

# **Cement Masons Pension Trust Fund for Northern California**

**Actuarial Valuation and Review as of  
September 1, 2014**



This report has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

Copyright © 2015 by The Segal Group, Inc. All rights reserved.



100 Montgomery Street, SUITE 500 San Francisco, CA 94104  
T 415.263.8200 www.segalco.com

*June 8, 2015*

*Board of Trustees  
Cement Masons Pension Trust Fund for Northern California  
Fairfield, CA*

*Dear Trustees:*

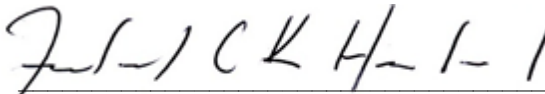
*We are pleased to submit the Actuarial Valuation and Review as of September 1, 2014. It establishes the funding requirements for the current year and analyzes the preceding year's experience. It also summarizes the actuarial data and includes the actuarial information that is required to be filed with Form 5500 to federal government agencies.*

*The census information upon which our calculations were based was prepared by the Fund Office, under the direction of Edward Smith. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Mark Hamwee, FSA, MAAA, Enrolled Actuary.*

*We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.*

*Sincerely,*

*Segal Consulting, a Member of the Segal Group*

By:   
*Frederick C. K. Herberich  
Senior Vice President*

*JZR/gxk*

<i>cc: Larissa Arespachaga</i>	<i>Patricia Davis, Esq.</i>	<i>Nickolas King</i>	<i>Jennifer Snow, CPA</i>
<i>Jill Bohnet</i>	<i>Edwin Embry</i>	<i>Alex W. Miller, CPA</i>	<i>Kristina Zinnen, Esq.</i>
<i>Debbie Bounds</i>	<i>Gemma Ganoy</i>	<i>Susan J. Olson, Esq.</i>	
<i>Matt Clizbe</i>	<i>Barry E. Hinkle, Esq.</i>	<i>Edward Smith</i>	

## SECTION 1

### ACTUARIAL VALUATION SUMMARY

Introduction .....	4
Important Information About Actuarial Valuations .....	5
A. Changes Since Last Valuation.....	7
B. 2014 Actuarial Status (Zone) Certification .....	8
C. Funded Percentage and Funding Standard Account .....	8
D. Scheduled Cost Deficit .....	9
Summary of Key Valuation Results.....	10
Comparison of Funded Percentages .....	11

## SECTION 2

### ACTUARIAL VALUATION RESULTS

A. Participant Data.....	12
B. Financial Information.....	18
C. Employment Experience .....	21
D. Actuarial Experience.....	22
E. Summary of Contribution Requirements .....	27
F. Pension Protection Act of 2006 (PPA'06).....	30
G. Scheduled Cost vs. Contributions .....	31
H. Disclosure Requirements .....	35

## SECTION 3

### SUPPLEMENTARY INFORMATION

EXHIBIT A Table of Plan Coverage .....	37
EXHIBIT B Participant Population: 2005 – 2014 .....	38
EXHIBIT C Summary Statement of Income and Expenses on an Actuarial Basis .....	39
EXHIBIT D Financial Information Table ..	40
EXHIBIT E Annual Funding Notice .....	41
EXHIBIT F Minimum Required Contribution.....	42
EXHIBIT G Maximum Deductible Contribution.....	44
EXHIBIT H Pension Protection Act of 2006 (PPA '06).....	45
EXHIBIT I Section 415 Limitations.....	47
EXHIBIT J General Background .....	48

## SECTION 4

### CERTIFICATE OF ACTUARIAL VALUATION

EXHIBIT I Summary of Actuarial Valuation Results.....	55
EXHIBIT II Information on Plan Status as of September 1, 2014.....	56
EXHIBIT III Schedule of Active Participant Data .....	57
EXHIBIT IV Funding Standard Account .....	58
EXHIBIT V Current Liability .....	63
EXHIBIT VI Actuarial Present Value of Accumulated Plan Benefits....	64
EXHIBIT VII Statement of Actuarial Assumptions/Methods .....	65
EXHIBIT VIII Summary of Plan Provisions .	71

## SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California

---

### INTRODUCTION

There are several ways of evaluating funding adequacy for a pension plan. In monitoring the Plan's financial position, the Trustees should keep in mind all of these concepts.

➤ **Scheduled Cost**

The Scheduled Cost is an annual contribution amount that allows an evaluation of whether benefit levels are sustainable over the long term, given current assets, negotiated contributions and the expectation of a continuing Plan.

➤ **Funding Standard Account**

The ERISA Funding Standard Account is charged with the normal cost and amortization of changes in the unfunded actuarial accrued liability measured as of each valuation date. The accumulation of actual contributions made in excess of the minimum required contributions is called the credit balance. If actual contributions fall short of the minimum required contribution on a cumulative basis, a funding deficiency has occurred.

➤ **PPA'06**

The Pension Protection Act of 2006 (PPA'06) calls on plan sponsors to actively monitor the projected Funding Standard Account credit balance, the funded percentage (the ratio of the actuarial value of assets to the present value of benefits earned to date) and cash flow sufficiency. Based on these measures, plans are then categorized as critical (*Red Zone*), endangered (*Yellow Zone*), or neither (*Green Zone*).

The Multiemployer Pension Reform Act of 2014 (MEPRA), among other things, makes permanent these provisions of PPA'06.

➤ **Solvency Projections**

Pension plan funding anticipates that, over the long term, both contributions and investment earnings will be needed to cover benefit payments and expenses. To the extent that contributions are less than benefit payments, investment earnings and fund assets will be needed to cover the shortfall. In some situations, a plan may be faced with insufficient assets to cover its current obligations and will need assistance from the Pension Benefit Guaranty Corporation (PBGC). MEPRA provides additional options for plans facing insolvency.

The current year's actuarial valuation results follow.

## SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California

---

### IMPORTANT INFORMATION ABOUT ACTUARIAL VALUATIONS

An actuarial valuation is a budgeting tool with respect to the financing of future uncertain obligations of a pension plan. As such, it will never forecast the precise future contribution requirements or the precise future stream of benefit payments. In any event, it is an estimated forecast – the actual cost of the plan will be determined by the benefits and expenses paid, not by the actuarial valuation.

In order to prepare a valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. For example, a plan may require the award of a Social Security disability pension as a condition for receiving a disability pension from the plan. If so, changes in the Social Security law or administration may change the plan’s costs without any change in the terms of the plan itself. It is important for the Trustees to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. For most plans, it is not possible or desirable to take a snapshot of the actual work force on the valuation date. In any event, the actuarial valuation is based on a future work force that is presumed to be the same as the active population included in the valuation, but in fact, employment varies from year to year, sometimes quite considerably. It is not necessary to have perfect data for an actuarial valuation: the valuation is an estimated forecast, not a prediction. The uncertainties in other factors are such that even perfect data does not produce a “perfect” result. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** Part of the cost of a plan will be paid from existing assets – the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. Some plans include assets, such as private equity holdings, real estate, or hedge funds, that are not subject to valuation by reference to transactions in the marketplace. A snapshot as of a single date may not be an appropriate value for determining a single year’s contribution requirement, especially in volatile markets. Plan sponsors often use an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year, as well as forecasts of the plan’s benefits for each of those events. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan’s assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions the actuary selects within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results and will have no impact on the actual cost of the plan. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

## **SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

Given the above, the user of Segal's actuarial valuation (or other actuarial calculations) needs to keep the following in mind:

- The actuarial valuation is prepared for use by the Trustees. It includes information for compliance with federal filing requirements and for the plan's auditor. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial snapshot is a measurement at a specific date – it is not a prediction of a plan's future financial condition. We have not been retained to perform and did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- Critical events for a plan include, but are not limited to, decisions about changes in benefits and contributions. The basis for such decisions needs to consider many factors such as the risk of changes in employment levels and investment losses, not just the current valuation results.
- ERISA requires a plan's enrolled actuary to provide a statement for inclusion in the plan's annual report disclosing any event or trend that the actuary has not taken into account, if, to the best of the actuary's knowledge, such an event or trend may require a material increase in plan costs or required contribution rates. If the Trustees are currently aware of any event that was not considered in this valuation and that may materially increase the cost of the Plan, they must advise Segal, so that we can evaluate it and take it into account.
- A certification of "zone" status under PPA'06 is a separate document from the actuarial valuation.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Trustees should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

## **SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

The actuarial valuation report as of September 1, 2014 is based on financial and demographic information as of that date. Changes subsequent to that date are not reflected and could affect future actuarial costs of the Plan. We are prepared to work with the Trustees to analyze the effects of any subsequent developments.

### **A. CHANGES SINCE LAST VALUATION**

1. On December 16, 2014, the Multiemployer Pension Reform Act of 2014 (MEPRA) was enacted. MEPRA expanded and clarified various zone status rules, made changes to withdrawal liability rules for plans in the red or yellow zones, enabled suspension of benefits for deeply troubled plans, and granted PBGC flexibility in facilitating plan mergers and approving partitions. This report does not discuss the implications of MEPRA for this plan.
2. The rate of return on the market value of plan assets was 13.2% for the 2013 plan year. The rate of return on the actuarial value of assets was 7.7% as a result of the asset valuation method. The current assumed long-term rate of return on investments is 7.50%. Given the low fixed income interest rate environments, target asset allocation and expectations of future investment returns for various asset classes, we will continue to monitor the Plan's actual and anticipated investment returns.
3. The assumed mortality tables and retirement rates were updated to better reflect recent experience and future expectations. Mortality rates were modified to reflect longer anticipated lifespans in retirement. Further details of these changes are included in Section 4, Exhibit VII. The net impact of these changes is an increase in the Scheduled Cost of \$2.1 million, as shown in Chart 22 in Subsection 2.G.
4. Based on a review of the administrative expenses, we have updated our assumption from \$750,000 to \$850,000 payable monthly, due to actual administrative expenses coming in higher than assumed for the past three years, resulting in actuarial losses. Details of this change are included in Section 4, Exhibit VII. The impact of this change is an increase in the Scheduled Cost by \$100,000, as shown in Chart 22 in Subsection 2.G.
5. We are recommending and are using in this report a revised level of contributory hours of 1,500 hours of contributions per active participant. The previous assumption was 1,600 hours.

**SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**B. 2014 ACTUARIAL STATUS (ZONE) CERTIFICATION**

1. The 2014 certification, previously issued, was based on the liabilities calculated in the 2013 actuarial valuation, projected to August 31, 2014, and estimated asset information as of August 31, 2014. This Plan was classified as endangered (*Yellow Zone*) because the funded percentage was 66.7% and the credit balance in the Funding Standard Account was projected to be positive for at least seven years.
2. As required by law, the Board of Trustees adopted a Funding Improvement Plan (“FIP”) on June 27, 2011. The Default Schedule of the FIP includes reductions in plan benefits with no changes in required contribution levels, while the Alternative Schedule reduces benefits to a lesser degree and does require increases in contributions. Following annual review by the Trustees, the schedules remain the same as those included in the original FIP. As noted above, all active participants are now covered by the Alternative Schedule, and this report recognizes the changes occurring under that schedule.
3. The plan’s funding improvement period began on September 1, 2013, and will end on August 31, 2023.

**C. FUNDED PERCENTAGE AND FUNDING STANDARD ACCOUNT**

1. Based on this September 1, 2014 actuarial valuation, the funded percentage as of that date is 64.8%. This will be reported on the 2014 Annual Funding Notice to be provided within 120 days after the end of this plan year.
2. The credit balance in the Funding Standard Account as of August 31, 2014 was \$63,954,620, an increase of \$1,330,073 from the prior year. PPA ’06 requires plan sponsors to monitor the projected credit balance.
3. We are available to work with the Trustees to develop credit balance projections.
4. A projection of the Funding Standard Account indicates that the credit balance is expected to remain positive for at least 30 years, assuming future market value rates of return of 7.5%, all other experience emerges as projected and there are no future changes in the Plan provisions, law/regulations or actuarial assumptions. This projection takes into consideration all deferred net investment losses.



**SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**D. SCHEDULED COST DEFICIT**

1. The projected annual contributions of \$10.30 per hour fall short of the Scheduled Cost of \$11.06 per hour, resulting in a deficit of \$0.76, or 7.4% of contributions as compared to a margin of 7.0% in the prior valuation. This existence of a deficit is primarily due to the changes in actuarial assumptions previously noted in Section A.
2. The investment losses that have occurred in the past years have only been partially recognized in the determination of the actuarial value of assets. As these deferred net losses are recognized in future years, the Scheduled Cost of the Plan will increase unless the losses are offset by future investment gains. To illustrate the effect of the net unrecognized investment losses, if the current year's actuarial value of assets were equal to the current market value of assets, the Scheduled Cost deficit of \$0.76 per hour would become a deficit of \$0.97 per hour.
3. The projected level of contributions is large enough that the unfunded actuarial accrued liability is expected to be amortized in 15 years. This is two years longer than the Board's amortization period.

**SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**SUMMARY OF KEY VALUATION RESULTS**

	<b>2014</b>		<b>2013</b>	
<b>Certified Zone Status</b>	<i>Endangered</i>		<i>Endangered</i>	
<b>Demographic Data:</b>				
Number of active participants	1,731		1,699	
Number of inactive participants with vested rights	930		977	
Number of retired participants and beneficiaries	1,842		1,793	
<b>Assets:</b>				
Market value of assets (MVA)	\$324,044,455		\$291,640,125	
Actuarial value of assets (AVA)	328,746,313		310,877,688	
AVA as a percent of MVA	101.5%		106.6%	
<b>Statutory Funding Information:</b>				
Minimum required contribution	\$0		\$0	
Maximum deductible contribution	857,968,697		849,442,596	
Annual Funding Notice percentage	64.8%		64.9%	
Funding Standard Account deficiency projected in Plan Year beginning	N/A		N/A	
	<b>Amount</b>	<b>Per Hour</b>	<b>Amount</b>	<b>Per Hour</b>
<b>Scheduled Cost and Employer Contributions:</b>				
Projected contributions*	\$26,743,950	\$10.30	\$27,999,520	\$10.30
Scheduled Cost	28,715,524	11.06	26,044,440	9.58
Margin/(Deficit)	-1,971,574	-0.76	1,955,080	0.72
Projected contributions for the upcoming year	25,662,075		25,054,200	
Actual contributions	- -		26,300,586	
<b>Cost Elements on a Scheduled Cost Basis:</b>				
Normal cost, including administrative expenses	\$3,959,854		\$3,653,998	
Actuarial accrued liability	535,409,907		506,128,059	
Unfunded actuarial accrued liability (based on AVA)	206,663,594		195,250,371	

\* Based on the long-term employment level assumption of 1,500 hours per active participant for 2014 and 1,600 hours per active participant for 2013.

**SECTION 1: Actuarial Valuation Summary as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**COMPARISON OF FUNDED PERCENTAGES\***

	2014		Funded Percentages as of September 1	
	Liability	Assets	2014	2013
1. Present Value of Future Benefits	\$552,778,594	\$328,746,313	59.5%	59.5%
2. Actuarial Accrued Liability	535,409,907	328,746,313	61.4%	61.4%
3. PPA '06 Liability and Annual Funding Notice	507,194,490	328,746,313	64.8%	64.9%
4. Accumulated Benefits Liability	507,194,490	324,044,455	63.9%	60.9%
5. Current Liability	830,142,757	324,044,455	39.0%	36.0%

Notes:

1. Includes the value of benefits earned through the valuation date (accrued benefits) plus the value of benefits projected to be earned in the future for current participants. Used to develop the actuarial accrued liability, based on long-term funding investment return assumption of 7.50% and the actuarial value of assets. The funded percentage using market value of assets is 58.6% for 2014 and 55.8% for 2013.
2. Represents the portion of present value of future benefits allocated by the actuarial cost method to years prior to the valuation date. Used in determining Scheduled Cost, based on long-term funding investment return assumption of 7.50% and the actuarial value of assets. The funded percentage using market value of assets is 60.5% for 2014 and 57.6% for 2013.
3. Measures present value of accrued benefits using the current participant census and financial data. As defined by the Pension Protection Act of 2006, based on long-term funding investment return assumption of 7.50% and the actuarial value of assets.
4. Provides present value of accrued benefits for disclosure in the audited financial statements, based on long-term funding investment return assumption of 7.50%, and the market value of assets.
5. Used to determine maximum tax-deductible contributions and is reported on Schedule MB to Form 5500. Based on the present value of accrued benefits, using a prescribed mortality table and investment return assumption of 3.57% for 2014 and 3.61% for 2013, and the market value of assets. The funded percentage is also shown on the Schedule MB if it is less than 70%.

\*Disclosure: These measurements are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**A. PARTICIPANT DATA**

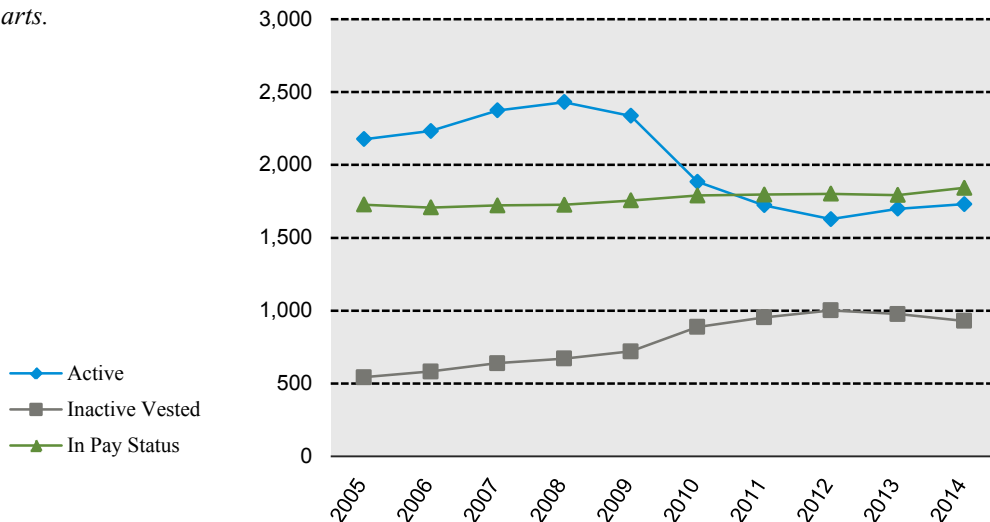
The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including 1,731 active participants, 930 inactive vested participants, and 1,842 pensioners, beneficiaries and suspensions, as of August 31, 2014.

This section presents a summary of significant statistical data on these participant groups. More detailed information for this valuation year and the preceding year can be found in Section 3, Exhibits A and B.

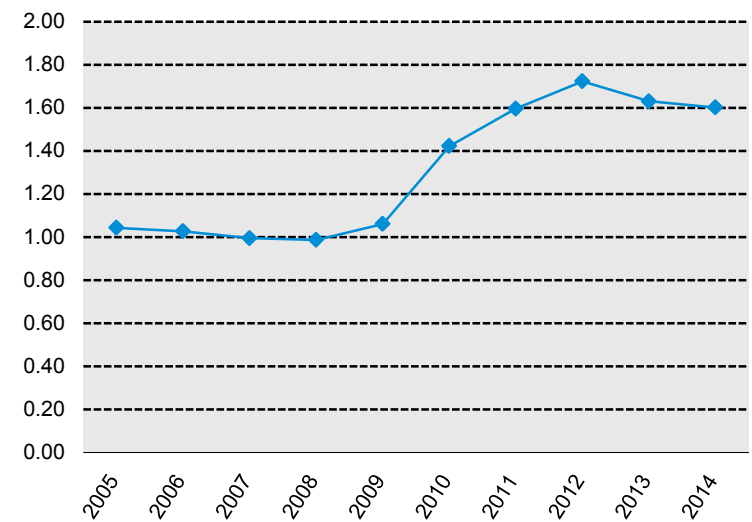
Chart 2 shows the number of non-active participants relative to the number of active participants, one indication of the Plan's maturity. A higher ratio shows a more mature plan.

*A historical perspective of how the participant population has changed over the past several years can be seen in these charts.*

**CHART 1**  
**Participant Population as of August 31, 2005 – 2014**



**CHART 2**  
**Ratio of Non-Actives to Actives as of August 31, 2005 – 2014**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Active Participants**

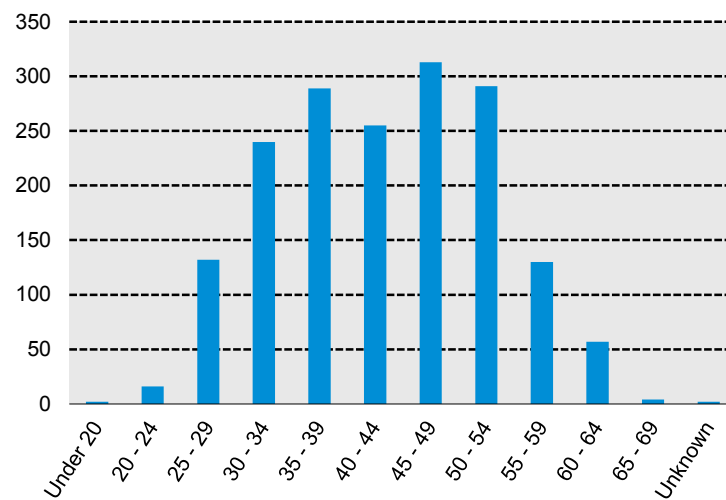
Pension plan costs are affected by the age and years of credited service of active participants. In this year's valuation, there were 1,731 active participants with an average age of 43.3 and average years of credited service of 11.7. This compares to 42.9 and 11.6, respectively, for the 1,699 active participants in the prior year.

Among active participants, there were 2 with unknown age. The actuarial calculations were adjusted for missing information by assuming that it was the same as information provided for other active participants with similar known characteristics.

*These charts show a distribution of active participants by age and by years of credited service.*

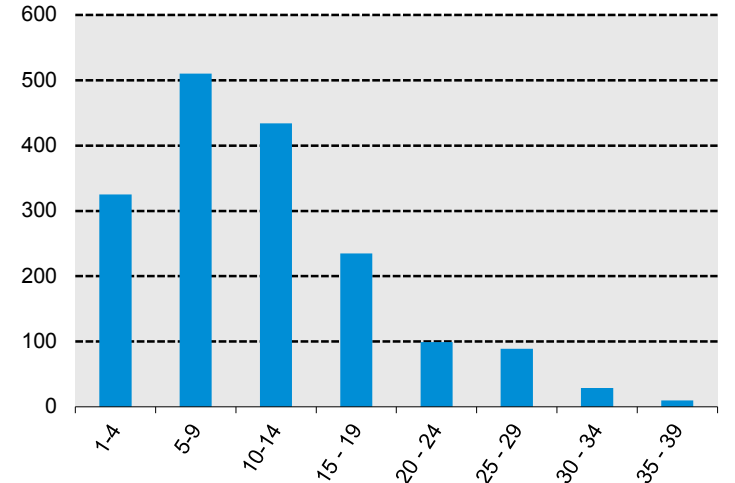
**CHART 3**

**Distribution of Active Participants by Age as of August 31, 2014**



**CHART 4**

**Distribution of Active Participants by Years of Credited Service as of August 31, 2014**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

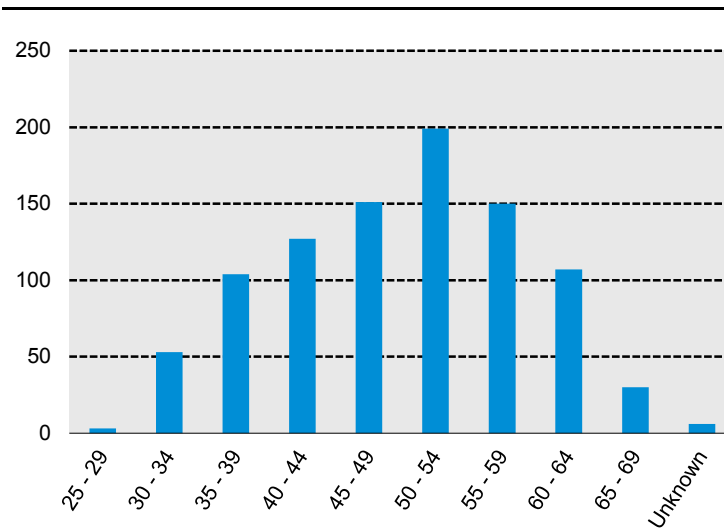
**Inactive Vested Participants**

Participants who leave the coverage of the Plan after satisfying the requirements for a deferred pension or an immediate pension but elect to defer commencement are considered to be “inactive vested” and are included in the pension plan cost. In this year’s valuation, there were 930 inactive vested participants with an average age of 49.3 and average monthly benefit of \$1,129. This compares to 49.1 and \$1,152, respectively, for the 977 inactive vested participants in the prior year.

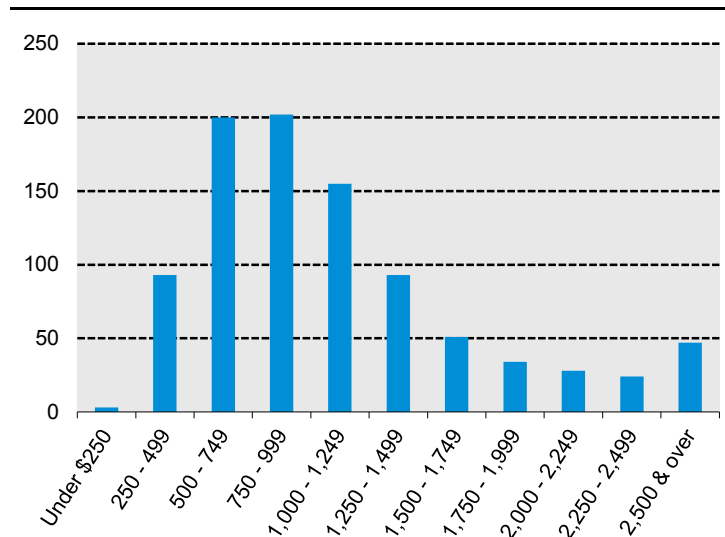
No cost is included for other inactive participants, even though some may return to active employment before incurring a permanent break in service.

*These charts show a distribution of inactive vested participants by age and by monthly amount.*

**CHART 5**  
**Distribution of Inactive Vested Participants by Age as of August 31, 2014**



**CHART 6**  
**Distribution of Inactive Vested Participants by Monthly Amount as of August 31, 2014**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Pensioners and Beneficiaries**

During the fiscal year ended August 31, 2014, there were 93 pensions awarded, as detailed in this chart. The average monthly pension awarded, after adjustment for optional forms of payment, was \$1,894. The chart below presents both the number and average monthly amount of pensions awarded in each of the years shown, by type and in total.

**CHART 7**  
**Pension Awards: 2005 – 2014**

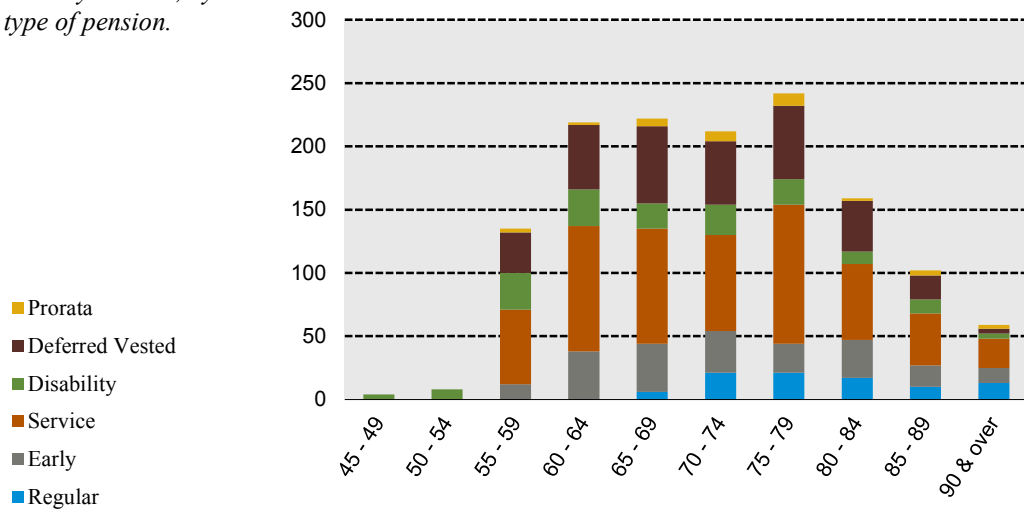
Year Ended August 31	Total		Regular		Early		Service		Disability		Deferred Vested		Pro Rata	
	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount	Number	Average Amount
2005	74	\$2,258	4	\$1,764	13	\$1,386	35	\$3,684	7	\$1,049	12	\$449	3	\$124
2006	42	2,001	6	1,327	8	1,955	14	3,370	2	846	11	962	1	1,007
2007	57	1,976	12	1,838	8	1,276	18	3,538	6	955	12	889	1	292
2008	50	1,817	2	2,919	10	1,485	14	3,687	8	833	15	677	1	1,720
2009	65	2,334	4	3,832	8	1,545	28	3,683	6	960	19	796	--	--
2010	80	2,185	5	1,763	10	1,582	33	3,720	2	1,042	27	896	3	370
2011	45	2,261	5	2,343	9	1,531	15	3,843	3	1,057	11	561	2	4,638
2012	66	1,910	2	2,077	12	1,307	20	3,774	3	1,020	26	1,028	3	316
2013	46	2,572	--	--	5	1,615	25	3,878	2	803	13	715	1	2,374
2014	93	1,894	4	2,160	14	1,402	26	3,775	7	1,055	42	1,009	--	--

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

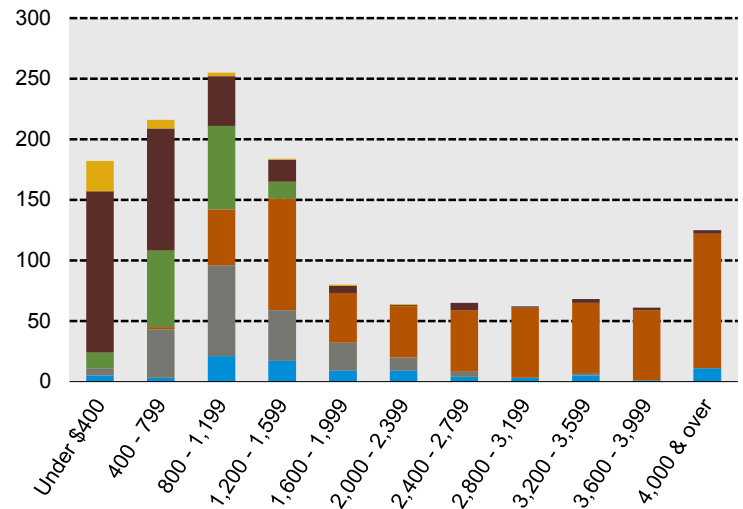
As of this year's valuation date, 1,362 pensioners and 458 beneficiaries were receiving total monthly benefits of \$2,599,331. For comparison, in the previous year, there were 1,327 pensioners, and 445 beneficiaries receiving monthly benefits of \$2,472,023. There were 22 suspended pensioners in this valuation compared with 21 in the prior year.

*These charts show the distribution of the current pensioners based on their age and monthly amount, by type of pension.*

**CHART 8**  
**Distribution of Pensioners by Type and by Age as of August 31, 2014**



**CHART 9**  
**Distribution of Pensioners by Type and by Monthly Amount as of August 31, 2014**





**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

In Chart 10, additions to the pension rolls include new pensions awarded and suspended pensioners who have been reinstated. Terminations include pensioners who died or were suspended during the prior plan year. The change in average age and average amounts of pensioners in payment status is shown as the Fund matures over time.

*This chart shows a year-by-year history of changes in the pensioner group.*

**CHART 10**  
**Progress of Pension Rolls: 2005 – 2014**

Year Ended August 31	Additions	Terminations	In Payment Status at Year End		
			Number	Average Age	Average Amount
2005	81	66	1,368	71.6	\$1,293
2006	44	68	1,344	71.8	1,333
2007	63	58	1,349	72.0	1,369
2008	50	91	1,308	72.0	1,413
2009	82	61	1,329	72.1	1,470
2010	84	85	1,328	72.0	1,547
2011	70	53	1,345	72.4	1,574
2012	66	87	1,324	72.2	1,631
2013	70	67	1,327	72.3	1,684
2014	93	58	1,362	72.0	1,722

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

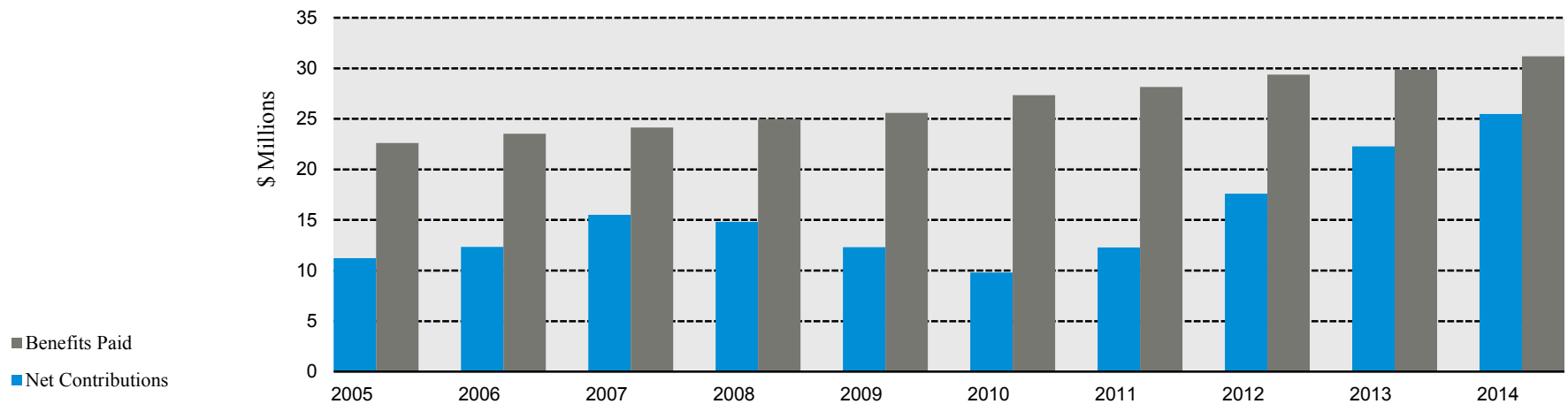
**B. FINANCIAL INFORMATION**

Pension plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Pension plan assets change as a result of the net impact of these income and expense components. A summary of these transactions for the valuation year is presented in Section 3, Exhibit C.

Contributions net of administrative expenses were \$25,482,677 for the year. Benefit payments during the year totaled \$31,180,865 and are projected to increase to approximately \$42 million ten years from now. To the extent that future contributions are projected to be less than benefit payments, investment earnings or fund assets will be needed to cover the shortfall.

*This chart depicts the net employer contributions and benefits paid over the last ten years.*

**CHART 11**  
**Comparison of Net Employer Contributions and Benefits Paid for Years Ended August 31, 2005 – 2014**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

Because the Plan is funded by a negotiated contribution rate, it is desirable to have a level and predictable pension plan cost from one year to the next. The Trustees have approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full effect of market fluctuations is not recognized in a single year.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized gains and losses and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The actuarial value of assets reflects the Trustees' election to recognize the 2008/2009 investment loss in the years ended August 31, 2009 and August 31, 2010 over 10 years.

*This chart shows the determination of the actuarial value of assets as of August 31, 2014.*

**CHART 12  
Determination of Actuarial Value of Assets as of August 31, 2014**

1	Market value of assets, August 31, 2014			\$324,044,455
2	Calculation of unrecognized return	Original <u>Amount*</u>	Unrecognized <u>Return**</u>	
	(a) Year ended August 31, 2014	\$16,443,191	\$13,154,553	
	(b) Year ended August 31, 2013	3,348,079	2,008,847	
	(c) Year ended August 31, 2012	5,285,074	2,114,030	
	(d) Year ended August 31, 2011	15,094,047	3,018,809	
	(e) Year ended August 31, 2010	-4,917,319	-2,458,659	
	(f) Year ended August 31, 2009	-56,348,595	<u>-22,539,438</u>	
	(g) Total unrecognized return			-4,701,858
3	Preliminary actuarial value: (1) - (2g)			328,746,313
4	Adjustment to be within 20% corridor			0
5	Final actuarial value of assets as of August 31, 2014: (3) + (4)			<u>\$328,746,314</u>
6	Actuarial value as a percentage of market value: (5) ÷ (1)			101.5%
7	Amount deferred for future recognition: (1) - (5)			-\$4,701,859

\* Total return minus expected return on a market value basis

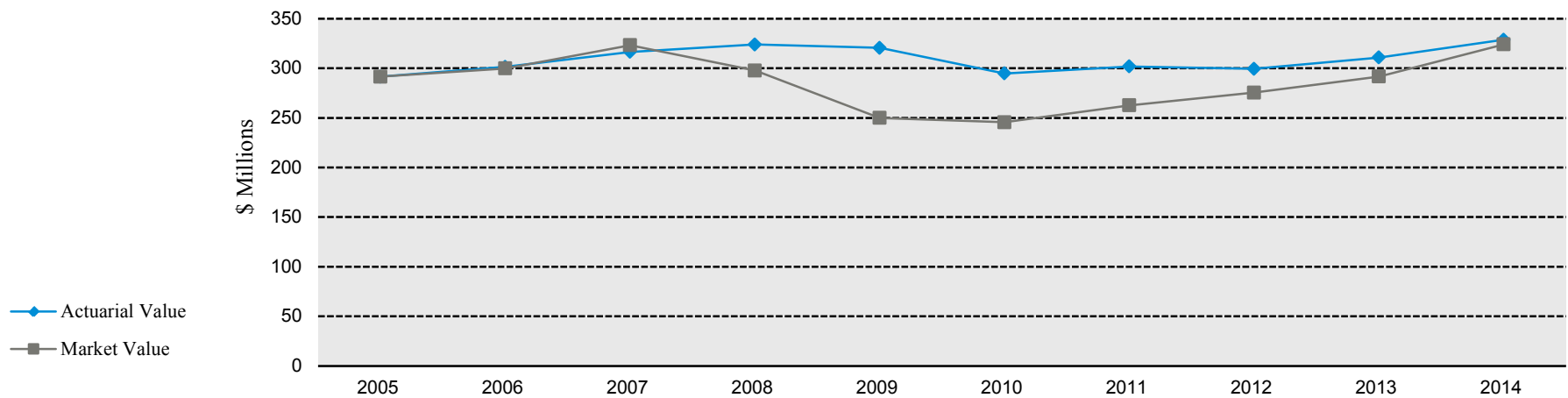
\*\* Recognition at 10% per year over 10 years for years ended August 31, 2009 and August 31, 2010, and at 20% per year over 5 years for remaining years.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

Both the actuarial value and the market value of assets are representations of the Fund's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial value is significant because it is subtracted from the Plan's total actuarial accrued liability to determine the portion that is not funded and is used to determine the PPA '06 funded percentage. Amortization of the unfunded portion is an important element in the contribution requirements of the Plan as detailed in Subsections E and G.

*This chart shows how the actuarial value of assets and the market value of assets have changed from 2005 to 2014.*

**CHART 13**  
**Actuarial Value of Assets vs. Market Value of Assets as of August 31, 2005 - 2014**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**C. EMPLOYMENT EXPERIENCE**

The Trustees are in the best position to select the appropriate employment level assumption to use in long term planning for funding the Plan. Total hours of contributions, number of actives and their average hours of contributions are shown in Chart 14.

Certifications under PPA'06 and MEPRA include a projection of future contributions. Any projection of industry activity, including future employment and contribution levels, must be based on reasonable information for the projection period provided by the Trustees. The industry activity assumption used for the 2014 actuarial certification

was 2,823,000 total contributory hours in the 2014-2015 plan year and 3,000,000 hours annually thereafter.

In prior valuations, the long-term assumption for Scheduled Cost purposes was 1,600 hours for each active participant. The experience in recent years has shown a trend of lower per capita hours. For this valuation, we recommend the assumption be changed to 1,500 hours for each active participant based on recent experience and have used that assumption in this report. We look to the Trustees for guidance as to whether this is reasonable for the long term.

*This chart provides a history of the various measures of employment.*

**CHART 14**  
**Employment History: 2005 - 2014**

Year Ended January 31*	Total Hours of Contributions		Active Participants		Average Hours of Contributions	
	Number	Percent Change	Number	Percent Change	Number	Percent Change
2005	3,499,324	0.7%	2,177	2.3%	1,607	-1.5%
2006	3,642,411	4.1%	2,232	2.5%	1,632	1.6%
2007	3,895,216	6.9%	2,374	6.4%	1,641	0.6%
2008	3,835,424	-1.5%	2,431	2.4%	1,578	-3.8%
2009	3,618,625	-5.7%	2,336	-3.9%	1,549	-1.8%
2010	2,517,565	-30.4%	1,884	-19.3%	1,336	-13.8%
2011	2,283,088	-9.3%	1,723	-8.5%	1,325	-0.8%
2012	2,233,977	-2.2%	1,628	-5.5%	1,372	3.5%
2013	2,449,442	9.6%	1,699	4.4%	1,442	5.1%
2014	2,491,333	1.7%	1,731	1.9%	1,439	-0.2%
Most recent five-year average hours:					1,383	
Ten-year average hours:					1,492	

\* Hours are reported on the basis of the plan credit year, which is February 1 through January 31.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**D. ACTUARIAL EXPERIENCE**

To calculate the cost requirements of the Plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions and, to the extent that there are differences in that year, the contribution requirement is adjusted. If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long run, experience will

return to that originally assumed. For contribution requirements to remain stable, assumptions should approximate experience.

When compared to the projected actuarial accrued liability of \$488,729,646 as of August 31, 2014, the net experience variation other than investment experience was not significant. On the following pages is a discussion of the major components of the actuarial experience.

*This chart provides a summary of the prior year's actuarial experience.*

**CHART 15**

**Actuarial Experience for the Year Ended August 31, 2014**

1	Net gain from investments*	\$464,668
2	Net loss from administrative expenses	-70,213
3	Net loss from other experience	<u>-2,141,233</u>
4	Net experience loss: (1) + (2) + (3)	<u>-\$1,746,778</u>

\* Details in Chart 16.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**Investment Rate of Return**

Because earnings on investments significantly affect the cost of the Plan, an assumption is made about the rate of return on plan assets. The rate of return is investment income net of investment expenses, expressed as a percentage of the average actuarial value of assets during the year.

Investment income for the purposes of the actuarial valuation consists of projected investment income at the actuarially assumed rate and the adjustment for market value changes. Investment expenses are subtracted.

The actuarial value of assets does not yet fully recognize past investment losses. As a result, the impact of favorable future investment returns will be dampened as recognition of past investment losses is phased in. Therefore, the rate of return on an actuarial basis is likely to fall below the assumed rate of return as unrecognized losses are reflected, even if market returns are favorable.

*This chart shows the portion of the gain due to investment experience.*

**CHART 16**  
**Actuarial Value Investment Experience for the Year Ended August 31, 2014**

1	Net investment income	\$23,566,813
2	Average actuarial value of assets	308,028,594
3	Rate of return: (1) ÷ (2)	7.65%
4	Assumed rate of return	7.50%
5	Expected net investment income: (2) x (4)	\$23,102,145
6	Actuarial gain: (1) – (5)	<u>\$464,668</u>

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

For your information, the following chart shows the rate of return on an actuarial basis compared to the market value investment return for the last 20 years, including five-year, ten-year and 20-year averages. However, actuarial planning is long term as the obligations of pension plans are expected to continue for the lifetime of its active and inactive participants.

term assumption. Overall, interest rates have declined substantially in the current economic environment. Based upon this experience, the current asset allocation, and future expectations, we have maintained the assumed long-term rate of return of 7.50%. However, we will continue to monitor the plan's actual and anticipated investment returns and may revise our assumed long-term rate of return in a future actuarial valuation, if warranted.

As indicated below, the experience in the past few years has shown both higher and lower rates of return than the long-

**CHART 17**

**Investment Return – Actuarial Value vs. Market Value: 1995 - 2014**

Year Ended August 31	Actuarial Value Investment Return		Market Value Investment Return		Year Ended August 31	Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent*	Amount	Percent		Amount	Percent*	Amount	Percent
1995	\$22,360,700	13.58%	\$27,607,872	15.80%	2005	\$28,476,213	10.60%	\$29,014,214	10.82%
1996	20,921,300	11.84%	20,238,971	10.54%	2006	21,053,938	7.36%	19,496,952	6.82%
1997	43,486,500	23.17%	47,985,856	23.71%	2007	23,744,972	7.99%	32,021,516	10.84%
1998	18,957,037	8.61%	23,958,595	10.01%	2008	17,619,682	5.66%	-15,251,787	-4.79%
1999	48,098,796	21.10%	39,048,689	15.49%	2009	9,962,073	3.14%	-34,512,018	-11.85%
2000	17,626,591	6.64%	24,672,915	8.79%	2010	-8,317,800	-2.67%	13,176,042	5.46%
2001	12,085,424	4.42%	-8,322,344	-2.82%	2011	22,915,553	7.99%	32,922,856	13.85%
2002	6,858,142	2.49%	-12,664,656	-4.57%	2012	9,387,702	3.17%	24,545,766	9.56%
2003	9,705,623	3.58%	15,768,577	6.22%	2013	18,995,692	6.42%	23,724,922	8.73%
2004	9,359,823	3.46%	20,495,510	7.93%	2014	23,566,813	7.65%	38,102,518	13.19%
					Total	\$376,864,774		\$362,030,966	
					Most recent five-year average return:		4.44%		10.22%
					Most recent ten-year average return		5.62%		5.92%
					20-year average return:		7.10%		6.99%

Note: Each year's yield is weighted by the average asset value in that year.

\*The investment return for 2005 and 2009 includes the effect of a change in the method for determining the Actuarial Value of Assets.

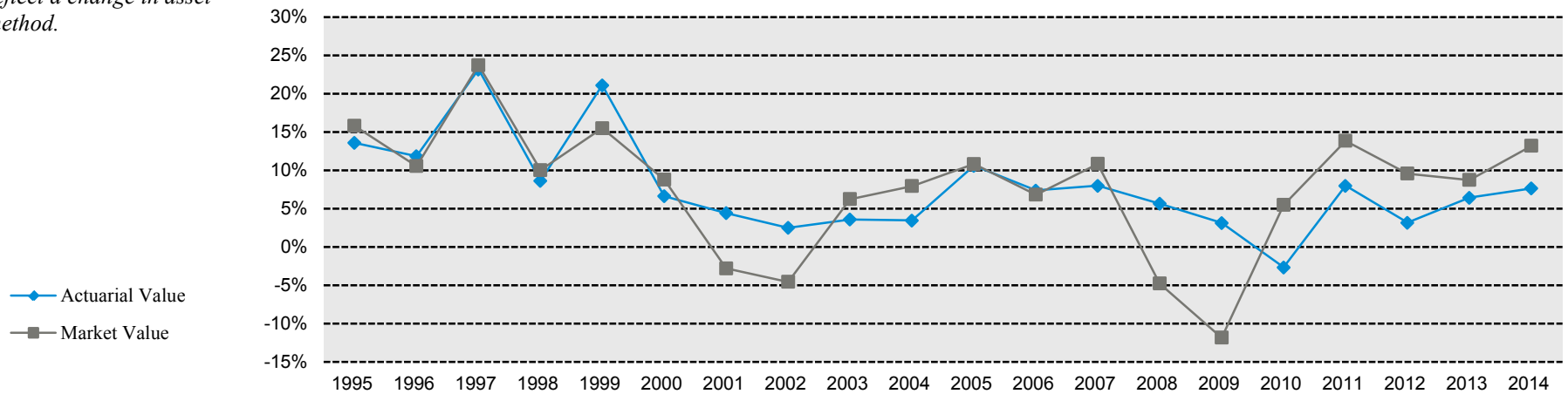


**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

Subsection B described the actuarial asset valuation method that gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

*This chart illustrates how this method has actually worked over the past twenty years. The actuarial return for years 2005 and 2009 reflect a change in asset method.*

**CHART 18**  
**Market Value and Actuarial Rates of Return for Years Ended August 31, 1995 - 2014**



## SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California

---

### **Administrative Expenses**

For the year ended August 31, 2014, administrative expenses of \$817,909 resulted in a loss of \$70,213. Because it is projected that these expenses will continue to increase, we have increased the assumption of \$750,000 to \$850,000.

### **Mortality Experience**

Mortality experience (fewer or more than expected deaths) yields actuarial gains or losses. The average number of deaths for non-disabled pensioners over the past 5 years was 50.8 per year compared to 51.2 projected deaths per year. Based on continuing mortality improvement expected in the plan over the next several years, we have updated our mortality assumptions and the margin for future mortality improvement.

### **Other Experience**

There are other differences between projected and actual experience that appear when a new valuation is compared with projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than projected) and
- the number of disability retirements.

The net loss from mortality and other experience amounted to \$2,141,233 for the last plan year, which is 0.4% of the projected actuarial accrued liability. This was primarily due to inactive participants returning to active employment before incurring a permanent break in service.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**E. SUMMARY OF CONTRIBUTION REQUIREMENTS**

**Changes Since Last Valuation**

As previously mentioned, the actuarial assumptions regarding mortality and annual administration expenses were updated in this valuation. These changes are summarized in Section 4, Exhibit VII.

The credited contribution rates are unchanged from our prior valuation i.e., the plan continues to credit the first \$3.20 per hour toward benefit accruals. The total paid hourly contribution rate increased from \$9.30 to \$9.80 in July, 2014 and is scheduled to increase to \$10.30 in July, 2015.

The plan of benefits is unchanged from the prior valuation.

**Contributions**

ERISA imposes a minimum funding standard that requires the Plan to maintain a Funding Standard Account.

Contributions meet the legal requirement on a cumulative basis if that account shows no deficiency. The Funding Standard Account for the prior Plan Year is shown in Section 3, Exhibit F.

Employers who contribute to defined benefit pension plans are also subject to maximum deductible contribution limitations prescribed by the IRS. For the development of the maximum deductible contribution amount, see Section 3, Exhibit G.

*This chart summarizes the contribution information for the valuation year.*

---

**CHART 19**

**Contribution Requirements vs. Contributions Projected for Year Beginning September 1, 2014**

---

ERISA minimum required contribution	\$0
Projected contributions	25,662,075
Maximum deductible contribution	857,968,697

---

## **SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

Based on the assumption that 1,731 participants will work an average of 1,500 hours at a \$9.88 contribution rate, the contributions projected for the year beginning September 1, 2014 are \$25,662,075 as shown in Chart 19. Contributions for the year beginning September 1, 2014 are projected to be less than the maximum allowable deduction level and to exceed the minimum required contribution. (See Section 4, Exhibit IV for the development of the minimum required contribution.)

### **Funding Standard Account**

On August 31, 2014, the Funding Standard Account had a credit balance of \$63,954,620, as shown on the 2013 Schedule MB. This reserve may be drawn upon to meet charges to the account if contributions fall below the net charge in the future.

The minimum funding requirement for the year beginning September 1, 2014, as shown in Chart 19, is \$0. For the year beginning September 1, 2014, the minimum contribution necessary to avoid a decrease in the current credit balance is \$26,750,246. The projected contributions for the year of \$25,662,075 are not projected to be sufficient to meet this cost and the credit balance is projected to decline by approximately \$1,128,977 to \$62,825,643 as of August 31, 2015.

We are available to work with the Trustees to develop credit balance projections.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Projection of Funding Standard Account**

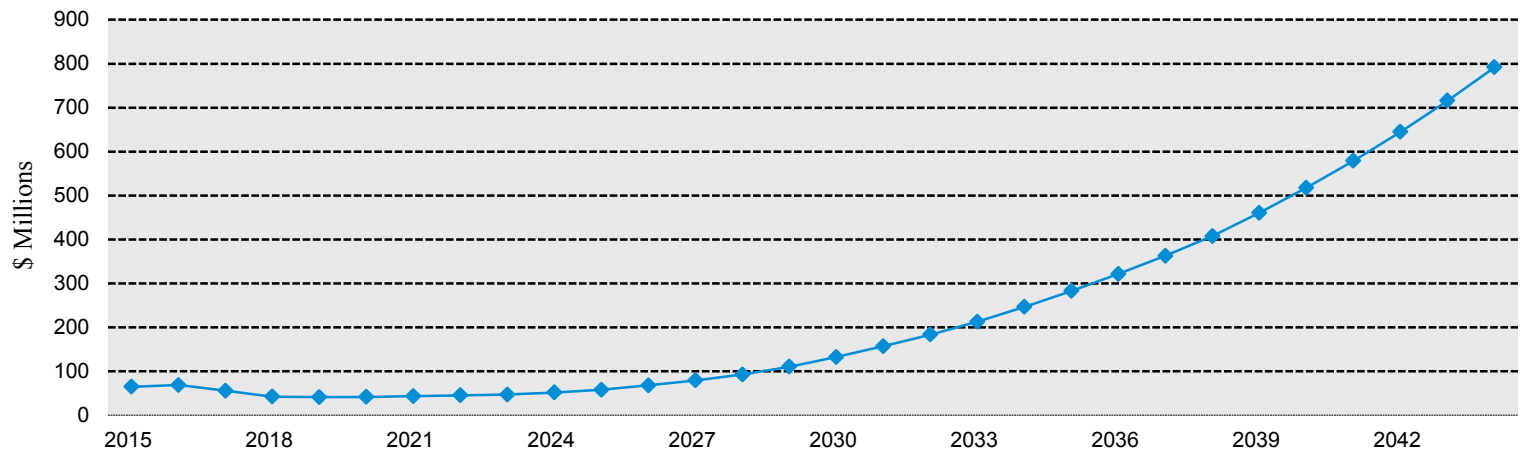
A 30-year projection of the Funding Standard Account based on this 2014 valuation, assuming the Plan will experience a market rate of return equal to 7.50% each year into the future and that all other experience emerges as projected, and with no plan amendments or changes to law/regulation or assumptions, indicates the credit balance will remain positive. Chart 20 shows the projected credit balance in the Funding Standard Account.

The chart shows how the credit balance would be affected by a specific industry activity and investment return scenario. We are available to develop additional scenarios to demonstrate sensitivity to investment return, employment and other alternative assumptions.

*This chart shows the projected credit balance for the next 30 years. This projection assumes that the number of contribution hours will reach 3 million by 2016, consistent with the Trustees' industry activity assumption for the 2014 status certification, and also assumes that current accumulated deferred investment gains and losses are recognized in accordance with the asset valuation method.*

**CHART 20**

**Projected Funding Standard Account Credit Balance for Years Ending August 31**



## SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California

---

### F. PENSION PROTECTION ACT OF 2006 (PPA'06)

PPA'06 calls on trustees to actively monitor their plans' financial prospects to identify emerging funding challenges so they can be addressed effectively. Trustees are required to review formal projections of the financial status of their plans at least annually

#### 2014 Actuarial Status Certification

The actuarial certification of plan status under PPA'06 is required not later than the 90th day of the plan year.

The 2014 certification was based on the liabilities calculated in the 2013 actuarial valuation and projected to August 31, 2014, and estimated asset information as of August 31, 2014. In addition, the Trustees provided an industry activity assumption 2,823,000 hours in the 2014/2015 plan year and 3,000,000 hours annually thereafter. This Plan was classified as endangered (*Yellow Zone*) because the funded percentage was 66.7% and the credit balance in the Funding Standard Account was projected to be positive for at least seven years.

As noted above, collective bargaining in 2013 resulted in the Alternative Schedule of the FIP being adopted in 2013. Under this schedule, benefit accruals will be reduced by 12.5% effective February 1, 2014, and contributions will increase in three annual increments of \$0.50 per hour per year, reaching \$10.30 per hour in 2015. These changes were recognized in the certification and in this valuation.

#### 2015 Actuarial Status Certification

Based on the assumptions and methods employed for this 2014 valuation, including an industry activity assumption of 2,823,000 hours in the 2014/2015 plan year and 3,000,000 hours annually thereafter, the funded percentage is 64.8% and there is no projected Funding Standard Account deficiency. A plan with these measurements would generally be categorized as being in endangered (*Yellow Zone*) status for 2015.

However, the actual status for the 2015 - 2016 Plan Year will involve the following:

- Trustee elections under MEPRA,
- Updated asset information,
- Trustee input on industry activity, and
- Projections of benefit liabilities that recognize adopted plan changes, changes in collectively bargained contribution rates and other significant events.

However, it is unlikely that this additional information will change the projected zone status of the Plan.

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**G. SCHEDULED COST VS. CONTRIBUTIONS**

The Scheduled Cost is the amount of annual contribution determined in accordance with the amortization approach adopted by the Trustees. It provides a long-term evaluation of whether benefit levels are sustainable given the negotiated contributions and the expectation of a continuing Plan.

The Plan’s Scheduled Cost is based on a funding schedule different from the minimum funding requirements established by ERISA. While the ERISA Funding Standard Account has separate components with individual amortization schedules for each change in the unfunded actuarial accrued liability due to (a) experience gains and losses, (b) revised assumptions and (c) benefit changes, the Scheduled Cost is derived by using a single amortization schedule (13 years remaining) for the Plan’s combined unfunded actuarial accrued liability. As of September 1, 2014, the unfunded actuarial accrued liability totaled \$206,663,594 (actuarial accrued liability of \$535,409,907 less assets of \$328,746,313).

The Scheduled Cost as of September 1, 2014 is based on all of the data described in the previous sections and the actuarial assumptions and methods described in the Certificate of Actuarial Valuation except that the Actuarial Cost Method is Entry Age Normal for the Scheduled Cost. It includes all changes affecting future costs, all plan provisions adopted at the time of the preparation of the Actuarial Valuation, actuarial gains and losses, changes in the actuarial assumptions and the effect of contribution levels that were higher or lower than necessary to meet the prior year's Scheduled Cost.

The plan of benefits, the actuarial assumptions and the credited contribution rate are the same as those used for the Funding Standard Account for the coming year (for the year beginning September 1, 2014).

*This chart compares this valuation’s Scheduled Cost with the corresponding determination one year earlier.*

**CHART 21  
Scheduled Cost**

Cost Element	Year Beginning September 1	
	2014	2013
1 Normal cost, including administrative expenses	\$3,959,854	\$3,653,998
2 Amortization of the unfunded actuarial accrued liability	23,658,501	21,395,331
3 Adjustment for monthly payments	<u>1,097,169</u>	<u>995,111</u>
4 Total Scheduled Cost, payable monthly	<u>\$28,715,524</u>	<u>\$26,044,440</u>

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

A reconciliation of the prior year's Scheduled Cost with the current year's Scheduled Cost is presented in Chart 22. As indicated, the increase in cost is primarily due to the changes in the mortality assumptions.

*This chart illustrates the changes in the Scheduled Cost over the preceding plan year.*

**CHART 22**

**Reconciliation of the Scheduled Cost**

<b>Scheduled Cost as of September 1, 2013</b>	<b>\$26,044,440</b>
Effect of change in administrative expense assumption	\$100,000
Effect of change in other actuarial assumptions	2,114,676
Effect of contributions (more)/less than Scheduled Cost	-42,710
Effect of investment gain	-55,308
Effect of other gains and losses on accrued liability	447,296
Effect of net other changes, including composition and number of participants	<u>107,130</u>
<b>Total change</b>	<b><u>\$2,671,084</u></b>
<b>Scheduled Cost as of September 1, 2014</b>	<b><u>\$28,715,524</u></b>



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Plan's Margin/(Deficit)**

If the contributions projected at the ultimate negotiated contribution rate exceed the Scheduled Cost, the Plan has a margin. If the Scheduled Cost exceeds the projected ultimate negotiated contributions, a deficit results. The projected employer contributions are based on the Trustees' assumption that 1,731 participants will work an average of 1,500 hours at the \$10.30 ultimate negotiated contribution rate. The annual contribution amount is projected to be \$26,743,950. This falls short of the Scheduled Cost of \$28,715,524 by \$1,971,574, or 7.4% of projected contributions.

The net investment losses that have occurred in the past have been only partially recognized in the determination of the actuarial value of assets. As these net deferred losses are recognized, unless offset by future gains, the cost of the Plan will increase. To illustrate the possible effect of unrecognized net losses, if the current year's actuarial value of assets were equal to the current market value, the deficit of \$1,971,574 would increase by \$559,644 to a deficit of \$2,531,218, or 9.5% of projected contributions.

If the actual market return is equal to the assumed 7.50% rate and all other actuarial assumptions are fully realized, we would anticipate an increase in the Scheduled Cost.

*This chart compares the Scheduled Cost with contributions projected at the ultimate negotiated contribution rate.*

**CHART 23**

**Contributions Projected at the Ultimate Negotiated Contribution Rate vs. Scheduled Cost**

	Year Beginning September 1, 2014	
	Amount	Rate per Hour
1 Total projected employer contributions (1,731 participants at 1,500 hours)	\$26,743,950	\$10.30
2 Scheduled Cost (13 years remaining on amortization schedule)	28,715,524	11.06
3 Projected margin/(deficit) for the year: (1) – (2)	<u>-\$1,971,574</u>	<u>-\$0.76</u>

**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

As previously noted, the Scheduled Cost is based on an amortization schedule that is different from what is demanded for the Funding Standard Account. Simply avoiding a legal funding deficiency as determined by the Funding Standard Account is not, in our opinion, an adequate or stable basis for funding the Plan through contribution rates that are fixed in multi-year contracts. PPA '06 reinforces this position by requiring formal annual projections and requires a Funding Improvement Plan or Rehabilitation Plan under certain conditions.

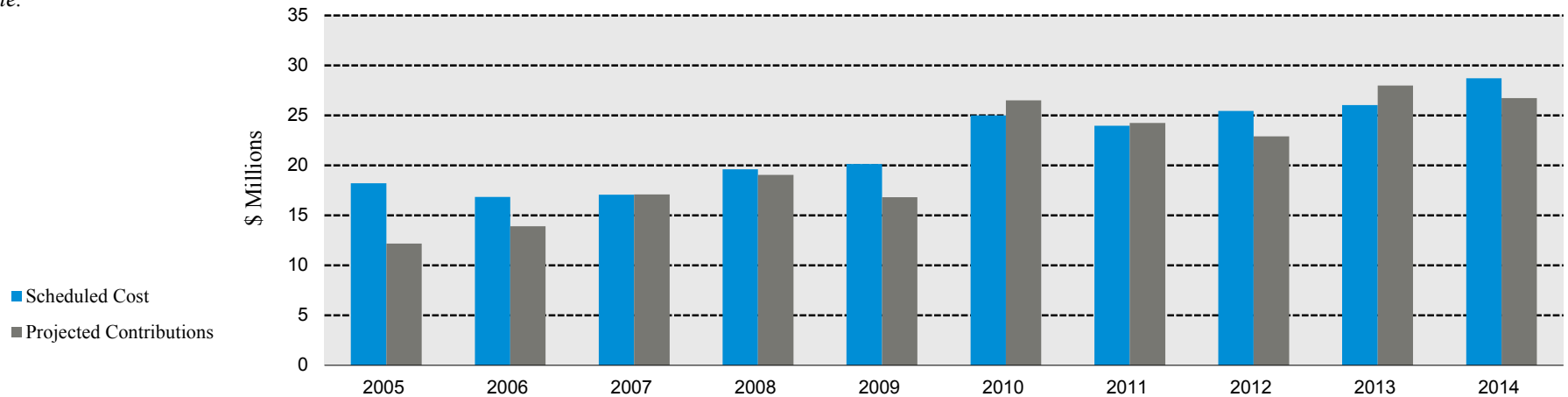
The Trustees have addressed the funding issues through the Funding Improvement Plan. The projected annual contributions reflect the ultimate negotiated contribution rate of \$10.30 per hour, which is sufficient to satisfy all of the contribution increases currently required under the Alternative Schedule of the Funding Improvement Plan. Once the short-term funding issues are resolved, the Trustees should review the Scheduled Cost policy that is directed toward preserving the long-term adequacy of contribution rates and maintaining a margin.

In Chart 24, the margin/(deficit) is represented by the difference between contributions projected at the ultimate negotiated contribution rate and the Scheduled Cost.

*Chart 24 shows a comparison of Scheduled Cost and contributions projected at the ultimate negotiated contribution rate.*

**CHART 24**

**Scheduled Cost and Contributions Projected at the Ultimate Negotiated Contribution Rate for Years Beginning September 1**



**SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**H. DISCLOSURE REQUIREMENTS**

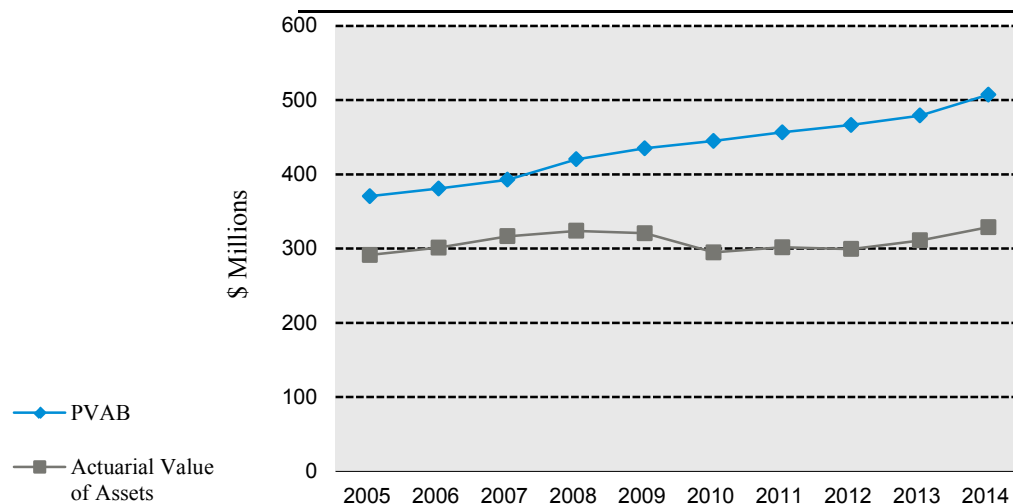
**Present Value of Accumulated Plan Benefits (PVAB)**

Financial reporting, in accordance with the Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) 960, requires determination of the present value of accumulated plan benefits. It is the single-sum value of the benefits, vested or not, earned by participants as of the valuation date. These present values are determined based on the plan of benefits reflected for Funding Standard Account purposes and are based upon the actuarial assumptions used to determine the ERISA funding costs of the ongoing Plan. These are not appropriate liability measurements for other purposes such as if the Plan were to terminate.

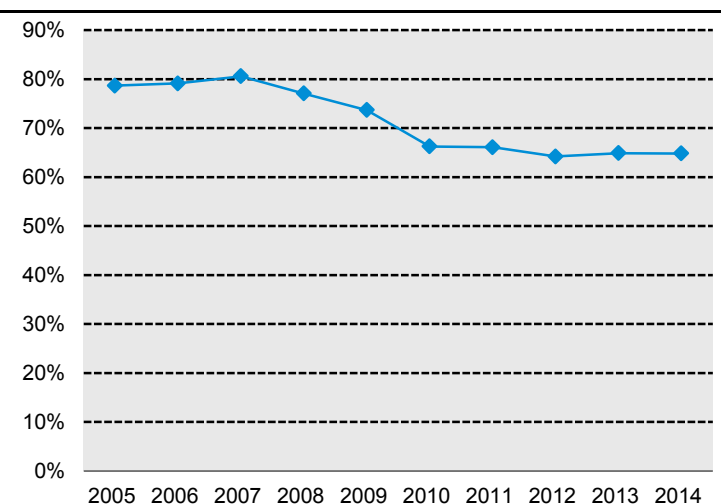
The funded percentages based on the actuarial value of assets are 64.8% and 64.9% for the 2014 and 2013 valuations, respectively. If the market value of assets were used to determine the funded percentage, the 64.8% figure for 2014 would become 63.9%. The PVAB funded percentage for 2014 is not the same as that used to determine the annual certification required under PPA'06. The 2014 values shown in Charts 25 and 26 reflect current participant and financial information and new assumptions, whereas the annual certification was based on prior participant data and estimated financial results. Chart 25 below compares the present value of accumulated plan benefits with the actuarial value of assets over the past ten years. Chart 26 shows the relationship of these measures as a percentage.

*A historical comparison over the past ten years is shown in these charts.*

**CHART 25**  
**Present Value of Accumulated Plan Benefits vs. Actuarial Value of Assets as of September 1, 2005 - 2014**



**CHART 26**  
**Actuarial Value of Assets as a Percentage of Present Value of Accumulated Plan Benefits as of September 1, 2005 - 2014**



## **SECTION 2: Actuarial Valuation Results as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

For a detailed breakdown of this information and reconciliation from last year to this year, see Section 4, Exhibit VI.

### **Annual Funding Notice**

PPA '06 requires the annual funding notice to be provided to participants, employers, unions and government agencies. The notice must be sent by 120 days after the end of the plan year. The actuary's "best estimate" assumptions are the basis for the measurement of the funding notice percentage.

The value of plan benefits earned to date as of September 1, 2014 is \$507,194,490 using the long-term funding interest rate of 7.50%. As the actuarial value of assets is \$328,746,313, the Plan's funded percentage is 64.8%, compared to 64.9% in the prior year. The funded percentage is one measure of a plan's funded status. It is not indicative of how well funded a plan may be in the future, especially in the event of plan termination.

The actuarial information to be provided in the annual funding notice is shown in Section 3, Exhibit E.

### **Current Liability**

ERISA also requires the disclosure by the actuary of the funding percentage based on "current liability" assumptions and the market value of assets, if it is less than 70%. As shown in Section 4, Exhibit V, the Plan's current liability as of September 1, 2014 is \$830,142,757 using an interest rate of 3.57%. As the market value of assets is \$324,044,455, this funded current liability percentage is 39.0%. This will be disclosed on the 2014 Schedule MB of IRS Form 5500.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT A**

**Table of Plan Coverage**

Category	Year Ended August 31		Change From Prior Year
	2014	2013	
<b>Participants in Fund Office tabulation</b>	1,859	1,807	2.9%
<b>Less: Participants with less than one year of credited service</b>	128	108	N/A
<b>Active participants in valuation:</b>			
Number	1,731	1,699	1.9%
Average age	43.3	42.9	N/A
Average years of credited service	11.7	11.6	N/A
Average contribution rate for coming year	\$9.88 <sup>(1)</sup>	\$9.38 <sup>(2)</sup>	5.4%
Number with unknown age	2	2	0.0%
Total active vested participants	1,406	1,396	0.7%
<b>Inactive participants with rights to a pension:</b>			
Number	930	977	-4.8%
Average age	49.3	49.1	N/A
Average monthly benefit	\$1,129	\$1,152	-2.0%
<b>Pensioners:</b>			
Number in pay status	1,362	1,327	2.6%
Average age	72.0	72.3	N/A
Average monthly benefit	\$1,722	\$1,684	2.3%
Number in suspended status	22	21	4.8%
<b>Beneficiaries:</b>			
Number in pay status	458	445	2.9%
Average age	75.2	75.0	N/A
Average monthly benefit	\$555	\$534	3.9%

<sup>(1)</sup> Weighted average of \$9.80 for ten months and \$10.30 for two months.

<sup>(2)</sup> Weighted average of \$9.30 for ten months and \$9.80 for two months.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**EXHIBIT B**

**Participant Population: 2005 – 2014**

---

<b>Year Ended August 31</b>	<b>Active Participants</b>	<b>Inactive Vested Participants</b>	<b>Pensioners and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
2005	2,177	544	1,727	1.04
2006	2,232	583	1,708	1.03
2007	2,374	640	1,722	0.99
2008	2,431	672	1,726	0.99
2009	2,336	721	1,756	1.06
2010	1,884	889	1,790	1.42
2011	1,723	954	1,796	1.60
2012	1,628	1,002	1,802	1.72
2013	1,699	977	1,793	1.63
2014	1,731	930	1,842	1.60

---

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT C**

**Summary Statement of Income and Expenses on an Actuarial Basis**

	Year Ended August 31, 2014	Year Ended August 31, 2013
<b>Contribution income:</b>		
Employer contributions	\$26,529,339	\$22,933,717
Net liquidated damages	-228,753	139,484
Less administrative expenses	<u>-817,909</u>	<u>-787,110</u>
Net contribution income	\$25,482,677	\$22,286,091
<b>Investment income:</b>		
Expected investment income	\$23,102,145	\$22,174,352
Adjustment toward market value	<u>464,668</u>	<u>-3,178,660</u>
Net investment income	<u>23,566,813</u>	<u>18,995,692</u>
<b>Total income available for benefits</b>	<b>\$49,049,490</b>	<b>\$41,281,783</b>
<b>Less benefit payments</b>	<b>-31,180,865</b>	<b>-29,838,163</b>
<b>Change in reserve for future benefits</b>	<b><u>\$17,868,625</u></b>	<b><u>\$11,443,620</u></b>

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT D**

**Financial Information Table**

	<b>Year Ended August 31, 2014</b>	<b>Year Ended August 31, 2013</b>
<b>Cash equivalents</b>	\$3,629,597	\$3,134,078
<b>Accounts receivable:</b>		
Employer contributions	\$3,645,206	\$3,697,568
Accrued investment income	415,732	430,791
Other receivables	2,912,513	520,572
Total accounts receivable	6,973,451	4,648,931
<b>Investments:</b>		
Fixed income	\$103,828,474	\$75,611,561
Real estate	32,158,744	30,008,104
Equities	78,939,089	71,616,399
Alternative investments*	<u>99,253,326</u>	<u>107,366,488</u>
Total investments at market value	<u>314,179,633</u>	<u>284,602,552</u>
<b>Total assets</b>	<u>\$324,782,681</u>	<u>\$292,385,561</u>
<b>Less accounts payable</b>	-738,226	-745,436
<b>Net assets at market value</b>	\$324,044,455	\$291,640,125
<b>Net assets at actuarial value</b>	\$328,746,313	\$310,877,688

*\*Includes GTAA, Risk Parity, Infrastructure, Commodities, etc.*



**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

---

**EXHIBIT E**

**Annual Funding Notice for Plan Year Beginning September 1, 2014 and Ending August 31, 2015**

---

	<b>2014 Plan Year</b>	<b>2013 Plan Year</b>	<b>2012 Plan Year</b>
Actuarial valuation date	September 1	September 1	September 1
Funded percentage	64.8%	64.9%	64.2%
Value of assets	\$328,746,313	\$310,877,688	\$299,434,068
Value of liabilities	507,194,490	479,133,354	466,400,302

---

Fair value of assets as of August 31, 2015		Not available	
Fair value of assets as of August 31, 2014		\$324,044,455	
Fair value of assets as of August 31, 2013		291,640,125	

**Critical or Endangered Status**

The Plan was in endangered status in the plan year because the funded percentage was less than 80%.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT F**

**Minimum Required Contribution**

**Funding Standard Account**

ERISA imposes a minimum funding standard that requires the Plan to maintain a Funding Standard Account. Contributions meet the legal requirement on a cumulative basis if that account shows no deficiency. The accumulation of the actual contributions in excess of the minimum required contributions under ERISA is called the credit balance. If actual contributions fall short of the minimum required contributions on a cumulative basis, a funding deficiency has occurred.

The Funding Standard Account is charged with normal cost and the amortization of increases in the unfunded actuarial accrued liability due to 1) plan amendments, 2) experience losses and 3) changes in actuarial assumptions and funding methods. The account is credited with employer

contributions and the amortization of decreases in the unfunded actuarial accrued liability due to 1) plan amendments, 2) experience gains and 3) changes in actuarial assumptions and funding methods.

Increases or decreases in the actuarial accrued liability due to assumption changes and plan amendments are amortized over 15 years and short-term benefits, such as 13th checks, are amortized over the scheduled payout period. The Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (PRA 2010) allowed eligible plans to amortize certain losses over periods up to 29 years.

**Funding Standard Account for the Year Ended August 31, 2014**

Charges			Credits		
1	Prior year funding deficiency	\$0	6	Prior year credit balance	\$62,624,547
2	Normal cost, including administrative expenses	6,580,422	7	Employer contributions	26,300,586
3	Total amortization charges	41,049,503	8	Total amortization credits	19,114,924
4	Interest to end of the year	<u>3,572,244</u>	9	Interest to end of the year	7,116,732
5	Total charges	\$51,202,169	10	Full-funding limitation credit	<u>0</u>
			11	Total credits	\$115,156,789
			12	Credit balance: (11) – (5)	<u>\$63,954,620</u>

### **SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

Beginning in 2009, the Funding Standard Account reflects the Trustees' election under PRA 2010 to extend the amortization of the 2009 and 2010 investment losses, and to smooth those losses over 10 years in the actuarial value of assets.

#### **Reorganization**

Under the reorganization provisions of the IRC, the Minimum Contribution Requirement (MCR) is calculated as the amount that amortizes the unfunded liability for current pensioners over ten years and the unfunded vested liability for non-pensioners over 25 years. The MCR is applicable only if this amount is larger than the Funding Standard Account requirement before the application of the credit balance.

For the year beginning September 1, 2014, the MCR does not exceed the Funding Standard Account requirement before the application of the credit balance, and is therefore not applicable for the current year. If the MCR is applicable, the Plan is said to be "in reorganization." When a plan is in reorganization, contribution requirements are greater than the normal ERISA funding requirements, a plan must give notice to its participating employers and union(s) that it is in reorganization, cut-backs in recent benefit increases are permitted and any new benefit increases must be adequately funded. We are prepared to discuss the implications of reorganization status in more detail.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT G**

**Maximum Deductible Contribution**

Employers that contribute to defined benefit pension plans are allowed a current deduction for payments to such plans. There are various measures of a plan’s funded level that are considered in the development of the maximum deductible contribution amount.

One of the limits is the excess of 140% of “current liability” over assets. “Current liability” is one measure of the actuarial present value of all benefits earned by the participants as of the valuation date. This is the limit that applies to your Plan as shown below.

Contributions received by the Plan in excess of the maximum deductible amount are not prohibited; only the deductibility of these contributions is subject to challenge and may have to be deferred to a later year. In addition, if contributions are not fully deductible, an excise tax in an amount equal to 10% of the non-deductible contributions may be imposed. However, the plan sponsor may elect to exempt the non-deductible amount up to the ERISA full-funding limitation from the excise tax.

You should review with Fund Counsel the interpretation and applicability of all laws and regulations concerning any issues as to the deductibility of contribution amounts.

*This chart presents the calculation of the maximum deductible contribution for the September 1, 2014 - August 31, 2015 year.*

**Maximum Deductible Contribution**

1.	Normal cost, including administrative expenses	\$6,661,872
2.	Amortization of unfunded actuarial accrued liability (fresh start as of September 1, 2014)	24,183,617
3.	Preliminary maximum deductible contribution: (1) + (2), with interest to the end of the plan year	33,158,901
4.	Full-funding limitation (FFL)	437,973,664
5.	Preliminary maximum deductible contribution, adjusted for FFL: lesser of (3) and (4)	33,158,901
6.	Current liability, projected to the end of the plan year	839,990,067
7.	Actuarial value of assets, projected to the end of the plan year	318,017,397
8.	Excess of 140% of current liability over projected assets at end of plan year: [140% of (6)] - (7), not less than zero	857,968,697
9.	End of year minimum required contribution	0
10.	Maximum deductible contribution: greatest of (5), (8), and (9)	<u>\$857,968,697</u>

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**EXHIBIT H**

**Pension Protection Act of 2006 (PPA '06)**

---

This section summarizes key provisions of PPA '06 as expanded and clarified by the Multiemployer Pension Reform Act of 2014 (MEPRA).

**PPA'06 Zone Status**

Based on projections of the credit balance in the Funding Standard Account, the funded percentage, and cash flow sufficiency tests, plans are categorized in one of three "zones," critical status, endangered status, or neither.

A plan is classified as being in critical status (the *Red Zone*) if:

- The PPA'06 funded percentage is less than 65%, and either there is a projected Funding Standard Account deficiency within five years or the plan is projected to be unable to pay benefits within seven years, or
- There is a projected Funding Standard Account deficiency within four years, or
- There is an inability to pay benefits within five years, or
- The present value of vested benefits for inactive participants exceeds that for actives, contributions are less than the value of the current year's benefit accruals plus interest on existing unfunded accrued benefit liabilities, and there is a projected Funding Standard Account deficiency within five years, or

- The plan was in critical status for the immediately preceding plan year and there is a projected Funding Standard Account deficiency within ten years or a projected insolvency within 30 years, or
- As permitted by MEPRA, the plan is projected to be in the Red Zone within the next five years and the plan sponsor elects to be in critical status.

A plan is further classified as being in "critical and declining" status if:

- There is an inability to pay benefits projected within 15 years, or
- The ratio of inactives to actives is at least 2 to 1, and there is an inability to pay benefits projected within 20 years, or
- The PPA'06 funded percentage is less than 80%, and there is an inability to pay benefits projected within 20 years.

Amortization extensions cannot be used for testing *Red Zone* criteria.

The corrective action for a critical plan is the adoption of a formal Rehabilitation Plan, designed to allow the plan to emerge from critical status by the end of the rehabilitation period. If the Trustees determine that such emergence is not reasonable, the rehabilitation plan is designed to emerge as of a later date or to forestall insolvency.

### SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California

---

*Red Zone* plans have tools, such as the ability to reduce or eliminate early retirement subsidies, to remedy the situation. Plans in the *Red Zone* may not pay lump sums. Other than critical and declining plans, they may not reduce benefits of participants who retired before being notified of the plan's critical status (other than rolling back recent benefit increases) or alter core retirement benefits payable at normal retirement age.

A plan is classified as being in endangered status (the *Yellow Zone*) if:

- The PPA '06 funded percentage is less than 80%, or
- There is a projected Funding Standard Account deficiency within seven years, and
- The plan is not in critical status (*Red Zone*).

A plan that was in the *Green Zone* in the prior year will not enter the *Yellow Zone* in the current year (although otherwise requires to do so) if the plan's current provisions are certified by the actuary to be sufficient (with no further action) to allow the plan to emerge from the *Yellow Zone* at the end of the 11 years.

The corrective actions for an endangered plan are based on the adoption of a formal Funding Improvement Plan,

designed to improve gradually the current funded percentage, to forestall a funding deficiency and to keep the plan out of critical status.

A plan that has both of the endangered conditions present is classified as seriously endangered. Trustees of those plans must take interim measures to delay the projected funding deficiency by one year and improve the plan's funded percentage.

A plan is classified as being in the *Green Zone* if it is neither in critical status (the *Red Zone*) nor in endangered status (the *Yellow Zone*).

#### **Funded Percentage**

For purposes of PPA '06, the funded percentage is determined using the actuarial value of assets and the "Unit Credit accrued liability." This liability is generally equivalent to the present value of benefits earned to date, as discussed in Subsection H of Section 2, and is based on the actuary's best estimate assumptions.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**EXHIBIT I**

**Section 415 Limitations**

---

Section 415 of the Internal Revenue Code specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan. If an individual is covered solely by multiemployer plans, the plans do not have to be combined for any of the limits. If the individual is covered by a single-employer plan, all plans maintained by the same employer are combined in applying these tests. Multiemployer plan benefits do not need to be combined with single-employer plan benefits in testing against the pay-based limit.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification; the plan could lose its tax exemption, employers could lose their deductions and active participants could be taxed on their vested benefits.

In particular, Section 415(b) of the IRC as amended by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) limits the maximum annual benefit payable to a dollar limit of \$160,000 indexed for inflation. The dollar limit indexed for inflation is \$210,000 for 2014 and 2015. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances for such things as age at retirement and form of benefits chosen.

While the actual determination of the exact limits applicable to each participant's benefit can only be done when the individual retires and applies for benefits, the overall impact of the Section 415 dollar limits has been reflected in this valuation for plan funding purposes, based on our understanding of the requirements of IRC Sections 404, 412, 415, and 431 and the data available to us.

Fund Counsel's review and interpretation of the law and regulations must be sought in this area as well.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**EXHIBIT J  
General Background**

An outline of the major developments in connection with the Plan's background and position is given below:

**Changes in Contribution Rates and Benefit Amounts:**

<u>Effective Date</u>		<u>Hourly Contribution Rate</u>	<u>Monthly Pension Amount</u>		<u>Adjustment for Existing Pensioners</u>
<u>Year</u>	<u>Month</u>		<u>Past Service</u>	<u>Future Service</u>	
			<u>To 1/31/87</u>	<u>Thereafter (% of Contributions)</u>	
1959	January	\$ .10			
1960	January		\$ 2.00		
1963	November	.15			
1964	January		4.00		Full
	June	.20			
1966	June	.40	8.00		Full
1969	July	.75			
1970	January		15.00		+10%
1972	July		19.00		+10%
1973	March	1.00			
1974	November	1.25			
1975	January		22.40		(1)
	November	1.35			
1976	July	1.43			
	September		24.30		(1)
1977	November	1.68	25.75		(1)
1978	July	1.75			
1980	October		\$25.75	\$27.00	\$30/month <sup>(1)</sup>



**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Changes in Contribution Rates and Benefit Amounts (continued):**

Effective Date		Hourly Contribution Rate	Monthly Pension Amount		Adjustment for Existing Pensioners	
			Past Service	Future Service		
Year	Month			To 1/31/87	Thereafter (% of Contributions)	
1982	December				(1)	
1984	October				(1)	
1985	February			\$27/\$30 <sup>(3)</sup>		
	December				\$396 <sup>(1)</sup>	
1986	August			\$27/\$35 <sup>(4)</sup>		
	December				\$408 <sup>(1)</sup>	
1987	September			<sup>(5)</sup>	\$80/month	
1988	September	.75 <sup>(6)</sup>		\$27/\$48 <sup>(7)</sup>	1.70%	\$60/month
1990	July	1.75 <sup>(8)</sup>				
	September			\$35/\$48 <sup>(7)</sup>	2.00%	\$565 <sup>(1)</sup>
1992	July	\$1.87				
	September		\$25.75	\$35/\$48 <sup>(9)</sup>	2.00%	\$150/month
1993	June	1.93				
1994	February			\$42/\$48 <sup>(9)</sup>	2.25%/2.00% <sup>(10)</sup>	\$50/month <sup>(1)(11)</sup>
	June	\$2.15				
	September			\$50 <sup>(12)</sup>	2.30%/2.00% <sup>(13)</sup>	(1)(12)
1995	June	2.40				
	December					(1)
1996	June	2.50				
	September			<sup>(15)</sup>	2.50%/2.00% <sup>(13)</sup>	\$25/month
	December					(1)
1997	January				2.75%/2.00% <sup>(16)</sup>	\$30/month <sup>(1)(17)</sup>
	September			<sup>(18)</sup>	3.15%/2.00% <sup>(18)</sup>	(1)
1998	June	\$2.62				
	September				3.30%/2.00% <sup>(19)</sup>	

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

**Changes in Contribution Rates and Benefit Amounts (continued):**

Effective Date		Hourly Contribution Rate	Monthly Pension Amount		Adjustment for Existing Pensioners
			Past Service	Future Service	
Year	Month		To 1/31/87	Thereafter (% of Contributions)	
1999	June	\$2.88			
	September			4.00%/2.00% <sup>(20)</sup>	(1)
	December				(1)
2000	June	\$3.00			(1)
	December				(1)
2001	June	\$3.10			(1)
	December				(1)
2002	June	\$3.20			
2003	July	\$3.40 <sup>(21)</sup>			
2004	July	\$3.45 <sup>(21)</sup>			
2005	July	\$3.50 <sup>(21)</sup>			
2006	July	\$3.90 <sup>(21)</sup>			
2007	July	\$4.20 <sup>(21)</sup>			
2008	July	\$4.50 <sup>(21)</sup>			
2010	July	\$5.40 <sup>(21)</sup>			
2011	July	\$7.20 <sup>(21)</sup>			
2012	July	\$8.80 <sup>(21)</sup>			
2013	July	\$9.30 <sup>(21)</sup>			
2014	February			4.00%/2.00%/1.75% <sup>(22)</sup>	
2014	July	\$9.80 <sup>(21)</sup>			
2015	July	\$10.30 <sup>(21)</sup>			

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

**Other Developments:**

<b>Date</b>	<b>Event</b>
November 24, 1959:	Board of Trustees adopted the Pension Plan and Trust Agreement.
March 23, 1960:	Date of favorable determination letter from Internal Revenue Service.
September 1, 1976:	Plan amended to comply with ERISA.
September 1, 1977:	Funding Standard Account established.
February 1, 1982:	Benefit Unit schedule changed to twelfths of a year (1,200 hours for one unit).
September 1, 1984:	Plan amended to recognize all Benefit Units.
February 1, 1985:	Plan amended to satisfy REA.
August 1, 1986:	Plan amended to provide a lump sum post-retirement death benefit of \$100 per Benefit Unit earned at retirement.
September 1, 1988:	The service requirement for Disability pensions was reduced to 10 years.
September 1, 1996:	The vesting requirement was reduced to 8 years.
January 1, 1997:	The vesting requirement was reduced to 5 years.
September 1, 1997:	Unreduced benefits became payable after attainment of age 62 with at least 20 Benefit Units.
September 1, 1999:	Actuarial asset method changed to smooth capital appreciation of all assets.
September 1, 1999:	Reduction for Husband-and-Wife pension changed from 7% to 5%.
June 14, 2002:	Supplemental benefit provided on prorated basis, to pensioners not retiring from active service. This amendment was made retroactive to January 1, 1987.
September 1, 2005:	Asset smoothing method changed to reset the actuarial value of assets to market value on September 1, 2005, and to recognize any market value gains or losses after September 1, 2005 over a five-year period. Change made pursuant to approval #16 of IRS Revenue Proc. 2000-40.
September 1, 2009:	Actuarial Cost Method for ERISA minimum funding determination changed from Entry Age Normal to Unit Credit.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

September 1, 2009:	Plan certified as being in seriously endangered status; Trustees elect to freeze 2008 Green Zone status for 2009.
September 1, 2009:	Changes in asset valuation method and funding standard account amortizations go into effect pursuant to Trustees' election of "funding relief."
September 1, 2010:	Plan certified as being in seriously endangered status.
June 27, 2011:	Trustees adopt Funding Improvement Plan.
September 1, 2011:	Plan certified as being in endangered status.
November 1, 2012	Date of most recent favorable determination letter from the IRS.
February 1, 2014	Supplemental Pension earned after this date is based on \$210 instead of \$240.

**Footnotes:**

- (1) Extra one-time only payment granted.
- (2) \$15 per month for Disability pensions.
- (3) The higher factor applies for service on or after February 1, 1985.
- (4) The higher factor applies for service on or after February 1, 1980.
- (5) Benefit formula modified to provide an additional supplemental monthly benefit of \$80.
- (6) Temporary reduction in contribution rate.
- (7) The higher factor applies for service from February 1, 1980 to January 31, 1987. In addition, the supplemental monthly benefit amount increased to \$140.
- (8) First million hours for each of the next three years at \$.75 per hour.
- (9) The higher factor applies to service from February 1, 1980 to January 31, 1987 only.
- (10) The higher factor applies to service from February 1, 1987 through January 31, 1995 only.
- (11) The \$50 supplement is payable for 36 months only, until January 31, 1997. It applies to prospective retirees also.
- (12) The benefit for the period February 1, 1980 to January 31, 1987 is subject to a minimum of 2.30% of contributions.

**SECTION 3: Supplementary Information as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

- (13) The lower factor applies for service after February 1, 1998.
- (14) The \$50 supplement was extended to January 31, 1998.
- (15) The benefit rate for Disability Pensions became \$30.
- (16) The lower factor applies for service after February 1, 2000.
- (17) The \$50 benefit supplement was extended to February 1, 1999.
- (18) The benefit rate for Disability Pensions became \$50. The supplemental monthly benefit amount increased to \$240.
- (19) The lower factor applies for service after February 1, 2002.
- (20) The lower factor applies for service after February 1, 2004.
- (21) Contributions in excess of \$3.20 per hour are excluded for benefit accrual purposes.
- (22) The lower factor applies for service after February 1, 2014.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

June 8, 2015

**CERTIFICATE OF ACTUARIAL VALUATION**

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. (“Segal”) has prepared an actuarial valuation of the Cement Masons Pension Trust Fund for Northern California as of September 1, 2014 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. 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.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on draft information supplied by the auditor with respect to contributions and assets and reliance on the Plan Administrator with respect to the participant data. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. Adjustments for incomplete or apparently inconsistent data were made as described in the attached Exhibit VII.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate, except as noted in Exhibit I. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.



Mark Hamwee, FSA, MAAA  
Vice President & Actuary  
Enrolled Actuary No. 14-05829

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT I**

**Summary of Actuarial Valuation Results**

The valuation was made with respect to the following data supplied to us by the Plan Administrator:

1	Pensioners as of the valuation date (including 458 beneficiaries in pay status and 22 pensioners in suspended status)		1,842
2	Participants inactive during year ended August 31, 2014 with vested (including 6 participants with unknown age)		930
3	Participants active during the year ended August 31, 2014 (including 2 participants with unknown age)		1,731
	Fully vested	1,406	
	Not vested	325	
4	Total participants		4,503

The actuarial factors as of the valuation date are as follows:

1	Normal cost, including administrative expenses		\$6,661,872
2	Actuarial present value of projected benefits		552,778,594
3	Present value of future normal costs		45,584,104
4	Actuarial accrued liability		507,194,490
	Pensioners and beneficiaries	\$292,373,168	
	Inactive participants with vested rights	57,572,758	
	Active participants	157,248,564	
5	Actuarial value of assets (\$324,044,455 at market value as reported by Hemming Morse, LLC.)		328,746,313
6	Unfunded actuarial accrued liability		\$178,448,177

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**EXHIBIT II**

**Information on Plan Status as of September 1, 2014**

---

1	Plan status (as certified on November 26, 2014, for the 2014 zone certification)	<i>Endangered</i>
2	Scheduled progress (as certified on November 26, 2014, for 2014 zone certification)	<i>Yes</i>
3	Actuarial value of assets for Funding Standard Account	\$328,746,313
4	Accrued liability under unit credit cost method	507,194,490
5	Funded percentage for monitoring plan's status	64.8%

---



**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT III**

**Schedule of Active Participant Data  
(Schedule MB, line 8b)**

The participant data is for the year ended August 31, 2014.

Age	Total	Years of Credited Service							
		1-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39
Under 25	18	18	--	--	--	--	--	--	--
25 - 29	132	74	56	2	--	--	--	--	--
30 - 34	240	63	120	56	1	--	--	--	--
35 - 39	289	59	110	93	26	1	--	--	--
40 - 44	255	32	76	97	48	2	--	--	--
45 - 49	313	32	75	86	65	40	14	1	--
50 - 54	291	28	45	58	63	33	47	17	--
55 - 59	130	10	16	33	25	13	20	8	5
60 - 64	57	7	9	9	7	9	8	3	5
65 - 69	4	--	3	--	--	1	--	--	--
70 & over	--	--	--	--	--	--	--	--	--
Unknown	2	2	--	--	--	--	--	--	--
<b>Total</b>	1,731	325	510	434	235	99	89	29	10

*Note: Excludes 128 participants with less than one year of credited service.*

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT IV**

**Funding Standard Account**

The table below presents the Funding Standard Account for the Plan Year ending August 31, 2015.

<b>Charges</b>		<b>Credits</b>			
1	Prior year funding deficiency	\$0	6	Prior year credit balance	\$63,954,620
2	Normal cost, including administrative expenses	6,661,872	7	Amortization credits	19,907,860
3	Amortization charges	43,525,036	8	Interest on (6) and (7)	6,289,686
4	Interest on (1), (2) and (3)	<u>3,764,018</u>	9	Full-funding limitation credit	<u>0</u>
5	Total charges	\$53,950,926	10	Total credits	\$90,152,166
Minimum contribution with interest required to avoid a funding deficiency: (5) – (10), not less than zero					\$0

**Full funding limitations (FFL) and credits:**

1	ERISA FFL (accrued liability FFL)	\$272,799,017
2	RPA'94 override (90% current liability FFL)	437,973,664
3	FFL credit	0

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT IV (continued)**

**Funding Standard Account**

**Schedule of Funding Standard Account Bases (Charges)  
(Schedule MB, line 9c)**

Type of Base	Date Established	Amortization Amount	Years Remaining	Outstanding Balance
Plan Amendment	09/01/1995	\$237,812	11	\$1,870,173
Combined Base	09/01/1995	11,552,658	4.02	41,774,856
Plan Amendment	09/01/1996	765,006	12	6,361,351
Plan Amendment	09/01/1997	984,513	13	8,599,999
Change in Assumptions	09/01/1998	442,512	14	4,038,291
Plan Amendment	09/01/1998	3,218,812	14	29,374,360
Plan Amendment	09/01/1999	2,312,867	15	21,947,146
Experience Loss	09/01/2000	419,551	1	419,551
Plan Amendment	09/01/2000	486,730	16	4,783,151
Change in Assumptions	09/01/2001	84,627	17	858,250
Plan Amendment	09/01/2001	256,698	17	2,603,300
Experience Loss	09/01/2001	1,432,910	2	2,765,850
Plan Amendment	09/01/2002	460,958	18	4,809,622
Experience Loss	09/01/2002	1,884,299	3	5,267,681
Experience Loss	09/01/2003	1,259,108	4	4,533,449
Change in Assumptions	09/01/2003	1,474,676	19	15,787,890
Experience Loss	09/01/2004	1,368,484	5	5,951,982
Experience Loss	09/01/2005	1,184,890	6	5,978,821
Experience Loss	09/01/2008	745,942	9	5,115,148
Change in Assumptions	09/01/2008	1,852,152	9	12,700,766
Experience Loss	09/01/2009	1,161,659	10	8,571,752
Recognition of 2009 Investment Loss	09/01/2009	2,088,531	24	24,658,632

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT IV (continued)**

**Funding Standard Account**

**Schedule of Funding Standard Account Bases (Charges)  
(Schedule MB, line 9c)**

<b>Type of Base</b>	<b>Date Established</b>	<b>Amortization Amount</b>	<b>Years Remaining</b>	<b>Outstanding Balance</b>
Recognition of 2010 Investment Loss	09/01/2010	391,090	25	4,686,413
Experience Loss	09/01/2010	2,741,233	11	21,557,280
Change in Assumptions	09/01/2011	142,679	12	1,186,438
Recognition of 2009 Investment Loss	09/01/2011	125,421	24	1,480,802
Experience Loss	09/01/2012	199,359	13	1,741,452
Recognition of 2009 Investment Loss	09/01/2012	865,954	24	10,224,052
Recognition of 2009 Investment Loss	09/01/2013	908,371	24	10,724,860
Recognition of 2009 Investment Loss	09/01/2014	785,240	24	9,271,083
Change in Assumptions	09/01/2014	<u>1,690,294</u>	15	<u>16,039,462</u>
Total		\$43,525,036		\$295,683,863

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT IV (continued)**

**Funding Standard Account**

**Schedule of Funding Standard Account Bases (Credits)  
(Schedule MB, line 9h)**

<b>Type of Base</b>	<b>Date Established</b>	<b>Amortization Amount</b>	<b>Years Remaining</b>	<b>Outstanding Balance</b>
Combined Base	09/01/2009	\$17,997,689	2.04	\$35,413,318
Recognition of 2009 Investment Loss	09/01/2010	171,095	24	2,020,071
Experience Gain	09/01/2011	383,667	12	3,190,350
Plan Amendment	09/01/2013	11,276	14	102,900
Experience Gain	09/01/2013	551,196	14	5,030,123
Experience Gain	09/01/2014	<u>792,937</u>	15	<u>7,524,304</u>
<b>Total</b>		<b>\$19,907,860</b>		<b>\$53,281,066</b>

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**EXHIBIT IV (continued)**

**Funding Standard Account**

---

**Equation of Balance**

---

1	Net outstanding balance of bases	\$242,402,797
2	Credit balance	<u>63,954,620</u>
3	Unfunded actuarial accrued liability: (1) - (2)	\$178,448,177

---

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT V**

**Current Liability**

The table below presents the current liability for the Plan Year beginning September 1, 2014.

Item	Amount
1. Retired participants and beneficiaries receiving payments	\$393,492,835
2. Inactive vested participants	119,271,799
3. Active participants	
a. Non-vested benefits	\$50,382,558
b. Vested benefits	<u>266,995,565</u>
c. Total active	317,378,123
4. Total	<u>\$830,142,757</u>
Expected increase in current liability due to benefits accruing during the plan year	\$13,578,961
Expected release from current liability for the plan year	33,258,846
Expected plan disbursements for the plan year, including administrative expenses of \$850,000	34,108,846
Current value of assets	324,044,455
Percentage funded for Schedule MB	39.03%

*Note: The actuarial assumptions used to calculate these values are shown in Exhibit VII.*

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT VI**

**Actuarial Present Value of Accumulated Plan Benefits**

The actuarial present value of accumulated plan benefits calculated in accordance with FAS ASC 960 is shown below as of September 1, 2014 and as of September 1, 2013. In addition, the factors that affected the change between the two dates follow.

	<b>Benefit Information Date</b>	
	<b>September 1, 2014</b>	<b>September 1, 2013</b>
Actuarial present value of vested accumulated plan benefits:		
Participants currently receiving payments	\$292,373,168	\$267,691,909
Other vested benefits	<u>191,536,569</u>	<u>188,894,260</u>
Total vested benefits	\$483,909,737	\$456,586,169
Actuarial present value of non-vested accumulated plan benefits	<u>23,284,753</u>	<u>22,547,185</u>
Total actuarial present value of accumulated plan benefits	<u>\$507,194,490</u>	<u>\$479,133,354</u>
		<b>Change in Actuarial Present Value of Accumulated Plan Benefits</b>
<b>Factors</b>		
Benefits accumulated, net experience gain or loss, changes in data		\$8,436,820
Benefits paid		-31,180,865
Changes in actuarial assumptions		16,039,462
Interest		<u>34,765,719</u>
Total		\$28,061,136



**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT VII**

**Statement of Actuarial Assumptions/Methods  
(Schedule MB, line 6)**

**Mortality Rates:** Healthy Retirees and Beneficiaries: RP-2014 Blue Collar Healthy Annuitant Table, generationally projected with Scale MP-2014 from 2014.

Disabled: RP-2000 Combined Healthy Blue Collar Table

Pre-Retirement: RP-2014 Blue Collar Employee Mortality Table generationally projected with Scale MP-2014 from 2014.

The RP-2014 Blue Collar Healthy Annuitant mortality table reasonably reflects the projected mortality experience of the Plan as of September 1, 2014. The mortality table was then adjusted to future years using generational projections under Scale MP-2014 to reflect future mortality improvement.

**Termination Rates before Retirement:**

Age	Rate (%)					
	Mortality*		Disability	Withdrawal**		
	Male	Female		First 5 Years	After 5 Years	
20	0.05	0.02	0.09	15.00	9.52	
25	0.06	0.02	0.13	15.00	9.26	
30	0.06	0.02	0.17	15.00	8.87	
35	0.07	0.03	0.22	15.00	8.22	
40	0.08	0.04	0.33	15.00	7.33	
45	0.13	0.07	0.54	15.00	6.19	
50	0.22	0.12	0.91	15.00	4.34	
55	0.36	0.19	1.51	15.00	1.64	
60	0.61	0.27	2.44	15.00	0.00	

\* Mortality rates shown for base table.

\*\* Withdrawal rates cut out at retirement eligibility.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

The termination rates and disability rates were based on historical and current demographic data, estimated future experience, and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations and disability retirements and the projected number based on the prior years' assumption over the most recent four years.

**Retirement Rates:**

<u>Age</u>	<u>Rate for Service Pensions</u>	<u>Rate for Non-Service Pensions</u>
55	40%	10%
56	20	5
57	20	5
58	25	10
59	25	10
60	30	10
61	40	40
62	50	50
63	30	30
64	20	20
65	100	100

The retirement rates were based on historical and current data, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements and the projected number based on the prior years' assumption over the most recent four years.

**Description of Weighted Average Retirement Age:**

Age 59.0, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the September 1, 2014 actuarial valuation.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**Retirement Age for Inactive Vested Participants:**

Age 65 or, if earlier, at Service Pension eligibility.

The retirement age for inactive vested participants was based on historical and current data, estimated future experience and professional judgment. As part of the analysis, the ages of new retirees from inactive status were reviewed.

**Future Benefit Accruals:**

1,500 hours per year

The future benefit accruals were based on historical and current data, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual benefit accruals over the most recent four years.

**Unknown Data for Participants:**

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

**Definition of Active Participants:**

Active participants are defined as those with at least 300 hours in the most recent Plan Credit year and who have accumulated at least one year of Credited Service, excluding those who have retired as of the valuation date.

**Exclusion of Inactive Vested:**

Inactive participants over age 70 excluded from the valuation.

The exclusion of inactive vested participants over age 70 was based on historical and current data, estimated future experience and professional judgment. As part of the analysis, the ages of new retirees from inactive vested status were reviewed.

**Percent Married:**

85%

**Age of Spouse:**

Females 4 years younger than males.

**Benefit Election:**

65% of future retirees are assumed to elect the 50% Husband-and-Wife Pension and the other 35% are assumed to elect the Single-Life Pension with a Three-Year Guarantee.

The benefit elections were based on historical and current data, adjusted to reflect the plan design, estimated future experience and professional judgment. As part of the analysis, a comparison was made between the assumed and the actual option election patterns over the most recent four years.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**Net Investment Return:** 7.50% -

The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by SegalRogerscasey, as well as the Plan's target asset allocation.

**Annual Administrative Expenses:** \$850,000, payable monthly (equivalent to \$817,523 payable at the beginning of the year)

**Actuarial Value of Assets:** The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the projected market return, and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value.

This valuation method is temporarily altered due to PRA 2010 Elections, such that the unrecognized return for each of the plan years ending in 2009 and 2010 is recognized over a ten-year period rather than five years.

---

**Actuarial Cost Method:** Unit Credit Actuarial Cost Method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service.

---

**Elections under the Pension Relief Act of 2010:**

*Extended Amortization of  
Net Investment Losses  
(IRC Section 431(b)(8)(A))*

The market value investment loss for the Plan Year ended August 31, 2009 continues to be amortized over an extended period, based on the prospective method as defined in IRS Notice 2010-83.

---

**Benefits Valued:** Unless otherwise indicated, includes all benefits summarized in Exhibit VIII.

---

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**Current Liability Assumptions:**

*Interest* 3.57%

*Mortality* Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1: RP-2000 tables projected forward to the valuation year plus seven years for annuitants and 15 years for nonannuitants

**Justification for Change in Actuarial Assumptions (Schedule MB, line 11):**

For purposes of determining current liability, the current liability interest rate was changed due to a change in the permissible range and recognizing that any rate within the permissible range satisfies the requirements of IRC Section 431(c)(6)(E) and the mortality tables were changed in accordance with IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1.

Based on past experience and future expectations, the following assumptions were changed as of September 1, 2014. Previously these assumptions were as follows:

*Mortality Rates:* Healthy: RP-2000 Combined Healthy Blue Collar Mortality Table, projected 25 years under Scale AA.

*Termination Rates Before Retirement:*

Age	Rate (%)	
	Mortality	
	Male	Female
20	0.02	0.01
25	0.03	0.01
30	0.06	0.02
35	0.10	0.04
40	0.11	0.06
45	0.13	0.09
50	0.15	0.13
55	0.26	0.23
60	0.55	0.44

*Annual Administrative Expenses:*

\$750,000, payable monthly (equivalent to \$721,344 payable at the beginning of the year).

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**Estimated Rate of Investment Return:**

*On actuarial value of assets*  
*(Schedule MB, line 6g):* 7.7%, for the Plan Year ending August 31, 2014

*On current (market) value of assets*  
*(Schedule MB, line 6h):* 13.2%, for the Plan Year ending August 31, 2014

---

**Funding Standard Account**

**Contribution Timing**

**(Schedule MB, line 3):**

Unless otherwise noted, contributions are paid periodically throughout the year pursuant to collective bargaining agreements. The interest credited in the Funding Standard Account is therefore assumed to be equivalent to a March 1 contribution date.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

**EXHIBIT VIII**

**Summary of Plan Provisions  
(Schedule MB, line 6)**

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions

**Plan Year:** September 1 through August 31

**Pension Credit Year:** February 1 through January 31

**Plan Status:** Ongoing plan

**Regular Pension:**

<i>Age and Service requirements</i>	65 and 5 years; or attainment of Normal Retirement Age.
<i>Amount</i>	\$25.75 per month for each Past Service Benefit Unit; plus \$50.00 per month for each Future Service Benefit Unit earned prior to February 1, 1980; plus 4.00% of the contributions received from February 1, 1980 to January 31, 2004; plus 2.00% of the contributions received on the participant's behalf from February 1, 2004 to January 31, 2014; plus 1.75% of the contributions received on the participant's behalf for service thereafter. Beginning with hours worked in July 2003, no more than \$3.20 per hour in contributions is recognized for benefit computation purposes.

**Early Retirement Pension:**

<i>Age and Service requirements</i>	Age 55 and 10 years.
<i>Amount</i>	Accrued Regular Pension amount, reduced ½ of 1% for each month that the retiring participant is younger than age 65. (The supplemental benefit of \$240/\$210 per month is not subject to the Early Retirement reduction factor.)

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

EIN 94-6277669/ PN 001

---

**Supplemental Pension:**

*Age and Service requirements* Eligible for Regular, Service, Early, Disability, or Deferred Vested Pension.

*Amount* Sum of:

- (a) \$240 per month, times a fraction (not to exceed one), whose numerator equals the participant's credited service as of February 1, 2014, and whose denominator is the participant's credited service of the earlier of the benefit effective date or the earliest date as of which he could have retired under the plan, and
- (b) \$210 per month, times 1 minus the fraction used in (a) above.

This benefit accrues ratably such that, in the event of a vested termination for reasons other than retirement or a qualifying disability, only a prorated portion of the benefit described above is payable.

---

**Service Pension:**

*Age and Service requirements* Age 55 and 25 Benefit Units, or age 62 and 20 Benefit Units.

*Amount* Accrued Regular Pension amount.

---

**Disability Pension:**

*Age and Service requirements* 10 years of Credited Service; and, as a result of actual employment, earned at least two quarters of Credited Service in the two consecutive Plan Credit Year period preceding the date of disability.

*Other requirements* Totally disabled and entitled to a Social Security Disability award.

*Amount* \$50.00 per month per Benefit Unit up to a maximum of 30 units but not less than the actuarial equivalent, or if higher 40%, of the accrued benefit payable at Normal Retirement Age.

---

**Deferred Vested Pension:**

*Age and Service requirements* 5 years of Credited Service, regardless of age.

*Amount* Accrued Regular Pension amount, payable at Normal Retirement Age or, on a reduced basis, as early as age 55. In addition, a prorated portion of the \$240/\$210 supplement is provided as noted above.

*Normal Retirement Age* 65, or fifth anniversary of participation, if later.



**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**Pro Rata/Partial Pension:** This type of pension is available for participants who have earned at least 5 years of Combined Credited Service under this Plan and Related Pension Plans.

---

**Spouse's Benefit:**

*Age and Service requirements*

5 years of Credited Service, regardless of age.

*Amount*

50% of the benefit that the participant would have received had he or she retired, on a Husband-and-Wife pension, the day before death. If death occurs before attainment of age 55, payments will commence when the participant would have reached that age, and the amount will equal the amount that would have been payable had the participant left Covered Employment on the date of death, retired on a Husband-and-Wife pension upon reaching age 55, and died immediately thereafter.

---

**Husband- and-Wife Pension:**

All retirements are paid in the form of a 50% joint and survivor annuity unless this form is rejected by the participant and spouse. The benefit amount otherwise payable is reduced to reflect the joint and survivor coverage (95% for same age participant/spouse on non-disability pension). In the event that the spouse predeceases the participant, the monthly pension amount will revert back to the original amount. If this type of pension is rejected, benefits are payable for the life of the participant (with a minimum guarantee of 36 monthly payments) without reduction or in any other available optional form (see list below) elected by the participant in an actuarially equivalent amount.

---

**Optional Forms of Payment:**

In addition to the Husband-and-Wife Pension described above, the following optional forms of benefit are available:

- Single-Life pension (with a Three-Year Guarantee), or
  - 75% Husband-and-Wife Pension, or
  - 100% Husband-and-Wife Pension, or
  - Level Income Option.
- 

**Post-Retirement Death Benefit:**

A lump sum benefit shall be paid to the surviving spouse of a deceased pensioner, in an amount equal to \$100 for each Benefit Unit earned under the Plan at the time of retirement.

**SECTION 4: Certificate of Actuarial Valuation as of September 1, 2014 for the Cement Masons Pension Trust Fund for Northern California**

---

EIN 94-6277669/ PN 001

---

**Service Schedules:**

<i>Credited Service</i>	Commencing February 1, 1976, a participant who works at least 300 hours in a Plan Credit Year receives 1/4 year of Credited Service for each 250 hours of work up to a maximum of one year for 870 hours or more.
<i>Benefit Units</i>	Commencing February 1, 1982, a participant who works at least 300 hours in a Plan Credit Year receives 1/12 of a Benefit Unit for each 100 hours of work up to a maximum of one Benefit Unit for 1,200 hours or more.

---

**Break in Service Rules:**

<i>One Year Break</i>	A participant incurs a One Year Break in Service if he or she fails to work at least 300 hours in a Plan Credit Year.
<i>Permanent Break</i>	A nonvested participant incurs a Permanent Break in Service if the number of consecutive One Year Breaks in Service is at least five and it equals or exceeds the number of full years of Credited Service previously accumulated. At this time, all accumulated Credited Service and Benefit Units are canceled.

---

**Participation Rules:**

<i>Participation</i>	An employee becomes a “Participant” the February 1 or August 1 next following a twelve month period during which he or she worked at least 300 hours in Covered Employment.
<i>Termination of Participation</i>	A Participant who incurs a One Year Break in Service ceases to be a Participant as of the last day of the Plan Year which constituted the One Year Break in Service, unless he or she has retired or attained vested rights.
<i>Separation from Employment</i>	A participant is deemed to be separated from employment at the end of any two consecutive Plan Credit Year period in which he or she does not work at least 300 hours in Covered Employment in at least one of the two Plan Credit Years. The monthly amount payable for Benefit Units earned prior to the last separation from employment is frozen at the then current benefit level.

---

**Plan Amendments:** There have been no changes in plan provisions since the prior year’s valuation.

5373768v2/00585.001