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# **ALASKA LABORERS – EMPLOYERS RETIREMENT FUND**

**July 1, 2013 Actuarial Valuation**

**Prepared by:**

Milliman, Inc.

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April 4, 2014

Board of Trustees  
Alaska Laborers – Employers Retirement Fund

Dear Trustees:

As requested, we have performed an actuarial valuation of the Alaska Laborers – Employers Retirement Fund as of July 1, 2013. Our findings are set forth in this actuary's report.

In preparing our report, we relied, without audit, on the employee data supplied by the administrative office and the draft financial statements prepared by the Fund's independent auditor. We also relied on the benefit provisions adopted and in effect as of July 1, 2013 based on the plan document provided by the Fund's legal counsel. We reviewed the data and financial statements and found them 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 inaccurate or incomplete, our results may be different and our calculations may need to be revised.

For actuarial requirements under ERISA, all costs, liabilities, rates of interest, and other factors under the Fund (except when mandated directly by the Internal Revenue Code and its regulations) have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Fund and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience under the Fund. We completed this actuarial valuation in accordance with our understanding of IRS minimum funding requirements as amended by subsequent legislation, including the Pension Protection Act of 2006 (PPA), and reflecting all proposed regulations and guidance issued to date.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations under ERISA are to determine the minimum required and maximum allowable funding amounts for an ongoing plan. The calculations in the enclosed report have been made on a basis consistent with our understanding of ERISA. Results 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 plan termination.

This report has been prepared for the internal use of the Fund and its Trustees and employees (for their use in administering the Fund). Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any other party. 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:

- (a) The Fund may provide a copy of Milliman's work, in its entirety to the Fund'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 Fund.
- (b) The Fund may distribute certain work products that Milliman and the Fund mutually agree are appropriate for distribution to participating employers, pension participants and other parties as may be required by the Pension Protection Act of 2006.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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.

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. I am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,



Peter R. Sturdivan, FSA, EA, MAAA  
Principal and Consulting Actuary

PRS:wp

# ALASKA LABORERS – EMPLOYERS RETIREMENT FUND

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# Section 1

## Summary of Valuation Results

### A. Overview of Results

	Actuarial Valuation for Plan Year Beginning	
	July 1, 2012	July 1, 2013
<b>Assets</b>		
Market Value of Assets	\$457,659,789	\$471,296,807
Actuarial Value of Assets	549,191,747	547,321,160
Return for Prior Plan Year		
Market Value of Assets	(6.0)%	8.9%
Actuarial Value of Assets	(0.6)%	4.5%
<b>Funded Status</b>		
Present Value of Accrued Benefits	\$683,298,948	\$679,894,108
Market Funded Percentage	67%	69%
Actuarial (Pension Protection Act) Funded Percentage	80%	81%*
<b>Withdrawal Liability</b>		
Present Value of Vested Benefits	\$660,325,395	\$658,149,388
Assets for Withdrawal Liability	509,395,078	488,087,487
Unfunded Vested Benefit Liability	150,930,317	170,061,901
<b>Credit Balance and Contribution Requirements</b>		
Credit Balance at End of Prior Year	\$64,726,993	\$65,530,009
Normal Cost (including expenses)	8,558,456	8,936,707
Net Amortization Payment	17,879,401	17,395,423
Minimum Required Contribution	0	0
Maximum Deductible Contribution	866,761,186	941,590,722
Anticipated Contributions	21,820,995	24,805,440
Contribution to Maintain Credit Balance	22,954,220	22,790,607
<b>Participant Counts</b>		
Pensioners	2,810	2,853
Vested Terminated Members	850	888
Active Participants	<u>1,821</u>	<u>1,951</u>
Total Participants in Valuation	5,481	5,692
<b>Certification Status</b>		
	Green	Orange

\* Originally certified as 79.2% on September 26, 2013

## B. Purpose of this Report

This report has been prepared for the Alaska Laborers – Employers Retirement Fund as of July 1, 2013 to:

- Review the Fund's funded status as of July 1, 2013.
- Review the experience for the plan year ending June 30, 2013, including the performance of the Fund's assets during the year and changes in plan participant demographics.
- Calculate the Fund's funding requirements under ERISA for the plan year beginning July 1, 2013.
- Determine the Fund's unfunded vested benefit liability for withdrawal liability purposes as of June 30, 2013 in accordance with the Multiemployer Pension Plan Amendments Act of 1980.
- Determine the actuarial present value of accumulated plan benefits as of June 30, 2013 for purposes of disclosing the Fund's liabilities under FASB ASC Topic 960.

## C. Plan Provisions

The valuation reflects the plan provisions in effect on July 1, 2013. There were no Plan changes during the prior plan year which impacted this valuation.

## D. Actuarial Methods and Assumptions

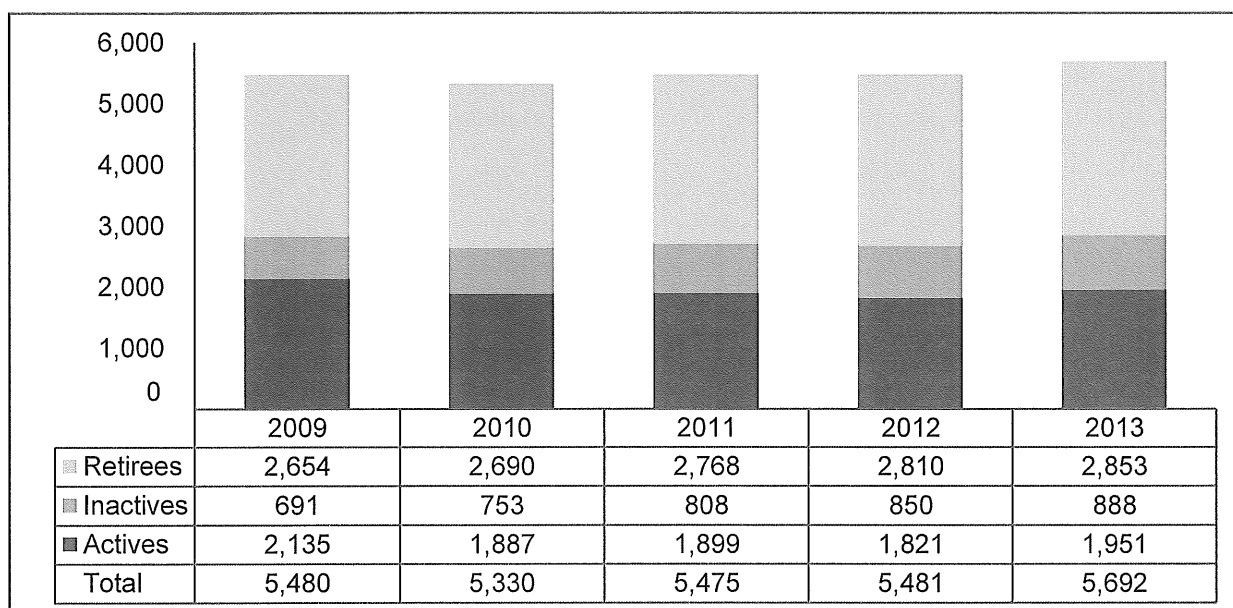
Appendix D contains a summary of the actuarial assumptions used for the July 1, 2013 actuarial valuation. All assumptions and methods are the same as those used in the July 1, 2012 actuarial valuation, with the following changes:

- The current liability interest rate was changed from 4.02% to 3.61% and remains within the allowable corridor.
- The current liability mortality was updated as specified by the IRS.
- The annual hours assumption for future credits was increased from 1,250 to 1,350. This assumption change increased actuarial liability by \$0.1 million, and increased normal cost by less than \$0.1 million.
- Assumed retirement rates for active participants were changed as shown below to better reflect recent and anticipated experience under the Fund. The result of this change was a \$0.9 million decrease in actuarial liability.

Age	At Least 10 Years of Service as of July 1, 2011 and Continuously Active	Under 10 Years of Service as of July 1, 2011 or Hired After June 30, 2011	
		<30,000 hours	>30,000 hours
50	35%	10%	35%
51	20%	10%	20%
52	10%	10%	10%
53	10%	10%	10%
54	5%	10%	10%
55	15%	30%	30%
56	20%	20%	20%
57	35%	35%	35%
58	35%	35%	35%
59	20%	20%	20%
60-61	25%	25%	25%
62	100%	100%	100%

## E. Participant Counts

The following chart shows the number of participants included in this valuation, along with comparable information from the last several valuations.



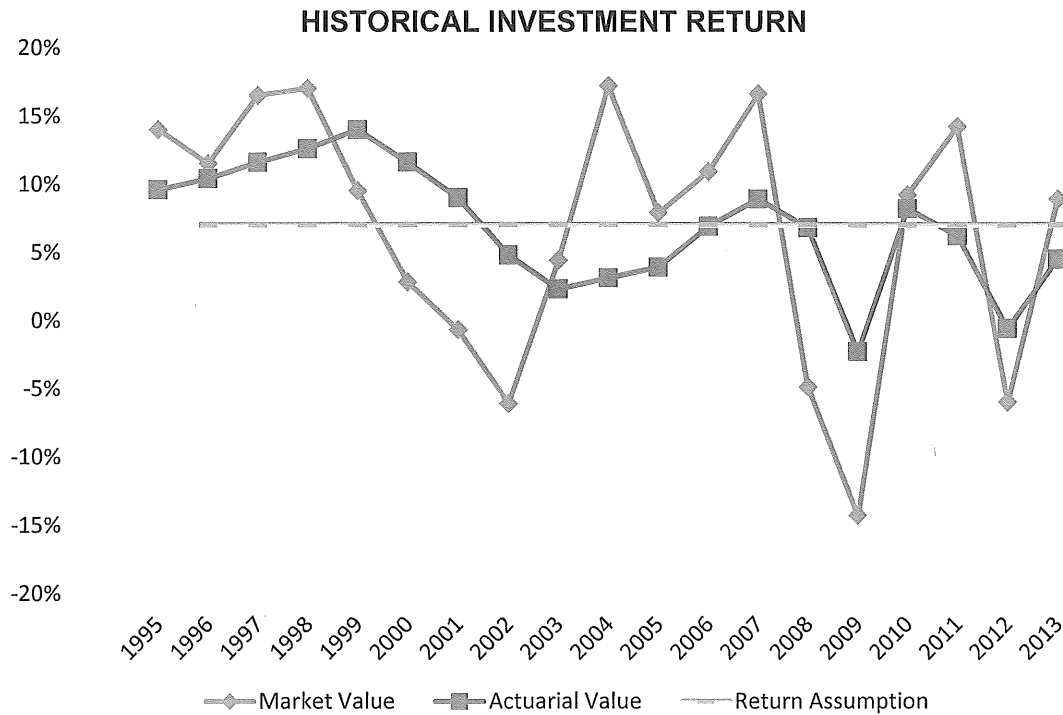
For valuation purposes, an active employee is a participant who is not retired, terminated or deceased on the valuation date and who has worked at least 250 hours during the prior plan year.

## F. Plan Assets

The Fund's market value of assets is the net assets available for benefits as shown on the Fund's financial statements. For funding calculations under ERISA, the Fund uses an asset smoothing method that recognizes market value investment gains and losses over a period of five years, except that the Trustees elected to recognize the 2008-2009 investment loss over 10 years under the Pension Relief Act of 2010. The resulting asset value is called the actuarial value of assets, 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 Fund's rate of investment return, net of investment expenses, over the past five years.

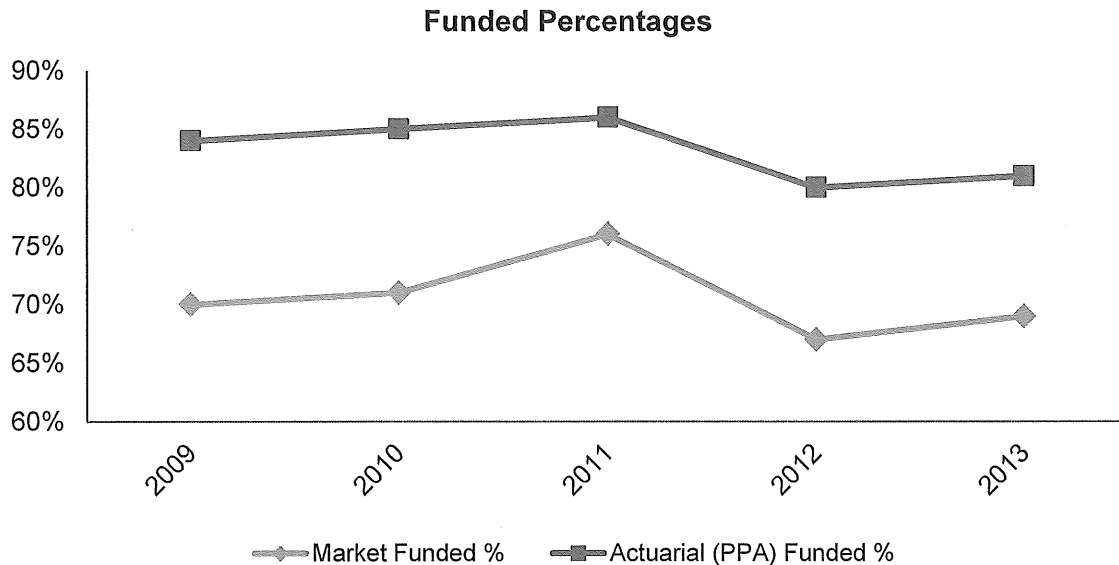
July 1,	Prior Year Rate of Return		Market Value of Assets	Actuarial Value of Assets	Gain/(Loss) on Market Value
	Market	Actuarial			
<b>2013</b>	8.9%	4.5%	\$471,296,807	\$547,321,160	\$ 8,654,546
<b>2012</b>	(6.0)	(0.6)	457,659,789	549,191,747	(65,175,958)
<b>2011</b>	14.2	6.2	516,362,034	581,076,938	33,417,851
<b>2010</b>	9.2	8.2	479,129,086	574,954,903	10,120,588
<b>2009</b>	(14.3)	(2.3)	464,349,097	557,218,916	(118,467,346)

Over the past ten years, the Fund's assets have averaged a 5.5% return on a market value basis, net of investment expenses. The graph below shows the Fund's annual returns over this time period, compared to the Fund's 7.0% investment return assumption.



## G. Funded Status

An important indicator of the Fund's funded status is the ratio of the Fund's *market value of assets* to the Fund's liability for all benefits earned to date, called the present value of accrued benefits. For purposes of determining the Fund's zone status under the Pension Protection Act, the Fund's *actuarial value of assets* is compared to this liability measurement. Below is a chart showing a historical comparison of these measurements and a table that details the relevant information for the past several valuations.



	Present Value of Accrued Benefits						
July 1,	Retirees & Beneficiaries	Vested Terminated Participants	Actives	Reserves	Total	Funded % Market Value	Funded % Actuarial Value (PPA)
2013	\$498,804,942	\$61,785,933	\$108,668,174	\$10,635,059	\$679,894,108	69%	81%
2012	496,332,925	64,128,095	111,510,394	11,327,534	683,298,948	67	80
2011	489,607,369	62,894,635	113,699,710	12,290,533	678,492,247	76	86
2010	485,286,601	59,585,130	120,831,215	12,761,699	678,464,645	71	85
2009	481,062,415	56,923,181	118,612,694	10,434,049	667,032,339	70	84

The annual funding notice to participants must be distributed within 120 days of the end of the plan year and will include the actuarial value (PPA) funded percentage for 2011, 2012, and 2013, as shown above.

## H. Minimum Required Contribution and Credit Balance

The Fund's minimum required contribution consists of two components:

- Gross normal cost, which includes the cost of benefits allocated to the next plan year and administrative expenses expected to be paid in the next plan year.
- Amortization payments to pay off the unfunded actuarial accrued liability.

If contributions do not meet this minimum, the plan's credit balance, which was created by contributions in excess of minimum required contributions in past years, may be used to offset the current year's contribution requirements. The table below summarizes the plan's contribution requirements, actual contributions, and credit balance over the last several years.

July 1,	Normal Cost	Net Amortization Payment	Minimum Required Contribution	Contribution To Maintain Credit Balance	Actual Contribution	Credit Balance, End of Year
<b>2013</b>	\$8,936,707	\$17,395,423	\$26,332,130	\$22,790,607	\$24,805,440 <sup>(1)</sup>	\$67,615,361 <sup>(2)</sup>
<b>2012</b>	9,512,556	17,879,401	27,391,957	22,954,220	24,803,328	65,530,009
<b>2011</b>	8,456,132	14,002,472	22,458,604	19,013,534	22,070,461	64,726,993
<b>2010</b>	11,370,452	14,888,265	26,258,717	22,930,414	20,842,509	61,682,995
<b>2009</b>	10,927,506	15,423,612	26,351,118	23,367,100	20,876,297	63,773,924
<sup>(1)</sup> Estimated contributions used for 2013						
<sup>(2)</sup> Expected based on estimated contributions for 2013						

## I. Withdrawal Liability

Withdrawing employers are assessed a portion of the Plan's unfunded vested benefit liability for withdrawal liability, which is determined by subtracting the plan's assets for withdrawal liability purposes from the liability for all vested benefits earned to date. The assets for withdrawal liability are identical to the actuarial value of assets except that the 2008 investment loss is recognized over five years rather than ten years. The table below summarizes this information for the past several years.

June 30,	Vested Benefit Liability	Assets For Withdrawal Liability	Unfunded Vested Benefit Liability
<b>2013</b>	\$658,149,388	\$488,087,487	\$170,061,901
<b>2012</b>	660,325,395	509,395,078	150,930,317
<b>2011</b>	653,787,084	545,536,734	108,250,350
<b>2010</b>	646,052,081	560,814,382	85,237,699
<b>2009</b>	631,509,947	557,218,916	74,291,031

## J. Zone Status

The following chart shows the plan's Zone Status that was reported in the Actuarial Certification for the past several years.

Plan Year Beginning July 1,	Zone Status
<b>2013</b>	Orange
<b>2012</b>	Green
<b>2011</b>	Green
<b>2010</b>	Green
<b>2009</b>	Green

As shown above, the plan entered the Orange Zone beginning July 1, 2013.

### Benefit Restrictions

Because the Trustees elected funding relief under the Pension Relief Act of 2010, the plan is subject to certain restrictions on plan amendments increasing benefits. In general, such a plan amendment cannot go into effect unless the plan actuary certifies that the increase is paid for out of additional contributions that were not allocated to the plan at the end of the prior plan year. Unless the Trustees choose to "opt out" of future relief under the Pension Relief Act of 2010, this restriction will remain in place through June 30, 2017.

## K. Plan Experience During Prior Plan Year

During 2012-2013, the Plan experienced an actuarial loss of approximately \$5.3 million. The experience loss can be broken down as follows:

Source of Gain or (Loss)	Amount in Millions
Investment Return	\$ (13.2)
Demographic Experience	<u>7.9</u>
Total Gain / (Loss)	\$ (5.3)

The return on the actuarial value of assets for 2012-2013 was 4.5%. When compared to the assumed 7.00% rate of return, this created an actuarial loss of approximately \$13.2 million.

Demographic gains and losses occur when the Plan's actual demographic experience differs from our valuation assumptions. During 2012-2013 the Plan experienced a demographic gain of \$7.9 million due to more retiree deaths than expected and various other sources.

## Section 2

### Introduction

The purpose of this actuarial valuation of the Alaska Laborers – Employers Retirement Fund is to review last year's activity, compute this year's contribution requirements, and test the funded status. Specifically:

- In Section 3, we summarize the trust fund activity and measure its investment return.
- In Section 4, we determine the appropriate charges and credits to the ERISA minimum Funding Standard Account for the plan year ending June 30, 2014, and estimate the credit balance at the end of the year. We also calculate the maximum tax-deductible contribution for the plan year ending June 30, 2014.
- In Section 5, we test the funded status by comparing the market value of assets to the actuarial present value of accumulated plan benefits, computed in accordance with FASB ASC Topic 960. We also summarize the Fund's Present Value of Vested Benefits in Exhibit 5.3 and calculate the Fund's Unfunded Vested Benefit Liability.
- In Section 6, we provide a 20-year projection of the Fund's expected benefit payments.

The appendices present a summary of the Fund, statistics for the participants included in the valuation, a description of the actuarial cost method, and a summary of our actuarial assumptions.



## Section 3

### Trust Fund Activity

In this section, we show the present status of the Fund's trust fund, trust activity over the past year, and investment return over the past ten years.

Exhibit 3.1 lists the types of assets held and their estimated market value.

Exhibit 3.2 summarizes the fund's activity during the past year.

Exhibit 3.3 develops the actuarial value of assets as of July 1, 2013. The actuarial value of assets is used to develop the minimum and maximum contributions and for determining the PPA funded percentage, and the unfunded vested benefit liability (UVB) for withdrawal liability. The difference between the actuarial value of assets and the market value of assets represents the portion of investment gains or losses that have not yet been recognized by the Fund's asset smoothing method.

Exhibit 3.4 measures the Fund's investment return, net of investment-related expenses. The exhibit displays annual rates of return, net of all investment related expenses, for both the market value and actuarial value of assets for each of the last ten years. The annual returns should be compared to the assumed rate of 7.0%.

**Exhibit 3.1**  
**Market Value of Assets**  
**(June 30, 2013)**

**CASH**

Pension – Checking	\$ 4,415,686	\$ 4,415,686
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**INVESTMENTS**

Money Market Funds	\$ 8,498,294	
Interest Bearing Cash	14,091,683	
U.S. Securities	21,496,133	
Corporate Bonds	20,085,222	
Common Stocks	201,839,208	
Promissory Notes	10,700,000	
Mutual Funds	49,851,546	
103-12 Investment Entities	20,223,699	
Partnerships	<u>115,943,924</u>	\$ 462,729,709

**RECEIVABLES**

Employer Contributions	\$ 3,044,161	
Accrued Interest and Dividends	884,908	
Security Transactions	<u>1,740,102</u>	\$ 5,669,171

**PREPAID EXPENSES AND OTHER ASSETS**

**LIABILITIES**

Accounts Payable	\$ 559,491	
Security Transactions	<u>966,186</u>	<u>1,525,677</u>

<b>TOTAL MARKET VALUE OF ASSETS</b>		<b>\$ 471,296,807</b>
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*Source: June 30, 2013 draft Fund audit*

## Exhibit 3.2

### Receipts and Disbursements (Year Ended June 30, 2013)

#### RECEIPTS

Employer Contributions	\$ 24,803,328
Interest and Dividends	9,625,542
103-12 Investment Entities Net Income	2,585,809
Net Appreciation in Market Value	29,457,926
Security Lending Income	51,297
Litigation Income and Reimbursement of Legal Fees	<u>99,682</u>
Total Receipts	\$ 66,623,584

#### DISBURSEMENTS

Benefit Payments	\$ 49,774,972
Expenses	
Operating Expenses	\$ 1,167,209
Investment-Related Expenses	<u>2,044,385</u>
	<u>3,211,594</u>
Total Disbursements	\$ 52,986,566

#### NET RECEIPTS

Receipts minus Disbursements	\$ 13,637,018
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#### CHANGE IN NET ASSETS

Market Value of Net Assets June 30, 2012	<u>457,659,789</u>
Market Value of Net Assets June 30, 2013	\$ 471,296,807

Source: June 30, 2013 draft Fund audit

### Exhibit 3.3

#### Actuarial Value of Fund Assets (July 1, 2013)

##### Asset Reconciliation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	Market Value of Assets Beginning of Year	Contributions	Benefit Payments	Operating Expenses	Cash Flow (2)+(3)+(4)	Actual Investment Income	Market Value of Assets End of Year (1)+(5)+(6)
2012-2013	\$457,659,789	\$24,803,328	\$(49,774,972)	\$(1,167,209)	\$(26,138,853)	\$39,775,871	\$471,296,807
2011-2012	516,362,034	22,070,461	(49,533,625)	(1,205,077)	(28,668,241)	(30,034,004)	457,659,789
2010-2011	479,129,086	20,842,509	(48,136,254)	(1,425,037)	(28,718,782)	65,951,730	516,362,034
2009-2010	464,349,097	20,876,297	(46,634,116)	(1,145,597)	(26,903,416)	41,683,405	479,129,086

##### Actuarial Value of Assets

Year	Actual Investment Rate of Return	Actual Investment Return	Expected Investment Return	Difference between Actual and Expected
2012-2013	8.9%	\$ 39,775,871	\$ 31,121,325	\$ 8,654,546
2011-2012	(6.0)%	(30,034,004)	35,141,954	(65,175,958)
2010-2011	14.2%	65,951,730	32,533,879	33,417,851
2009-2010	9.2%	41,683,405	31,562,817	10,120,588

(1) Market Value of Assets on July 1, 2013	\$ 471,296,807
(2) 80% of 2012-2013 gain	6,923,637
(3) 60% of 2011-2012 loss	(39,105,575)
(4) 40% of 2010-2011 gain	13,367,140
(5) 20% of 2009-2010 gain	2,024,118
(6) 50% of 2008-2009 loss*	<u>(59,233,673)</u>
Preliminary Actuarial Value of Assets (1)-(2)-(3)-(4)-(5)	\$ 547,321,160

Actuarial Value of Assets on July 1, 2013 Limited to 80% to 120% of Market Value	\$ 547,321,160
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Actuarial Value as a Percentage of Market Value	116%
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\* 10-year amortization of loss under the Pension Relief Act of 2010. Withdrawal liability assets are calculated using a 5-year amortization of this loss. For withdrawal liability assets, the 2008-2009 investment loss is now fully reflected.

## Exhibit 3.4

### Investment Return

#### Market Value of Assets Annual Rate of Investment Return

For One-Year Period		For Period Ending June 30, 2013	
Ending June 30	Annual Rate	Period	Average Annual Rate
2013	8.9%	1 year	8.9%
2012	(6.0)	2 years	1.2
2011	14.2	3 years	5.3
2010	9.2	4 years	6.3
2009	(14.3)	5 years	1.8
2008	(4.9)	6 years	0.7
2007	16.6	7 years	2.8
2006	10.9	8 years	3.8
2005	7.9	9 years	4.2
2004	17.2	10 years	5.5

#### Actuarial Value of Assets Annual Rate of Investment Return

For One-Year Period		For Period Ending June 30, 2013	
Ending June 30	Annual Rate	Period	Average Annual Rate
2013	4.5%	1 year	4.5%
2012	(0.6)	2 years	1.9
2011	6.2	3 years	3.3
2010	8.2	4 years	4.5
2009	(2.3)	5 years	3.1
2008	6.8	6 years	3.7
2007	8.9	7 years	4.4
2006	6.9*	8 years	4.8
2005	3.9	9 years	4.7
2004	3.1	10 years	4.5

\* Effective July 1, 2006, the Fund's asset valuation method was reset so that the actuarial value of assets equaled the market value of assets on that date. The return shown above for 2005-2006 reflects the rate of return prior to this method change. The rate of return including the asset method change was 13.7%.

All rates reflect total investment return, net of investment related expenses.

## Section 4

### Contribution Requirements

In this section we calculate the projected ERISA minimum funding requirement, and the maximum tax-deductible limit under the Internal Revenue Code for the plan year ending June 30, 2014. Under the law, an Enrolled Actuary must calculate costs using an approved actuarial cost method and actuarial assumptions, which are individually reasonable and in combination are his best estimate of future Fund experience. Our actuarial cost method and assumptions are fully explained in Appendices C and D.

The actuarial present value of projected plan benefits is made up of liabilities for benefits being paid to current retirees and their beneficiaries and of liabilities that are projected to be paid to future retirees. The chart below illustrates the allocation of the actuarial present value of projected plan benefits among these categories of participants.

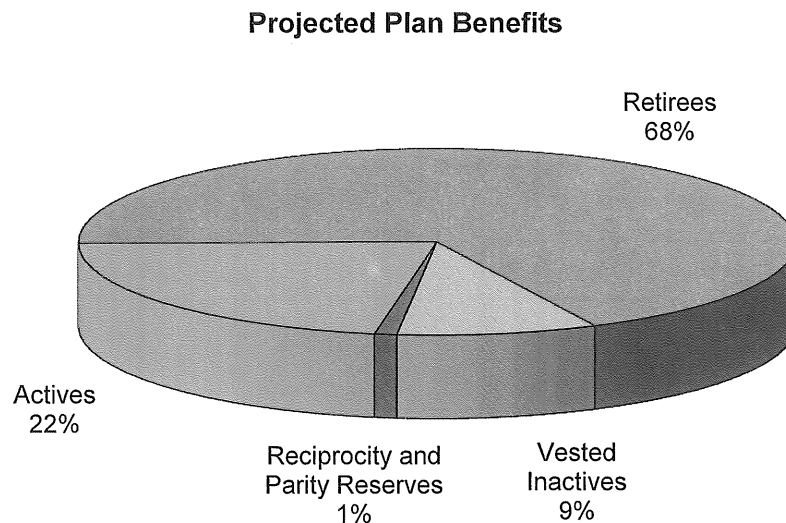


Exhibit 4.1 contains information on the actuarial balance sheet. The Fund requirements consist of the actuarial present value of projected plan benefits on July 1, 2013. As seen above, 78% of the Fund liabilities are for benefits to be paid to participants who are no longer contributing to the Fund. Fund resources consist of Fund assets, as well as projected future contributions to pay for the Fund's projected future normal costs and unfunded actuarial liability. In determining Fund requirements and resources, only current participants are considered.

Exhibit 4.2 details the changes in the value of the Fund's unfunded actuarial liability from July 1, 2012 to July 1, 2013. Unfunded actuarial liability changes throughout the year due to benefit accruals, contributions to the Fund and actuarial gains or losses, which arise from actual experience being different than expected. Changes to the plan document, the actuarial assumptions, or the funding method can also impact the unfunded actuarial liability.

This year's normal cost is shown in Exhibit 4.3. The normal cost is the annual cost of benefits expected to be earned during the plan year and includes an allowance for operating expenses expected during the plan year.

### **ERISA Minimum Funding Requirement**

Exhibit 4.4 projects the Fund's funding standard account through June 30, 2014 and provides detail on the amortization charges and credits. A positive credit balance is produced by cumulative contributions sufficient to pay normal costs and to amortize the unfunded actuarial liability faster than required.

### **Maximum Deductible Contribution**

Exhibit 4.5 calculates the maximum deductible contribution for the 2013-2014 plan year. Anticipated employer contributions for 2013-2014 are less than this limit and, therefore, are expected to be fully deductible.

**Exhibit 4.1**  
**Actuarial Balance Sheet**  
**(July 1, 2013)**

**REQUIREMENTS**

Present Value of Projected Benefits			
Retired Participants			\$ 498,804,942
Vested Inactive Participants			61,785,933
Reciprocity Reserve*			6,950,128
Parity Reserve*			3,684,931
Active Participants			
Retirement	\$ 121,445,879		
Vested Withdrawal	34,566,485		
Death	2,197,151		
Disability	<u>2,660,091</u>		<u>160,869,606</u>
Total Present Value of Projected Benefits			\$ 732,095,540

**RESOURCES**

Actuarial Value of Assets		\$ 547,321,160
Present Value of Future Normal Costs		52,201,432
Unfunded Actuarial Liability		<u>132,572,948</u>
Total		\$ 732,095,540

\* See Appendix E for development of reciprocity and parity reserves.



**Exhibit 4.2**  
**Analysis of Change in the**  
**Unfunded Actuarial Liability**  
**(July 1, 2013)**

**EXPECTED UNFUNDED ACTUARIAL LIABILITY ON JULY 1, 2013**

(a) Unfunded Actuarial Liability as of July 1, 2012	\$ 134,107,201
(b) Normal Cost including Assumed Operating Expenses	9,512,556*
(c) Contributions	(24,803,328)
(d) Interest on (a), (b) and (c)	<u>9,275,190</u>
(e) Expected Unfunded Actuarial Liability as of July 1, 2013	\$ 128,091,619

**CHANGES**

Investment (Gain)/Loss	\$ 13,170,373	
Demographic (Gain)/Loss	(7,840,384)	
Other (Gain)/Loss	(32,519)	
Change in Assumptions	<u>(816,141)</u>	<u>4,481,329</u>

<b>UNFUNDED ACTUARIAL LIABILITY ON JULY 1, 2013</b>	<b>\$ 132,572,948</b>
---	-----------------------

\* Based on \$7,399,036 normal cost as of July 1, 2012, adjusted for \$18,632,962 in actual pension contributions, compared with \$16,504,695 expected. Operating expenses as of July 1, 2012 were assumed to be \$1,159,420.

**Exhibit 4.3**

**Normal Cost  
(July 1, 2013)**

**NORMAL COST**

Retirement	\$	5,574,365	
Vested Withdrawal		1,961,178	
Death		101,824	
Disability		<u>139,920</u>	
	\$		7,777,287

<b>EXPENSES</b> (\$1,200,000 Payable Mid-Year)		<u>1,159,420</u>
--	--	------------------

<b>TOTAL NORMAL COST</b> (Beginning of Year)	\$	8,936,707
--	----	-----------

## Exhibit 4.4

### Projected Funding Standard Account (Year Ending June 30, 2014)

#### CHARGES TO FUNDING STANDARD ACCOUNT

Prior Year Funding Deficiency	\$ 0
Normal Cost for Year	8,936,707
Amortization Charges*	38,115,225
Interest	<u>3,293,635</u>
Total Charges	\$ 50,345,567

#### CREDITS TO FUNDING STANDARD ACCOUNT

Prior Year Credit Balance	\$ 65,530,009
Expected Employer Contributions**	24,805,440
Amortization Credits*	20,719,802
Interest	<u>6,905,677</u>
Total Credits	\$ 117,960,928

#### BALANCE

Credit Balance	\$ 67,615,361
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#### MINIMUM REQUIRED CONTRIBUTION

\$ 0

#### CONTRIBUTION REQUIRED TO PRESERVE CREDIT BALANCE

(assumed to be made mid-year) \$ 22,790,607

\* See tables on the following pages.

\*\* Estimated based on 2013-2014 average contribution rate of \$9.57 per hour, 1,920 active participants under age 62, and assumed hours of 1,350 per active participant.

**Exhibit 4.4**  
(Continued)  
**Amortization Charges and Credits**  
(Year Ending June 30, 2014)

Amortization Charges

Date Established	Type of Base	Original Amount	Original Amortization Period	Amortization Period as of 7/1/2013	Outstanding Balance as of 7/1/2013	Annual Payment
07/01/1978	Unfunded Actuarial Liability	\$ 46,366,197	40	5	\$ 13,685,525	\$ 3,119,412
07/01/1979	Plan Amendment	2,740,620	40	6	943,769	185,045
07/01/1981	Plan Amendment	5,457,055	40	8	2,370,414	370,998
07/01/1984	Plan Amendment	6,094,630	30	1	444,279	444,279
07/01/1985	Plan Amendment	4,360,095	30	2	616,721	318,789
07/01/1986	Change in Actuarial Assumptions	1,033,028	30	3	212,475	75,669
07/01/1987	Change in Actuarial Assumptions	3,264,167	30	4	868,161	239,538
07/01/1988	Plan Amendment	15,495,176	30	5	4,998,512	1,139,336
07/01/1989	Plan Amendment	14,282,678	30	6	5,364,327	1,051,788
07/01/1990	Plan Amend & Assumption Change	9,497,467	30	7	4,035,178	699,757
07/01/1991	Plan Amendment	2,974,769	30	8	1,404,286	219,787
07/01/1992	Plan Amendment	11,828,915	30	9	6,102,289	875,345
07/01/1993	Plan Amendment	2,376,252	30	10	1,323,537	176,114
07/01/1994	Plan Amendment	2,745,736	30	11	1,635,218	203,801
07/01/1995	Plan Amendment	14,649,245	30	12	9,254,182	1,088,898
07/01/1997	Plan Amendment	19,001,306	30	14	13,253,124	1,416,288
07/01/1999	Plan Amendment	6,678,996	30	16	5,045,021	499,116
07/01/2000	Change in Actuarial Assumptions	11,279,765	30	17	8,816,613	843,966
07/01/2002	Experience Loss	19,910,596	15	4	7,354,667	2,029,258
07/01/2002	Plan Amendment	10,136,113	30	19	8,406,839	760,174
07/01/2003	Experience Loss	35,632,373	15	5	15,960,749	3,638,017
07/01/2004	Experience Loss	31,489,025	15	6	16,425,273	3,220,516
07/01/2005	Experience Loss	18,084,964	15	7	10,683,784	1,852,719
07/01/2006	Experience Loss	9,404,428	15	8	6,165,700	965,005
07/01/2006	Change in Actuarial Assumptions	5,660,626	30	23	5,142,025	426,327
07/01/2008	Experience Loss	7,257,786	15	10	5,596,856	744,734
07/01/2009	Experience Loss	12,793,995	15	11	10,533,476	1,312,815
07/01/2009	PRA 2010 Base	48,405,848	29	25	45,945,310	3,684,665
07/01/2010	PRA 2010 Base	4,321,180	28	25	4,149,028	332,739
07/01/2011	PRA 2010 Base	4,395,282	27	25	4,273,132	342,691
07/01/2012	PRA 2010 Base	16,924,874	26	25	16,678,430	1,337,556
07/01/2012	Experience Loss	26,656,779	15	14	25,595,983	2,735,300
07/01/2013	PRA 2010 Base	22,005,667	25	25	22,005,667	1,764,783
					\$ 285,290,550	\$ 38,115,225

**Exhibit 4.4**  
(Continued)

**Amortization Charges and Credits**  
**(Year Ending June 30, 2014)**

**Amortization Credits**

Date Established	Type of Base	Original Amount	Original Amortization Period	Amortization Period as of 7/1/2013	Outstanding Balance as of 7/1/2013	Annual Payment
07/01/2011	Combined Base	\$ 97,451,918	6.07	4.07	\$ 69,663,255	\$ 18,921,598
07/01/2013	Experience Gain	16,708,197	15	15	16,708,197	1,714,458
07/01/2013	Change in Actuarial Assumptions	816,141	15	15	816,141	83,746
					<u>\$ 87,187,593</u>	<u>\$ 20,719,802</u>

## Exhibit 4.5

### Maximum Tax-Deductible Contribution (Plan Year Ending June 30, 2014)

#### Maximum Tax-Deductible Contribution

(Lesser of I and II below, but not less than III)

\$ 941,590,722

#### I. 10-Year Amortization Limitation

(1)	Normal Cost as of July 1, 2013	\$ 8,936,707
(2)	Amortization of Unfunded Actuarial Liability	17,640,566
(3)	Interest on (1) and (2) to June 30, 2013	<u>1,860,409</u>
(4)	Maximum Contribution for the 2013-2014 Plan Year (1) + (2) + (3)	\$ 28,437,682

#### II. Full Funding Limitation

##### A. Full Funding Limitation

(1)	Actuarial Liability as of July 1, 2013	\$ 679,894,108
(2)	Normal Cost as of July 1, 2013	8,936,707
(3)	Test Value of Assets	<u>471,296,807</u>
(4)	Full Funding Limitation $((1) + (2) - (3)) \times 1.07$ , but not less than zero	\$ 232,761,389

##### B. Full Funding Limitation Floor

(1)	Current Liability as of June 30, 2014 (calculated using 3.61% interest rate assumption)	\$ 1,050,890,108
(2)	90% of Current Liability	945,801,097
(3)	Expected Actuarial Value of Assets at Year End	<u>529,655,429</u>
(4)	Full Funding Limitation Floor (2) - (3), but not less than zero	\$ 416,145,668

##### C. Full Funding Limitation Greater of A and B

\$ 416,145,668

#### III. Unfunded 140% of Current Liability

(1)	Current Liability as of June 30, 2014 (calculated using a 3.61% interest rate assumption)	\$ 1,050,890,108
(2)	140% of Current Liability	1,471,246,151
(3)	Expected Actuarial Value of Assets at Year End	<u>529,655,429</u>
(4)	Unfunded Current Liability (2) - (3), but not less than zero	\$ 941,590,722

## Exhibit 4.5 (Continued)

The current liabilities are developed in the following table. Note that current liabilities are determined using a 3.61% interest assumption. As required, the 3.61% interest assumption is within the IRS prescribed corridor. The current liability must be calculated using a set of mandated mortality tables.

**Current Liability, Beginning-of-Year**

Retirees	\$ 713,909,332
Vested Inactive Participants	113,077,171
Reciprocity Reserve	6,950,128
Parity Reserve	3,684,931
Active Participants	<u>211,805,278</u>
Total	\$ 1,049,426,840

**Changes Expected During 2013-2014 Plan Year**

Accrual of Benefits plus Expenses	\$ 17,990,952
Expected Benefit Payments	(54,085,229)
Interest	<u>37,557,545</u>
Total	\$ 1,463,268

**Current Liability, End-of-Year** \$ 1,050,890,108

The amortization limitation required by IRC Section 404(a)(1)(A)(iii) equals the sum of the last column of the following table:

<u>Ten-Year Amortization Bases</u>	<u>Original Amount</u>	<u>As of July 1, 2013</u>	
		<u>Remaining Base</u>	<u>Maximum Payment</u>
Fresh Start as of July 1, 2013	\$132,572,948	\$132,572,948	\$ 17,640,566

## Section 5

### Funded Status

In this section, we test the Fund's funded status by comparing the Fund's Market Value of Assets to the Actuarial Present Value of Accumulated Plan Benefits and the Fund's Actuarial Present Value of Vested Plan Benefits. As shown on Exhibit 5.1, the Market Value of the Fund's Assets is less than the Present Value of Accumulated Plan Benefits as of June 30, 2013.

Exhibit 5.2 shows the change in the Actuarial Present Value of Accumulated Plan Benefits from June 30, 2012 to June 30, 2013.

Exhibit 5.3 shows the Fund's unfunded vested benefits. The Withdrawal Liability Assets is less than the Present Value of Vested Plan Benefits which means there are unfunded vested benefits. Employers withdrawing from the Fund during the 2013-2014 plan year may be subject to withdrawal liability.



## Exhibit 5.1

### Statement of Actuarial Present Value of Accumulated Plan Benefits

	FASB ASC Topic 960	
	June 30, 2012	June 30, 2013
<b>ACTUARIAL PRESENT VALUE OF VESTED PLAN BENEFITS</b>		
Retired Participants	\$ 491,851,183	\$ 494,273,744
Other Participants	<u>168,474,212</u>	<u>163,875,644</u>
Total	\$ 660,325,395	\$ 658,149,388
Nonvested Benefits	\$ 22,973,553	\$ 21,744,720
<b>ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS</b>	\$ 683,298,948	\$ 679,894,108
<b>ASSETS</b>		
Market Value of Assets (MV)	\$ 457,659,789	\$ 471,296,807
<b>FUNDING RATIOS</b>		
Ratio of MV to Vested Benefits	69%	72%
Ratio of MV to Accumulated Plan Benefits	67%	69%

## Exhibit 5.2

### Statement of Changes in Actuarial Present Value of Accumulated Plan Benefits

<b>VALUE AS OF JUNE 30, 2012</b>	<b>\$ 683,298,948</b>
<b>CHANGES:</b>	
Benefits Accumulated	\$ 8,937,855
Actuarial (Gain)/Loss	(7,840,384)
Plan Amendments	0
Interest	46,088,802
Benefit Payments	(49,774,972)
Assumption Changes	<u>(816,141)</u>
<b>NET CHANGE</b>	<b>\$ (3,404,840)</b>
<b>VALUE AS OF JUNE 30, 2013</b>	<b>\$ 679,894,108</b>

**Exhibit 5.3**  
**Unfunded Vested Benefits**  
**(June 30, 2013)**

**PRESENT VALUE OF VESTED PLAN BENEFITS**

Retired Participants		\$	494,273,744
Vested Inactive Participants			60,993,796
Active Participants			
Retirement	\$	80,100,304	
Vested Withdrawal		21,436,603	
Death		0	
Disability		<u>1,344,941</u>	<u>102,881,848</u>

**TOTAL PRESENT VALUE OF VESTED PLAN BENEFITS** \$ 658,149,388

**WITHDRAWAL LIABILITY ASSETS\*** 488,087,487

**UNFUNDED VESTED BENEFITS** \$ 170,061,901

\* *Withdrawal Liability Assets are determined using the Fund's asset valuation method without regard to the 10-year smoothing applied to the 2008-2009 investment loss.*

## Section 6

### Projections

Exhibit 6.1 provides a projection of benefit payments over the next 20 years. This can be useful for the investment manager in planning future liquidity requirements.

## Exhibit 6.1

### Twenty-Year Projection of Benefit Payments

<b>Plan Year Ending June 30</b>	<b>Estimated Benefit Payments</b>
2014	\$54,086,000
2015	52,588,000
2016	53,056,000
2017	53,605,000
2018	54,305,000
2019	54,586,000
2020	54,757,000
2021	54,939,000
2022	55,046,000
2023	55,055,000
2024	55,289,000
2025	55,190,000
2026	55,047,000
2027	54,705,000
2028	54,360,000
2029	53,705,000
2030	53,239,000
2031	52,755,000
2032	51,889,000
2033	51,076,000

*Note: This is a closed group projection of benefit payments based on the plan participants as of the valuation date and does not include projected payments to future new entrants.*

The expected payout in 2013-2014 includes \$1.9 million in expected retroactive payments with interest for vested terminated participants who have reached age 57 but not yet commenced benefits.

# Appendix A

## Summary of Present Plan

**ALASKA LABORERS – EMPLOYERS RETIREMENT FUND****Summary of Present Plan  
(July 1, 2013)****Effective Date**

Original Plan - July 1, 1962

Latest Restatement - July 1, 2010, as amended through Amendment 2.

**Eligibility and Participation**

The Fund covers employees whose employers are required to contribute on their behalf under a collective bargaining agreement with the Alaska State District Council of Laborers, or Laborers' Locals 341 and 942.

An employee may also participate if their employer contributes on the employee's behalf under a special agreement with the Trustees.

**Credited Service**

- a. **Credited Past Service:** Credited Past Service is the number of completed years of continuous service rendered by a participant immediately prior to July 1, 1962, but no earlier than July 1, 1947.
- b. **Credited Future Service:** Credited Future Service is earned based on the number of hours in covered employment. A year of Credited Future Service is earned for plan year after July 1, 1962 in which the employee works 250 covered hours.
- c. **Special Credited Service:** Special Credited Service may be earned by Participants who have continuous service with the same employer for the plan years immediately preceding the date that employer first begins contributing to the Fund. Special Credited Service is limited to four years, is used to determine vesting only, and may be provided under (a) or (b) below.
  - (a) Participants must work at least 250 hours in a plan year in work that would be covered under a collective bargaining agreement with either Locals 942 or 341 of the Laborers International Union of North America to receive one year's credit.
  - (b) Effective July 1, 1999, the Trustees may grant Special Credited Service to all members of a unit of an employer who contributed to the Alaska Laborers Defined Contribution Retirement Plan.

To receive Special Credited Service, a Participant must earn one year of Credited Future Service in either the plan year in which their employer first begins contributing to the plan, or the subsequent plan year.

**Years of Service**

Years of Service are used to determine if an employee is vested. A year of service is earned for each plan year in which the employee completes 250 hours of service. Hours of service include both covered hours and uncovered hours. Unearned hours are generally earned for continuous employment of a Participant with the same employer in a position not covered by the collective bargaining agreement.

## Break In Service

A break in service means any plan year in which a Participant completes less than 250 Hours of Service. Plan years in which a participant does not complete 250 Hours of Service due to U.S. military service, disability, approved leave of absence, or employment under the jurisdiction of a collective bargaining agreement not covered by the Fund shall not be counted as a Break in Service.

## Vesting

A Participant becomes vested if the Participant:

- (a) earns 10 Years of Service, of which one year was Credited Future Service;
- (b) earns 5 Years of Service, of which at least one year was Credited Future Service in the case of a Participant not covered by a Collective Bargaining Agreement or of someone who worked at least one hour of covered employment as a Participant on or after July 1, 1997; or
- (c) meets the requirement for a Normal Retirement Date.

## Amount of Accrued Benefits

- a. Past Service Benefit – For each year of Credited Past Service earned (maximum of 15 years), a Participant will earn a yearly Past Service Benefit of \$35.00 for retirements before July 1, 1989, \$36.75 for retirements between June 30, 1989 and July 1, 1990, and \$37.85 for retirements on or after June 30, 1990.
- b. Future Service Benefit – For each year of Credited Future Service earned, a Participant will accrue benefits according to the following schedules:

7/1/1962 to 6/30/1974	\$.04326 per Hour of Employment
7/1/1974 to 6/30/2000	3.35% of Contributions
7/1/2000 to 6/30/2003	2.50% of Contributions
7/1/2003 to 8/31/2006	2.00% of Contributions
9/1/2006 to 6/30/2011	1.50% of Contributions
After 7/1/2011	1.20% of Contributions

Participants must work at least 250 covered hours in a plan year to earn benefits.

- c. Retiree Benefit Adjustments

- (i) Extra benefits. A 13th check was paid to all retirees and beneficiaries as follows:

Date	13 <sup>th</sup> Check Amount
11/1/1986	Amount of regular benefit
12/1/1987	Amount of regular benefit
12/1/1989	Amount of regular benefit
12/1/1990	Amount of regular benefit
12/1/1991	Amount of regular benefit
12/1/1992	Amount of regular benefit
12/1/1993	Amount of regular benefit
12/1/1994	Amount of regular benefit
12/1/1996	Amount of regular benefit
1/1/1998	125% of amount of regular benefit
1/1/1999	\$160 x Years of Service
7/1/2000	Amount of regular benefit



- (ii) Increases in benefits. Monthly benefits were increased on the following dates for all retirees and beneficiaries:

Date	Increase
9/1/1980	9%
7/1/1983	10%
7/1/1985	10% increase of 7/1/1983 extended to retirees who retired up to 7/1/1985 and benefits earned from 7/1/79 to 6/30/1984 recalculated at 2.6% of contributions.
1/1/1988	Benefits increased by \$100 per month for participants who qualify under this plan alone. For others, benefits recalculated at 2.6% of contributions to 7/1/1987 and 2.5% of contributions after 7/1/1987.
7/1/1989	5%
7/1/1990	3%
5/1/1993	3% plus \$2
2/1/1996	5%
2/1/1999	5%

## Retirement Benefits

### a. Normal Retirement Pension

- (i) Age requirement: 57 for accruals through June 30, 2011; 65 for accruals after June 30, 2011.
- (ii) Service requirement: 5 Years of Service, or active on the fifth anniversary of participation, or completion of 6,000 covered hours of employment if the Participant's Participation Date is on or before June 30, 1979.
- (iii) Pension amount: The monthly benefit amount is equal to the Participant's accrued benefit.

### b. Reduced Early Retirement Pension

- (i) Age requirement: 50
- (ii) Service requirement: 5 years of Credited Service
- (iii) Pension amount:

#### For benefits accrued before July 1, 2003

The accrued benefit is reduced by 2% for each year by which the Early Retirement Date precedes the Normal Retirement Date.

#### For benefits accrued between July 1, 2003 and June 30, 2011

The early retirement reduction depends on the number of hours of covered employment at the time of the first retirement. If those hours are less than 10,000, this reduction is 6% per year; if they are at least 10,000 but less than 20,000 the reduction is 4% per year; otherwise, it is 2% per year.

A special accrual rate of 0.92% of contributions applies to benefits earned between July 1, 2003 and June 30, 2011 and after an initial period of retirement but before age 57. Such benefits will not be payable until age 57.

For benefits accrued after June 30, 2011

The early retirement reduction depends on the number of hours of covered employment and follows the table below:

Age	Total Covered Hours of Employment			
	< 10,000	10,000 to 20,000	20,000 to 30,000	> 30,000
50	34%	57%	61%	86%
51	37	64	68	88
52	40	71	75	90
53	44	78	82	92
54	48	85	89	94
55	52	92	96	96
56	57	96	98	98
57	62	100	100	100
58	68	100	100	100
59	75	100	100	100
60	82	100	100	100
61	91	100	100	100
62-65	100	100	100	100

A special accrual rate of 0.92% of contributions applies to benefits earned after June 30, 2011 and after an initial period of retirement but before age 65. Such benefits will not be payable until age 57.

## c. Disability Pension

- (i) Age requirement: None.
- (ii) Service requirement: Must earn at least 1 hour of Credited Service and have either
  - (a) completed 10 years of Credited Service (including at least one year of Credited Future Service), or
  - (b) remained totally and permanently disabled from the date of the original disability through the 10<sup>th</sup> anniversary of his or her Participation Date and have either
    - 1. 5 years of Credited Future Service, or
    - 2. completed 6,000 Covered Hours of Employment, if the Participant's Participation Date occurred on or before June 30, 1979.
- (iii) Pension amount: Accrued benefit, reduced 2% for each year from age Normal Retirement Date to age 50, and 2.5% for each year (prorated to the nearest month) before age 50 that the disability retirement date precedes age 50, (prorated to the nearest month). Upon reaching age 57, the monthly benefit amount increases to the accrued benefit.
- (iv) Disability Retirement Date: First day of any month coinciding with or immediately following the later of the date that his or her total and permanent disability is established or the date that he or she meets the requirements for a Disability Retirement Date as provided above.

## Death Benefits

### a. Pre-retirement Death Benefit

- (i) Age requirement: None
- (ii) Service requirement: Vested
- (iii) Pension Amount

A surviving spouse has the choice of 1. and 2. below:

- 1. A life annuity equal to the amount the spouse would have received if the Participant had terminated on his date of death, retired on the earliest possible date thereafter, and elected the 100% spouse option.
- 2. An annuity for 60 months equal to the Participant's accrued benefit on his date of death.

If a Participant has no surviving spouse, his beneficiary will receive option 2. above.

### b. Lump Sum Death Benefit

- (i) Age requirement: None
- (ii) Service requirement: 10 years of Credited Service
- (iii) Lump sum amount: \$5,000 for active and retired Participants and none for vested terminated Participants.

## Forms of Payment

- a. Five-Year Certain and Life thereafter (normal form)
- b. 50% Joint and Survivor Option (reduced)
- c. 100% Joint and Survivor Option (reduced)

## Changes In Plan Provisions

None.

# Appendix B

## Participant Statistics

## **ALASKA LABORERS – EMPLOYERS RETIREMENT FUND**

### **Participant Statistics**

This actuarial valuation is based upon the data made available to us regarding present and past participants in the Fund and their beneficiaries. The data are summarized in Exhibits B.1 through B.5.

Exhibits B.1 and B.2 contain information on the active participants included in the valuation. Active participants included in the valuation are those participants who were not retired or deceased on July 1, 2013 and who worked 250 or more hours during 2012-2013.

Exhibit B.1 contains an age and service distribution of the active participants. Exhibit B.2 summarizes the hours worked during 2012-2013 by both age and years of vesting service on the valuation date.

Exhibits B.3 and B.4 contain information on the retired participants and their beneficiaries.

Exhibit B.5 contains a distribution by age of the vested inactive participants included in the valuation.

# Exhibit B.1

## Distribution of Active Participants by Age and Completed Years of Service (July 1, 2013)

AGE	YEARS OF SERVICE					
	UNDER 1	1 TO 4	5 TO 9	10 TO 14	15 TO 19	20 TO 24
UNDER 25	0	263	9	0	0	0
25 TO 29	0	179	120	6	0	0
30 TO 34	0	143	106	50	1	0
35 TO 39	0	99	62	40	18	0
40 TO 44	0	82	73	44	21	10
45 TO 49	0	69	58	34	27	12
50 TO 54	0	69	61	26	29	12
55 TO 59	0	38	49	20	14	4
60 TO 64	0	27	14	12	5	2
65 TO 69	0	3	8	1	1	1
70 & UP	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTALS	0	972	562	233	116	41

AGE	YEARS OF SERVICE				ALL YEARS
	25 TO 29	30 TO 34	35 TO 39	40 & UP	
UNDER 25	0	0	0	0	272
25 TO 29	0	0	0	0	305
30 TO 34	0	0	0	0	300
35 TO 39	0	0	0	0	219
40 TO 44	0	0	0	0	230
45 TO 49	4	2	0	0	206
50 TO 54	3	3	0	0	203
55 TO 59	3	4	1	0	133
60 TO 64	0	1	0	0	61
65 TO 69	0	0	0	0	14
70 & UP	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>
TOTALS	10	10	1	0	1,945

PARTICIPANTS WITH MISSING DATA 6

GRAND TOTAL 1,951

AVERAGE HOURS 1,353

AVERAGE AGE 38.1

AVERAGE SERVICE 6.1

## Exhibit B.2

Distribution of Active Participants by Age and Total Hours Worked  
(July 1, 2013)

Age	Total Hours					Total
	< 10,000	10,000 – 19,999	20,000 – 29,999	> 30,000		
Less than 25	271	1	0	0		272
25 to 29	253	51	1	0		305
30 to 34	200	74	22	4		300
35 to 39	139	50	26	10		225
40 to 44	127	57	28	18		230
45 to 49	105	47	29	25		206
50 to 54	108	47	18	30		203
55 to 59	71	33	15	14		133
60 to 64	37	13	9	2		61
65 to 69	9	2	1	2		14
70 & Up	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>		<u>2</u>
Grand Total	1,322	375	149	105		1,951

## Exhibit B.3

Distribution of Average Hours Worked by Active Participants  
(July 1, 2013)

Average Hours by Age			Average Hours By Completed Years of Service		
Age	Count	Average Hours	Completed Years of Service	Count	Average Hours
Less than 25	272	980	Less than 1	0	0
25 to 29	305	1,289	Exactly 1	481	895
30 to 34	300	1,563	2 to 4	497	1,265
35 to 39	219	1,411	5 to 9	562	1,545
40 to 44	230	1,421	10 to 14	233	1,658
45 to 49	206	1,441	15 to 19	116	1,707
50 to 54	203	1,387	20 to 24	41	1,947
55 to 59	133	1,438	25 to 29	10	2,119
60 to 64	61	1,322	30 to 34	10	2,456
65 to 69	14	1,441	35 to 39	1	2,335
70 & Up	2	1,300	40 & Up	<u>0</u>	<u>0</u>
Unknown	<u>6</u>	<u>413</u>	All Years		1,353
2012 Total	1,951	1,353			



## Exhibit B.4

**Distribution of Retirees & Beneficiaries by Age  
and Retirement Type  
(July 1, 2013)**

Age	Total			Normal & Early			Disability			Survivors & Beneficiaries		
	Number of Participants	Total Monthly Benefit		Number of Participants	Total Monthly Benefit		Number of Participants	Total Monthly Benefit		Number of Participants	Total Monthly Benefit	
Under 50	27	\$ 28,971		0	\$ 0		4	\$ 4,609		23	\$ 24,362	
50 – 54	144	221,620		121	206,903		2	951		21	13,767	
55 – 59	527	896,966		454	818,938		12	22,273		61	55,755	
60 – 64	721	1,214,847		662	1,153,566		11	18,599		48	42,682	
65 – 69	560	785,365		510	739,776		7	8,861		43	36,729	
70 – 74	368	439,752		320	405,907		4	1,844		44	32,001	
75 – 79	227	246,975		191	220,972		0	0		36	26,003	
80 – 84	160	178,134		132	154,827		3	2,495		25	20,812	
85 & Up	119	132,644		83	104,344		1	1,518		35	26,782	
Unknown	0	0		0	0		0	0		0	0	
Total	2,853	\$ 4,145,274		2,473	\$ 3,805,233		44	\$ 61,150		336	\$ 278,893	
Average Monthly Benefit		\$ 1,453			\$ 1,539			\$ 1,390			\$ 830	

**Exhibit B.5**

**Distribution of Retirees & Beneficiaries  
by Benefit Amount and Type  
(July 1, 2013)**

<b>Monthly Amount</b>	<b>Total</b>	<b>Normal &amp; Early</b>	<b>Disability</b>	<b>Survivors and Beneficiaries</b>
Under \$500	561	428	9	124
\$500 – \$999	734	614	11	109
\$1,000 – \$1,499	561	495	6	60
\$1,500 – \$1,999	312	279	8	25
\$2,000 – \$2,499	218	209	3	6
\$2,500 – \$2,999	152	141	2	9
\$3,000 – \$3,499	111	106	4	1
\$3,500 – \$3,999	69	67	1	1
\$4,000 – \$4,499	50	49	0	1
\$4,500 – \$4,999	28	28	0	0
\$5,000 – \$5,499	22	22	0	0
\$5,500 – \$5,999	11	11	0	0
\$6,000 – \$6,499	12	12	0	0
\$6,500 – \$6,999	4	4	0	0
\$7,000 – \$7,499	3	3	0	0
\$7,500 – \$7,999	3	3	0	0
\$8,000 & Up	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>
Total	2,853	2,473	44	336

**Exhibit B.6**  
**Distribution of Vested Inactive Participants**  
**(July 1, 2013)**

<u>Age</u>	<u>Number of Participants</u>	<u>Total Monthly Normal Retirement Benefit</u>
Under 30	50	\$ 30,101
30 – 34	131	107,868
35 – 39	135	126,880
40 – 44	144	151,564
45 – 49	142	168,709
50 – 54	125	117,489
55 – 59	101	78,074
60 – 64	27	21,709
65 & Over	33	11,252
Unknown	<u>0</u>	<u>0</u>
Total	888	\$ 813,646
Average Monthly Benefit		\$ 916

# Appendix C

## Actuarial Cost and Asset Valuation Methods

## ALASKA LABORERS – EMPLOYERS RETIREMENT FUND

### Actuarial Cost and Asset Valuation 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, or future contributions, where each amount in the series is:

- a. 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
- b. discounted at an assumed rate of investment return.

Our actuarial assumptions include these probabilities and the investment return.

#### Cost Method (Adopted July 1, 2009)

The actuarial cost method we used to calculate the funding requirements of the Fund is called the **Unit Credit Actuarial Cost** method.

Under the Unit Credit Actuarial Cost Method, the actuarial liability is the sum of the actuarial present value of accrued benefits earned by the plan participants through the valuation date. The Normal Cost is computed as the actuarial present value of benefits expected to be earned in the current plan year under the current Benefit Percentage Factor of 1.2% of employer pension contributions. An adjustment to the normal cost is made on the Schedule MB to reflect actual versus expected contributions.

The unfunded actuarial liability is the difference between the actuarial liability and the actuarial value of assets. Actuarial gains and losses reflect the difference between the expected unfunded actuarial liability and the actual unfunded actuarial liability prior to any changes.

#### Funding Requirements

Each year the plan must fund the normal cost and amortize a portion of the unfunded actuarial liability. IRS minimum and maximum funding rules specify amortization schedules for the unfunded actuarial liability, depending on the source of increase or decrease (plan improvements, assumption changes, gains/losses, etc.). However, if assets exceed the accrued liability, the IRS Full Funding Limitation applies, reducing or eliminating the need for an annual contribution to the Fund.

Two other factors can also affect funding requirements. First, 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. Second, contribution requirements may be affected by comparing the Fund's assets to the **current liability**. The current liability is the actuarial value of all benefits accrued under the Fund, based on service to date and calculated using a discount rate within a range specified by the IRS.

#### Asset Valuation Method

The **asset valuation method** is used to determine the actuarial “value” of plan assets on the valuation date. This value is used for purposes of determining the plan's actuarial costs and contribution requirements. Market value can be used as the actuarial value of plan assets, but most trusts have adopted an asset valuation method that “*smoothes out*” short-term fluctuations in the market value of plan assets.

Effective July 1, 2006, the asset valuation method used to determine the Fund's Actuarial Value of Assets is a 5-year smoothed value with phase-in as described in Section 3.16 of Internal Revenue Service Revenue Procedure 2000-40. Under this method, investment gains or losses are recognized gradually over a period of 5 years. This method was further modified under the provisions of the Pension Relief Act of 2010 to reflect 10-year smoothing for the investment losses incurred in the 2008-2009 plan year. The resulting Actuarial Value of Assets must be between 80% and 120% of the Market Value of Assets on the valuation date. For purposes of determining withdrawal liability, however, the 10-year smoothing provision is not applied.

Investment gains and losses are determined based on actual and expected investment returns calculated net of investment management fees using simple interest and assuming contributions, benefit payments, and expenses all occur at mid-year.

### **July 1, 2013 Market Value of Assets**

We have relied on the market value of assets provided by the Fund's auditors.

# Appendix D

## Actuarial Assumptions

## ALASKA LABORERS – EMPLOYERS RETIREMENT FUND

### Actuarial Assumptions

The following actuarial assumptions are the basis for the calculations set forth in this report:

#### Investment Return

7.0% per annum, net of investment expenses.

#### Mortality (Adopted July 1, 2009)

The RP-2000 Combined Healthy Mortality Tables for Males and Females, with Blue Collar Adjustment, projected with Scale AA to 2005. This assumption includes a margin for future mortality improvement relative to recent experience.

The RP-2000 Disability Mortality Tables for Males and Females for disabled participants.

#### Disability (Adopted July 1, 2011)

##### Active Lives

Disability rates are based on the 1985 Society of Actuaries Table for males and females, reduced by 40%.

Sample disability rates are shown below:

Age	Number Becoming Disabled per 1,000 Covered	
	Males	Females
25	0.228	0.282
35	0.414	0.816
45	1.212	1.938
55	4.332	5.712

#### Withdrawal

Withdrawal rates are based on plan experience, and is dependent on age and service. Sample withdrawal rates are shown below:

Age	Rate of Termination
25	11.6%
35	10.6%
45	7.5%
55	1.7%

The above withdrawal rates are increased by 12%, 8% and 4% for employees in the first three years of participation, respectively.



## Retirement Age (Adopted July 1, 2013)

### Active Participants

Non-retired employees are assumed to retire from active status at the rates shown below (note that rates from the prior valuation are shown in parenthesis if changed):

Age	At Least 10 Years of Service as of July 1, 2011 and Continuously Active	Under 10 Years of Service as of July 1, 2011 or Hired After June 30, 2011	
		<30,000 hours	>30,000 hours
50	35% (40%)	10%	35% (40%)
51	20% (25%)	10%	20% (25%)
52	10%	10%	10%
53	10% (15%)	10%	10% (15%)
54	5% (10%)	10%	10%
55	15%	30%	30%
56	20% (25%)	20% (30%)	20% (30%)
57	35% (30%)	35% (50%)	35% (50%)
58	35% (20%)	35% (20%)	35% (20%)
59	20%	20%	20%
60-61	25% (10%)	25% (10%)	25% (10%)
62	100%	100%	100%

### Vested Inactive Participants

Age 57 for participants with fewer than 10 Years of Service as of July 1, 2011 or a date of entry on or after July 2001.

Age 53 for all other participants.

## Surviving Spouse Commencement (Adopted July 1, 2011)

Age 55 for participants with fewer than 10 Years of Service as of July 1, 2011 or a date of entry on or after July 2001.

Age 50 for all other participants.

## Future Credits

In valuing the Plan, it was assumed that each active participant would earn a full credit in each future year.

## Future Benefit Accrual (Adopted July 1, 2013)

In valuing projected benefits it was assumed that employees would receive credit for employer contributions based on 1,350 hours of service in each future year, using the average contribution rate in effect for the participant during the prior plan year.

## Expenses (Adopted July 1, 2011)

Administrative expenses are assumed to be \$1,200,000 per year, payable mid-year.

## Probability of Marriage

80% of non-retired participants are assumed to be married.

### Spouse Age Difference (Adopted July 1, 2008)

Husbands are assumed to be three years older than their wives.

### Incomplete Data (Adopted July 1, 2008)

Non-retired participants without birthdates were assumed to be 33 years old on their hire date.

### Form of Benefit

Non-retired members are assumed to select the 60-month certain and life form of benefit at retirement.

### Reciprocity Reserve

A liability is held to recognize the fact that former non-vested Participants in the Fund may become vested due to reciprocity service. Each year this liability increases with interest and with 20% of the accrued liability for participants who terminated non-vested during the year with at least 4 years of service and 5% of the accrued liability for Participants who terminated non-vested during the year with fewer than 4 years of service. The reserve decreases by 5% each year to reflect participants no longer expected to retire due to the passage of time. The reserve is also written down by the accrued liability for retired participants who became vested through reciprocity service during the year. This calculation is shown in Appendix E.

### Parity Reserve

A liability is held to recognize the fact that former non-vested Participants in the Fund may have service reinstated upon rehire prior to a five-year break in service. Each year, this liability increases with interest and with 40% of the accrued liability for participants who terminated non-vested during the year with at least 4 years of service and 25% of the accrued liability for participants who terminated non-vested during the year with fewer than 4 years of service. The reserve decreases by the accrued liability for participants who return to active status from non-vested terminated status. It also decreases by 20% each year due to the passage of time coinciding with a potential five-year break in service. This calculation is shown in Appendix E.

### Current Liability Assumptions (Adopted July 1, 2013)

Interest Rate	Mortality
3.61%	Projected version of the RP-2000 Mortality Tables as prescribed by the IRS for 2013

### Assumption Changes Incorporated in the July 1, 2013 Valuation

- The current liability interest rate was changed from 4.02% to 3.61% and remains within the allowable corridor.
- The current liability mortality was updated as specified by the IRS.
- The hours assumption for future credits was updated to be based on a 1,350-hour work year. The prior valuation assumed 1,250 hours per participant per year, and then the Fund's expected normal cost was increased to reflect an expectation of 1,350 hours per participant.
- Assumed retirement rates for active participants were changed as shown above to better reflect recent and anticipated experience under the Fund.

# Appendix E

## Development of Reciprocity and Parity Reserves

**ALASKA LABORERS – EMPLOYERS RETIREMENT FUND**  
**Development of Reciprocity and Parity Reserves**  
**(July 1, 2013)**

**RECIPROCITY RESERVE**

Reciprocity Reserve as of July 1, 2012	\$ 6,879,772
Interest to June 30, 2013	481,584
Liability Released for 2012-2013 Retirees	(222,828)
Liability Released Due to Passage of Time (5%)	(356,926)
Liability Added for 2012-2013 Nonvested Terminations	<u>168,526</u>
Reciprocity Reserve as of July 1, 2013	\$ 6,950,128

**PARITY RESERVE**

Parity Reserve as of July 1, 2012	\$ 4,447,762
Interest to June 30, 2013	311,343
Liability Released for 2012-2013 Rehires	(792,764)
Liability Released Due to Passage of Time (20%)	(793,268)
Liability Added for 2012-2013 Nonvested Terminations	<u>511,858</u>
Parity Reserve as of July 1, 2013	\$ 3,684,931

# Appendix F

## Actuarial and Benefits Glossary

**ALASKA LABORERS – EMPLOYERS RETIREMENT FUND****Actuarial and Benefits Glossary**

**Accrued (accumulated) benefit** – a participant's accumulated pension benefit amount payable at normal retirement age. The pension benefit amount is generally based on an employee's years of service or amount of contributions made on his or her behalf.

**Accumulated funding deficiency** – the result of an annual contribution to a pension plan which is less than the minimum annual contribution requirement under ERISA. A projected accumulated funding deficiency in a future year can trigger yellow zone, orange zone, or red zone status.

**Active participant** – an employee who met the participation requirements of the plan and is currently working and earning benefit, eligibility and vesting service.

**Actuarial accrued liability** – computed differently under different actuarial cost methods, the actuarial accrued liability generally represents the portion of the actuarial present value of projected plan benefits attributable to service earned as of the valuation date. Equivalently, the actuarial accrued liability for a pension plan is the actuarial present value of projected plan benefits minus the present value of future normal costs.

**Actuarial cost method** – technique used to determine the periodic contributions needed to cover future benefit payments and administrative costs of a benefit plan. Most actuarial cost methods are comprised of two components; normal cost and the actuarial accrued liability. Two common actuarial cost methods used are the entry age actuarial cost method and the unit credit actuarial cost method.

**Actuarial equivalent** – payment stream that has the same actuarial present value as another payment stream based on a given set of actuarial assumptions. For example, a lifetime monthly benefit of \$67.60 beginning at the age of 60 can be said to be the actuarial equivalent of \$100 a month beginning at the age of 65. While the benefit amounts are different, the actuarial present values of the two benefits are the same for a participant currently age 60.

**Actuarial gain/loss** – plan experience, from one year to the next, which is different from assumed results based on the actuarial assumptions. For example, if assets earn 9% for a given year and the assumed investment return is 7%, then an actuarial gain has occurred.

**Actuarial present value** – current value of an amount or series of amounts receivable over a period of time that is determined using a set of actuarial assumptions.

**Actuarial present value of accumulated plan benefits** – the current value of the *accrued* future payments from the plan determined using actuarial assumptions for the probability of payment (i.e. retirement, death, disability) and discounting the payments to the valuation date using the valuation investment return assumption.

**Actuarial present value of future normal costs** – the current value of the plan's annual future normal costs discounted to the valuation date using the valuation investment return assumption.

**Actuarial present value of projected plan benefits** – the current value of the *total* future payments from the plan determined using actuarial assumptions for the amount and probability of payment (e.g. future service,

retirement, death, disability) and discounting the payments to the valuation date using the valuation investment return assumption.

**Actuarial present value of vested plan benefits** – the current value of the *vested accrued* future payments from the plan determined using actuarial assumptions for the probability of payment (e.g. retirement, death, disability) and discounting the payments to the valuation date using the valuation investment return assumption. Certain death and disability benefits are sometimes considered not vested.

**Actuarial valuation** – the annual report that discloses the plan's funded status, annual contribution requirements and unfunded vested benefit liability used for withdrawal liability.

**Actuarial value of assets** – The value of plan assets used by the actuary for the actuarial valuation. Actuaries often use an actuarial asset method that smoothes the effects of short-term volatility in market returns.

**Alternate payee** – a plan participant who is eligible for a portion of a participant's benefit based on a Qualified Domestic Relations Order.

**Amortization charges** – annual minimum ERISA payments for benefit improvements, actuarial losses and changes to actuarial cost methods. The general payment period is 15 years for benefit improvements and actuarial losses, and 10 years for changes to actuarial cost methods. PRA 2010 allowed the use of periods beginning with 29 years for the 2008 investment loss.

**Amortization credits** – annual minimum ERISA payment for benefit reductions, actuarial gains and changes to actuarial cost methods. The general payment period is 15 years for benefit reductions and actuarial losses, and 10 years for changes to actuarial cost methods.

**Annual funding notice** – the annual notice provided to plan participants, plan sponsors, and federal agencies describing the funded status of the plan.

**Asset smoothing** – method by which the actuarial value of assets is determined. Fluctuations in market values are “smoothed” by gradual recognition of investment return. The most common smoothing period is 5 years. PRA 2010 allowed a 10 year smoothing period for 2008 investment losses.

**Beneficiary** – the person designated to receive benefits under the plan in the event of death of the participant.

**Coverage testing** – rules used to determine that a retirement plan's coverage of eligible, active participants does not prohibitively favor highly compensated employees.

**Critical status** – designation specified by the Pension Protection Act of 2006 for multiemployer pension plans that are expected to have an accumulated funding deficiency for any of the next five plan years or facing other serious financial problems. If a plan actuary certifies that the plan is in critical status, the plan must notify the U.S. Department of Labor, Pension Benefit Guaranty Corporation, beneficiaries, unions and employers of the designation. A rehabilitation plan must be prepared and implemented. See also *rehabilitation plan*.

**Credit balance** – accumulated excess, with interest, of actual contributions made to a defined benefit plan (since the effective date of ERISA), over the accumulated minimum required contributions for the same period. In any year, the credit balance may be used to satisfy the minimum required contribution.

**Current liability** – the actuarial present value of accumulated plan benefits determined using an interest rate prescribed by the Internal Revenue Service. The value is generally used to determine a multiemployer plan's maximum deductible contribution.

**Death benefit** – a benefit payable to a surviving spouse or beneficiary due to a participant's death.

**Defined benefit plan** – a pension plan providing a definitely determinable benefit at retirement. The benefit is generally based on years of service, the amount of contributions made on a participant's behalf or salary.

**Defined contribution plan** – a pension plan providing contributions to individual accounts for each active participant. The retirement benefit is dependent on the amount of the participant's account balance at retirement. The balance depends on the amounts contributed on a participant's behalf and the investment return on those contributions.

**Disability benefit** – a benefit that is paid to a participant who is determined to be disabled under the term of the plan. This benefit can be a retirement benefit or an auxiliary, temporary benefit.

**Early retirement** – a combination of age and service requirements stated in a pension plan that when satisfied allow the participant to start retirement benefits.

**Entry age actuarial cost method** - under this cost method, the normal cost is the sum of the individual normal costs for all participants. For each active participant, the individual normal cost equals the actuarial present value of all projected future benefits determined as of the participant's entry age divided by the actuarial present value of an annuity of \$1 per year payable from entry age to retirement age. The normal cost equals zero for all inactive participants.

The actuarial liability is the sum of the individual actuarial liabilities for all participants. The individual actuarial liability equals the actuarial present value of all projected future benefits less the actuarial present value of all future normal costs, where both of these present values are calculated as of the valuation date.

**Employee Retirement Income Security Act of 1974 (ERISA)** – federal law that sets minimum standards for the protection of individuals in most voluntarily established pension plans within private industry. ERISA also defines the annual minimum required contribution that must be made to pension plans.

**Endangered status** – under the Pension Protection Act of 2006, a designation for a multiemployer pension plan that has a funded percentage under 80%, or is expected to have an accumulated funding deficiency for any of the next six plan years. If a plan actuary certifies that the plan is in endangered status, the plan must notify the U.S. Department of Labor, Pension Benefit Guaranty Corporation, beneficiaries, unions and employers of the designation. A funding improvement plan must be prepared and implemented. See also *funding improvement plan (FIP)*.

**Experience gain/loss** – *see actuarial gain / loss*

**Family and Medical Leave Act of 1993 (FMLA)** – federal legislation that requires employers with more than 50 employees to provide eligible workers with up to 12 weeks of unpaid leave during any 12-month period if the employee is unable to work because of a serious health condition. The same unpaid leave is available for the birth of a child and newborn care, adoption, foster care placement, and care of an immediate family member (i.e., spouse, child or parent) with a serious health condition.

**Form 5500** – document that must be filed each year by pension and health and welfare benefit plans with 100 or more participants that reports the financial condition of the plan. This joint agency form was developed by



the IRS, U.S. Department of Labor and Pension Benefit Guaranty Corporation to satisfy the reporting requirements of the Internal Revenue Code and Titles I and IV of ERISA.

**Full funding limitation** – the maximum deductible contribution amount allowed by federal law. This limit is overridden by an allowance to fund up to 140% of a plan's current liability.

**Funding improvement plan (FIP)** – under the Pension Protection Act of 2006, trustees of pension plans in endangered status must establish and implement a scheme that is reasonably likely to achieve a one-third reduction in the underfunded liability over a period of about ten years. For a seriously endangered plan, the goal is a one-fifth reduction in the underfunded liability within 15 years. Generally, the strategies for achieving these goals are increasing contributions or decreasing benefits, or a combination of both. See also *endangered status and rehabilitation plan*.

**Funding standard account** – the report provided to the IRS showing a defined benefit plan's satisfaction of the annual ERISA minimum funding requirement. The funding standard account is generally made up of the normal cost, amortization charges, amortization credits, employer contributions, interest and the credit balance.

**Green Zone** – the common term used to identify a plan that is not in endangered status, seriously endangered status or critical status.

**Life expectancy** – the average number of years a person is expected to live.

**Lump sum distribution** – a single cash payment generally equal to the actuarial present value of the participant's accrued benefit based on federally mandated actuarial assumptions.

**Market value of assets** – the market price of the plan's assets as of the valuation date. Generally this value is found in the plan's audit.

**Maximum tax-deductible contribution** – the annual amount that is generally deductible under IRC Section 404.

**Minimum required contribution** – least amount that the IRS requires sponsors of qualified single-employer, multiple employer and multiemployer pension plans to make each year. If contributions are less than this amount, the plan may have an accumulated funding deficiency and sponsors may be subject to an excise tax. Governmental and church plans that do not elect to be covered by ERISA are not subject to this rule.

**Multiemployer Pension Plan Amendments Act of 1980 (MPPAA)** – legislation that amended ERISA to strengthen the funding requirements for multiemployer pension plans. The act removes multiemployer plans from ERISA's plan termination insurance system and substitutes a system that imposes liability for certain unfunded vested benefits when an employer partially or totally withdraws from a multiemployer plan.

**Multiemployer plan** – collectively bargained benefit plan maintained by more than one employer, usually within the same or related industries. Multiemployer plans, also known as jointly administered or Taft-Hartley plans, are governed by a board of trustees with labor and management equally represented. While there are exceptions, the board typically makes decisions about the types of benefits to be offered in the plan. Bargaining parties negotiate a contribution rate and the trustees translate that rate into benefits.

**Nondiscrimination rule** – federal requirement that limits the extent to which employers can target tax-favored retirement benefits toward higher-paid versus lower-paid employees. Compliance with the nondiscrimination rule is required for a plan to be considered qualified for ERISA.

**Normal cost** – actuarially determined annual contribution needed to fund benefits which are earned for employee service rendered during the current year. The unit credit normal cost is the actuarial present value of the anticipated benefit earned during the year by an active participant. The entry age normal cost is determined at entry age and is the annual amount required to be paid each year from entry age to retirement to fund the projected retirement benefit for each active participant.

**Orange zone** – the common term used to identify a plan that is in seriously endangered status. See also *seriously endangered status*.

**Pension Benefit Guaranty Corporation (PBGC)** – nonprofit corporation created by ERISA and charged with protecting the pensions of workers and retirees. Sponsors of defined benefit plans pay premiums to the PBGC, which help guarantee benefits for participants and beneficiaries if a plan terminates.

**Pension Relief Act of 2010** – the Pension Relief Act of 2010 provided the opportunity for multiemployer plan trustees to lessen the minimum required contribution by amortizing the 2008 investment loss over a longer period of time and smoothing the loss up to 10 years. The plan must be certified solvent, and benefit improvement testing is required while taking advantage of these provisions.

**Pension Protection Act of 2006 (PPA)** – the Pension Protection Act of 2006 included significant changes to minimum funding requirements and provided for trustees and bargaining parties to create funding improvement plans and rehabilitation plans. It also provided for increased reporting and the possibility of eliminating certain accrued benefits if the plan was certified in the red zone.

**PPA funded percentage** – the ratio of the actuarial value of assets to the actuarial present value of accumulated plan benefits. This is one of the measurements used to identify a plan's PPA zone status.

**Qualified Domestic Relations Order (QDRO)** – a court order that assigns a portion of a participant's benefit to an alternate payee.

**Red zone** – a common term used to identify a plan that is in critical status.

**Rehabilitation plan** – under the Pension Protection Act of 2006, trustees of pension plans that are certified as in the red zone or critical status must establish and implement a scheme that will remove the plan from critical status within ten years. Generally, the strategies for achieving this goal are increasing contributions, decreasing benefits, or a combination of both. The Worker, Retiree and Employer Relief Act of 2008 has temporarily extended the ten-year time frame to 13 years. See also *critical status*.

**Retiree** – a participant or beneficiary who is receiving a periodic benefit from the trust.

**Schedule MB** – attachment to the annual Form 5500 in which a plan actuary certifies actuarial valuation results, including the minimum required contribution that has been made to the plan for the plan year.

**Seriously endangered status** – under the Pension Protection Act of 2006, a designation for a multiemployer pension plan that has a funded percentage under 80%, and is expected to have an accumulated funding deficiency in any of the next six plan years. See also *funding improvement plan (FIP)*.

**Unfunded actuarial accrued liability** – actuarial accrued liability that exceeds the actuarial value of fund assets. If the value is negative, it is referred to as a negative unfunded actuarial accrued liability, or a funding surplus. Also referred to as unfunded actuarial liability.

**Unfunded vested benefits** – difference when assets are less than the actuarial present value of vested plan benefits.

**Uniformed Services Employment and Reemployment Rights Act of 1994 (USERRA)** – federal law that protects the jobs and benefits of employees who take a leave of absence for military service.

**Unit credit actuarial cost method** - Under the unit credit actuarial cost method, the actuarial liability is the sum of the actuarial present value of accrued benefits earned by the plan participants through the valuation date. The normal cost is computed as the actuarial present value of benefits expected to be earned in the current plan year under the current accrual rate.

**Vested inactive participant** – a participant who has suffered a break in service and has earned sufficient vesting service in order to have the right to a retirement benefit beginning at retirement eligibility.

**Withdrawal liability** – financial responsibility of a contributing employer to make contributions necessary to fund vested employee benefits when the employer withdraws in part or completely from a qualified multiemployer defined benefit plan.

**Worker, Retiree, and Employer Recovery Act of 2008 (WRERA)** – federal legislation providing emergency relief to pension funds and technical corrections to the Pension Protection Act of 2006.

**Yellow zone** – a common term used to identify a plan that is in endangered status.

**Zone status** – common terminology used to describe whether a plan that is in endangered status (yellow zone), seriously endangered status (orange zone), or critical status (red zone).