

**TAB 15**



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# Alaska Ironworkers Pension Plan

## July 1, 2016 Actuarial Valuation

**Prepared by:**

**Mark C. Olleman**

FSA, EA, MAAA

**Kelly S. Coffing**

FSA, EA, MAAA

Milliman, Inc.  
1301 Fifth Avenue, Suite 3800  
Seattle WA 98101-2605

Tel +1 206 624 7940  
Fax +1 206 623 3485  
[milliman.com](http://milliman.com)

## 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:

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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.

**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,

Redacted by the U.S. Department of the Treasury

Mark C. Olliman, FSA, EA, MAAA  
Principal and Consulting Actuary  
Enrolled Actuary Number **Redacted**

March 7, 2017  
Date

Redacted by the U.S. Department of the Treasury

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

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# Summary of Results

A. Overview

	Actuarial Valuation for Plan Year Beginning	
	July 1, 2015	July 1, 2016
<b>Assets</b>		
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%
<b>Funded Status</b>		
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%
<b>Withdrawal Liability</b>		
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
<b>Credit Balance and Contribution Requirements</b>		
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
<b>Participant Data</b>		
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
<b>Certification</b>		
PPA Zone Status	Critical (Red)	Critical & Declining
Scheduled Progress	Forefall Insolvency	Forefall 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(1)(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.

**E. Plan Assets**

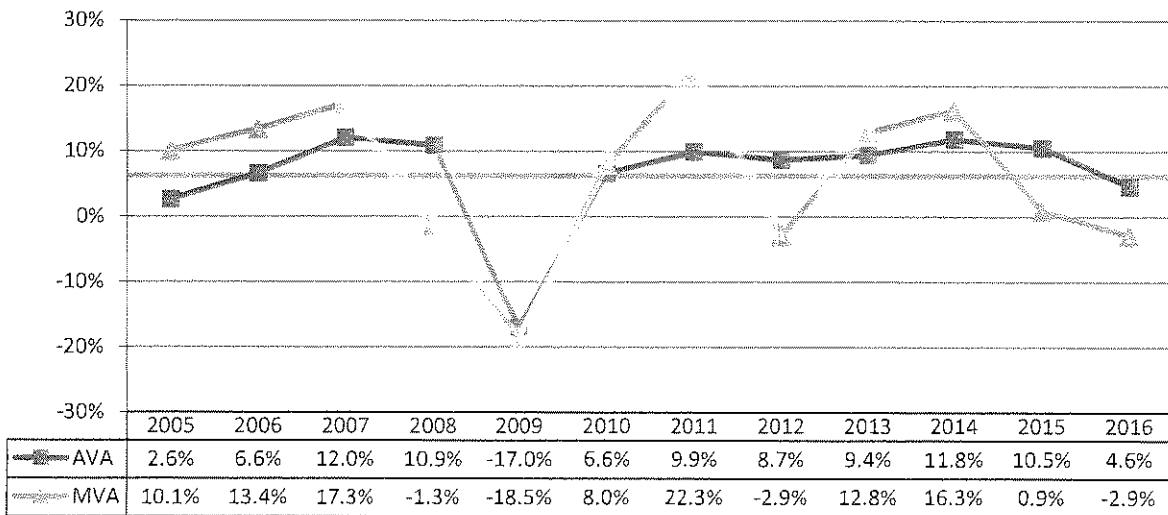
The Plan's Market Value of Assets (MVA) is the net asset value available for benefits as shown on the Plan's financial statements. For funding calculations under ERISA, the Plan uses an asset-smoothing method, which recognizes market value investment gains and losses over a period of five years. The 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.

Year	Rate of Return Market	Rate of Return Assumed	Market Value of Assets (in millions)	Actuarial Value of Assets (in millions)	Change in Assets (in millions)
2012	-2.9%	6.7%	\$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**

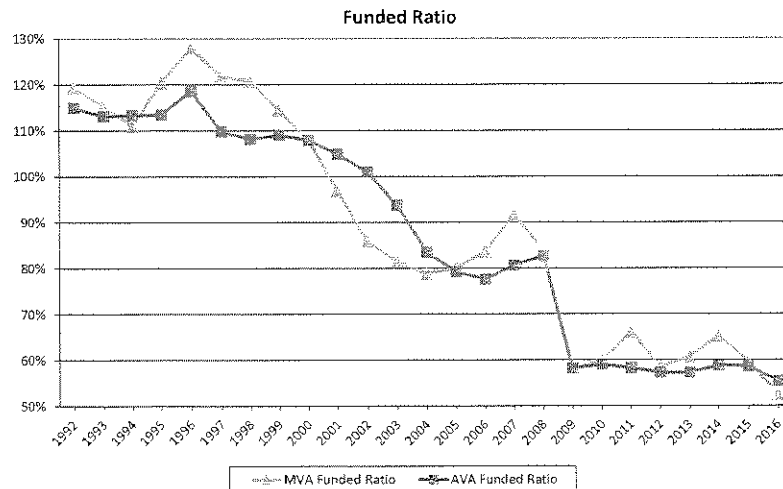


F. Funded Status

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.

July 1	Prior Year Investment Return	(A) Market Value of Assets (MVA)	(B) Actuarial Value of Assets (AVA)	(C) Present Value of Accrued Benefits*	(A) - (C) MVA Funding Reserve/ (Shortfall)	(A) / (C) MVA Funded Ratio	(B) - (C) AVA Funding Reserve/ (Shortfall)	(B) / (C) 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.

Projected 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.

### 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.

Year End	Residual Benefit Liability (RBL)	Value of Assets Available to Cover RBL	Assets Available 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).

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 Plan Year	Net Assessment Payments Plan Year	Minimum Required Contributions		Employee 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	\$ 1,745,854	\$ 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.

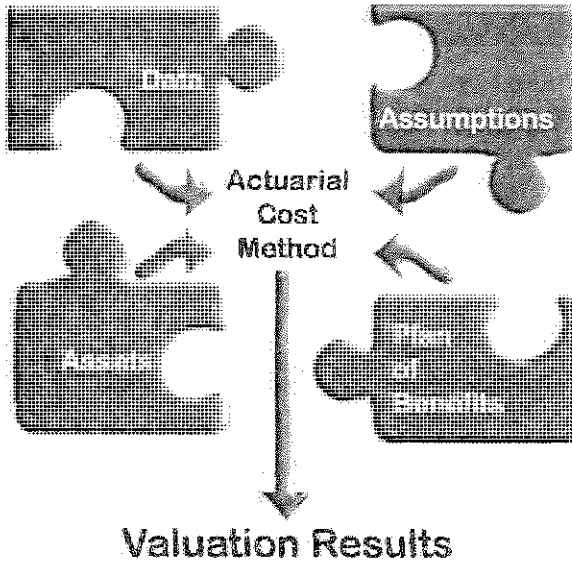
**Uncertain Future:** Despite a rehabilitation plan that is designed to take all reasonable measures by making large contribution increases and benefit reductions, the Plan still needs experience more favorable than assumed to return to health. Based on experience through July 1, 2016, the Plan is projected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

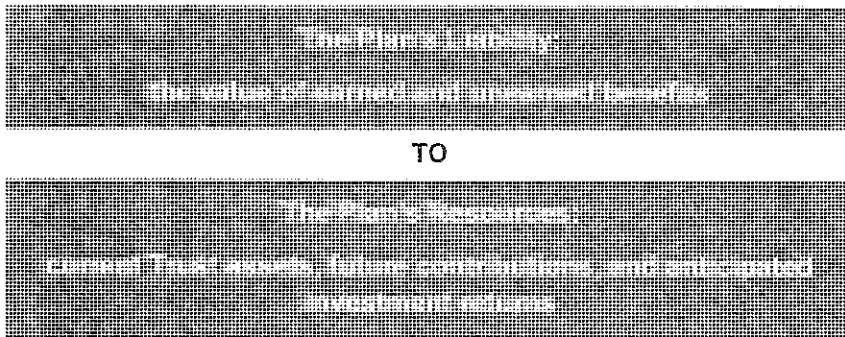
There are four necessary elements of an actuarial valuation: data, assumptions, assets, and a plan of benefits. Those elements, combined with an actuarial cost method, produce the actuarial valuation results.



**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:

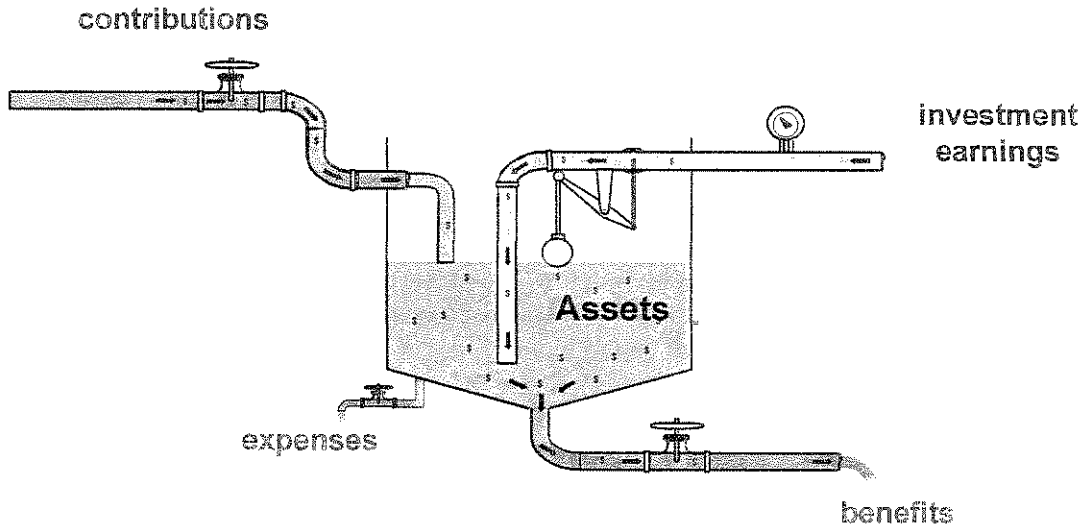


In the actuarial valuation, we start by projecting the future benefit payments that will be made from the Trust for current participants. These are used to determine the value of the Plan's liability. We then determine the value of the Plan's resources based on the current asset information and the actuarial 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.

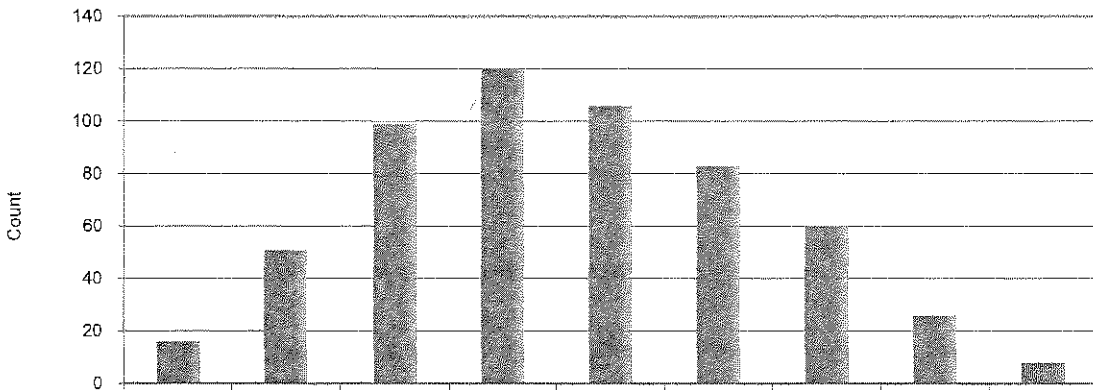
<b>Change in Net Assets Available for Benefits</b>		
	<b>June 30, 2015</b>	<b>June 30, 2016</b>
<b>Beginning of Year Market Value</b>	<b>\$61,268,718</b>	<b>\$56,786,143</b>
Contributions	3,123,859	2,276,515
Investment Earnings	534,270	(1,573,264)
Benefit Payments	(7,654,800)	(7,451,069)
Operating Expenses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



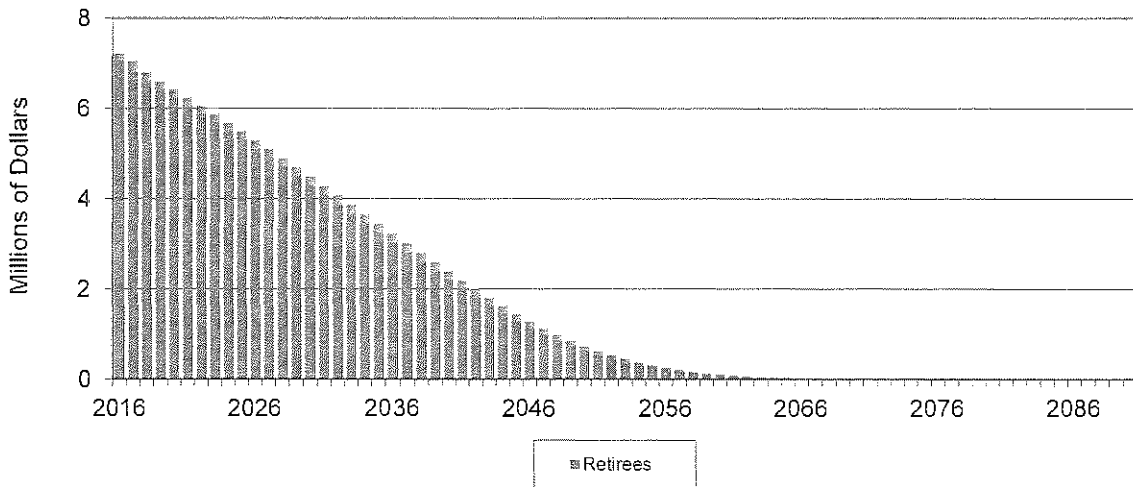
Age	54-55	56-58	59-64	65-69	70-74	75-79	80-84	85-89	90 & Over	Total
Count	16	51	99	120	106	83	60	28	8	569
Avg Mo Ben	1,147	909	1,702	1,146	933	728	815	622	1,813	1,072

**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).

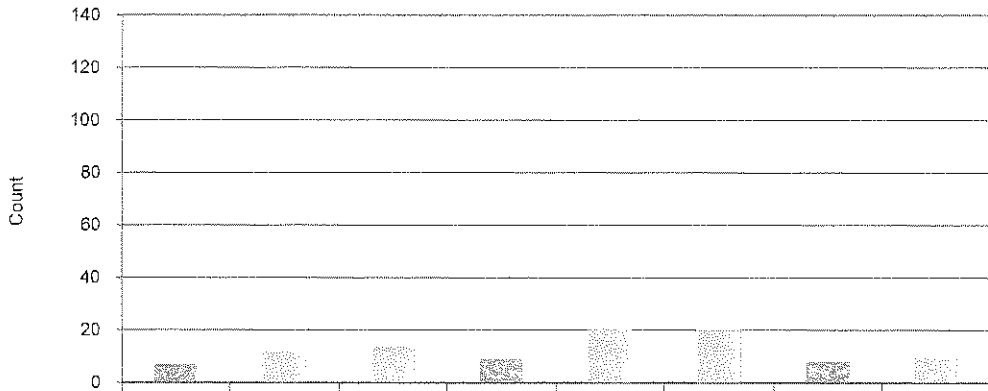


**E. Terminated and Inactive Participants**

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	44 & Less	45-49	50-54	55-59	60-64	65 & Over	Total
Count	7	12	14	9	21	8	101
Avg Mo Ben	541	630	1,232	1,286	2,053	982	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.

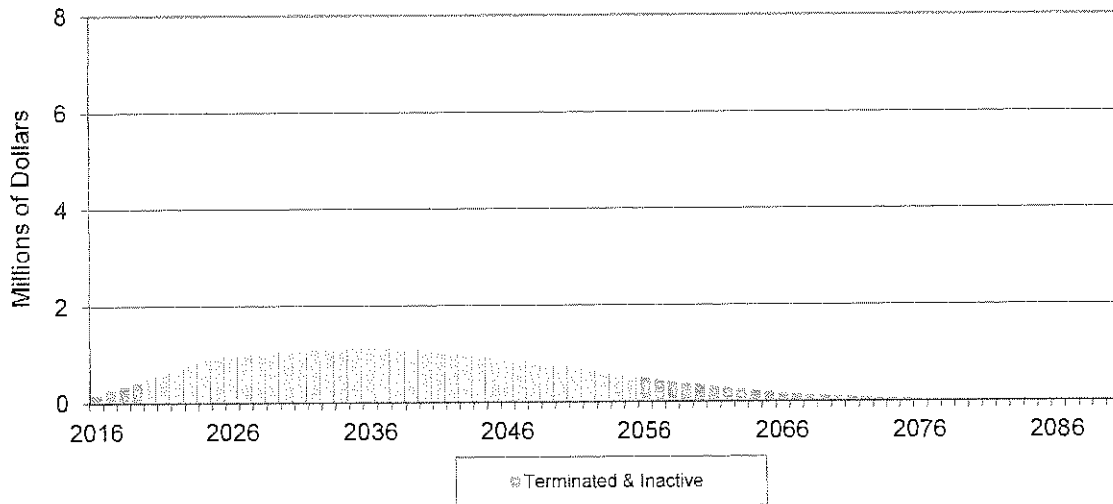
**Assumptions**

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**

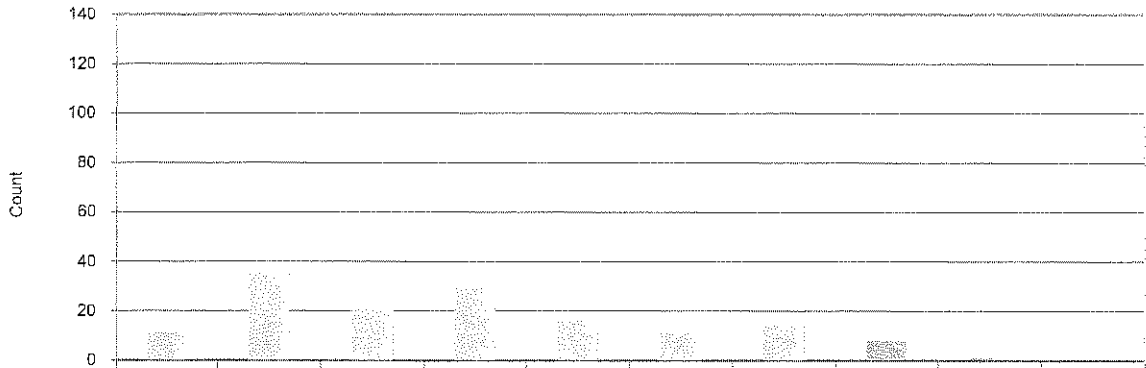
Based on the data and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to terminated and inactive participants.



**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**



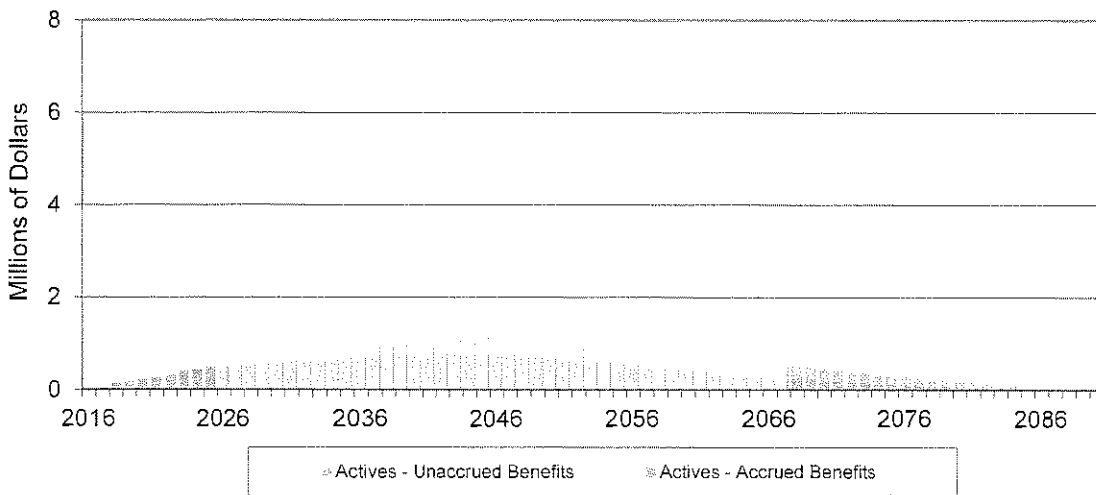
Age	24 & Less	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	Total
Count	12	36	22	30	17	12	15	8	1	0	153
Avg Mo Ben	75	229	438	745	967	1,151	1,936	1,761	57	0	749
Avg Svc Credit	1.4	3.2	5.6	8.2	8.2	9.5	12.8	12.2	1.0	0.0	6.9

**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**

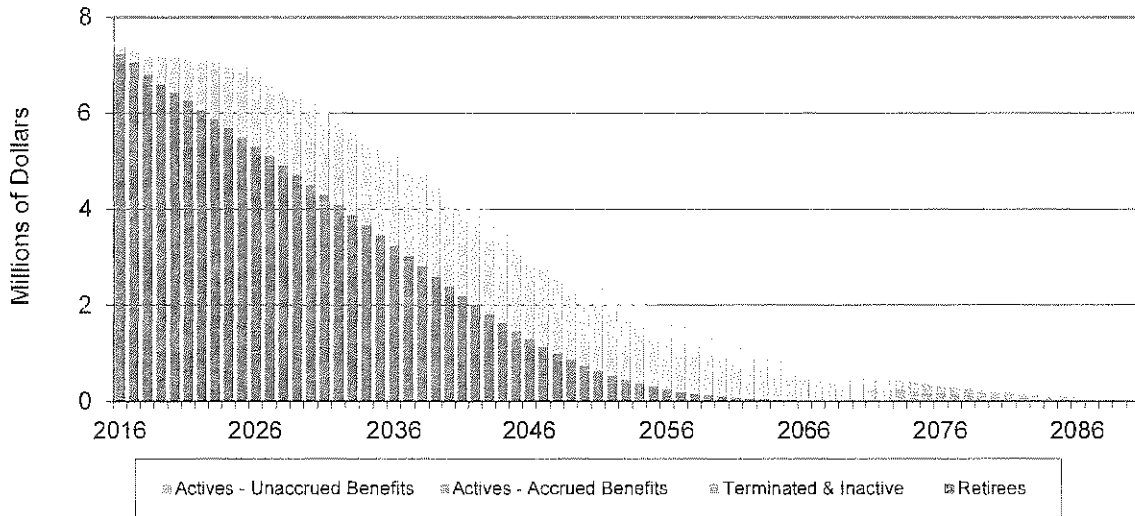
Based on the data, plan of benefits, and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to the participants that are currently active. Benefits earned in the past and anticipated to be earned in the future are both included.



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.

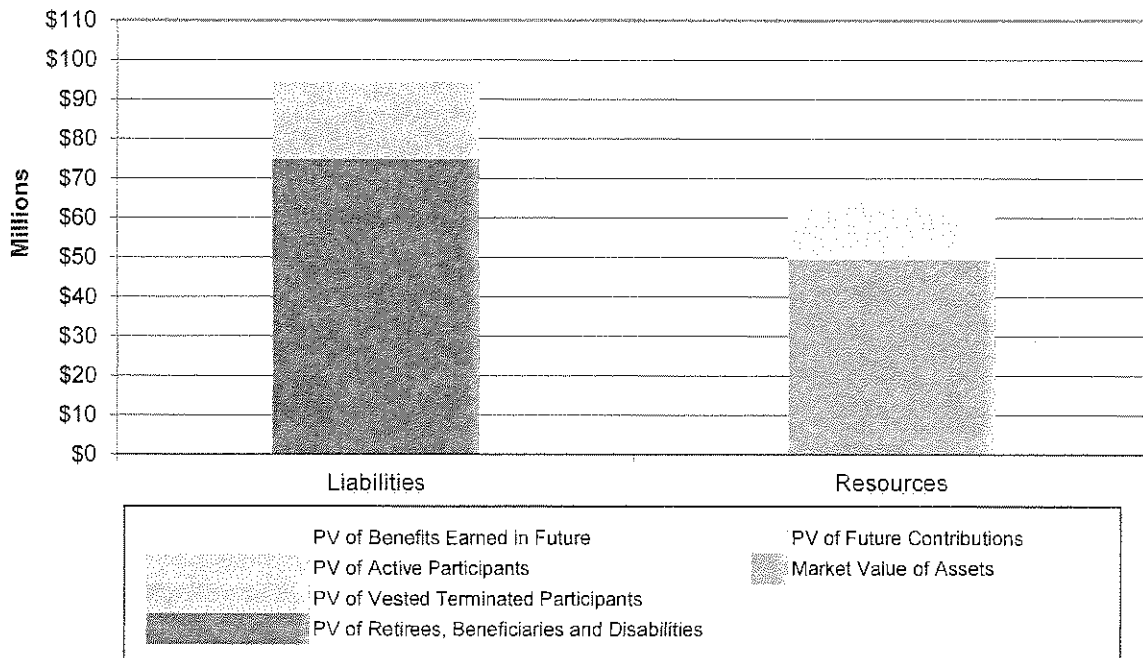
Summary of Plan Requirements	
Actuarial Present Value of All Future Benefits (all benefits shown above)	\$97.0 million
Actuarial Present Value of Accrued Benefits (Retirees, Terminated Vested, and Active Accrued)	\$94.6 million
Actuarial Value of Assets	\$52.5 million
Market Value of Assets	\$49.5 million

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

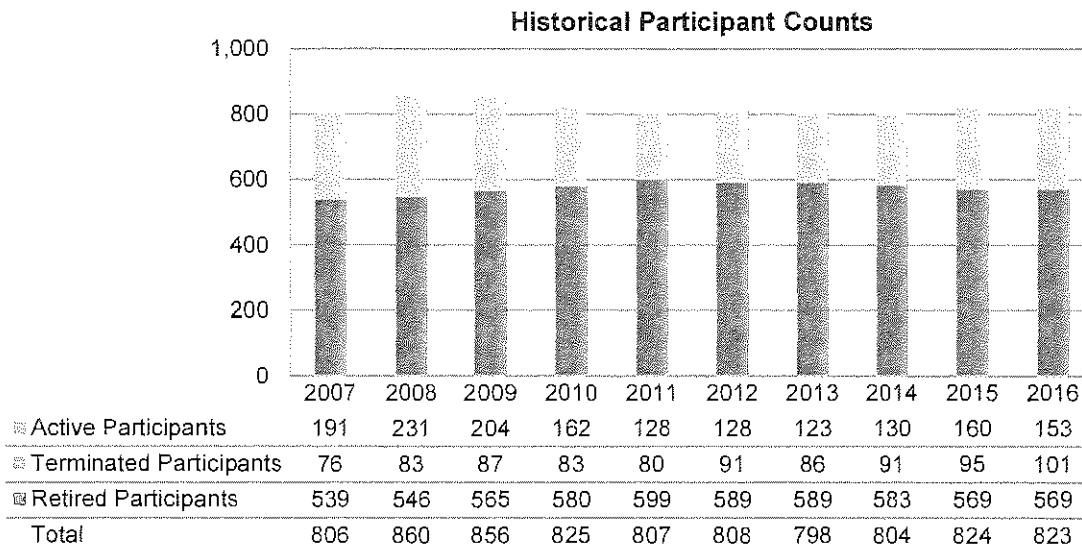
**A. Historical Investment Return**

Period Ended	1 Year	5 Years <sup>(1)</sup>	10 Years <sup>(1)</sup>	Since 1992 <sup>(1)</sup>
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.



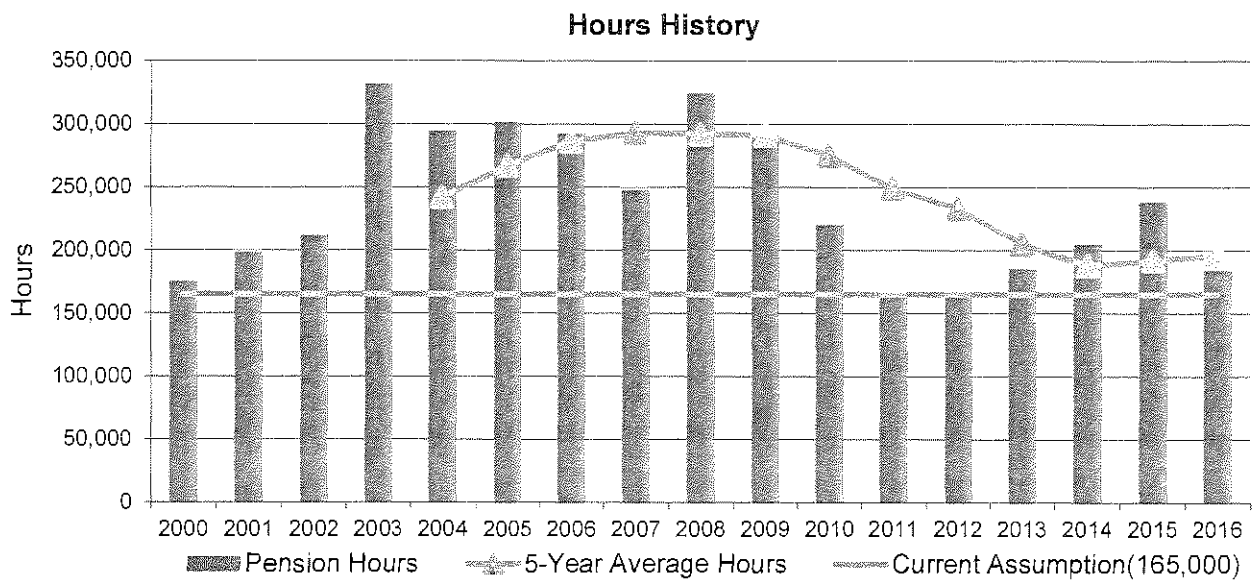
**C. Historical Hours and Contributions**

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 <sup>(1)</sup>	Rounded 5-Year Average Hours	Reciprocal Hours <sup>(1)</sup>	Total Contribution <sup>(2)</sup>
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

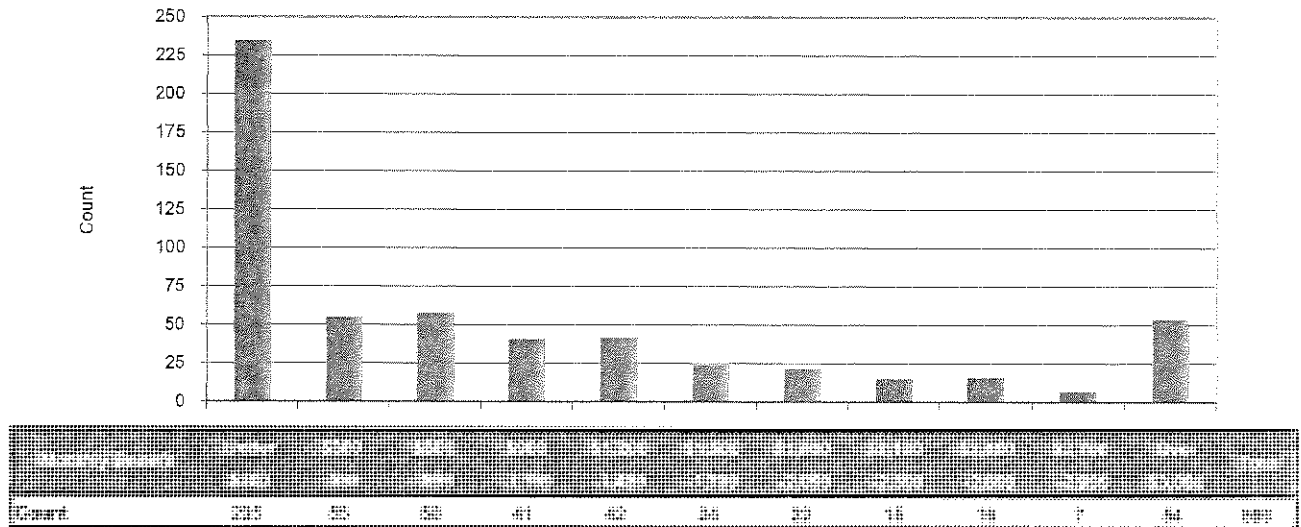
(1) Based on total hours reported in WPAS summary reports.

(2) Includes withdrawal liability payments.



**D. Retired Participant Statistics**

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

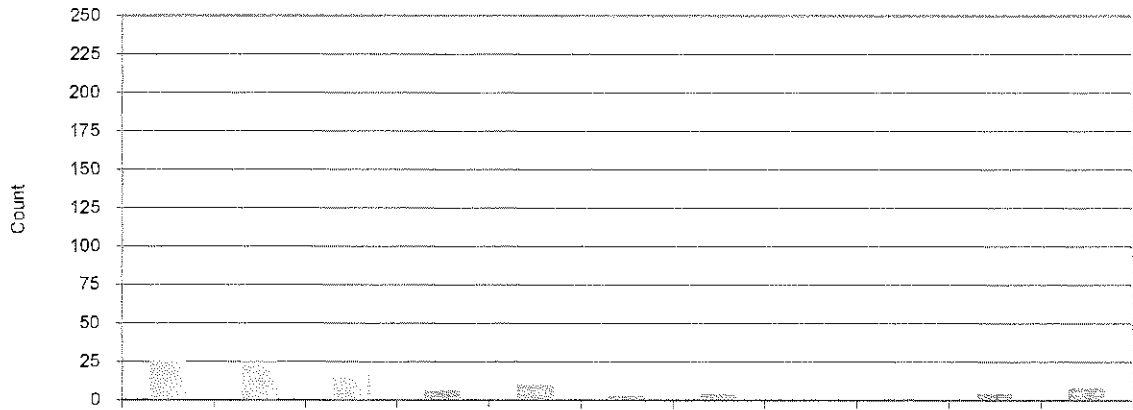


**Retired Participant Historical Information**

Plan Year	Number of Retirees, Beneficiaries, and Disabilities	Total Annual Payout	Average Monthly Payout
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**



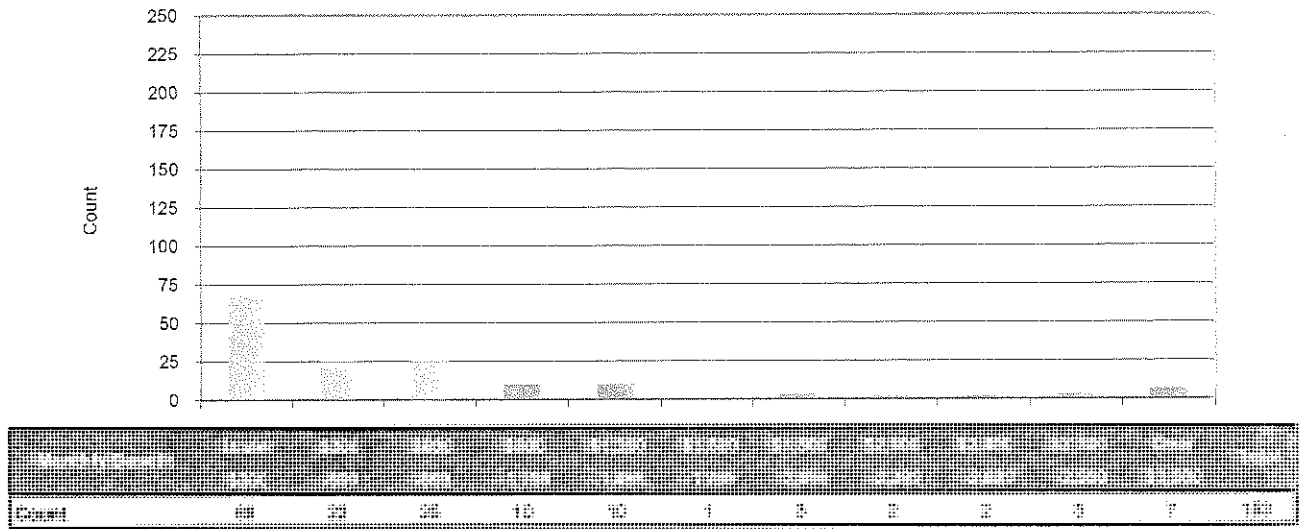
Monthly Benefit	Count
\$0	101
\$1	1
\$2	1
\$3	1
\$4	1
\$5	1
\$6	1
\$7	1
\$8	1
\$9	1
\$10	1
\$11	1
\$12	1
\$13	1
\$14	1
\$15	1
\$16	1
\$17	1
\$18	1
\$19	1
\$20	1
\$21	1
\$22	1
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\$81	1
\$82	1
\$83	1
\$84	1
\$85	1
\$86	1
\$87	1
\$88	1
\$89	1
\$90	1
\$91	1
\$92	1
\$93	1
\$94	1
\$95	1
\$96	1
\$97	1
\$98	1
\$99	1
\$100	1
\$101	1

**Vested Terminated Participant Historical Information**

Year	Number of Terminated Participants	Total Annual Benefits	Average Annual Benefit
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

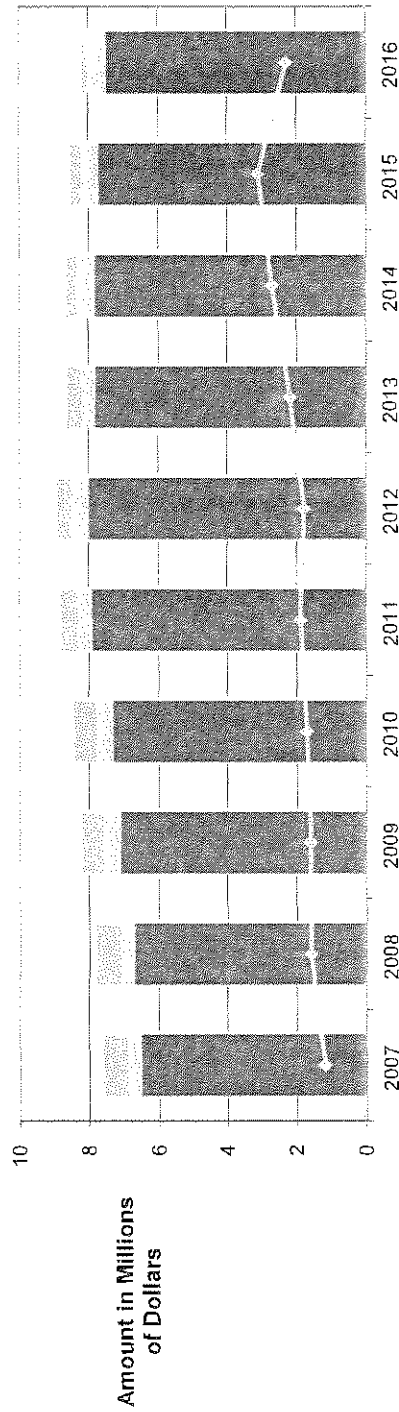
Plan Year	Number of Active Participants	Average Age	Average Years of Service
2006	227	40.7	6.4
2007	191	40.4	7.1
2008	231	38.5	6.1
2009	204	38.0	6.3
2010	162	37.0	7.0
2011	128	37.6	7.0
2012	128	38.1	7.4
2013	123	38.1	7.8
2014	130	38.0	7.7
2015	160	36.2	6.4
2016	153	37.3	6.9

**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)

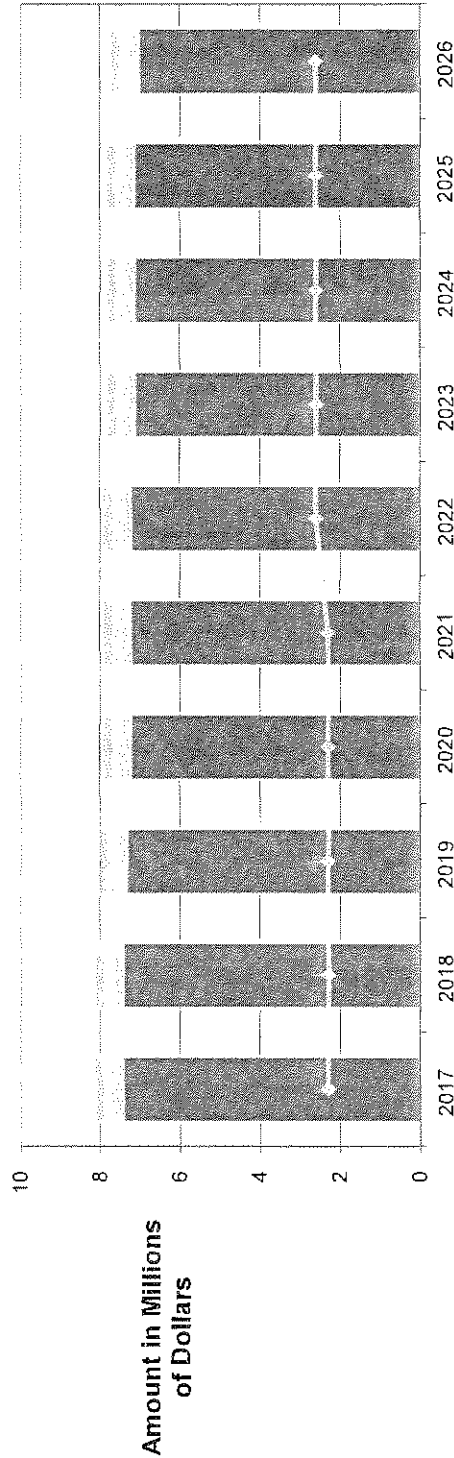


(1) Based on draft Auditor's Report.

### H. Projected Net Cash Flow

The following chart shows the relationship between contributions<sup>(1)</sup>, investment management expenses<sup>(2)</sup>, operating expenses<sup>(3)</sup>, and benefit payments<sup>(4)</sup> 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 <sup>(1)</sup>	2.3	2.3	2.3	2.3	2.3	2.6	2.6	2.6	2.6	2.6
(B) Investment Management Expenses <sup>(2)</sup>	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
(C) Operating Expenses <sup>(3)</sup>	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 <sup>(4)</sup>	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.



I. Historical Summary of Hourly Employer Contribution Rates

Effective Date		Hourly Employer Contribution Rate		
Year	Month	Inclusion of Benefits	Employer Only	Total Contribution
1955	July	\$0.15	\$0.00	\$0.15
1958	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):

Annual Death Expectancy (in years)					
Age	Sex	2015	2016	2015	2016
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).

Termination Years After Termination	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.

Retirement Age	Assumed Rate of Retirement at Age	Probability of Retiring at Age	Probability of Retiring at Age	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.

Retirement Age	Assumed Probability of Retirement at Age	Probability of Future Annuity Not Being Required	Probability of Future Annuity Being Required	Weighted 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(1)(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.

## Summary

## 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

7/5/2016

### 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 pian 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

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### 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

### Table 1

#### 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

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)

STATISTICS

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

2016-17

## Actuarial Balance Sheet

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

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**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

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## Normal Cost

## 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	0
e. Total	245,340
2. Beginning of year loading for administrative expenses	505,069
3. Total	750,409

(Continued)

### 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

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### 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	0
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)

Actuarial Valuation

### 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

Attachment 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

125,656,662

**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.

	<u>Count</u>	<u>Vested Benefits</u>	<u>All Benefits</u>
1. Current Liability			
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%

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### 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.

		Actuarial Value of Assets (Beginning)	Actuarial Value of Assets (End of Year)
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



Illustrations

**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.

### Limitations

#### 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	Amortization Amount	Remaining Years	Outstanding Balance
<u>Date Established</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

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### 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.

	2015	2016
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%

### 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 B**

**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.

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



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# Alaska Ironworkers Pension Plan

**July 1, 2015 Actuarial Valuation**

**Prepared by:**

**Mark C. Olleman**

FSA, EA, MAAA

**Kelly S. Coffing**

FSA, EA, MAAA

Milliman, Inc.

1301 Fifth Avenue, Suite 3800

Seattle WA 98101-2605

Tei +1 206 624 7940

Fax +1 206 623 3485

milliman.com

## July 1, 2015 Actuarial Valuation of the Alaska Ironworkers Pension Plan

The 2015 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, 2015.
- 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.

### 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,

Redacted by the U.S. Department of the Treasury

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

April 1, 2016  
Date

Redacted by the U.S. Department  
of the Treasury

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



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## Summary of Results

A. Overview

	Actuarial Valuation for Plan Year Beginning	
	July 1, 2014	July 1, 2015
<b>Assets</b>		
Market Value of Assets (MVA)	\$61,268,718	\$56,786,143
Actuarial Value of Assets (AVA)	\$55,193,938	\$55,701,125
Return for Prior Plan Year		
Market Value of Assets	16.3%	0.9%
Actuarial Value of Assets	11.8%	10.5%
<b>Funded Status</b>		
Present Value of Accrued Benefits	\$93,844,780	\$94,886,295
Market Funded Percentage	65.3%	59.8%
Actuarial (Pension Protection Act) Funded Percentage	58.8%	58.7%
<b>Withdrawal Liability</b>		
Present Value of Vested Benefits for Withdrawal Liability	\$89,968,699	\$91,352,139
Value of Unamortized Affected Benefit Reductions	1,850,336	1,728,363
Market Value of Assets for Withdrawal Liability	<u>(61,268,718)</u>	<u>(56,786,143)</u>
Unfunded Present Value of Vested Benefits (UVB)	\$30,550,317	\$36,294,359
<b>Credit Balance and Contribution Requirements</b>		
Actuarial Accrued Liability	\$93,844,780	\$94,886,295
Reserve for Expenses	\$0	\$0
Actuarial Value of Assets	\$(55,193,938)	\$(55,701,125)
Unfunded Actuarial Accrued Liability	\$38,650,842	\$39,185,170
Credit Balance at End of Prior Plan Year	\$965,246	\$(4,792,391)
Normal Cost (including expenses)	\$757,830	\$781,860
Plan Year Employer Contributions	\$3,123,859	Not Available
Maximum Deductible Contribution	\$121,535,537	\$123,204,751
<b>Participant Data</b>		
Active participants	130	160
Inactive participants with deferred benefits	91	95
Retired participants	473	461
Disabled participants	34	31
Beneficiaries	<u>76</u>	<u>77</u>
Total participants	804	824
<b>Certification</b>		
PPA Zone Status	Critical (Red)	Critical (Red)
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, 2015 to:

- Review the experience for the plan year ending June 30, 2015, 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, 2015.
- Determine the Plan's unfunded vested benefit liability as of June 30, 2015 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, 2015 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, 2015. There were no changes to the plan provisions during the 2014-2015 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 demographic assumptions were updated based on the Demographic Assumptions Study prepared concurrently with this valuation. This increased the present value of accrued benefits by approximately \$3.3 million. The changes included:
  - The rates of termination were revised.
  - The rates of retirement for terminated participants were revised.
  - The mortality assumptions were updated to the gender specific blue collar RP-2014 Mortality Tables, adjusted to factor out Scale MP-2014 to the 2006 base year, then projected forward using Scale MP-2015 on a generational basis. Employee rates are used before benefit commencement and Healthy Annuitant rates are used after benefit commencement.
- Effective July 1, 2015, the current liability interest rate was re-established within the statutory interest rate corridor, effective July 1, 2015.
- Effective July 1, 2015, 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 \$470,000 to \$490,000 to better reflect expected future expenses.

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

**E. Plan Assets**

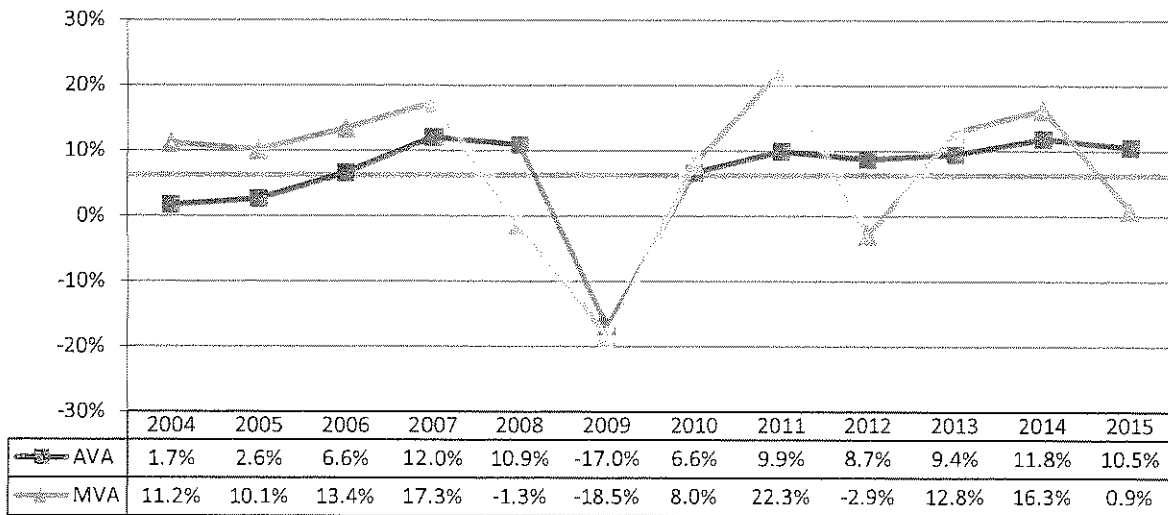
The Plan's Market Value of Assets (MVA) is the net asset value available for benefits as shown on the Plan's financial statements. For funding calculations under ERISA, the Plan uses an asset-smoothing method, which recognizes market value investment gains and losses over a period of five years. The 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			
2011	22.3%	9.9%	\$65.4	\$57.6	\$9.0
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)

The Plan's investment return of 0.91% last year was 5.34% less than anticipated by the actuarial assumption of 6.25%.

Over the past 10 years, the Plan's assets have averaged a 6.1% 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 6.25% 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**

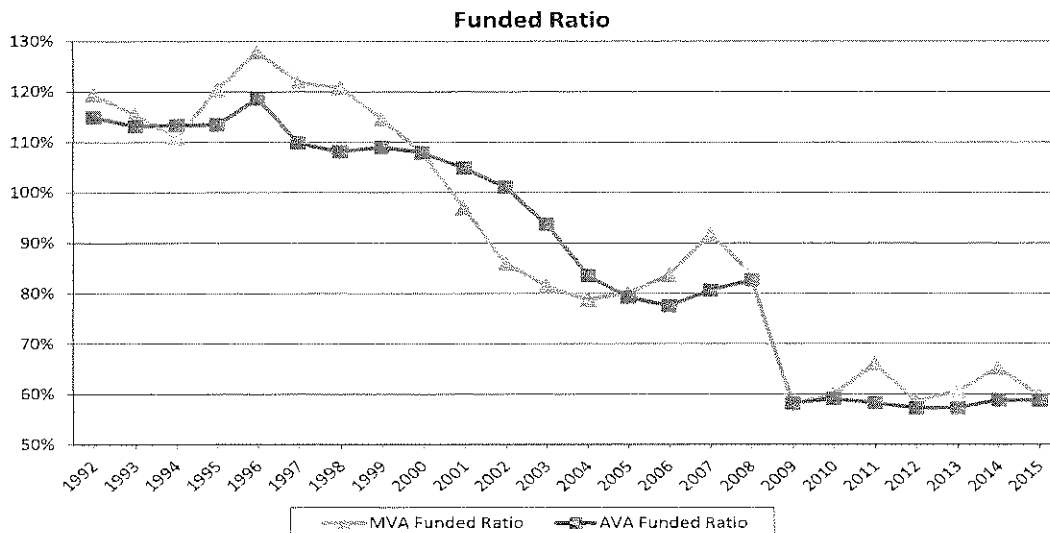


F. Funded Status

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%

\* 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, 2016) and will include the AVA funded ratio for 2013, 2014, and 2015, 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.

<b>Prior Year Changes in the Funding Reserve/(Shortfall)</b>		
(all values in millions)		
July 1, 2014 Funding Reserve / (Shortfall)		\$ (32.58)
Interest on Unfunded	\$(2.04)	
Contributions with Interest	3.22	
Value of Benefit Accruals with Interest	(0.35)	
Expenses with Interest	<u>(0.50)</u>	
Expected Change in the Reserve / (Shortfall)		0.33
Asset Gain / (Loss)	\$ (3.14)	
Assumption Changes	(3.25)	
Experience Gain / (Loss) on Liabilities (Experience different than assumed)	<u>0.54</u>	
Combined Impact of Gains, Losses, and Changes		<u>\$ (5.85)</u>
July 1, 2015 Funding Reserve / (Shortfall)		\$ (38.10)

The funding shortfall was expected to decrease by \$0.33 million due to the value of benefit accruals, expenses, and interest on the beginning of year funding shortfall being less than contributions. However, the net impact of earning 5.34% less than the actuarial assumption of 6.25%, combined with a liability increase due to assumption changes, resulted in an increase in the shortfall. In total, the Plan now has a funding shortfall of \$38.10 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.

<b>Projected Changes in the Funding Reserve/(Shortfall)</b>		
(all values in millions)		
July 1, 2015 Funding Reserve / (Shortfall)		\$ (38.10)
Interest on Unfunded	\$(2.38)	
Expected Contributions with Interest	3.15	
Value of Benefit Accruals with Interest	(0.33)	
Expenses with Interest	<u>(0.50)</u>	
Expected Change in the Reserve / (Shortfall)		<u>\$ (0.06)</u>
Projected January 1, 2016 Funding Reserve / (Shortfall)		\$ (38.16)

The table above shows that if the actuarial assumptions are realized, the Plan's funding shortfall is projected to increase by \$60,000 during the plan year. This means that the contributions expected to come into the Plan during 2015/2016 are less than the expected cost of benefit accruals, expenses, and interest on the funding shortfall.



**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.

Year	Unfunded Vested Benefit Liability (Plan)	Value of Assets Held by Withdrawn Employer	Market Assets for Withdrawal Liability	Unfunded Vested Benefit Liability
2010	\$24,374,434	\$2,174,957	\$16,363,604	\$31,055,353
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

As of June 30, 2015, the interest assumption for determining vested benefit liability is based on the valuation rate of 6.25%.

**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
2011	Critical (Red)
2012	Critical (Red)
2013	Critical (Red)
2014	Critical (Red)
2015	Critical (Red)

As shown above, the Plan is in the red zone (critical) for the plan year beginning July 1, 2015. Please see our separate certification letters for details.

**J. Contributions for the 2015/2016 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 9 for details).
- Amortization payment to pay for past liabilities (see Exhibit 13 for details).

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 for Year	Plan Assessment Payment for Year	Minimum Required Contributions		Employee Contributions (Actual)	Credit Balance at End of Plan Year
			Dollars Paid Balance	Other Plan 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	3,055,120*	(11,100,000)*

\* Expected based on hours assumption of 236,000 in 2015/2016 (including 200,000 hours tied to benefits and 36,000 reciprocal hours for funding only) and average contribution rates.

The contribution of \$3,123,859 for the plan year ended June 30, 2015 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, 2014, the Plan's market assets covered 65.3% of the value of its accrued benefits. Due primarily to investment return during 2014/2015 of 0.91%, which was 5.34% below the 6.25% investment return assumption, the funded ratio has decreased from 65.3% to 59.8% at July 1, 2015.

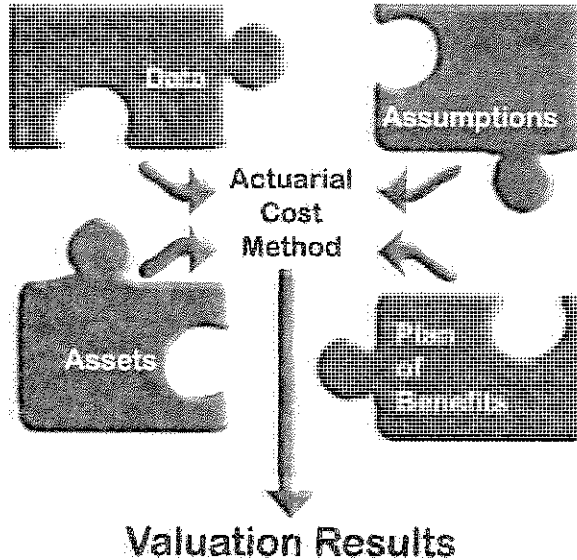
**Uncertain Future:** Despite a rehabilitation plan that is designed to take all reasonable measures by making large contribution increases and benefit reductions, the Plan still needs experience more favorable than assumed to return to health. Based on experience through July 1, 2015, the Plan's funded percentage is projected to decrease slowly.

**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

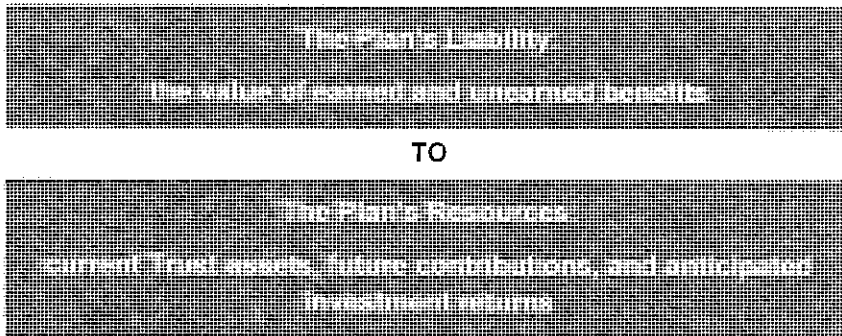
There are four necessary elements of an actuarial valuation: data, assumptions, assets, and a plan of benefits. Those elements, combined with an actuarial cost method, produce the actuarial valuation results.



### 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.

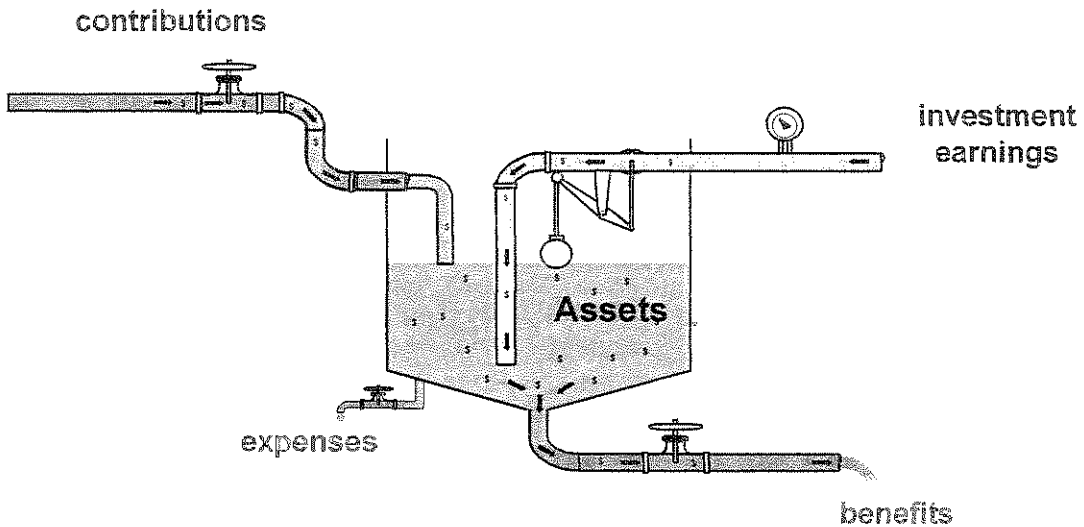
This report compares:



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.

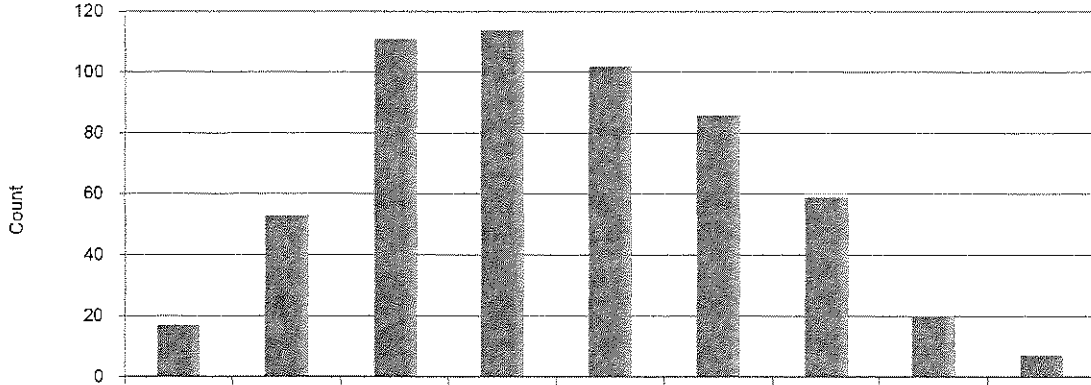
Change in Net Assets Available for Benefits		
	June 30, 2014	June 30, 2015
<b>Beginning of Year Market Value</b>	<b>\$57,890,426</b>	<b>\$61,268,718</b>
Contributions	2,663,353	3,123,859
Investment Earnings	8,958,256	534,270
Benefit Payments	(7,777,462)	(7,654,800)
Operating Expenses	<u>(465,855)</u>	<u>(485,904)</u>
Net Change in Assets	\$3,378,292	\$(4,482,575)
<b>End of Year Market Value</b>	<b>\$61,268,718</b>	<b>\$56,786,143</b>
Market Value Investment Return	16.3%	0.9%

**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**



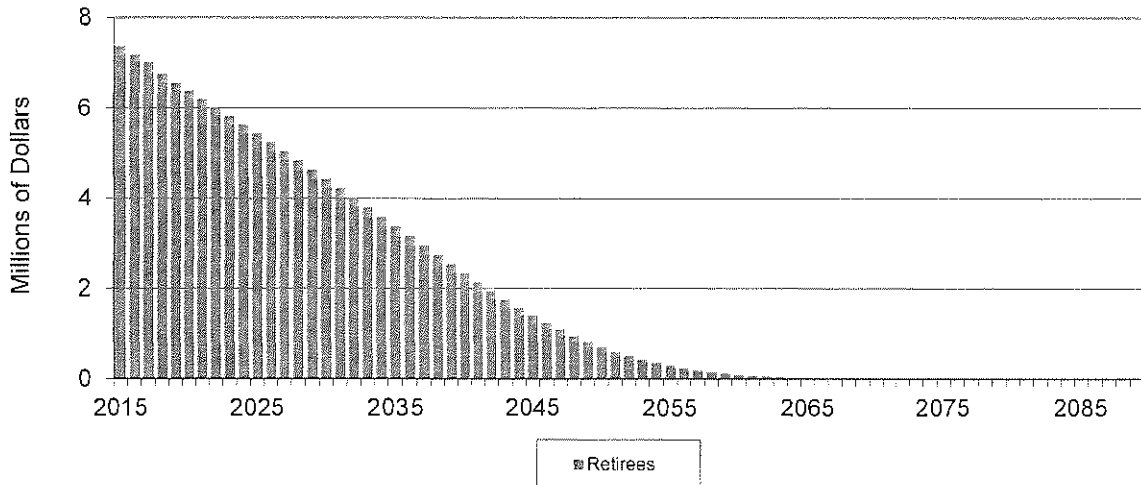
Age	54 & Less	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90 & Over	Total
Count	17	53	111	114	102	86	59	20	7	569
Avg Mo Ben	1,112	1,129	1,661	1,136	816	768	868	852	1,347	1,089

**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).

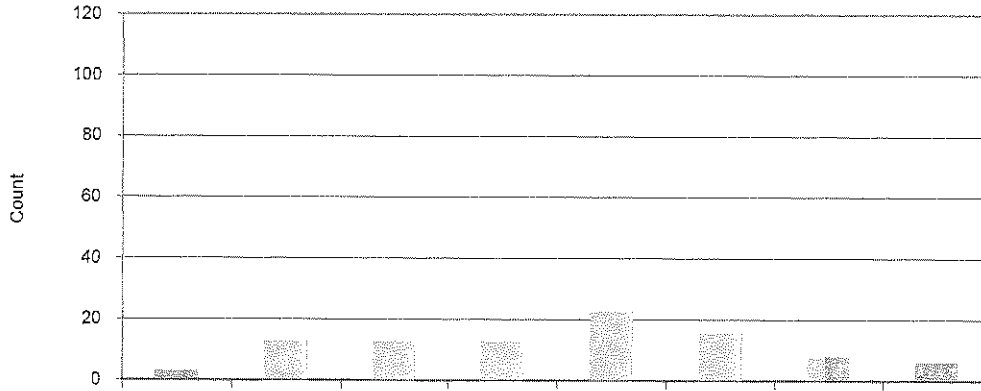


**E. Terminated and Inactive Participants**

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	3	13	13	13	23	16	8	6	95
Avg Mo Ben	446	789	1,374	1,128	2,256	643	668	156	1,185

In addition to the 95 vested terminated participants represented above, there are 718 non-vested participants who may still vest due to reciprocity or returning as an active.

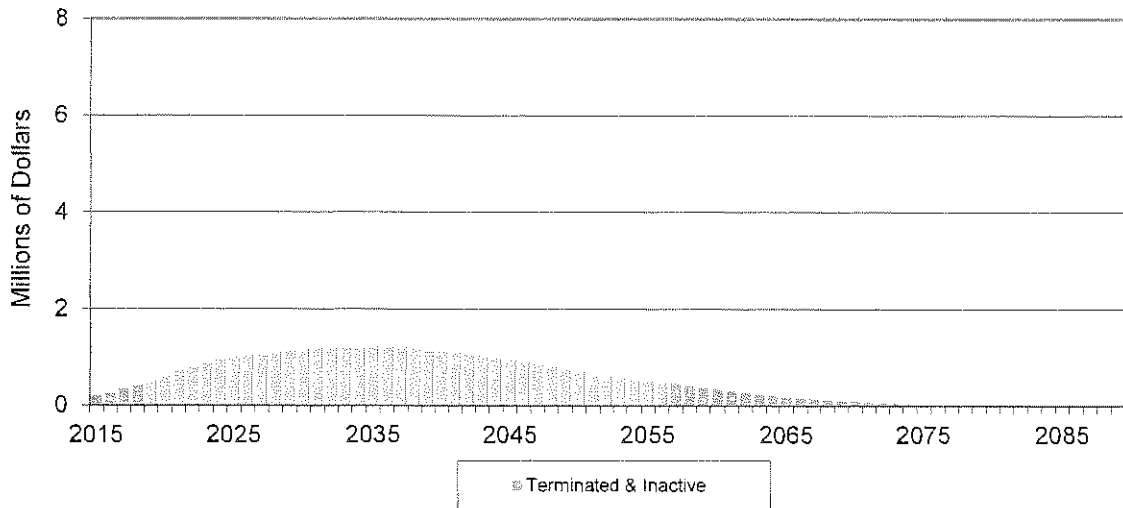
**Assumptions**

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.

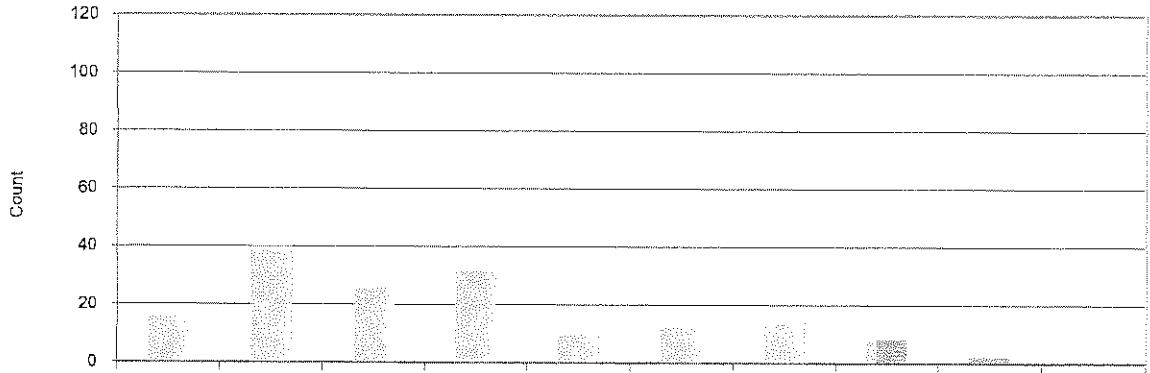




**F. Active Participants**

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**



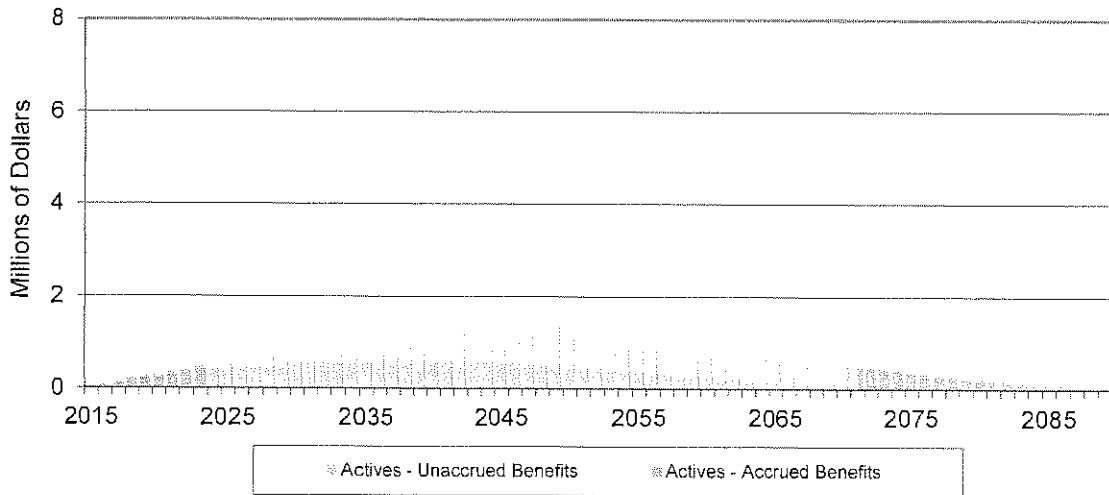
Age	24 & Less	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & Over	Total
Count	16	39	26	32	10	13	14	8	2	0	160
Avg Mo Ben	96	261	426	620	956	1,476	1,790	1,755	1,595	0	711
Avg Svc Credit	1.4	3.5	5.4	6.7	8.2	10.4	12.0	11.8	12.3	0.0	6.4

**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**

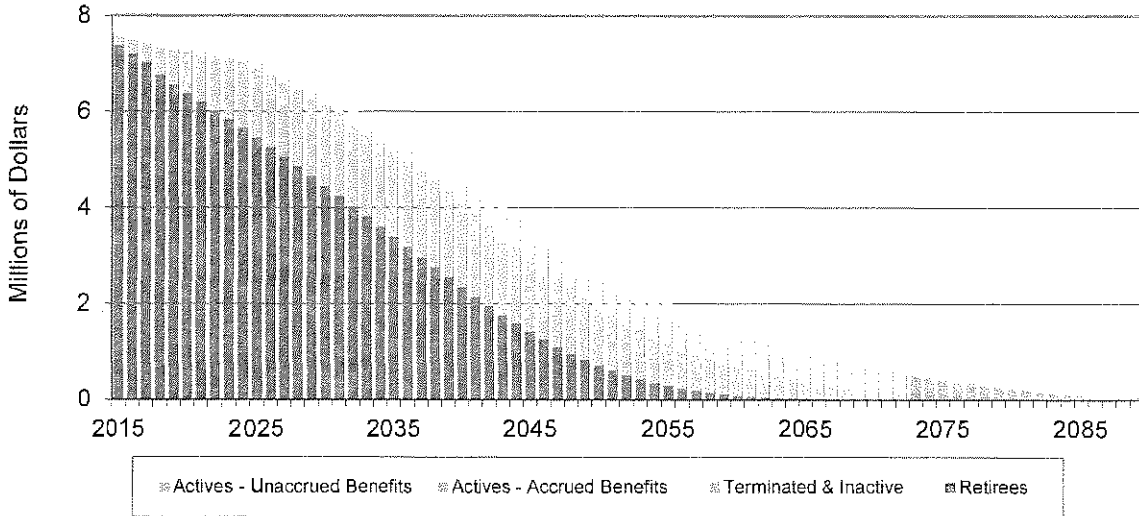
Based on the data, plan of benefits, and assumptions used in this valuation, the Trust will need to have assets to pay for the following stream of benefit payments due to the participants that are currently active. Benefits earned in the past and anticipated to be earned in the future are both included.



**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 6.25%. If a fund of investments earned a level annual return of 6.25%, net of investment expenses, a balance of \$97.7 million on July 1, 2015 would be sufficient to provide for all benefit payments shown above; the Actuarial Present Value of Future Benefits is \$97.7 million (see Exhibit 8 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 6.25%, net of all expenses, a balance of \$94.9 million on July 1, 2015 would be sufficient to provide for all accrued benefits.

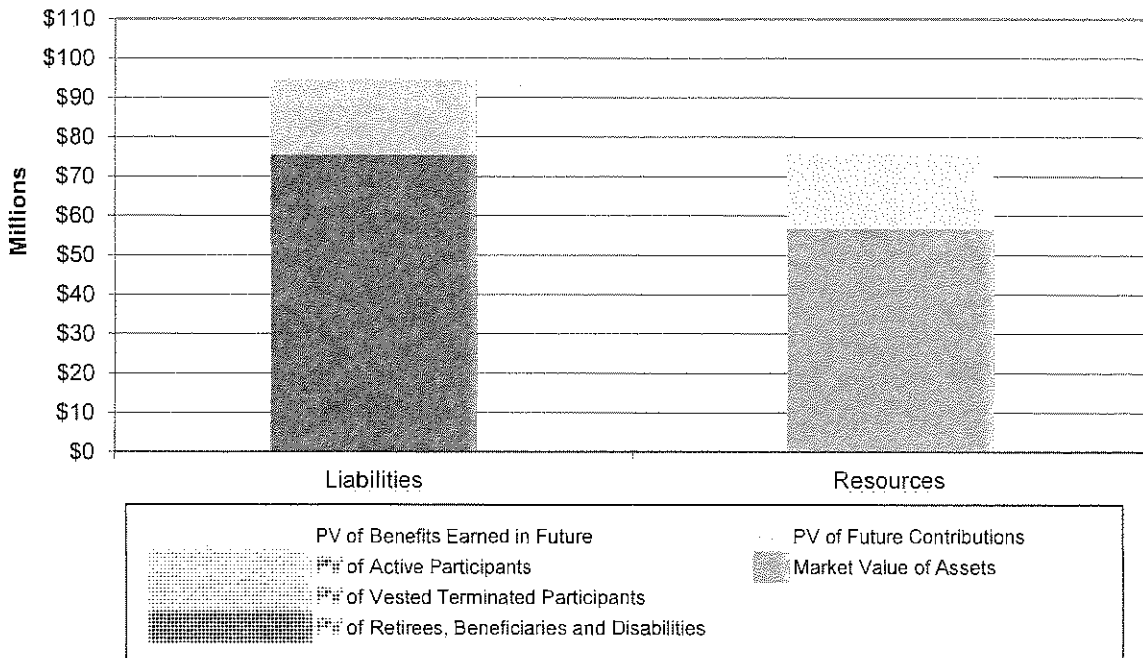
Summary of Plan Requirements	
Actuarial Present Value of All Future Benefits (all benefits shown above)	\$97.7 million
Actuarial Present Value of Accrued Benefits (Retirees, Terminated Vested, and Active Accrued)	\$94.9 million
Actuarial Value of Assets	\$55.7 million
Market Value of Assets	\$56.8 million

H. Actuarial Methodology and Results

Detail of Actuarial Present Value of Future Benefits		
	July 1, 2014 (in millions)	July 1, 2015 (in millions)
Retired Participants, Disabilities, and Beneficiaries	\$ 75.2	\$ 75.5
Terminated Vested Participants	7.9	9.1
Parity and Reciprocity Reserves	<u>3.5</u>	<u>3.3</u>
Total Inactive Liability	\$ 86.6	\$ 87.9
Active Accrued Benefits	7.2	7.0
Active Unaccrued Benefits	<u>2.6</u>	<u>2.8</u>
Total Active Liability	\$ 9.8	\$ 9.8
Total Plan Requirements	\$ 96.4	\$ 97.7

Comparing Liabilities to Resources as of July 1, 2015

- The Plan's liabilities, \$97.7 million, are the sum of the actuarial present value of accrued benefits, \$94.9 million, and the actuarial present value of unaccrued benefits, \$2.8 million.
- The Plan's resources, \$76.4 million, are the sum of the market value of assets, \$56.8 million, and the actuarial present value of future contributions for current participants, \$19.6 million.



- The Plan's resources of \$76.4 million are less than the Plan's liabilities of \$97.7 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, 2014	July 1, 2015
Present Value of Accrued Benefits	\$93.8 million	\$94.9 million
Vested Benefit Liability	\$90.0 million	\$91.4 million
Market Value of Assets (MVA)	\$61.3 million	\$56.8 million
MVA / Present Value of Accrued Benefits	65.3%	59.8%
MVA / Vested Benefit Liability	68.1%	62.2%

# Historical Statistics and Projections

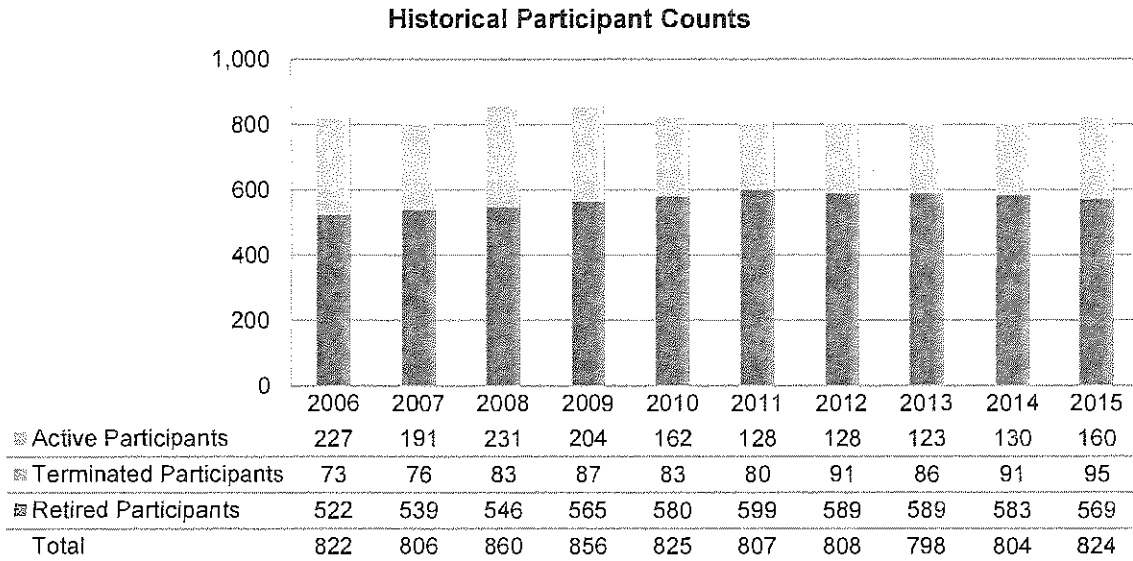
A. Historical Investment Return

Period Ended	1 Year	5 Years <sup>(1)</sup>	10 Years <sup>(1)</sup>	Since 1992 <sup>(1)</sup>
06/30/2015	0.9	9.5	6.1	7.7
06/30/2014	16.3	11.0	7.1	
06/30/2013	12.8	3.3	6.6	
06/30/2012	-2.9	0.6	5.8	
06/30/2011	22.3	4.5	5.5	
06/30/2010	8.0	2.9	3.1	
06/30/2009	-18.5	3.3	2.7	
06/30/2008	-1.3	10.0	5.8	
06/30/2007	17.3	11.2	7.8	
06/30/2006	13.4	6.5	8.2	
06/30/2005	10.1	3.3	8.3	
06/30/2004	11.2	2.0	9.1	
06/30/2003	4.2	1.7	8.3	
06/30/2002	-5.1	4.5	8.6	
06/30/2001	-2.7	9.8	10.4	
06/30/2000	3.3	13.4		
06/30/1999	9.5	16.7		
06/30/1998	19.2	15.2		
06/30/1997	21.7	12.9		
06/30/1996	14.5	11.0		
06/30/1995	19.0			
06/30/1994	2.8			
06/30/1993	7.7			
06/30/1992	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.

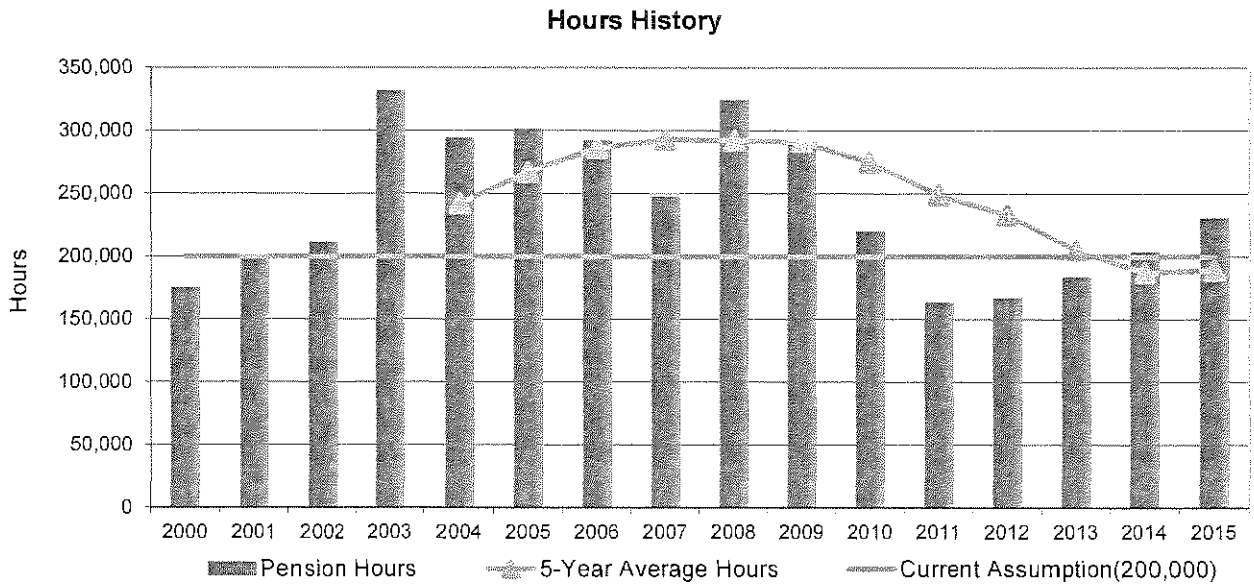


**C. Historical Hours and Contributions**

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

Plan Year Ending 12/31/00	Number of Active at Risk Participants	Total Contributory Hours	Retiree 5-Year Average Hours	Required Hours	Total Contribution
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	184,980	205,000	28,054	2,166,310
2014	130	204,616	188,000	36,954	2,663,353
2015	160	238,000	192,000	32,433	3,123,859

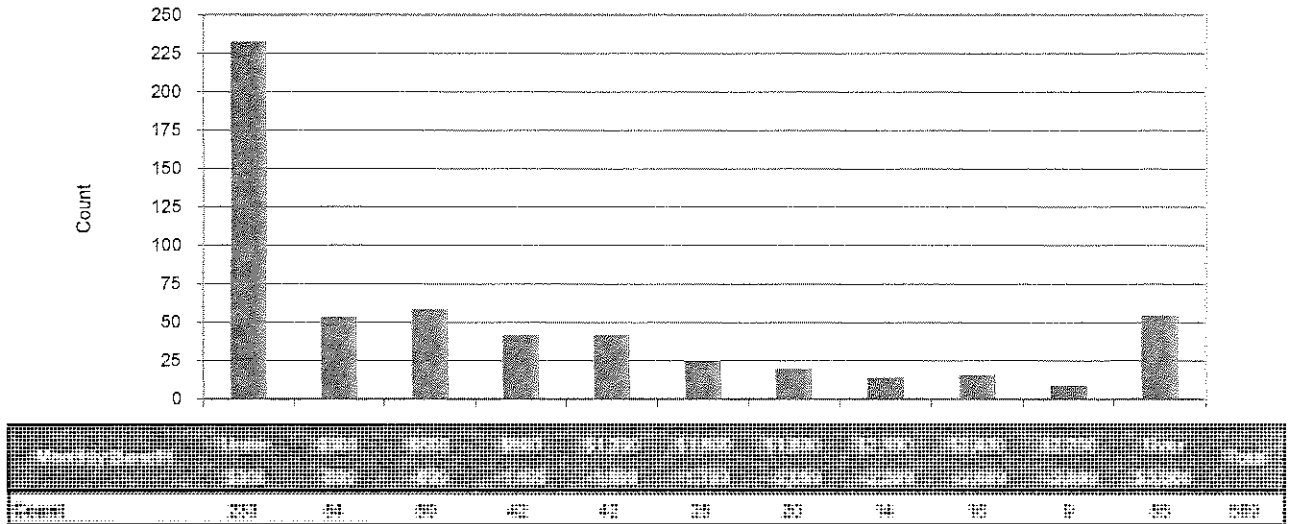
- (1) Based on total hours reported in WPAS summary reports.
- (2) Includes withdrawal liability payments.





**D. Retired Participant Statistics**

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

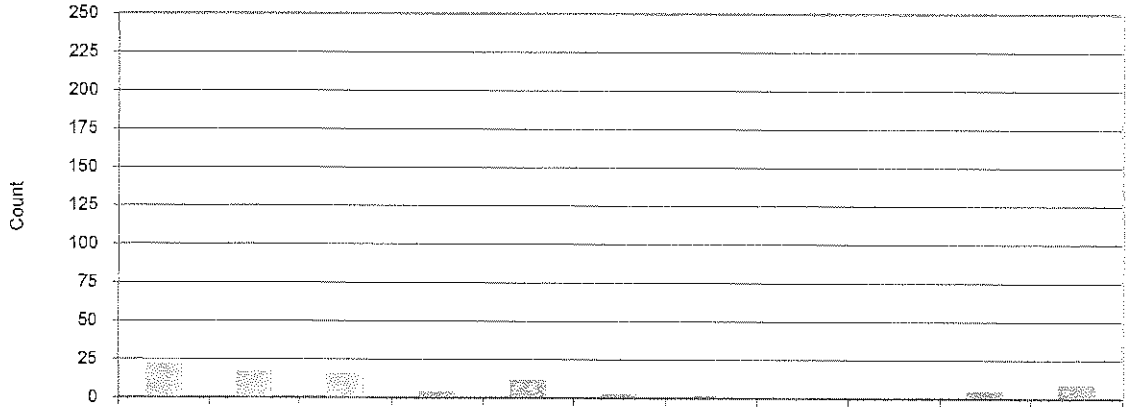


**Retired Participant Historical Information**

Plan Year	Number of Retirees	Total Annual Benefits	Average Annual Benefit
2005	522	\$6,155,725	\$11,784
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

**E. Vested Terminated Participant Statistics**

**Current Distribution of Vested Terminated Participants by Monthly Benefit Amount**



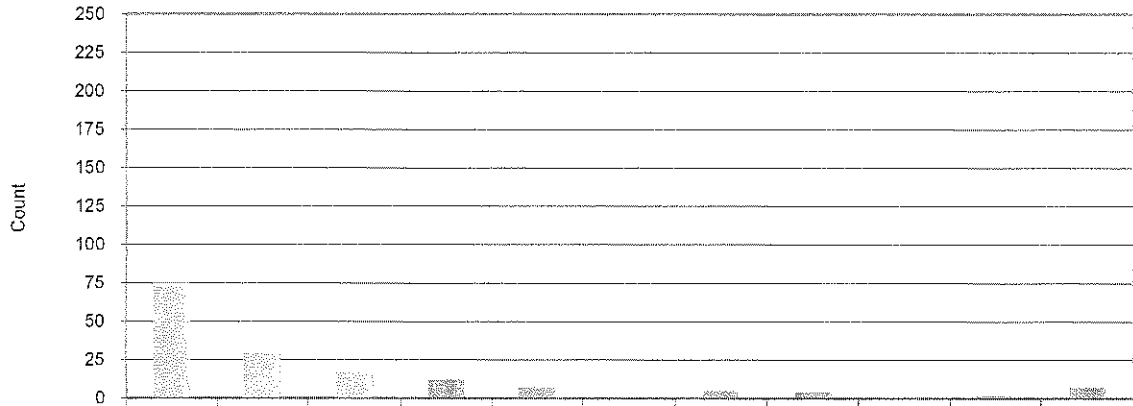
Monthly Benefit	Count	Monthly Benefit	Count	Monthly Benefit	Count	Monthly Benefit	Count	Monthly Benefit	Count	Monthly Benefit	Count
0	3	100	18	200	17	300	4	400	12	500	3
50	2	150	2	250	2	350	2	450	1	550	1
100	20	200	1	300	1	400	1	500	5	600	6
150	1	250	1	350	1	450	1	550	1	650	1
200	1	300	1	400	1	500	1	600	1	700	1
250	1	350	1	450	1	550	1	650	1	750	1
300	1	400	1	500	1	600	1	700	1	800	1
350	1	450	1	550	1	650	1	750	1	850	1
400	1	500	1	600	1	700	1	800	1	900	1
450	1	550	1	650	1	750	1	850	1	950	1
500	1	600	1	700	1	800	1	900	1	1000	1
550	1	650	1	750	1	850	1	950	1		
600	1	700	1	800	1	900	1				
650	1	750	1	850	1						
700	1	800	1								
750	1	850	1								
800	1	900	1								
850	1	950	1								
900	1										
950	1										
1000	1										

**Vested Terminated Participant Historical Information**

Plan Year	Number of Vested Participants	Total Annual Benefits	Average Annual Benefit
2006	79	\$1,618,346	\$20,485
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

**F. Active Participant Statistics**

**Current Distribution of Active Participants by Accrued Monthly Benefit Amount**



Count	75	90	98	102	7	5	5	4	5	5	7	5
Count	75	90	98	102	7	5	5	4	5	5	7	5

**Active Participant Historical Information**

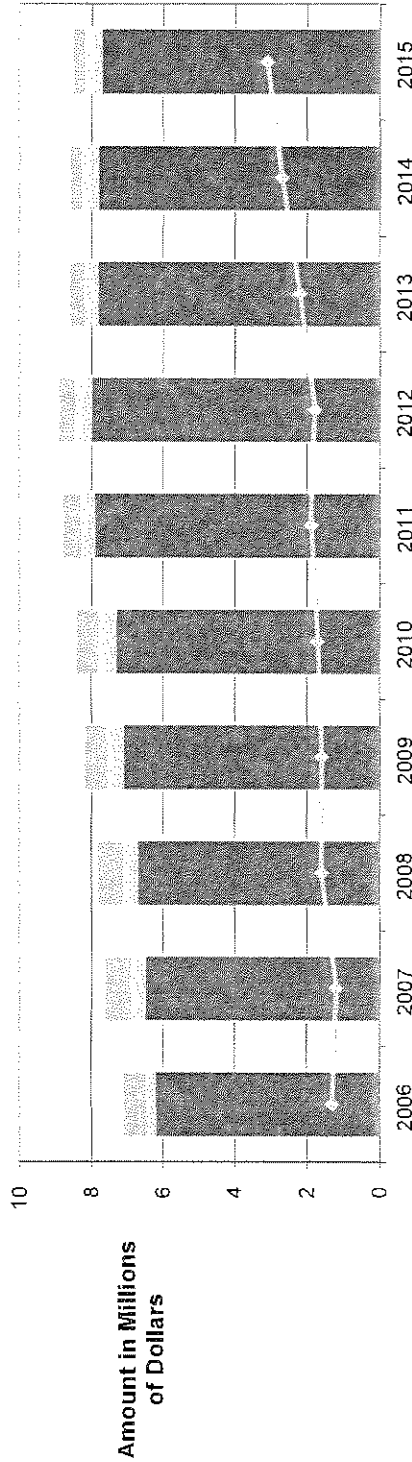
Plan Year Ending July 1	Number of Active	Average Age	Average Years of Service
2006	227	40.7	6.4
2007	191	40.4	7.1
2008	231	38.5	6.1
2009	204	38.0	6.3
2010	162	37.0	7.0
2011	128	37.6	7.0
2012	128	38.1	7.4
2013	123	38.1	7.8
2014	130	38.0	7.7
2015	160	36.2	6.4

**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 2006-2015.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
(A) Contributions	1.3	1.2	1.6	1.6	1.7	1.9	1.8	2.2	2.7	3.1
(B) Investment Management Expenses	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3
(C) Operating Expenses	0.3	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.5	0.5
(D) Benefit Payments without 13th Check	6.2	6.5	6.7	7.1	7.3	7.9	8.0	7.8	7.8	7.7
(E) Net Cashflow (A-B-C-D)	(5.8)	(6.4)	(6.2)	(6.6)	(6.7)	(6.9)	(7.1)	(6.4)	(5.9)	(5.4)

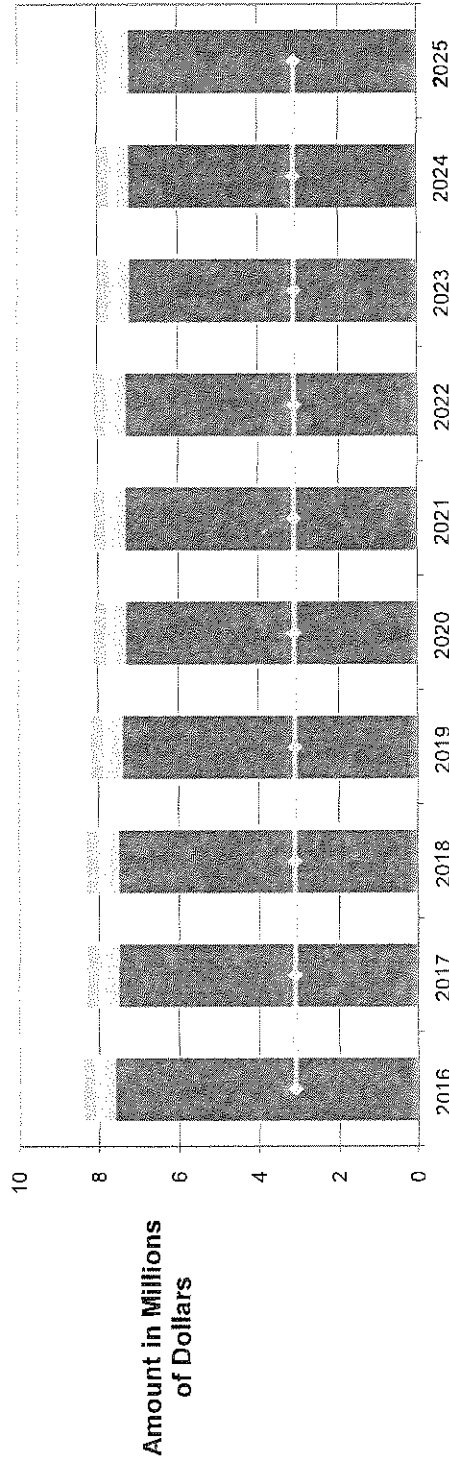


(1) Based on draft Auditor's Report.

### H. Projected Net Cash Flow

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

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(A) Contributions <sup>(1)</sup>	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
(B) Investment Management Expenses <sup>(2)</sup>	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
(C) Operating Expenses <sup>(3)</sup>	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 <sup>(4)</sup>	7.6	7.5	7.5	7.4	7.3	7.3	7.3	7.2	7.2	7.2
(E) Net Cashflow (A-B-C-D)	(5.3)	(5.2)	(5.2)	(5.1)	(5.0)	(5.0)	(5.0)	(4.9)	(4.9)	(4.9)



(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.

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:** 6.25% per year (adopted July 1, 2009). 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:** 6.25% per year (adopted July 1, 2009).

**Current Liability:** 3.34% per year (adopted July 1, 2015).

**Inflation**

No explicit assumption.

**Administrative Expenses**

The annual operating expense assumption is \$490,000 (adopted July 1, 2015).

**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):

		Mortality Rate (per 100,000)			
Age	Sex	2010	2015	2055	2065
60	Male	24.3	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).

Years of Service	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	
	Probability of Retirement	Probability of Vested Retirement
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.

Possible Retirement Age (T)	Assumed Retirement Age (R)	Probability of Person Age (P)	Probability of Person Age at Retirement (P <sub>T</sub> )	Component Weighted Average Retirement Age (R x P <sub>T</sub> )
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)	(d)	(e)
Probable Retirement Age	Assumed Rate of Retirement at Age	Probability of Retiring at Age	Probability of Retiring at Age	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 assumption of 200,000 contributory hours per year (adopted July 1, 2014).

### Benefits Not Valued

None.

### Changes in Actuarial Assumptions Since Prior Valuation

- The demographic assumptions were updated based on the Demographic Assumptions Study prepared concurrently with this valuation. This increased the present value of accrued benefits by approximately \$3.3 million. The changes included:
  - The rates of termination were revised.
  - The rates of retirement for terminated participants were revised.
  - The mortality assumptions were updated to the gender specific blue collar RP-2014 Mortality Tables, adjusted to factor out Scale MP-2014 to the 2006 base year, then projected forward using Scale MP-2015 on a generational basis. Employee rates are used before benefit commencement and Healthy Annuitant rates are used after benefit commencement.
- Effective July 1, 2015, the current liability interest rate was re-established within the statutory interest rate corridor, effective July 1, 2015.
- Effective July 1, 2015, 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(1)(7)-1.
- The annual operating expense assumption was changed from \$470,000 to \$490,000 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.

Death benefits offered by the Plan are not considered vested 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, 2015**

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 15, 2016.

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, 2014 Actuarial Valuation Report.

Exhibit 1

Market Assets  
June 30, 2015

Assets:

Investments at fair value:

Short term funds	\$ 4,465,484
U.S. securities	605,387
Corporate bonds	418,957
Foreign bonds	40,828
Common stocks	24,758,561
Common/collective funds	2,491,746
Partnerships	4,152,277
Mutual Funds	6,093,066
Exchange traded funds	<u>12,875,063</u>
Total investments	55,901,369

Receivables:

Employer contributions	308,747
Accrued interest and dividends	56,799
Securities transactions	308,440
Other receivables	<u>100</u>
Total receivables	674,086

Cash:

Checking	<u>883,224</u>
Total cash	<u>883,224</u>

Total assets 57,458,679

Liabilities:

Accounts payable	111,463
Security transactions payable	<u>561,073</u>
Total liabilities	<u>672,536</u>

Net assets available for benefits \$ 56,786,143

Exhibit 2

Receipts and Disbursements  
(Year Ended June 30, 2015)

Additions:

Investment Income:

Net appreciation (depreciation) in fair value	\$ (248,512)
Interest and dividends	1,063,876
Security lending	-

815,364

Less investment expenses:

Custodial fees	15,000
Investment manager fees	276,339
Investment performance fees	206

291,545

Net investment income (loss) 523,819

Employer contributions 3,123,859

Other income 10,451

3,134,310

Total additions 3,658,129

Deductions:

Benefits paid	7,654,800
Administrative expenses	485,904

Total deductions 8,140,704

Net increase (decrease) (4,482,575)

Net assets available for benefits:

Beginning of year 61,268,718

End of year \$ 56,786,143



**Exhibit 3**

**Actuarial Assets  
July 1, 2015**

**Determination of Recognized Investment Gains and Losses - Five-Year Smoothing**

1. Expected investment return – Year Ended 6/30/2015	\$	3,674,894
2. Actual investment return – Year Ended 6/30/2015	\$	534,270
3. Gains/(losses) – 2015 (Actual – Expected)	\$	(3,140,624)
4. Gains/(losses) for prior years		
2010-2011	\$	8,978,965
2011-2012		(5,661,065)
2012-2013		3,556,575
2013-2014		5,511,835
2014-2015		<u>(3,140,625)</u>
	\$	9,245,685
5. Gains/(losses) recognized at 7/1/2015	\$	1,849,138

**Determination of Actuarial Assets**

<b>Actuarial value of assets 7/1/2014</b>	\$	55,193,938
Net cash flow during year	\$	(5,016,845)
Expected investment return		3,674,894
Recognized investment gains/(losses)		<u>1,849,138</u>
	\$	507,187
<b>Actuarial value of assets 7/1/2015 before corridor*</b>	\$	55,701,125
<b>Actuarial value of assets 7/1/2015 after corridor*</b>	\$	55,701,125
Unrecognized gain/(loss)		1,085,018
<b>Market value of assets 7/1/2015</b>		
(Actuarial value before corridor + unrecognized gain)	\$	56,786,143

\* Actuarial value must be between 80% and 120% of market value. For July 1, 2015, the market value of assets equals \$56,786,143, and the initial actuarial value of assets falls within this required corridor.

Exhibit 4

Schedule of Investment Gain / (Loss) Recognition  
(in millions)

Year Ending 6/30	Market Value Investment Gain/(Loss)	Investment Gain/(Loss) Recognized in Past Years				Investment Gain/(Loss) Recognized in Current Year 2015*	Investment Gain/(Loss) to be Recognized in Future Years							
		2011	2012	2013	2014		2016	2017	2018	2019				
2007	\$8.0	\$0.0												
2008	(\$7.1)	\$0.0	\$0.0											
2009	(\$20.0)	\$0.0	\$0.0	\$0.0										
2010	\$1.0	\$0.2	\$0.2	\$0.2	\$0.2									
2011	\$9.0	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8								
2012	(\$5.7)	(\$1.1)	(\$1.1)	(\$1.1)	(\$1.1)	(\$1.1)								
2013	\$3.6	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7								
2014	\$5.5	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1								
2015	(\$3.1)					(\$0.6)								
2016	\$0.0					\$0.0								
2017	\$0.0					\$0.0								
2018	\$0.0					\$0.0								
2019	\$0.0					\$0.0								

\$1.8  
(\$1.1)  
\$0.7  
\$1.1  
(\$0.6)

Total Gain/(Loss) Recognized at Each Valuation Date	
Recognized	Scheduled to be Recognized*
\$2.0	\$0.1
\$0.9	\$1.2
\$1.6	\$0.5
\$2.7	(\$0.6)

Unrecognized Gain/(Loss) Remaining	
\$1.1	(\$0.6)
\$1.0	(\$0.6)
(\$0.2)	(\$0.6)
(\$0.0)	(\$0.0)

\* The total gain/(loss) actually recognized in each future year will include additional amortizations of future gains and/or losses.

Exhibit 5

Funding Standard Account for Prior Plan Year

The Funding Standard Account for the plan year ending June 30, 2015 is determined below.

1. Outstanding balances as of July 1, 2014	
a. Amortization charges	\$61,996,378
b. Amortization credits	22,380,289
c. Accumulated Additional Funding Charges with interest	0
d. Accumulated Additional Interest Charges with interest	0
2. Charges to Funding Standard Account	
a. Funding Deficiency as of July 1, 2014	0
b. Normal Cost as of July 1, 2014	757,830
c. Amortization charges as of July 1, 2014	10,295,907
d. Interest on (a), (b), and (c) to end of plan year	690,859
e. Additional Interest Charge for plan year	0
f. Additional Funding Charge for plan year	<u>0</u>
g. Total	11,744,596
3. Credits to Funding Standard Account	
a. Credit Balance as of July 1, 2014	965,246
b. Employer contributions for plan year	3,123,859
c. Amortization credits as of July 1, 2014	2,563,232
d. Interest on (a), (b), and (c) to end of plan year	299,868
e. Full Funding Credit	<u>0</u>
f. Total	6,952,205
4. Credit Balance / (Funding Deficiency) as of June 30, 2015	\$(4,792,391)

**Exhibit 6**

**Application of Employer Contributions to  
Maximum Deductible Contribution Limit**

The amount of undeducted employer contributions, if any, as of June 30, 2015 is determined below.

1. Employer contributions for tax year ending June 30, 2015	\$3,123,859
2. Undeducted employer contributions as of July 1, 2014	0
3. Maximum Deductible Contribution for tax year ending June 30, 2015	121,535,537
4. Undeducted employer contributions as of June 30, 2015 to be carried over to future tax years [(1) + (2) - (3), but not less than \$0]	\$0

Exhibit 7

Summary of Active Participants by Age and Service

Number of Participants by Age and Service Groups

Age	Years of Vesting Service										Total
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40&Up	
0-24	7	9	-	-	-	-	-	-	-	-	16
25-29	11	14	14	-	-	-	-	-	-	-	39
30-34	5	6	11	4	-	-	-	-	-	-	26
35-39	5	8	9	9	1	-	-	-	-	-	32
40-44	3	-	3	2	2	-	-	-	-	-	10
45-49	1	3	2	4	2	1	-	-	-	-	13
50-54	-	3	2	3	5	-	1	-	-	-	14
55-59	-	2	2	1	2	-	1	-	-	-	8
60-64	-	-	-	2	-	-	-	-	-	-	2
65-69	-	-	-	-	-	-	-	-	-	-	-
70&Up	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>32</b>	<b>45</b>	<b>43</b>	<b>25</b>	<b>12</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>160</b>

Exhibit 8

Actuarial Balance Sheet

The total plan requirements compared to the total value of plan resources as of July 1, 2015 is shown below.

**Plan Requirements**

1. Present value of active participant benefits	
a. Withdrawal	\$1,642,018
b. Early Retirement	4,338,072
c. Unreduced Retirement	3,740,323
d. Death	<u>77,377</u>
e. Total	9,797,790
2. Present value of inactive participant benefits	
a. Terminated vested participants	9,116,215
b. Contingent vested participants	3,343,842
c. Retired participants	67,187,293
d. Disabled participants	2,289,965
e. Beneficiaries	<u>6,000,818</u>
f. Total	87,938,133
3. Reserve for expenses	0
4. Total plan requirements [(1e) + (2f) + (3)]	97,735,923

**Plan Resources**

5. Actuarial Value of Assets	55,701,125
6. Unfunded Actuarial Accrued Liability	39,185,170
7. Present Value of Future Normal Costs	2,849,628
8. Total plan resources [(4) + (5) + (6)]	\$97,735,923

**Exhibit 9**

**Normal Cost**

The Normal Cost is the amount allocated to the current plan year under the plan's actuarial cost method. The employer Normal Cost as of July 1, 2015 is determined below.

1. Normal Cost for benefits	
a. Withdrawal	\$91,734
b. Early Retirement	127,024
c. Unreduced Retirement	85,120
d. Death	<u>2,612</u>
e. Total	306,490
2. Loading for expenses	475,370
3. Total Employer Normal Cost [(1e) + (2)]	\$781,860

Exhibit 10

Unfunded Actuarial Accrued Liability

The Actuarial Accrued Liability represents that portion of the Present Value of Benefits that is not provided by the Present Value of Future Normal Costs. 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, 2014 and July 1, 2015 is determined below.

	7/1/2014	7/1/2015
1. Present Value of Benefits		
a. Active participants	\$9,779,480	\$9,797,790
b. Terminated vested participants	7,871,981	9,116,215
c. Contingent vested participants	3,569,849	3,343,842
d. Retired participants	67,482,384	67,187,293
e. Disabled participants	1,906,050	2,289,965
f. Beneficiaries	<u>5,772,517</u>	<u>6,000,818</u>
g. Total	96,382,261	97,735,923
2. Present Value of Future Normal Costs	2,537,481	2,849,628
3. Actuarial Accrued Liability [(1g) - (2)]	93,844,780	94,886,295
4. Actuarial Value of Assets	55,193,938	55,701,125
5. Reserve for expenses	0	0
6. Unfunded Actuarial Accrued Liability [(3) - (4) + (5)]	\$38,650,842	\$39,185,170



Exhibit 11

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, 2015 is determined below.

1. Unfunded Actuarial Accrued Liability as of July 1, 2014	\$38,650,842
2. Normal Cost as of July 1, 2014	757,830
3. Interest on (1) and (2) to end of plan year	<u>2,463,042</u>
4. Subtotal [(1) + (2) + (3)]	41,871,714
5. Employer contributions for plan year	3,123,859
6. Interest on (5) to end of plan year	<u>79,338</u>
7. Subtotal [(5) + (6)]	3,203,197
8. Changes in Actuarial Accrued Liability	
a. Plan amendments	0
b. Changes in actuarial assumptions	3,254,301
c. Changes in cost method	<u>0</u>
d. Total	3,254,301
9. Expected Unfunded Actuarial Accrued Liability as of July 1, 2015 [(4) - (7) + (8d)]	41,922,818
10. Actual Unfunded Actuarial Accrued Liability as of July 1, 2015	39,185,170
11. Actuarial (Gain) / Loss for prior plan year [(10) - (9)]	\$(2,737,648)

Exhibit 12

**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, 2015 are determined below.

1. Charges for plan year	
a. Funding Deficiency as of July 1, 2015	\$4,792,391
b. Normal Cost	781,860
c. Amortization charges (on \$58,186,053)	10,616,445
d. Interest on (a), (b), and (c) to end of plan year	1,011,919
e. Additional Funding Charge	<u>0</u>
f. Total	17,202,615
2. Credits for plan year	
a. Amortization credits (on \$23,793,272)	2,832,877
b. Other credits	0
c. Interest on (a) and (b) to end of plan year	<u>177,055</u>
d. Total	3,009,932
3. Current Annual Cost for plan year [(1f) - (2d)]	14,192,683
4. Full Funding Credit for plan year	
a. Full Funding Limitation	61,047,636
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, 2015	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]	\$14,192,683

Exhibit 13

**Charges and Credits for Funding Standard Account**

The amortization charges and credits for the Funding Standard Account for the plan year beginning July 1, 2015 are determined below.

1. Charges as of July 1, 2015

	<b>Date Established</b>	<b>Description *</b>	<b>Amortization Amount</b>	<b>Remaining Years</b>	<b>Outstanding Balance</b>
a.	July 1, 2000	Combination of bases	\$4,560,950	7.2	\$27,469,936
b.	July 1, 2001	Actuarial loss (1)	173,490	1.0	173,490
c.	July 1, 2002	Actuarial loss (1)	438,175	2.0	850,575
d.	July 1, 2003	Actuarial loss (1)	715,782	3.0	2,023,509
e.	July 1, 2004	Actuarial loss (1)	628,481	4.0	2,300,677
f.	July 1, 2004	Change in assumptions (4)	265,703	19.0	3,089,386
g.	July 1, 2005	Actuarial loss (1)	348,883	5.0	1,550,910
h.	July 1, 2006	Actuarial loss (1)	20,354	6.0	105,516
i.	July 1, 2006	Change in assumptions (4)	68,396	21.0	837,226
j.	July 1, 2008	Change in assumptions (4)	39,929	8.0	260,861
k.	July 1, 2009	Actuarial loss (1)	673,892	9.0	4,817,530
l.	July 1, 2009	Change in assumptions (4)	741,360	9.0	5,299,842
m.	July 1, 2009	Change in cost method (5)	1,572,812	4.0	5,757,591
n.	July 1, 2011	Change in assumptions (4)	47,705	11.0	394,703
o.	July 1, 2015	Change in assumptions (4)	320,533	15.0	3,254,301
p.	Total		10,616,445		58,186,053

2. Credits as of July 1, 2015

	<b>Date Established</b>	<b>Description *</b>	<b>Amortization Amount</b>	<b>Remaining Years</b>	<b>Outstanding Balance</b>
a.	July 1, 2002	Change in assumptions (4)	\$43,644	17.0	\$477,222
b.	July 1, 2003	Plan amendment (3)	77,346	18.0	873,351
c.	July 1, 2007	Actuarial gain (1)	391,543	7.0	2,301,853
d.	July 1, 2007	Change in assumptions (4)	25,210	22.0	315,649
e.	July 1, 2008	Actuarial gain (1)	225,088	8.0	1,470,528
f.	July 1, 2010	Actuarial gain (1)	99,763	10.0	770,994
g.	July 1, 2010	Plan amendment (3)	472,658	10.0	3,652,845
h.	July 1, 2010	Change in assumptions (4)	27,344	10.0	211,325
i.	July 1, 2011	Actuarial gain (1)	64,125	11.0	530,554
j.	July 1, 2012	Actuarial gain (1)	120,617	12.0	1,059,862
k.	July 1, 2012	Change in assumptions (4)	35,940	12.0	315,810
l.	July 1, 2013	Actuarial gain (1)	184,026	13.0	1,705,948
m.	July 1, 2013	Change in assumptions (4)	7,242	13.0	67,135

Milliman Actuarial Valuation

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n.	July 1, 2014	Actuarial gain (1)	253,671	14.0	2,466,903
o.	July 1, 2014	Change in assumptions (4)	392,438	14.0	3,816,387
p.	July 1, 2014	Change in cost method (5)	142,577	9.0	1,019,258
q.	July 1, 2015	Actuarial gain (1)	269,645	15.0	2,737,648
r.	Total		2,832,877		23,793,272
3.	Net outstanding balance [(1p) - (2r)]				34,392,781
4.	Funding Deficiency as of July 1, 2015				4,792,391
5.	Accumulated reconciliation account as of July 1, 2015				
a.	Additional Funding Charges				0
b.	Additional Interest Charges				0
c.	Due to Waived Funding Deficiencies				0
d.	Total [(a) + (b) + (c)]				0
6.	Balance test result [(3) + (4) - (5d)]				39,185,172
7.	Unfunded Actuarial Accrued Liability as of July 1, 2015, minimum \$0				\$39,185,170

\* The numbers following the descriptions identify the type of base according to Schedule MB line 7 instructions.

## Exhibit 14

### Current Liability

In accordance with IRS requirements, the Current Liability has been calculated at 3.34%. The Current Liability as of July 1, 2015 is determined below.

1. Current Liability

	<b>Count</b>	<b>Vested Benefits</b>	<b>All Benefits</b>
a. Participants in pay status	569	\$95,307,862	\$95,307,862
b. Participants with deferred benefits	95	14,619,317	19,827,907
c. Active participants	<u>160</u>	<u>11,609,480</u>	<u>12,026,676</u>
d. Total	824	121,536,659	127,162,445
2. Expected increase in Current Liability for benefit accruals during year			621,995
3. Expected distributions during year			7,612,128
4. Market Value of Assets			\$56,786,143
5. Current Liability Funded Percentage [(4) ÷ (1d)]			44.66%

Exhibit 15

Full Funding Limitation

The Full Funding Limitation for the plan year ending June 30, 2016 and the tax year ending June 30, 2016 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	[\$94,886,295]	\$100,816,688	\$100,816,688
b. Normal Cost	[781,860]	830,726	830,726
c. Expected distributions	[7,856,255]	8,347,270	8,347,270
d. Subtotal [(a) + (b) - (c)]		93,300,144	93,300,144
2. Current Liability	3.34%		
a. Current Liability	[127,162,445]	131,409,671	131,409,671
b. Normal Cost	[1,097,365]	1,134,017	1,134,017
c. Expected distributions	[7,963,474]	8,229,455	8,229,455
d. Subtotal [(a) + (b) - (c)]		124,314,233	124,314,233
3. Adjusted Plan Assets	6.25%		
a. Actuarial Value of Assets	[55,701,125]	59,182,445	59,182,445
b. Market Value of Assets	[56,786,143]	60,335,277	60,335,277
c. Credit Balance	[0]	0	n/a
d. Undeducted employer contributions	[0]	n/a	0
e. Expected distributions	[7,856,255]	8,347,270	8,347,270
f. ERISA assets [min{(a), (b)} - (c) - (d) - (e)]		50,835,175	50,835,175
g. Current Liability assets [(a) - (d) - (e)]		50,835,175	50,835,175
4. Full Funding Limitation			
a. ERISA [max{(1d) - (3f), \$0}]		42,464,969	42,464,969
b. Current Liability [max{90% × (2d) - (3g), \$0}]		61,047,635	61,047,635
c. Full Funding Limitation [max{(a), (b)}]		\$61,047,635	\$61,047,635

Exhibit 16

**Maximum Deductible Contribution under IRC Section 404**

The Maximum Deductible Contribution under IRC Section 404 for the tax year beginning July 1, 2015 is determined below.

1. Minimum Required Contribution for plan year beginning July 1, 2015	\$14,192,683
2. Preliminary Maximum Deductible Contribution under IRC Section 404 for tax year	
a. Normal Cost	781,860
b. Amortization payment on ten-year limitation bases	5,070,350
c. Interest to earlier of tax year end or plan year end	<u>365,763</u>
d. Total	6,217,973
3. Full Funding Limitation for tax year	61,047,635
4. Unfunded 140% of Current Liability as of June 30, 2016	
a. Current Liability (for IRC Section 404 purposes) projected to end of year	124,314,233
b. Actuarial Value of Assets (for IRC Section 404 purposes) projected to end of year	50,835,175
c. Unfunded 140% of Current Liability [140% × (a) - (b), but not less than \$0]	123,204,751
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)]	\$123,204,751

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. Please consult your tax advisors regarding the deductibility of cash contributions.

**Exhibit 17**

**Charges and Credits for Maximum Deductible Contribution**

The ten-year limitation bases for the preliminary Maximum Deductible Contribution as of July 1, 2015 are determined below.

1. Ten-year limitation bases

	<b>Date Established</b>	<b>Amortization Amount</b>	<b>Remaining Years</b>	<b>Outstanding Balance</b>
a.	July 1, 2015	\$5,070,350	10.0	\$39,185,170
b.	Total	5,070,350		39,185,170
2.	Net outstanding balance			39,185,170
3.	Undeducted employer contributions			0
4.	Balance test [(2) - (3)]			39,185,170
5.	Unfunded Actuarial Accrued Liability as of July 1, 2015			\$39,185,170



Exhibit 18

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, 2014 and July 1, 2015 is shown below.

	7/1/2014	7/1/2015
1. Present Value of vested Accumulated Plan Benefits		
a. Retired participants	\$67,482,384	\$67,187,293
b. Disabled participants	1,906,050	2,289,965
c. Beneficiaries	5,772,517	6,000,818
d. Terminated vested participants	7,823,054	9,116,215
e. Active participants	<u>6,984,694</u>	<u>6,757,848</u>
f. Total	89,968,699	91,352,139
2. Present Value of non-vested Accumulated Plan Benefits	3,876,081	3,534,156
3. Present Value of all Accumulated Plan Benefits [(1f) + (2)]	93,844,780	94,886,295
4. Market Value of Assets	61,268,718	56,786,143
5. Funded percentage on Market Value of Assets		
a. Vested benefits [(4) ÷ (1f)]	68.10%	62.16%
b. All benefits [(4) ÷ (3)]	65.29%	59.85%
6. Actuarial Value of Assets	\$55,193,938	\$55,701,125
7. Funded percentage on Actuarial Value of Assets		
a. Vested benefits [(6) ÷ (1f)]	61.35%	60.97%
b. All benefits [(6) ÷ (3)]	58.81%	58.70%

**Exhibit 19**

**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, 2014 to July 1, 2015 is shown below.

1. Present Value of all Accumulated Plan Benefits as of July 1, 2014	\$93,844,780
2. Changes	
a. Reduction in discount period	5,629,712
b. Benefits accumulated	320,729
c. Benefit payments	7,654,800
d. Plan amendments	0
e. Change in assumptions	3,254,301
f. Actuarial (gain) / loss	(508,427)
g. Total	
[(a) + (b) - (c) + (d) + (e) + (f)]	1,041,515
3. Present Value of all Accumulated Plan Benefits as of July 1, 2015	
[(1) + (2g)]	\$94,886,295

Exhibit 20

**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 and certain benefits such as death and disability benefits which are not considered vested. These liabilities have been determined as of June 30, 2014 and June 30, 2015. However, if there is a termination by mass withdrawal during the year, a separate calculation would have to be performed.

	6/30/2014	6/30/2015
1. Present value of vested accumulated plan benefits		
a. Retired participants	\$67,482,384	\$67,187,293
b. Disabled participants	1,906,050	2,289,965
c. Beneficiaries	5,772,517	6,000,818
d. Terminated vested participants	7,823,054	9,116,215
e. Active participants	<u>6,984,694</u>	<u>6,757,848</u>
f. Total vested benefits	89,968,699	91,352,139
2. Additional Vested Benefit Liability for Unamortized Benefit Reductions	<u>1,850,336</u>	<u>1,728,363</u>
3. Total Vested Benefit Liability	91,819,035	93,080,502
4. Market Value of Assets	61,268,718	56,786,143
5. Funded ratio [(4) ÷ (3)]	66.73%	61.01%
6. Unfunded Vested Benefit Liability [(3) - (4), but not less than \$0]	\$30,550,317	\$36,294,359

**Appendix A**

# Alaska Ironworkers Pension Trust

375 W. 36<sup>th</sup> Avenue, Suite 200 • P.O. Box 93870 (99509) • Anchorage, Alaska 99503  
Phone (907) 561-5119 or (800) 325-6532 • Fax (907) 561-4802 • Website [www.akironworkerstrust.com](http://www.akironworkerstrust.com)

Administered by  
Labor Trust Services, Inc.

April 5, 2017

Dear Employer,

On March 30, 2017, the Board of Trustees of the Alaska Ironworkers Pension Plan (“Plan”) submitted an application to the U.S. Treasury Department for approval to reduce benefits under the Plan.

For your reference, enclosed are copies of the announcement and required notice that have been mailed to Plan participants.

This application does not affect how you report and pay pension contributions.

If you have any questions, please contact the Plan Administration office:

By phone: (907) 561-5119 or (800) 325-6532

By email: [retirement@wpas-inc.com](mailto:retirement@wpas-inc.com)

By mail: PO Box 93870  
Anchorage, AK 99509-3870

# NOTICE OF A PROPOSED REDUCTION OF YOUR PENSION BENEFITS

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On March 30, 2017, the Board of Trustees of the Alaska Ironworkers Pension Plan (“Plan”) submitted an application to the U.S. Treasury Department for approval to reduce benefits under the Plan. This type of benefit reduction is allowed by the Federal law called the Multiemployer Pension Reform Act of 2014.

You are getting this notice because you have a pension benefit under the Plan. The enclosed benefit estimate describes the proposed reduction of your monthly payments.\* This notice will also answer the following questions for you—

1. Why is the Board of Trustees proposing to reduce benefits?
2. What will happen if the Plan runs out of money?
3. How did the Board of Trustees decide whose benefits to reduce and by how much?
4. What are the proposed reductions in benefits?
5. What comes next?

## 1. Why is the Board of Trustees proposing to reduce benefits?

The Plan’s actuary estimated that, unless benefits are reduced, the Plan will not have enough money to pay benefits in the year 2030. This estimate is based on how much money the actuary expects the Plan to receive and to pay out each year. The Plan’s actuary estimated that, with the reduction of benefits that the Board of Trustees has proposed, the plan should not run out of money.

## 2. What will happen if the Plan runs out of money?

If the Plan does not have enough money to pay benefits, then only the amount guaranteed by the Pension Benefit Guaranty Corporation (“PBGC”) will be paid. The PBGC-guaranteed benefit level would be a greater reduction than what is proposed under this proposed reduction.

You can find the amount of your benefit that is guaranteed by PBGC on the enclosed benefit estimate.

## Terms to Know

**Actuary** – professional hired to analyze the data and calculate the value of benefits earned under the Plan and determine if the Plan is well-funded.

**PBGC** – the Pension Benefit Guaranty Corporation is an independent agency of the federal government. The Plan pays premiums to the PBGC’s insurance program to protect benefits (up to the limits set by law) if the Plan becomes insolvent.

\*A version of this notice that does not include the estimate of the effect on your benefit is being sent to unions that represent Plan participants and to all contributing employers.

### 3. How did the Board of Trustees decide whose benefits to reduce and by how much?

Under Federal law, the Board of Trustees must apply the following rules to the proposed reduction—

- The total reduction in everybody's benefits must be estimated to be large enough to keep the Plan from running out of money but not larger than needed to do that.
- Your monthly benefit and the benefit of your beneficiary cannot be reduced below 110% of the amount guaranteed by PBGC.
- Disability benefits (as defined under the Plan) cannot be reduced.
- The benefits of people who are at least 80 years old as of the end of the month the reduction takes effect and their beneficiaries cannot be reduced.
- The benefits of people who are at least 75 years and one month old as of the end of the month the reduction takes effect and their beneficiaries are partially protected, and the closer the person is to age 80 the less the benefits can be reduced.
- The reduction of benefits must be spread fairly among the people who have a pension benefit under the Plan.

The Board of Trustees used the default method of a level percent decrease as described in the law. Everyone's benefits are reduced by the same amount and no one is treated differently, except as required by law.

#### What are the proposed reductions in benefits?

The Board of Trustees proposes the following reduction of benefits:

A 34.5% across-the-board reduction of benefits earned through June 30, 2016 for active participants, retirees, beneficiaries, and inactive participants with a vested benefit.

The reduction would take effect the first of the month following 30 days from the end of the voting period, but not earlier than 9 months from the date of this filing, and not later than February 1, 2018.

That means the amount of your benefit earned through June 30, 2016 would be multiplied by 0.345 to calculate your reduction. Amounts earned on or after July 1, 2016 will not be reduced. (See the enclosed benefit estimate for your actual reduced benefit amount.)

(Continued on the next page)

#### Terms to Know

**Early retirement** - if you retire between ages 50 and 62, with five years of pension credit, your benefit is reduced to account for the expectation you'll receive benefits over a longer time.

**Normal retirement** - the "normal" retirement age for this Plan is 62 for benefits earned on and after July 1, 2011 (age 60 for benefits earned before that date).

*In deciding how to set up the benefit reduction, Trustees determined the fairest way to save the Plan was an across-the-board percentage reduction.*

#### Examples:

These examples assume the benefit reduction takes effect February 1, 2018.

##### 65-year-old retiree:

Benefit earned through  
June 30, 2016:  
\$1,000

Reduction on February 1, 2018:  
 $\$1,000 \times 0.345 = \$345$

Reduced benefit =  $\$1,000 - \$345 =$   
\$655

##### 40-year-old active participant:

Benefit earned through  
June 30, 2016:  
\$400

Reduction February 1, 2018:  
 $\$400 \times 0.345 = \$138$   
 $\$400 - \$138 = \$262$

Benefit earned since July 1, 2016:  
\$133 (reduction does not apply)

Total benefit as of February 1,  
2018:  
 $\$262 + \$133 = \$395$

#### 4. What are the proposed reductions in benefits? (cont'd)

No special groups would be treated differently except those required by law:

- Participants or beneficiaries with benefits based on disability would have no reduction.
- Participants or beneficiaries who are at least age 80 as of the end of the month that the reduction takes effect would have no reduction.
- Participants or beneficiaries who are at least age 75 and one month as of the end of the month the reduction takes effect would have a smaller benefit reduction. Their reduced benefit earned through June 30, 2016 would be calculated as follows:

$$\begin{array}{r}
 \text{Benefit through} \\
 \text{June 30, 2016}
 \end{array}
 -
 \begin{array}{r}
 \text{Benefit through} \\
 \text{June 30, 2016 times} \\
 0.345 \\
 \text{(reduced benefit received} \\
 \text{if younger than 75)}
 \end{array}
 \times
 \begin{array}{r}
 \text{Number of months} \\
 \text{beginning with the} \\
 \text{month following} \\
 \text{the benefit} \\
 \text{reduction and} \\
 \text{ending with the} \\
 \text{month the person} \\
 \text{turns 80} \\
 \text{divided by} \\
 60 \\
 \text{(percent that} \\
 \text{represents how} \\
 \text{close the person is} \\
 \text{to age 80)}
 \end{array}$$

The benefit reduction would be in effect only until the Plan is no longer projected to run out of money without the reduction in place. We expect reduced benefits to be in place for quite a few years. For some, that means reduced benefits for the remainder of retirement. For others, there's at least a possibility that their benefit would come back up to the unreduced amount at some point in the future.

This benefit reduction is expected to stabilize the Plan and keep it from running out of money. This expectation is based on a number of assumptions; if reality differs significantly from these assumptions, the reduction might not work as intended. However, we have used realistic assumptions to give the Plan the best chance of success.

The proposed reduction is not designed to get the Plan back to 100% funded. The cuts are only big enough, and will only last long enough, to keep the Plan from running out of money.

#### Examples:

These examples assume the benefit reduction takes effect February 1, 2018.

#### Retiree who is 78 and 4 months on February 28, 2018:

Benefit earned through  
June 30, 2016:  
\$1,000

Reduction on February 1, 2018 if  
younger than 75:  
 $\$1,000 \times 0.345 = \$345$

Number of months beginning with  
March 2018 and ending with the  
month the person turns 80:  
20 months

$\$345 \times (20 \div 60) = \$115$

Reduced benefit =  $\$1,000 - \$115 =$   
\$885

#### 80-year-old retiree:

Benefit earned through  
June 30, 2016:  
\$1,000

No reduction: Benefit on  
February 1, 2018 remains \$1,000



## 5. What comes next?

### Approval or denial of the application by the Treasury Department

The Treasury Department will review the application to see whether it meets all of the legal requirements under Federal law. If the application meets all of those requirements, the Treasury Department is required to approve the application. If the application does not meet the legal requirements, the Treasury Department will deny the application. The Treasury Department will have until November 10, 2017 to make a decision.

### You can get information from the Treasury Department

More information about the proposed benefit reductions and a copy of the application is available at [www.treasury.gov/mpra](http://www.treasury.gov/mpra).

The application will be available on that website within 30 days after the Treasury Department receives it. The application includes more information about the proposed reduction, including details about:

- 1) the Plan actuary's certification that the Plan will run out of money (that is, that the plan is in "critical and declining status");
- 2) how the proposed reduction would satisfy the requirement that it be large enough so that the Plan is estimated not to run out of money, while not being larger than needed; and
- 3) the sensitivity of these estimates to the assumptions used.

The application describes the steps the Board of Trustees has already taken to keep the Plan from running out of money and why the Board of Trustees believes that a benefit reduction is the only remaining option to keep the Plan from running out of money. In addition, the application explains why the Board of Trustees believes that the proposed reduction is spread fairly among the people who have a pension benefit under the Plan.

The Treasury Department website will also provide updated information on the application, such as whether the application has been updated or withdrawn.

For further information and assistance you can also write to the Treasury Department at the following address:

Department of the Treasury  
Attn: MPRA Office, Room 1001  
1500 Pennsylvania Avenue, NW  
Washington, DC 20220

### You can comment on the application to reduce benefits

You can submit a comment on the application by going to [www.treasury.gov/mpra](http://www.treasury.gov/mpra). Comments may also be mailed to the Department of the Treasury, at the address listed above. All interested parties can make comments, and the comments will be publicly available.

### Retiree representative

The Board of Trustees is not required to select a retiree representative, because the Plan has fewer than 10,000 participants. The Board of Trustees has not chosen to select a retiree representative.

## Vote on the proposed benefit reduction

If the application for the proposed reduction of benefits is approved by the Treasury Department, then you will have the opportunity to vote on the proposed reduction. Unless a majority of all participants and beneficiaries of the Plan vote to reject the reduction, the Treasury Department must allow the reduction of benefits to take effect. This means that not voting counts the same as a vote to approve the reduction.

## Your right to see Plan documents

You may want to review Plan documents to help you understand your rights and the proposed reduction to your benefits. The Plan administrator must respond to your request for the following documents within 30 days:

- The Plan document (including any amendments adopted to reflect an authorized reduction of benefits), trust agreement, and other documents governing the Plan (such as collective bargaining agreements).
- The Plan's most recent summary plan description (SPD or plan brochure) and any summary of material modifications.
- The Plan's Form 5500 annual reports, including audited financial statements, filed with the U.S. Department of Labor during the last six years.
- The annual funding notices furnished by the Plan during the last six years.
- Actuarial reports, including reports prepared in anticipation of the benefit reduction, furnished to the Plan within the last six years.
- The Plan's current rehabilitation plan, including contribution schedules and annual plan-sponsor determinations that all reasonable measures to avoid running out of money continue to be taken and that the Plan would run out of money if there were no benefit reductions.
- Any quarterly, semi-annual or annual financial reports prepared for the Plan by an investment manager, fiduciary or other advisor and furnished to the Plan within the last six years.

*The Retirement Plan Booklet (Summary Plan Description) is available at [www.akironworkerstrust.com](http://www.akironworkerstrust.com) in the Plan Information section.*

The Plan administrator may charge you the cost per page to the Plan for the cheapest way of copying documents, but cannot charge more than 25 cents per page. The Plan's Form 5500 Annual Return/Report of Employee Benefit Plan is also available free of charge at [www.dol.gov/ebsa/5500main.html](http://www.dol.gov/ebsa/5500main.html). Some of the documents also may be available for examination, without charge, at the Plan administrator's office, your worksite or union hall.

## Your right to challenge incorrect calculations

If you think the Plan miscalculated the reduction to your benefits, then you have the right to submit a claim to the Plan to have the calculation corrected. The Plan's summary plan description ("SPD") tells you how to submit a claim for appeal. The SPD also describes your right to have an arbitrator review the Plan's final decision on your claim.

If you believe the information used to calculate your estimate (shown on the enclosed benefit estimate) is wrong, please contact the Plan Administration office:

By phone: (907) 561-5119 or (800) 325-6532  
By email: [retirement@wpas-inc.com](mailto:retirement@wpas-inc.com)  
By mail: PO Box 93870  
Anchorage, AK 99509-3870

## Alaska Ironworkers Pension Plan Benefit Reduction FAQs for Participants

### 1. What's happening to the pension plan?

Because our plan has reached 'critical and declining' funding status, we have just two options:

- *Let the plan go.* In that case, your benefits would be paid by the Pension Benefit Guaranty Corporation (PBGC), which is in trouble itself and may have to pay benefits at an even lower level in the future.
- *Try to save the plan.* If we keep paying benefits, but at a lower level, we have a chance to stabilize the plan.

Reducing benefits – fairly, across the board – means:

- You receive higher benefits than with PBGC benefits.
- Benefits accrued after July 1, 2016 are not affected by the reduction. This option is not available under the PBGC.
- The reduction can be lifted once the plan is no longer projected to run out of money only if we keep it going ourselves – not under the PBGC.

### 2. What do the Trustees say?

The Trustees have decided to try to save the plan. The Multiemployer Pension Reform Act (MPRA) allows what it calls 'benefit suspension' in cases like this; the term doesn't mean benefits stop, though – only that they can be reduced to help a troubled plan.

### 3. What is the current situation with the plan?

Our Alaska Ironworkers Pension Plan has reached what's termed 'critical and declining' and is projected to run out of assets in 2029. We're contributing more for plan funding than ever and participants are earning smaller benefits, yet our plan is not in a sustainable position. This is why the Trustees have filed an application with the federal government to reduce benefits, rather than let it go to the Pension Benefit Guaranty Corporation (PBGC).

### 4. What are other plans doing?

From what we can tell, there are over 100 multiemployer plans that are projected to run out of money at some point in the future. As of the end of 2016, 9 plans submitted applications to reduce benefits. Of those 9, 4 were still in review, 4 have been denied and 1 has been accepted. The denials have largely been due to the assumptions they used. We believe we have used realistic assumptions that give the Plan the best chance of success. It is worth noting that an application can only be submitted if the proposed benefit reduction has a reasonable chance of saving the plan. There are plans that cannot submit an application because no allowable benefit reduction would keep them from running out of money.

**5. What got us to this point?**

Our plan moved from the 'critical' stage in 2015 to 'critical and declining' in 2016. Negative investment returns and fewer hours worked by active participants to support plan contributions are the significant factors behind the plan's funding problem.

**6. The plan's investment returns were almost 10% less than what was projected. How are the plan assumptions decided?**

A 6.25% return has been our best projection for the long term, but now needs to be re-evaluated. It was based on market assumptions, historical performance, and expected trends. Investment experts are currently expecting lower returns than in the past. We are committed to being realistic about expected future investment returns.

**7. What is the process our Trustees are considering to help save the plan?**

The government mandates a specific process we must follow, which includes comments and a vote by plan participants. A timeline follows:

- March 2017 - Trustees submit application to the Treasury Department for review (the government has 225 days to review the application)
- May-June 2017 - 45-day comment period
- July 2017-January 2018 – voting period happens during this time depending when and if the application is approved
- February 1, 2018 – latest date benefit reduction would take effect. If approved, the effective date will be the first of the month following 30 days from the end of the voting period. The effective date will be no earlier than 9 months from the date the application was filed, but no later than February 1, 2018. We don't know exactly when the vote will take place because it depends on how long the government takes to review the application.

**8. What input do Alaska Ironworkers Pension Plan participants have into the proposed benefit reduction?**

The process includes asking for comments as well as a participant vote. The reduction will go into effect unless a majority of all plan participants, regardless of how many vote, reject it.

**9. Who's affected by the Trustees' proposed action?**

If approved, the proposed benefit reduction would lower benefits by a flat 34.5 percent across the board for all participants and beneficiaries, except:

- No reduction for those 80 or older
- Less reduction for those between 75 and 80
- No reduction for those receiving disability benefits
- No reduction below 110% of the PBGC guarantee

These exceptions are required by law.

**10. Why is Alaska Ironworkers doing this now?**

Since we are projected to run out of assets in 2029, the pension plan has reached the 'critical and declining' stage, so the Trustees have considered all options available; saving the plan is the best way to keep paying benefits. The longer we wait to take action, the more difficult it becomes to save the plan. The Trustees recommend an across the board reduction of benefits as the fairest solution.

**11. Isn't our Alaska Ironworkers Pension Plan covered by insurance?**

Yes, it is protected by the Pension Benefit Guaranty Corporation (PBGC), a federal agency. The plan pays premiums to the PBGC insurance program to protect benefits, up to limits set by law. When a plan runs out of assets and becomes insolvent, benefits are paid by the PBGC, which would not pay out full benefits of our plan and could itself become insolvent – meaning benefits could be significantly lower than the current PBGC guaranteed amounts. Benefits paid by the PBGC would be significantly lower than the benefits paid under the proposed benefit reduction. Our plan Trustees believe trying to save the plan by reducing benefits is a more advantageous solution for you.

**12. If the benefit reduction is approved, what will be the percent decrease?**

Under the proposal, benefits would be reduced by a flat 34.5 percent for all participants and beneficiaries except those 80 or older and those receiving disability. Also, benefit reductions would be less for those between 75 and 80.

**13. Is there an alternative to the recommendation for reduced benefits?**

Our Trustees propose the reduction to prevent the plan from running out of money. For plans that run out of assets and become insolvent, benefits are paid by the Pension Benefit Guaranty Corporation (PBGC) – at a permanently reduced level. In contrast, the proposed benefit reduction could be temporary until the plan is no longer projected to run out of money and it will pay higher benefits than the PBGC.

**14. What is the advantage of voting for a reduction in benefits?**

The goal of the benefit reduction is to avoid insolvency. In fact, the benefit reduction could be temporary, until the plan is no longer projected to run out of money. Not taking action risks further decline into insolvency, in which case the Pension Benefit Guaranty Corporation (PBGC) would take over and pay out permanently reduced benefits.

**15. What does this reduction in benefits mean to us now and in the future?**

Currently the reduction in benefits is needed to avoid insolvency. For the future, the Trustees hope this action will enable the plan to move from 'critical and declining' to a more healthy funded state. The benefit reduction could be temporary, unlike the permanent reduction and lower benefits if we let the plan go to the Pension Benefit Guaranty Corporation (PBGC), which itself is in trouble.

# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:



Sample 1  
Active

This personal estimate shows how your benefit would change IF the proposed reduction is approved. *Nothing is happening to your benefit right now.*

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

Benefit earned  
through June 30, 2016  
\$503.40

Proposed benefit  
\$329.73

PBGC guaranteed  
benefit  
\$232.38

If PBGC goes  
insolvent, your  
benefit could be  
much less

Any benefits earned after July 1, 2016 would not be reduced under this proposal.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

- **Benefit earned through June 30, 2016:** If you start receiving your benefit at normal retirement age in the form of a single life annuity, the portion of your monthly benefit earned through June 30, 2016 without the proposed reduction would be \$503.40.
- **Proposed benefit:** Under the proposed reduction, your monthly benefit earned through June 30, 2016 in the same form would be reduced to \$329.73.

Note: These numbers are just estimates. Final calculations will be made when the reduction is approved. In addition, the actual amount you receive will depend on other factors, like how long you work, when you begin receiving payments, and which payment form you choose. For more information, see the Alaska Ironworkers Retirement Plan Booklet (Summary Plan Description) available at [www.akironworkerstrust.com](http://www.akironworkerstrust.com).

The proposed reduction is considered to be permanent.



## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 6.50 years of credited service under the Plan as of July 1, 2016.
- You will be 38 as of February 28, 2018.
- The portion of your benefit that is based on disability is \$0.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

Here is how this estimate was calculated:

Benefit earned through February 1, 2016:  
\$503.40

Reduction on April 1, 2018:  
 $\$503.40 \times 34.5\% = \$173.67$

Reduced benefit =  $\$503.40 - \$173.67 = \$329.73$

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$232.38.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 2  
Disability Benefit

Nothing is happening to your benefit right now.

Because you are receiving disability benefits, your monthly benefit would not change under the proposed reduction.

Current benefit  
\$1,884.24

Proposed benefit  
\$1,884.24

PBGC guaranteed  
benefit  
\$625.63

If PBGC goes  
insolvent, your  
benefit could be  
much less

## PBGC GUARANTEES YOUR BENEFITS UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$625.63.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.





## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 3  
Less than 110% of PBGC benefit

Nothing is happening to your benefit right now.

Your monthly benefit would not change under the proposed reduction because it is already less than 110% of the benefit guaranteed by the PBGC.

Benefit earned  
through June 30, 2016  
\$4.18

Proposed benefit  
\$4.18

PBGC guaranteed  
benefit  
\$3.82

If PBGC goes  
insolvent, your  
benefit could be  
much less

## PBGC GUARANTEES YOUR BENEFITS UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$3.82.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

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# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

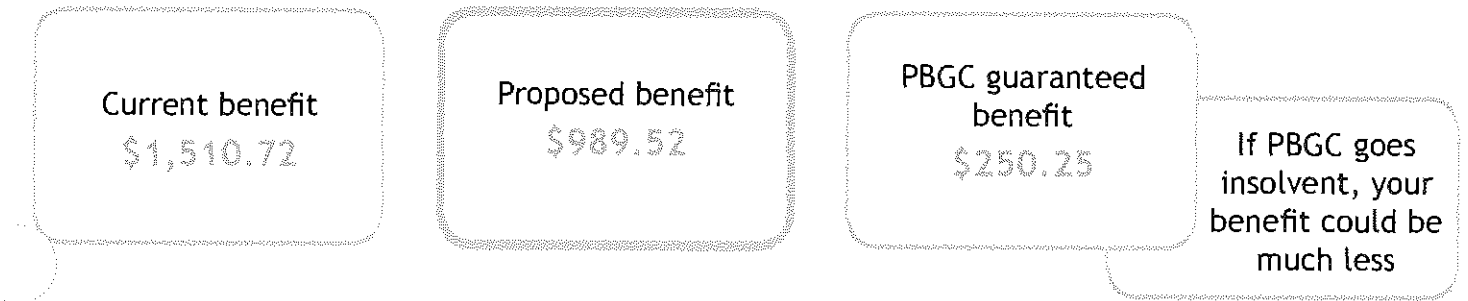
This estimate of the effect of the proposed reduction of benefits has been prepared for:



Sample 4  
Retiree less than 75

This personal estimate shows how your benefit would change **IF** the proposed reduction is approved. *Nothing is happening to your benefit right now.*

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.



Your current monthly benefit is \$1,510.72. Under the proposed reduction, your monthly benefit would be reduced to \$989.52.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.



## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 7.00 years of credited service under the Plan.
- You will be 70 as of February 28, 2018.
- The portion of your benefit that is based on disability is \$0.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

Here is how this estimate was calculated:

Benefit earned through February 1, 2016:  
\$1,510.72

Reduction on April 1, 2018:  
 $\$1,510.72 \times 34.5\% = \$521.20$

Reduced benefit =  $\$1,510.72 - \$521.20 = \$989.52$

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$250.25.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

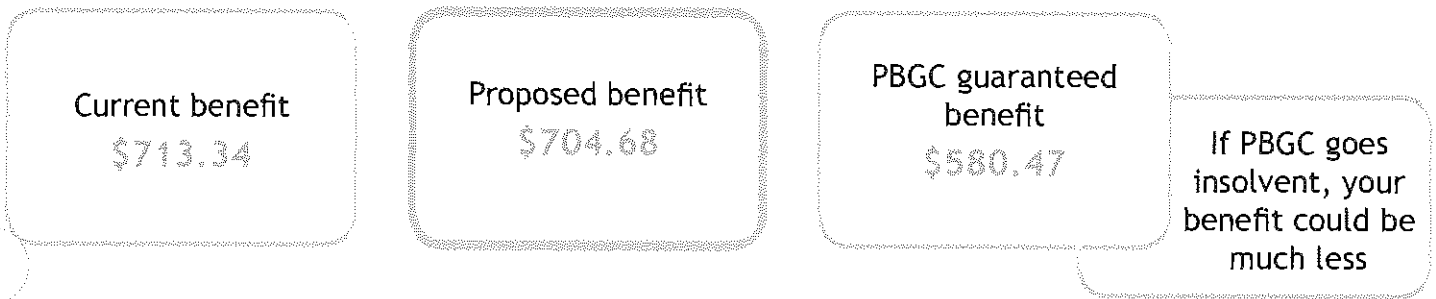
# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 5  
Retiree 75-80

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.



Your current monthly benefit is \$713.34. Under the proposed reduction, your monthly benefit would be reduced to \$704.68.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts earlier or later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 16.50 years of credited service under the Plan.
- You will be 79 as of January 31, 2018.
- The portion of your benefit that is based on disability is \$0.

Because you will be 79 on January 31, 2018, you have a smaller reduction to your benefit than younger participants, calculated as follows:

Benefit through June 30, 2016	–	Benefit through June 30, 2016  <i>times</i> 10.4%*  (reduced benefit received if you are younger than 75)	x	Number of months beginning with March 2018 and ending with the month you turn 80  <i>divided by</i> 60  (percent that represents how close you are to age 80)	=	Reduced benefit
\$713.34	–	\$713.34  <i>times</i> 10.4%*  = \$74.19	x	7 months  <i>divided by</i> 60  = 0.11667	=	\$704.68

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$580.47.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

*\*Your suspension factor is less than normal because your reduced benefit would have been less than 110% of the PBGC guaranteed benefit.*

## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

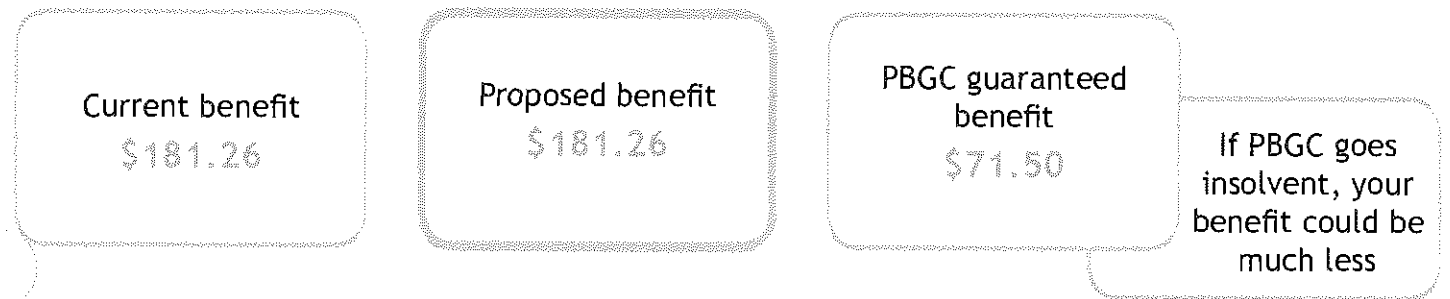
This estimate of the effect of the proposed reduction of benefits has been prepared for:



Sample 6  
Retiree over 80

Nothing is happening to your benefit right now.

Because you will be over age 80 at the time of the proposed reduction, your monthly benefit **would not change**.



## PBGC GUARANTEES YOUR BENEFITS UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$71.50.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.





# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 7  
Retiree 75-80

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

Current benefit  
\$588.76

Proposed benefit  
\$436.42

PBGC guaranteed  
benefit  
\$125.13

If PBGC goes  
insolvent, your  
benefit could be  
much less

Your current monthly benefit is \$588.76. Under the proposed reduction, your monthly benefit would be reduced to \$436.42.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts earlier or later later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 3.50 years of credited service under the Plan.
- You will be 76 as of January 31, 2018.
- The portion of your benefit that is based on disability is \$0.

Because you will be 76 on January 31, 2018, you have a smaller reduction to your benefit than younger participants, calculated as follows:

Benefit through June 30, 2016	—	Benefit through June 30, 2016  <i>times</i> 34.5% (reduced benefit received if you are younger than 75)	x	Number of months beginning with March 2018 and ending with the month you turn 80  <i>divided by</i> 60 (percent that represents how close you are to age 80)	=	Reduced benefit
\$588.76	—	\$588.76 <i>times</i> 34.5% = \$203.12	x	45 months <i>divided by</i> 60 = 0.75000	=	\$436.42

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$125.13.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 8  
Beneficiary 75-80

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

Current benefit  
\$439.26

Proposed benefit  
\$412.44

PBGC guaranteed  
benefit  
\$359.70

If PBGC goes  
insolvent, your  
benefit could be  
much less

Your current monthly benefit is \$439.26. Under the proposed reduction, your monthly benefit would be reduced to \$412.44.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts earlier or later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 11.00 years of credited service under the Plan.
- You will be 76 as of January 31, 2018.
- The portion of your benefit that is based on disability is \$0.

Because you will be 76 on January 31, 2018, you have a smaller reduction to your benefit than younger participants, calculated as follows:

Benefit through June 30, 2016	–	Benefit through June 30, 2016  <i>times</i> 9.9%*  (reduced benefit received if you are younger than 75)	x	Number of months beginning with March 2018 and ending with the month you turn 80  <i>divided by</i> 60  (percent that represents how close you are to age 80)	=	Reduced benefit
\$439.26	–	\$439.26  <i>times</i> 9.9%*  = \$43.49	x	37 months  <i>divided by</i> 60  = 0.61667	=	\$412.44

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$359.70.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

*\*Your suspension factor is less than normal because your reduced benefit would have been less than 110% of the PBGC guaranteed benefit.*

## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 9  
Beneficiary less than 75

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

Current benefit  
\$742.83

Proposed benefit  
\$486.55

PBGC guaranteed  
benefit  
\$321.75

If PBGC goes  
insolvent, your  
benefit could be  
much less

Your current monthly benefit is \$742.83. Under the proposed reduction, your monthly benefit would be reduced to \$486.55.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 9.00 years of credited service under the Plan.
- You will be 66 as of February 28, 2018.
- The portion of your benefit that is based on disability is \$0.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

Here is how this estimate was calculated:

Benefit earned through February 1, 2016:  
\$742.83

Reduction on April 1, 2018:  
 $\$742.83 \times 34.5\% = \$256.28$

Reduced benefit =  $\$742.83 - \$256.28 = \$486.55$

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$321.75.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 10  
Beneficiary over 80

Nothing is happening to your benefit right now.

Because you will be over age 80 at the time of the proposed reduction, your monthly benefit **would not change**.

Current benefit  
\$59.93

Proposed benefit  
\$59.93

PBGC guaranteed  
benefit  
\$17.88

If PBGC goes  
insolvent, your  
benefit could be  
much less

## PBGC GUARANTEES YOUR BENEFITS UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$17.88.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.





## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

This estimate of the effect of the proposed reduction of benefits has been prepared for:

Sample 11  
Beneficiary 75-80

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

Current benefit  
\$778.84

Proposed benefit  
\$577.31

PBGC guaranteed  
benefit  
\$455.81

If PBGC goes  
insolvent, your  
benefit could be  
much less

Your current monthly benefit is \$778.84. Under the proposed reduction, your monthly benefit would be reduced to \$577.31.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts on February 1, 2018. If the benefit reduction starts earlier or later later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 12.75 years of credited service under the Plan.
- You will be 76 as of January 31, 2018.
- The portion of your benefit that is based on disability is \$0.

Because you will be 76 on January 31, 2018, you have a smaller reduction to your benefit than younger participants, calculated as follows:

Benefit through June 30, 2016	—	Benefit through June 30, 2016  <i>times</i> 34.5% (reduced benefit received if you are younger than 75)	x	Number of months beginning with March 2018 and ending with the month you turn 80  <i>divided by</i> 60 (percent that represents how close you are to age 80)	=	Reduced benefit
\$778.84	—	\$778.84 <i>times</i> 34.5% = \$268.70	x	45 months <i>divided by</i> 60 = 0.75000	=	\$577.31

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to be about 12 years from now).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$455.81.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

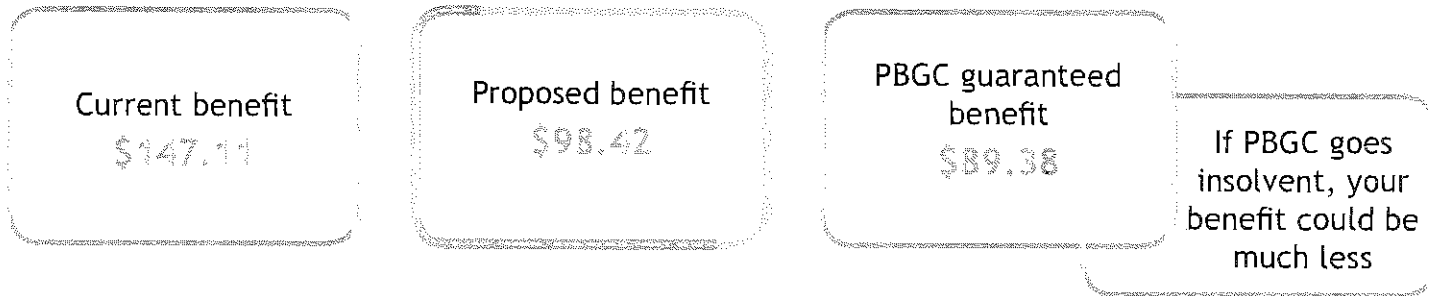
# HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

Sample 12  
Retired participant impacted by the 110% of  
PBGC guarantee limitation less than age 75

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

## ESTIMATE OF PROPOSED BENEFIT FOR SAMPLE 12



Your current monthly benefit is \$147.11. Under the proposed reduction, your monthly benefit would be reduced to \$98.42.

This is an estimate. Final calculations will be made when the reduction is approved.

Before your benefit changes, you will receive a statement showing your new benefit amount as well as your authorized deductions (such as health plan premiums and income taxes) to give you an opportunity to make any changes before the reduction takes effect.

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts no later than February 1, 2018. If the benefit reduction starts later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 2.50 years of credited service under the Plan.
- Your date of birth is 03/15/1951.
- The portion of your benefit that is based on disability is \$0.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

Here is how this estimate was calculated:

$$\begin{aligned} &\text{Benefit earned through June 30, 2016:} \\ &\quad \$147.11 \\ &\quad \text{Reduction:} \\ &\quad \$147.11 \times 33.1\% = \$48.69 \\ &\text{Reduced benefit} = \$147.11 - \$48.69 = \$98.42 \end{aligned}$$

*\*Your suspension factor is less than normal because your reduced benefit would have been less than 110% of the PBGC guaranteed benefit.*

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to happen in 2030).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$89.38.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

## HOW YOUR MONTHLY PAYMENTS WOULD BE AFFECTED

Sample 13  
Participant over normal retirement age, not  
retired, benefit reduction effective at retirement

This personal estimate shows how your benefit would change IF the proposed reduction is approved. Nothing is happening to your benefit right now.

If approved, the reduction would take effect the first of the month following 30 days from the end of the voting period, but no later than February 1, 2018.

### ESTIMATE OF PROPOSED BENEFIT FOR SAMPLE 13



Any benefits earned after July 1, 2016 would not be reduced under this proposal.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

- **Benefit earned through June 30, 2016:** If you start receiving your benefit at normal retirement age in the form of a single life annuity, the portion of your monthly benefit earned through June 30, 2016 without the proposed reduction would be \$1,907.29.
- **Proposed benefit:** Under the proposed reduction, your monthly benefit earned through June 30, 2016 in the same form would be reduced to \$1,249.27.

Note: These numbers are just estimates. Final calculations will be made when the reduction is approved. In addition, the actual amount you receive will depend on other factors, like how long you work, when you begin receiving payments, and which payment form you choose. For more information, see the Alaska Ironworkers Retirement Plan Booklet (Summary Plan Description) available at [www.akironworkerstrust.com](http://www.akironworkerstrust.com).

The proposed reduction is considered to be permanent.

## HOW YOUR PROPOSED BENEFIT REDUCTION ESTIMATE IS CALCULATED

This is an estimate of the effect the proposed reduction would have on your benefit under the Plan. It is not a final benefit calculation. This estimate assumes that the proposed benefit reduction starts no later than February 1, 2018. If the benefit reduction starts later, the effect of the proposed reduction on your benefit might be different. Final calculations will be made once the reduction is approved.

This estimate is based on the following information from Plan records:

- You have 12.50 years of credited service under the Plan as of July 1, 2016.
- Your date of birth is 06/20/1954.
- The portion of your benefit that is based on disability is \$0.

The proposed reduction would affect the benefit you earned through June 30, 2016. Benefits earned after that date are not included in the amounts shown on this statement and would not be affected by the reduction.

Here is how this estimate was calculated:

$$\begin{aligned} &\text{Benefit earned through June 30, 2016:} \\ &\quad \$1,907.29 \\ &\quad \text{Reduction:} \\ &\quad \$1,907.29 \times 34.5\% = \$658.02 \\ &\text{Reduced benefit} = \$1,907.29 - \$658.02 = \$1,249.27 \end{aligned}$$

## PBGC GUARANTEES YOUR BENEFIT UP TO A LIMIT

If the reduction in benefits is rejected, it's important to note that your current benefit amount is available only until the Plan runs out of money (estimated to happen in 2030).

If the Plan does not have enough money to pay benefits, your monthly benefit would then be paid by the PBGC, up to the amount it guarantees. Your current monthly benefit guaranteed by PBGC is estimated to be \$446.88.

However, there is concern about the health of the PBGC. If the PBGC itself becomes insolvent, your benefit could be significantly less.

**Appendix B**



**POWER OF ATTORNEY AND DECLARATION OF AUTHORIZED REPRESENTATIVE BEFORE THE  
DEPARTMENT OF THE TREASURY**

**Applicant Information:**

Board of Trustees, Alaska Ironworkers Pension Plan  
PO Box 93870  
Anchorage, AK 99509  
EIN: 91-6123695  
Plan number: 001  
Paul M. Carr, Chairman  
Phone: (907) 563-4766  
[iw751@alaska.net](mailto:iw751@alaska.net)  
Fax: (907) 563-2855

The Board of Trustees for the Alaska Ironworkers Pension Trust hereby appoints the following representative as attorney-in-fact to represent the taxpayer before the Department of the Treasury and perform acts related to the attached application dated March 30, 2017 for suspension of benefits under § 432(e)(9) of the Internal Revenue Code of 1986, as amended.

**Representative Information:**

Charles A. Dunnagan  
Jermain, Dunnagan & Owens, P.C.  
3000 A Street, Suite 300  
Anchorage, AK 99507  
EIN: 92-0116216  
Phone: (907) 563-8844  
[cdunnagan@jdolaw.com](mailto:cdunnagan@jdolaw.com)  
Fax: (907) 563-7322

Send copies of notices and communications to representative: Yes.

With the exception of the acts described below, I authorize my representative to receive and inspect my confidential tax information and to perform acts that I can perform with respect to the attached application dated March 30, 2017 for suspension of benefits under § 432(e)(9). For example, my representative shall have the authority to sign any agreements, consents, or similar documents.

Specific acts not authorized: None.

Redacted by the U.S. Department of the Treasury

Paul Carr, Chairman  
Board of Trustees

3-10-17  
Date

Redacted by the U.S. Department of the Treasury

Allan Harding, Secretary  
Board of Trustees

3-10-17  
Date

DECLARATION OF REPRESENTATIVE

Under penalties of perjury, by my signature below I declare that:

- I am not currently suspended or disbarred from practice below the Internal Revenue Service;
- I am authorized to represent the applicant for the matters specified in this Power of Attorney and Declaration of Representative; and
- I am an attorney, a member in good standing of the bar of the highest court of the jurisdiction shown below.

Date

3/28/17

JERMAIN, DUNNAGAN & OWENS, P.C.

Redacted by the U.S. Department of the Treasury

Charles A. Dunnagan

State of Alaska Bar No. Redacted