal cost** is that portion of the cost allocated to the current year, and the **actuarial accrued liability** is the actuarial present value of costs allocated to prior years. The **unfunded actuarial accrued liability** (UAAL) is equal to the excess, if any, of the actuarial accrued liability over the actuarial value of assets.

Under the traditional unit credit cost method, the normal cost is the actuarial present value of all benefits expected to be earned during the plan year; for active employees, these earned benefits are generally due to additional covered hours worked. The actuarial accrued liability is the actuarial present value of all benefits accrued to date, generally based on service to date.

Funding Requirements

Each year contributions must fund the normal cost and amortize a portion of the unfunded actuarial accrued liability. IRS minimum and maximum funding rules specify amortization schedules for the unfunded actuarial accrued liability, depending on the source of increase or decrease (Plan improvements, assumption changes, gains/losses, etc.).

Another factor can also affect funding requirements. The excess, if any, of past contributions over the accumulated minimum required amount creates a **credit balance**, which may be used to offset the minimum required contribution.

Asset Valuation Method

The **actuarial value of assets** is the asset value used to determine funding requirements. The actuarial asset method is a part of the Plan's cost method and may include smoothing to reduce large year-to-year swings in funding requirements due to asset gains and losses.

The method used recognizes market value gains and losses in relation to the investment assumption over the five-year periods following the occurrence of the gains or losses. However, this method cannot produce an asset value that varies from market value more than 20%.

Withdrawal Liability

The market value of assets is used for determining unfunded vested benefit liability for withdrawal liability.

The PBGC Technical Update 10-3 Simplified Method is used to determine the value of adjustable benefits that were removed under the rehabilitation plan that are included for withdrawal liability purposes.

Only the vested benefits are valued for withdrawal liability calculations.

Changes in Actuarial Methods Since Prior Valuation

None.

Appendix D

Glossary of Actuarial Terms

The following definitions are from a glossary adopted by the Actuarial Standards Board. In some cases, the definitions have been modified for specific applicability to the Alaska Ironworkers Pension Plan. Defined terms are capitalized throughout this Appendix.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of this value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date, with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Experience Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Funding Reserve (Deficit)

The amount by which the Market Value of Assets exceeds the Present Value of Accrued Benefits may be referred to as the Funding Reserve. If the Market Value of Assets is smaller it may be referred to as the Deficit.

Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Present Value of Accrued Benefits

The expected discounted value of projected benefits corresponding to benefits accrued as of the valuation date.

Present Value of Future Benefits

The expected discounted value of projected benefits corresponding to both the accrued benefits and the unaccrued benefits.

Projected Benefits

Those pension plan benefit amounts which are expected to be paid at various future times to current participants under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.

Unaccrued Benefits

Projected Benefits that have not yet been earned as of the valuation date.

Unfunded Actuarial Accrued Liability

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Appendix E

Supporting Actuarial Calculations July 1, 2016

The exhibits in this section provide detail of the actuarial calculations on which this report is based. The calculations reflect draft financial statements provided by the Auditor on February 2, 2017.

There were no changes to the draft asset information provided by the auditor last year that had any impact on the supporting actuarial calculations provided in our July 1, 2015 Actuarial Valuation.

Exhibit 1

Summary of Market Value of Assets

The summary of plan assets on a market-value basis as of July 1, 2016 is shown below.

1. Assets	
a. Cash & equivalents	\$804,141
b. Short term funds	2,402,720
c. U.S. securities	2,054,750
d. Corporate bonds	985,303
e. Foreign bonds	100,662
f. Common stocks	14,120,356
g. 102-12 investment entity	4,551,414
h. Limited partnerships	4,262,833
i. Mutual funds	6,637,776
j. Exchange traded funds	13,534,466
k. Employer contributions receivable	207,744
l. Accrued interest and dividends receivable	63,275
m. Security transactions receivable	41,349
n. Other accruals or receivables	<u>100</u>
o. Total	49,766,889
2. Liabilities	
a. Accounts payable	94,754
b. Security transactions payable	147,822
c. Other payables	<u>0</u>
d. Total	242,576
3. Total	
[(1o) - (2d)]	49,524,313

Exhibit 2

Summary of Income and Disbursements

The change in the Market Value of Assets from July 1, 2015 to July 1, 2016 is shown below.

1. Market Value of Assets as of July 1, 2015	\$56,786,143
2. Income	
a. Net appreciation (depreciation) in fair value of investmenets	(2,193,625)
b. Interest and dividends	859,179
c. Employer contribution for plan year	2,276,515
d. Other income	<u>1,779</u>
e. Total	943,848
3. Disbursements	
a. Benefit payments to participants	7,451,069
b. Custodial fees	17,195
c. Investment manager fees	223,150
d. Investment performance fees	252
e. Administrative expenses	<u>514,012</u>
f. Total	8,205,678
4. Net increase / decrease [(2e) - (3f)]	(7,261,830)
5. Market Value of Assets as of July 1, 2016 [(1) + (4)]	49,524,313

Exhibit 3

Actuarial Value of Assets

The Actuarial Value of Assets is the Market Value of Assets less a weighted average of asset gains / (losses) over a four-year period (five-year smoothing), but not less than 80% nor more than 120% of the Market Value of Assets. The Actuarial Value of Assets as of July 1, 2016 is determined below.

1.	Market Value of Assets as of June 30, 2016		\$49,524,313
2.	Unrecognized asset gains / (losses) for the plan years ending		
	<u>Plan Year Ending</u>	<u>Gain / (Loss) for Year</u>	<u>Percent Unrecognized</u>
			<u>Amount Unrecognized</u>
a.	June 30, 2016	(\$4,947,324)	80% (3,957,859)
b.	June 30, 2015	(3,140,625)	60% (1,884,375)
c.	June 30, 2014	5,511,835	40% 2,204,734
d.	June 30, 2013	3,556,575	20% 711,315
e.	Total		(2,926,185)
3.	Preliminary Actuarial Value of Assets as of July 1, 2016 [(1) - (2e)]		52,450,498
4.	Actuarial Value of Assets as of July 1, 2016 [(3), but not less than 80% x (1), nor more than 120% x (1)]		52,450,498

Exhibit 4

Asset (Gain) / Loss for Prior Plan Year on Actuarial Value of Assets

The asset (gain) / loss is the difference between the expected and actual values of the Actuarial Value of Assets. An asset gain is negative because it represents a decrease from the expected Unfunded Actuarial Accrued Liability. The asset (gain) / loss for the plan year ending June 30, 2016 is determined below.

1. Expected Actuarial Value of Assets	
a. Actuarial Value of Assets as of July 1, 2015	\$55,701,125
b. Employer contributions for plan year	2,276,515
c. Benefit payments	7,451,069
d. Administrative expenses	514,012
e. Expected investment return based on 6.25% interest rate	3,306,247
f. Expected Actuarial Value of Assets as of July 1, 2016 [(a) + (b) – (c) – (d) + (e)]	53,318,806
2. Actuarial Value of Assets as of July 1, 2016	52,450,498
3. Asset (gain) / loss [(1f) – (2)]	868,308
4. Estimated investment return on Actuarial Value of Assets	4.61%

Exhibit 5

Funding Standard Account for Prior Plan Year

The Funding Standard Account for the plan year ending June 30, 2016 is determined below.

1. Outstanding balances as of July 1, 2015	
a. Amortization charges	\$58,186,053
b. Amortization credits	23,793,272
2. Charges to Funding Standard Account	
a. Funding Deficiency as of July 1, 2015	4,792,391
b. Normal Cost as of July 1, 2015	781,860
c. Amortization charges as of July 1, 2015	10,616,445
d. Interest on (a), (b), and (c) to end of plan year	<u>1,011,919</u>
e. Total	17,202,615
3. Credits to Funding Standard Account	
a. Credit Balance as of July 1, 2015	0
b. Employer contributions for plan year	2,276,515
c. Amortization credits as of July 1, 2015	2,832,877
d. Interest on (a), (b), and (c) to end of plan year	235,099
e. Full Funding Credit	<u>0</u>
f. Total	5,344,491
4. Credit Balance / (Funding Deficiency) as of June 30, 2016	(11,858,124)

Exhibit 6

Active Participants by Age and Service

The number of active participants summarized by attained age and years of vesting service as of July 1, 2016 is shown below.

Age	Years of Credited Service										Total
	< 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-24	6	3	0	0	0	0	0	0	0	0	9
25-29	6	21	9	0	0	0	0	0	0	0	36
30-34	5	7	8	3	0	0	0	0	0	0	23
35-39	1	7	12	10	1	0	0	0	0	0	31
40-44	5	1	3	4	2	0	0	0	0	0	15
45-49	2	1	3	5	3	1	0	0	0	0	15
50-54	2	2	1	2	4	1	1	1	0	0	14
55-59	0	2	2	3	1	0	1	0	0	0	9
60-64	0	1	0	0	0	0	0	0	0	0	1
65-69	0	0	0	0	0	0	0	0	0	0	0
70+	0	0	0	0	0	0	0	0	0	0	0
Total	27	45	38	27	11	2	2	1	0	0	153

Exhibit 7

Actuarial Balance Sheet

The total plan requirements compared to the total value of plan resources as of July 1, 2016 is shown below.

Plan Requirements	
1. Present value of active participant benefits	
a. Retirement	\$7,951,521
b. Termination	1,596,880
c. Death	78,189
d. Disability	<u>0</u>
e. Total	9,626,590
2. Present value of inactive participant benefits	
a. Retired participants	66,066,114
b. Terminated vested participants	12,552,969
c. Beneficiaries	6,496,646
d. Disabled participants	<u>2,283,522</u>
e. Total	87,399,251
3. Reserve for expenses	0
4. Total plan requirements [(1e) + (2e) + (3)]	97,025,841
Plan Resources	
5. Actuarial Value of Assets	52,450,498
6. Unfunded Actuarial Accrued Liability	42,187,826
7. Present Value of Future Normal Costs	2,387,517
8. Total plan resources [(5) + (6) + (7)]	97,025,841

Exhibit 8

Normal Cost

The Normal Cost is the amount allocated to the current plan year under the Plan's actuarial cost method. The Normal Cost as of July 1, 2016 is determined below.

1. Present value of active participant benefits	
a. Retirement	\$171,091
b. Termination	72,117
c. Death	2,132
d. Disability	<u>0</u>
e. Total	245,340
2. Beginning of year loading for administrative expenses	505,069
3. Total	750,409

Exhibit 9

Unfunded Actuarial Accrued Liability

The Actuarial Accrued Liability represents that portion of the Present Value of Benefits that is allocated to service before the current plan year. The Unfunded Actuarial Accrued Liability is the excess (deficiency) of the Actuarial Accrued Liability over the Actuarial Value of Assets. The Unfunded Actuarial Accrued Liability as of July 1, 2016 is determined below

1. Actuarial Accrued Liability for active participants	
a. Retirement	\$6,051,814
b. Termination	1,128,842
c. Death	58,417
d. Disability	<u>0</u>
e. Total	7,239,073
2. Actuarial Accrued Liability for inactive participant benefits	
a. Retired participants	66,066,114
b. Terminated vested participants	12,552,969
c. Beneficiaries	6,496,646
d. Disabled participants	<u>2,283,522</u>
e. Total	87,399,251
3. Total Actuarial Accrued Liability [(1e) + (2e)]	94,638,324
4. Actuarial Value of Assets	52,450,498
5. Reserve for expenses	0
6. Unfunded Actuarial Accrued Liability [(3) – (4) + (5)]	42,187,826

Exhibit 10

Actuarial (Gain) / Loss for Prior Plan Year

The Actuarial (Gain) / Loss for the prior plan year is the difference between the expected and actual Unfunded Actuarial Accrued Liability as of the beginning of the current plan year. The Actuarial (Gain) / Loss for the plan year ending June 30, 2016 is determined below

1. Unfunded Actuarial Accrued Liability as of July 1, 2015	\$39,185,170
2. Normal Cost as of July 1, 2015	781,860
3. Interest on (1) and (2) to end of plan year	2,497,938
4. Subtotal [(1) + (2) + (3)]	42,464,969
5. Employer contributions for plan year	2,276,515
6. Interest on (5) to end of plan year	58,044
7. Subtotal [(5) + (6)]	2,334,559
8. Changes in Actuarial Accrued Liability	
a. Plan amendments	0
b. Changes in actuarial assumptions	2,289,202
c. Changes in cost method	<u>0</u>
d. Total	2,289,202
9. Expected Unfunded Actuarial Accrued Liability as of July 1, 2016 [(4) - (7) + (8d)]	42,419,612
10. Actual Unfunded Actuarial Accrued Liability as of July 1, 2016	42,187,826
11. Actuarial (Gain) / Loss on Actuarial Value of Assets	868,308
12. Actuarial (Gain) / Loss on Actuarial Accrued Liability [(10) - (9) - (11)]	(1,100,094)
13. Total Actuarial (Gain) / Loss for prior plan year [(11) + (12)]	(231,786)
14. Total Actuarial (Gain) / Loss for prior plan year subject to amortization	(231,788)

Exhibit 11

Current Annual Cost and Minimum Required Contribution

The Current Annual Cost is the Plan's cost under the minimum funding requirements prior to the recognition of the Full Funding Limitation and any Credit Balance. The Minimum Required Contribution is the amount needed to avoid a Funding Deficiency in the Funding Standard Account. These amounts for the plan year beginning July 1, 2016 are determined below.

1. Charges for plan year	
a. Funding Deficiency as of July 1, 2016	\$11,858,124
b. Normal Cost	750,409
c. Amortization charges (on \$52,831,910)	10,611,206
d. Interest on (a), (b), and (c) to end of plan year	1,393,184
e. Additional Funding Charge	<u>0</u>
f. Total	24,612,923
2. Credits for plan year	
a. Amortization credits (on \$22,502,208)	2,827,660
b. Other credits	0
c. Interest on (a) and (b) to end of plan year	<u>169,660</u>
d. Total	2,997,320
3. Current Annual Cost for plan year [(1f) - (2d)]	21,615,603
4. Full Funding Credit for plan year	
a. Full Funding Limitation	62,869,570
b. Full Funding Credit [(3) - (4a), but not less than \$0]	0
5. Credit Balance for plan year	
a. Credit Balance as of July 1, 2016	0
b. Interest on (a) to end of plan year	<u>0</u>
c. Total	0
6. Minimum Required Contribution for plan year [(3) - (4b) - (5c), but not less than \$0]	21,615,603

Exhibit 12

Charges and Credits for Funding Standard Account

The amortization charges and credits for the Funding Standard Account for the plan year beginning July 1, 2016 are determined below.

1. Charges as of July 1, 2016

Date <u>Established</u>	Description	Amortization <u>Amount</u>	Remaining <u>Years</u>	Outstanding <u>Balance</u>
a. July 1, 2000	Combination of bases	\$4,534,859	6	\$24,340,798
b. July 1, 2002	Actuarial loss (1)	438,175	1	438,175
c. July 1, 2003	Actuarial loss (1)	714,965	2	1,389,460
d. July 1, 2004	Actuarial loss (1)	627,060	3	1,776,708
e. July 1, 2004	Change in assumptions (4)	261,401	18	3,000,163
f. July 1, 2005	Actuarial loss (1)	347,713	4	1,277,154
g. July 1, 2006	Actuarial loss (1)	20,265	5	90,484
h. July 1, 2006	Change in assumptions (4)	67,188	20	816,882
i. July 1, 2008	Change in assumptions (4)	39,670	7	234,740
j. July 1, 2009	Actuarial loss (1)	668,848	8	4,402,615
k. July 1, 2009	Change in assumptions (4)	735,811	8	4,843,387
l. July 1, 2009	Change in cost method (5)	1,569,259	3	4,446,328
m. July 1, 2011	Change in assumptions (4)	47,257	10	368,685
n. July 1, 2015	Change in assumptions (4)	316,374	14	3,117,129
o. July 1, 2016	Change in assumptions (4)	222,361	15	2,289,202
p. Total		10,611,206		52,831,910

2. Credits as of July 1, 2016

Date <u>Established</u>	Description	Amortization <u>Amount</u>	Remaining <u>Years</u>	Outstanding <u>Balance</u>
a. July 1, 2002	Change in assumptions (4)	\$43,005	16	\$460,677
b. July 1, 2003	Plan amendment (3)	76,154	17	845,755
c. July 1, 2007	Actuarial gain (1)	389,402	6	2,029,704
d. July 1, 2007	Change in assumptions (4)	24,747	21	308,591
e. July 1, 2008	Actuarial gain (1)	223,628	7	1,323,280
f. July 1, 2010	Actuarial gain (1)	98,919	9	713,183
g. July 1, 2010	Change in assumptions (4)	27,113	9	195,480
h. July 1, 2010	Plan amendment (3)	468,661	9	3,378,949
i. July 1, 2011	Actuarial gain (1)	63,522	10	495,581
j. July 1, 2012	Actuarial gain (1)	119,371	11	997,948
k. July 1, 2012	Change in assumptions (4)	35,569	11	297,362
l. July 1, 2013	Actuarial gain (1)	181,958	12	1,617,042

m.	July 1, 2013	Change in assumptions (4)	7,161	12	63,636
n.	July 1, 2014	Actuarial gain (1)	250,597	13	2,351,559
o.	July 1, 2014	Change in assumptions (4)	387,682	13	3,637,946
p.	July 1, 2014	Change in cost method (5)	141,510	8	931,474
q.	July 1, 2015	Actuarial gain (1)	266,146	14	2,622,253
r.	July 1, 2016	Actuarial gain (1)	22,515	15	231,788
s.	Total		2,827,660		22,502,208
3.	Net outstanding balance [(1p) - (2s)]				30,329,702
4.	Credit Balance / (Funding Deficiency) as of July 1, 2016				(11,858,124)
5.	Accumulated reconciliation account				0
6.	Balance test result [(3) - (4) - (5)]				42,187,826
7.	Unfunded Actuarial Accrued Liability as of July 1, 2016				42,187,826

Exhibit 13

Current Liability

In accordance with IRS requirements, the Current Liability has been calculated at 3.18%. The Current Liability as of July 1, 2016 is determined below.

1. Current Liability			
	<u>Count</u>	<u>Vested Benefits</u>	<u>All Benefits</u>
a. Participants in pay status	569	\$93,537,229	\$93,537,229
b. Participants with deferred benefits	101	14,648,339	19,646,034
c. Active participants	<u>153</u>	<u>12,287,209</u>	<u>12,473,399</u>
d. Total	823	120,472,777	125,656,662
2. Expected increase in Current Liability for benefit accruals during year			995,219
3. Expected release from "RPA 94" current liability			0
4. Expected distributions during year			7,416,711
5. Market Value of Assets			49,524,313
6. Current Liability Funded Percentage [(5) ÷ (1d)]			39.41%

Exhibit 14

Full Funding Limitation

The Full Funding Limitation for the plan year ending June 30, 2017 and the tax year ending June 30, 2017 is determined below. The bracketed numbers are as of the beginning of the plan year. The other numbers are as of the end of the plan year.

		Minimum Required Contribution	Maximum Deductible Contribution
1. ERISA Actuarial Accrued Liability	6.25%		
a. Actuarial Accrued Liability	[\$94,638,324]	\$100,316,623	\$100,316,623
b. Normal Cost	[750,409]	795,434	795,434
c. Expected distributions	[7,705,369]	8,167,691	8,167,691
d. Subtotal [(a) + (b) - (c)]		92,944,366	92,944,366
2. Current Liability	3.18%		
a. Current Liability	[\$125,656,662]	129,652,544	129,652,544
b. Normal Cost	[995,219]	1,026,867	1,026,867
c. Expected distributions	[7,806,594]	8,054,844	8,054,844
d. Subtotal [(a) + (b) - (c)]		122,624,567	122,624,567
3. Adjusted Plan Assets			
a. Actuarial Value of Assets	[52,450,498]	55,597,528	55,597,528
b. Market Value of Assets	[49,524,313]	52,495,772	52,495,772
c. Credit Balance	[0]	0	0
d. Undeducted employer contributions	[0]	0	0
e. Expected distributions	[7,705,369]	8,167,691	8,167,691
f. ERISA assets [min{(a), (b)} - (c) - (d) - (e)]		44,328,081	44,328,081
g. Current Liability assets [(a) - (d) - (e)]		47,429,837	47,429,837
4. Full Funding Limitation			
a. ERISA [max{(1d) - (3f), \$0}]		48,616,285	48,616,285
b. Current Liability [max{90% × (2d) - (3g), \$0}]		62,932,273	62,932,273
c. Full Funding Limitation [max{(a), (b)}]		62,932,273	62,932,273

Exhibit 15

Maximum Deductible Contribution under IRC Section 404

The Maximum Deductible Contribution under IRC Section 404 for the tax year beginning July 1, 2016 is determined below.

1.	Minimum Required Contribution for plan year beginning July 1, 2016	\$21,615,603
2.	Preliminary Maximum Deductible Contribution under IRC Section 404 for tax year	
a.	Normal Cost	750,409
b.	10-year amortization of Unfunded Actuarial Accrued Liability	5,407,523
c.	Interest to earlier of tax year end or plan year end	<u>369,476</u>
d.	Total	6,527,408
3.	Full Funding Limitation for tax year	62,869,570
4.	Unfunded 140% of Current Liability as of June 30, 2017	
a.	Current Liability (for IRC Section 404 purposes) projected to end of year	123,145,697
b.	Actuarial Value of Assets (for IRC Section 404 purposes) projected to end of year	47,961,557
c.	Unfunded 140% of Current Liability [140% × (a) - (b), but not less than \$0]	124,442,419
5.	Maximum Deductible Contribution under IRC Section 404 for tax year [greater of (1) and (2d), but not more than (3), nor less than (4c)]	124,442,419

There are alternative calculations of the Maximum Deductible Contribution under IRC Section 404 that may produce a different amount than illustrated above. Additionally, deductibility of contributions to a defined contribution plan maintained for the same employees may be affected by the 25% of pay limitation for defined benefit and defined contribution plans combined. Employers should consult their tax advisors regarding the deductibility of contributions.

Exhibit 16

Charges and Credits for Maximum Deductible Contribution

The 10-year limitation bases for the preliminary Maximum Deductible Contribution as of June 30, 2016 are determined below.

1. 10-year limitation bases	<u>Amortization</u>	<u>Remaining</u>	<u>Outstanding</u>
<u>Date Established</u>	<u>Amount</u>	<u>Years</u>	<u>Balance</u>
a. July 1, 2016	\$5,407,523		\$42,187,826
b. Total	5,407,523		42,187,826
2. Net outstanding balance			42,187,826
3. Undeducted employer contributions			0
4. Balance test [(2) - (3)]			42,187,826
5. Unfunded Actuarial Accrued Liability as of June 30, 2016			42,187,826

Exhibit 17

Present Value of Accumulated Plan Benefits

Accumulated Plan Benefits are benefits earned to date, based on pay history and service rendered to date, expected to be paid in the future to retired, terminated vested, and active participants, and beneficiaries of active or former participants. The Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) as of July 1, 2015 and July 1, 2016 is shown below.

	07/01/15	07/01/16
1. Present Value of vested Accumulated Plan Benefits		
a. Active participants	\$6,757,848	\$7,120,555
b. Retired participants	67,187,293	66,066,114
c. Terminated vested participants	9,116,215	9,321,085
d. Beneficiaries	6,000,818	6,496,646
e. Disabled participants	<u>2,289,965</u>	<u>2,283,522</u>
f. Total	91,352,139	91,287,922
2. Present Value of non-vested Accumulated Plan Benefits	3,534,156	3,350,402
3. Present Value of all Accumulated Plan Benefits [(1f) + (2)]	94,886,295	94,638,324
4. Market Value of Assets	56,786,143	49,524,313
5. Funded percentage on Market Value of Assets		
a. Vested benefits [(4) ÷ (1f)]	62.16%	54.25%
b. All benefits [(4) ÷ (3)]	59.85%	52.33%
6. Actuarial Value of Assets	55,701,125	52,450,498
7. Funded percentage on Actuarial Value of Assets		
a. Vested benefits [(6) ÷ (1f)]	60.97%	57.46%
b. All benefits [(6) ÷ (3)]	58.70%	55.42%

Exhibit 18

Change in Present Value of Accumulated Plan Benefits

The change in the Present Value of Accumulated Plan Benefits (determined on a plan continuation basis in accordance with FASB ASC Topic 960) from July 1, 2015 to July 1, 2016 is shown below.

1. Present Value of all Accumulated Plan Benefits as of July 1, 2015	\$94,886,295
2. Changes	
a. Reduction in discount period	5,701,076
b. Benefits accumulated plus actuarial (gain) / loss	(787,180)
c. Benefit payments	(7,451,069)
d. Plan amendments	0
e. Change in assumptions	<u>2,289,202</u>
f. Total	(247,971)
3. Present Value of all Accumulated Plan Benefits as of July 1, 2016 [(1) + (2f)]	94,638,324

Exhibit 19

Unfunded Vested Benefit Liability for Withdrawal Liability Calculations

Withdrawal liability payments are based on unfunded vested benefit liability. Vested benefit liability is the present value of benefits earned to date, excluding benefits for non-vested participants. These liabilities have been determined as of June 30, 2015 and June 30, 2016. However, if there is a termination by mass withdrawal during the year, a separate calculation would have to be performed.

	06/30/15	06/30/16
1. Present Value of vested Accumulated Plan Benefits		
a. Active participants	\$6,757,848	\$7,120,555
b. Retired participants	67,187,293	66,066,114
c. Terminated vested participants	9,116,215	9,321,085
d. Beneficiaries	6,000,818	6,496,646
e. Disabled participants	<u>2,289,965</u>	<u>2,283,522</u>
f. Total vested benefits	91,352,139	91,287,921
2. Additional Vested Benefit Liability for Unamortized Benefit Reductions	1,728,363	1,598,768
3. Total Vested Benefit Liability	93,080,502	92,886,690
4. Market Value of Assets	56,786,143	49,524,313
5. Funded ratio [(4) ÷ (3)]	61.01%	53.32%
6. Unfunded Vested Benefit Liability [(3) - (4), but not less than \$0]	\$36,294,359	\$43,362,377