



O'Sullivan  
Associates Inc.

**Bricklayers and Allied Craftworkers Local 5  
New York Pension Plan**

Actuarial Valuation Report  
12/31/2013

1236 Brace Road, Unit E  
Cherry Hill, NJ 08034  
(856) 795-7777

September 2014

## TABLE OF CONTENTS

<b>1.</b>	<b>CERTIFICATION OF RESULTS .....</b>	<b>1</b>
<b>2.</b>	<b>VALUATION SUMMARY .....</b>	<b>3</b>
<b>3.</b>	<b>SUMMARY OF FUNDING MEASURES .....</b>	<b>4</b>
<b>4.</b>	<b>PLAN COST .....</b>	<b>5</b>
4.1	Annual Plan Cost and Margin .....	5
4.2	Margin Detail .....	6
4.3	Development of Plan Asset Values .....	7
4.3.1	Market Value of Assets .....	7
4.3.2	Actuarial Value of Assets .....	7
4.3.3	Actuarial Asset Gain/(Loss) .....	8
4.3.4	Total Gain/(Loss) .....	9
4.4	Historical Information .....	10
4.4.1	Gain/(Loss) .....	10
4.4.2	Asset Information .....	11
4.4.3	Employment .....	12
4.4.4	Funded Percentage .....	13
4.4.5	Actuarial Value of Assets Expressed as a % of Market Value .....	14
4.5	Pension Protection Act .....	15
<b>5.</b>	<b>ASC NO. 960 DISCLOSURES .....</b>	<b>18</b>
5.1	Present Value of Accumulated Plan Benefits .....	18
5.2	Reconciliation of Changes in Present Value of Accumulated Benefits .....	18
<b>6.</b>	<b>GOVERNMENT REPORTING .....</b>	<b>19</b>
6.1	Summary of Assumptions and Methods .....	19
6.2	Summary of Plan Provisions .....	20
6.3	Plan History .....	22
6.4	Contribution Rates .....	23
6.5	Funding Standard Account and Minimum Required Contributions .....	24
6.6	Maximum Deductible Contribution .....	24
6.7	Current Liability at Beginning of Year .....	25
6.8	Amortization Schedule for Minimum Required Contribution .....	26
6.9	Equation of Balance .....	27
<b>7.</b>	<b>DATA SUMMARY .....</b>	<b>28</b>
7.1	Flow of Lives .....	28
7.2	Historical Participation .....	29
7.3	Actives by Age and Future Service Credit .....	30
7.4	Distribution of Service Worked by Actives .....	31
7.5	Distribution of Periodic Benefits .....	32
7.6	Distribution of Retirees Monthly Pensions .....	33
7.7	Distribution of Separated Vested Participant Accrued Monthly Pensions .....	34

## **1. Certification of Results**

This report was prepared on behalf of the based on employee data, asset statements and Plan documents provided by the Plan Sponsor or its representatives. We relied upon the data as submitted, without formal audit. However, the data was tested for reasonableness, and we have no reason to believe that any other information which would have had a material effect on the results of this valuation was overlooked.

Therefore, to the best of our knowledge and belief, the information presented in this report is complete and accurate, and in our opinion, each assumption used represents our best estimate of anticipated experience under the Plan.

### **Certified by:**

Redacted by the U.S. Department of  
the Treasury

---

Craig A. Voelker, FSA, MAAA, EA  
Enrolled Actuary No.: 14-05537

\*\*\*\* *This Page Has Been Left Intentionally Blank* \*\*\*



## 2. Valuation Summary

### 1. Long-Term Funding

Projected annual contributions of \$2.57 million (\$13.39 per hour) fall short of the Plan's total annual cost of benefits of \$4.98 million (\$25.94 per hour). This leaves a negative margin of \$2.41 million (\$12.55 per hour). Therefore, the Plan's finances are currently not meeting the 15-year funding policy. At the current level of funding the Plan is projected to go insolvent in the Plan Year ending 12/31/2025.

### 2. Margin

The margin has decreased by \$0.68 from negative \$11.87 to negative \$12.55 over last year. The margin is explained in Section 4.

### 3. Pension Protection Act

The Pension Protection Act (PPA) requires that multiemployer plans disclose the percent level of funding using the actuarial value of assets. As of 12/31/2013 the Plan's funding level is 35.9%.

The funded level is below 65% and the Plan is projected to have a funding deficiency within four years. As a result, the Plan continues to remain in the "red" zone or Critical Status.

Each year the Rehabilitation Plan needs to be monitored and updated if it is not providing the anticipated funding progress. The Rehabilitation Plan adopted by the Trustees is considered a "safety valve" plan as allowed by §432(e)(3)(A)(ii). This section provides that the Trustees consider all reasonable measures to exit the Red Zone by the end of the Rehabilitation Period, and if the Plan cannot exit the Red Zone in that time frame to consider all reasonable measures to exit at a later time or to forestall insolvency. The Rehabilitation Plan and future projections are detailed in Section 4.6.

**Potential Insolvency:** In the past the Board was cautiously optimistic that the Fund would not go insolvent. If this perspective changes, and the Trustees believe the Fund will go insolvent, they should discuss the benefit suspensions and suspended accrual.

### 3. Summary of Funding Measures

		As of December 31	
		<u>2013</u>	<u>2012</u>
<b>1. Current</b>			
	<u>Assets</u>		
a	at Market	\$ 25,576,496	\$ 26,128,846
b	at Actuarial	\$ 25,074,815	\$ 27,162,775
c	Actuarial / Market (b/a)	98.0%	104.0%
	<u>Present Values</u>		
d	Vested Benefits	\$ 69,722,207	\$ 70,557,689
e	Accrued Benefits (Accrued Liability)	\$ 69,749,742	\$ 70,599,287
	<u>Funding Percentages</u>		
f	Vested at market (a/d)	36.7%	37.0%
g	Vested at actuarial (b/d)	36.0%	38.5%
h	Accrued at market (a/e)	36.7%	37.0%
i	Accrued at actuarial (b/e)	35.9%	38.5%
		For Plan Year Ending December 31	
		<u>2014</u>	<u>2013</u>
<b>2. Prospective</b>			
	<u>Contributions</u>		
a	Minimum Required	\$ 7,697,782	\$ 4,843,928
b	Anticipated	\$ 2,570,880	\$ 2,570,880
c	Actual	TBD	\$ 1,843,878
d	Maximum Deductible	\$ 112,201,963	\$ 111,685,051
e	Credit Balance	\$ (5,048,304)	\$ (2,943,678)
f	Minimum to preserve Credit Balance	\$ 4,613,071	\$ 4,344,957
	<u>Costs</u>		
g	Cost of benefits earned in year	\$ 295,212	\$ 295,212
h	Amortization of Unfunded Liability	<u>4,684,675</u>	<u>4,554,814</u>
i	Total Cost (g+h)	\$ 4,979,887	\$ 4,850,026
j	Margin (b-i)	\$ (2,409,007)	\$ (2,279,146)
<b>3. Assumptions</b>			
a	Interest rate per annum	6.75%	6.75%
b	Hours in aggregate per year	192,000	192,000

## 4. Plan Cost

### 4.1 Annual Plan Cost and Margin

There are two component costs to funding a pension plan: the cost of benefits earned in the year, and the amortization of the unfunded liability. The costs above are calculated consistent with a funding policy of paying off the unfunded liability over 15 years assuming asset return of 6.75% annually.

The margin, found on Line C below, indicates that the Plan requires an additional \$12.55 per hour to pay for all future benefits.

There are many actuarial measures and statistics to measure the state of the Plan's funding. The margin is designed to provide a single simplified statistic for a trustee to get a sense for the Plan's level of funding. As long as the margin is positive it is a strong indication that the current benefits are affordable on a long-term basis. If negative, it is an indication that the overall funding may need to be improved before benefits are affordable.

	<u>Per Year</u>	<u>Per Hour</u>	<u>As a % of Contributions</u>
A. Anticipated annual contribution	\$ 2,570,880	\$ 13.39	100.0%
B. Actuarial Costs			
1. Cost of benefits earned in the year*	\$ 295,212	\$ 1.54	11.5%
2. Amortization of unfunded liability	<u>4,684,675</u>	<u>24.40</u>	<u>182.2%</u>
3. Total annual costs (1+2)	\$ 4,979,887	\$ 25.94	193.7%
C. Margin (B4 - C3)	\$ (2,409,007)	\$ (12.55)	-93.7%
D. Effective Amortization	Does not fund		

Note: The 15-year period for amortizing the Plan's unfunded liability is an ongoing one, in that it is reset at 15 years each time the annual actuarial valuation is completed.

\* Since benefit accruals have been frozen as of 1/1/2012, this number only represents administrative expenses.



## 4.2 Margin Detail

A. As of	<u>12/31/2013</u>		
1. Actuarial liability	\$ 69,749,742		
2. Actuarial value of assets	<u>25,074,815</u>		
3. Unfunded actuarial liability (1 - 2)	\$ 44,674,927		
4. Normal cost	0		
5. Expenses	<u>285,000</u>		
6. Total cost of benefits (4 + 5)	\$ 285,000		
7. Amortization of unfunded liability	\$ 4,522,621		
B. Anticipated Contribution Income*			
1. Number of actives			
2. Projected hours	192,000		<b>As a % of</b>
3. Projected contribution rate	<u>\$ 13.39</u>	<b><u>\$/Hour</u></b>	<b><u>Contributions</u></b>
4. Anticipated annual contribution (1 x 2 x 3)	\$ 2,570,880	\$13.39	100.0%
C. Actuarial Costs*			
4. Cost of benefits earned in the year	\$ 295,212	\$ 1.54	11.5%
5. Amortization of unfunded liability	4,684,675	<u>24.40</u>	<u>182.2%</u>
6. Total annual costs (1+2)	\$ 4,979,887	\$ 25.94	193.7%
D. Margin (B4 - C3)	\$ (2,409,007)	\$ (12.55)	-93.7%
E. Market value of assets	\$ 25,576,496		
F. Spread Statistic	2.0%		
G. Margin using assets at market	\$ (2,356,400)	\$ (12.27)	-91.7%

\* Assumes contributions and costs are paid at the end of the month.



### 4.3 Development of Plan Asset Values

#### 4.3.1 Market Value of Assets

	<u>Total Fund</u>
A. Assets at 12/31/2012	\$ 26,128,846
B. Employer contributions	1,843,878
C. Investment income:	
1. Interest and dividends	\$ 588,643
2. Realized/unrealized gain/(loss)	2,998,130
3. Investment fees	<u>(195,519)</u>
4. Total investment income	\$ 3,391,254
D. Distributions:	
1. Benefit payments and annuity purchases	\$ (5,552,487)
2. Administrative expenses	<u>(234,995)</u>
3. Total distributions	\$ (5,787,482)
E. Market value as of 12/31/2013	\$ 25,576,496
F. Average invested assets (A+.5 x (B+D3))	\$ 24,157,044
G. Rate of return, C4÷ F	14.0%

#### 4.3.2 Actuarial Value of Assets

A. Market value as of 12/31/2013	\$ 25,576,496
----------------------------------	---------------

Development of Amount Deferred			
<u>Year Ending December 31</u>	<u>Unexpected Amount</u>	<u>Percentage Deferred</u>	<u>Deferred Amount</u>
2010	\$ 1,519,352	20%	\$ 303,870
2011	(4,185,375)	40%	(1,674,150)
2012	772,394	60%	463,437
2013	1,760,654	80%	1,408,524
B. Total deferred amount			\$ 501,681
C. Preliminary actuarial value of assets (A - B)			\$ 25,074,815
D. 80% of market value			20,461,197
E. 120% of market value			30,691,795
F. Actuarial value as of 12/31/2013 (C not less than D or greater than E)			\$ 25,074,815

### 4.3.3 Actuarial Asset Gain/(Loss)

A. Actuarial assets at 12/31/2012 \$ 27,162,775

B. Investment income:

1. Expected income (net of investment expenses) \$ 1,630,599

Development of amount recognized			
Year Ending December 31	Unexpected Amount	Percentage Recognized	Recognized Amount
2009	\$ 1,258,199	20%	\$ 251,640
2010	1,519,352	20%	303,870
2011	(4,185,375)	20%	(837,075)
2012	772,394	20%	154,479
2013	1,760,654	20%	352,131

2. Total recognized amount 225,045

3. Forced recognition (due to +/-20% corridor) \$ 0

4. Total investment income (1 + 2 + 3) \$ 1,855,644

C. Employer contributions \$ 1,843,878

D. Distributions:

1. Benefit payments and annuity purchases \$ (5,552,487)

2. Administrative expenses (234,995)

3. Total distributions \$ (5,787,482)

E. Actuarial value as of 12/31/2010 \$ 25,074,815

F. Average invested assets (A + .5 x (C + D3)) \$ 25,190,973

G. Rate of return (B4 ÷ F) 7.4%

H. Assumed rate of return 6.75%

I. Expected income (H x F) \$ 1,700,391

J. Asset gain/(loss) (B4 - I) \$ 155,253

#### **4.3.4 Total Gain/(Loss)**

A. Unfunded accrued liability (UAL) at 12/31/2012	\$ 43,436,512
B. Annual cost of benefits and expenses at 12/31/2012	285,000
C. Less contributions	(1,843,878)
D. Interest on A, B, and C	<u>2,894,830</u>
E. Expected unfunded accrued liability as of 12/31/2013 (A+B+C+D)	\$ 44,772,464
F. Preliminary UAL before changes as of 12/31/2013	<u>44,674,927</u>
G. Total gain/(loss), (E - F)	\$ 97,537
H. Change due to:	
1. Assumption changes	\$ 0
2. Plan amendments	0
3. Method changes	<u>0</u>
4. Subtotal changes	\$ 0
I. Actual unfunded accrued liability as of 12/31/2013 (F+H4)	\$ 44,674,927
J. Gain/(loss) due to:	
1. Asset experience	\$ 155,253
2. Expenses	60,217
3. Demographic experience	<u>(117,933)</u>
4. Total gain/(loss)	\$ 97,537

#### 4.4 Historical Information

##### 4.4.1 Gain/(Loss)

<u>Plan Year</u>	<u>Assets</u>	<u>Expense</u>	<u>Demographic Assumptions</u>	<u>Total Gain/(Loss)</u>
2010	\$ (859,829)	\$ 96,282	\$ 152,762	\$ (610,785)
2011	(1,538,401)	63,068	(316,944)	(1,792,277)
2012	(1,578,321)	78,716	(829,018)	(2,328,623)
2013	155,253	60,217	(117,933)	97,537
4-yr Avg	\$ (955,325)	\$ 74,571	\$ (277,783)	\$ (1,158,537)

Gain/loss analysis is one of the most important tools available to an actuary to ensure that the actuary's model of the Plan's funding is accurate. The exhibit above shows the total gain/(loss) broken down into three components: assets, expenses, and demographic assumptions.

The gain on assets is very unpredictable due to the unpredictable returns on the market value of assets. Moreover, the gain/(loss) on assets is greatly influenced by the smoothing method. The pattern of asset gains is discussed later in this report.

After itemizing the gain/(loss) on assets and administrative expenses, what remains is the gain/(loss) on all the other demographic assumptions including retirement, turnover, disability, and mortality rates. Over time, to remain confident in the future funding, it is important that the gains and losses on the demographic assumptions average zero, or at least a relatively small number. The Plan experienced more deaths than anticipated during in the past year, which accounted for a significant portion of this year's gain.

The past four years the Plan has averaged a small loss. We will continue to monitor this experience and recommend assumption changes as necessary.



#### 4.4.2 Asset Information

##### For Plan Years Ending December 31

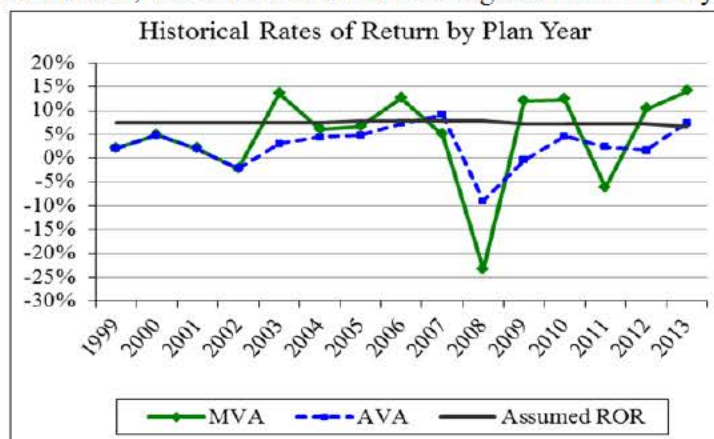
##### Rates of Return

<u>Plan Year</u>	<u>Market Value of Assets</u>	<u>Contributions</u>	<u>Benefits</u>	<u>Expenses</u>	<u>Market Investment Income</u>	<u>At Market</u>	<u>At Actuarial</u>
1999	\$ 45,985,528	\$ 1,582,312	\$ (3,275,134)	\$ (241,204)	\$ 960,756	2.1%	2.1%
2000	46,013,972	1,951,078	(3,869,312)	(221,882)	2,168,560	4.8%	4.8%
2001	44,516,263	1,746,713	(3,915,295)	(225,320)	896,193	2.0%	2.0%
2002	40,980,198	1,776,555	(4,123,429)	(213,626)	(975,565)	-2.2%	-2.2%
2003	43,856,690	2,072,205	(4,288,636)	(264,039)	5,356,962	13.5%	3.1%
2004	43,690,276	1,920,424	(4,359,238)	(285,467)	2,557,867	6.0%	4.4%
2005	43,531,191	1,905,835	(4,579,029)	(279,319)	2,793,428	6.6%	4.8%
2006	45,797,900	2,035,681	(4,783,899)	(255,346)	5,270,273	12.5%	7.3%
2007	45,263,564	2,459,030	(4,854,881)	(331,794)	2,193,309	4.9%	9.0%
2008	31,966,921	2,228,212	(5,012,514)	(271,494)	(10,226,545)	-23.4%	-8.9%
2009	32,154,846	2,009,200	(5,142,691)	(281,874)	3,603,290	11.9%	-0.4%
2010	32,828,413	2,480,621	(5,289,710)	(256,784)	3,739,440	12.2%	4.7%
2011	27,201,622	1,992,893	(5,432,225)	(248,461)	(1,938,998)	-6.3%	2.4%
2012	26,128,846	2,016,684	(5,488,392)	(212,044)	2,610,976	10.3%	1.7%
2013	25,576,496	<u>1,843,878</u>	<u>(5,552,487)</u>	<u>(234,995)</u>	<u>3,391,254</u>	14.0%	7.4%
Totals		\$ 30,021,321	\$ (69,966,872)	\$ (3,823,649)	\$ 22,386,898		

5-Year Average	8.4%	3.2%
10-Year Average	4.9%	3.2%
15-Year Average	4.6%	2.8%

The average return on the market value of assets for the 15 years ending December 31, 2013 is 4.6%. The historically low return in 2008 has largely impacted this average, which is much lower than the assumed rate of 6.75%.

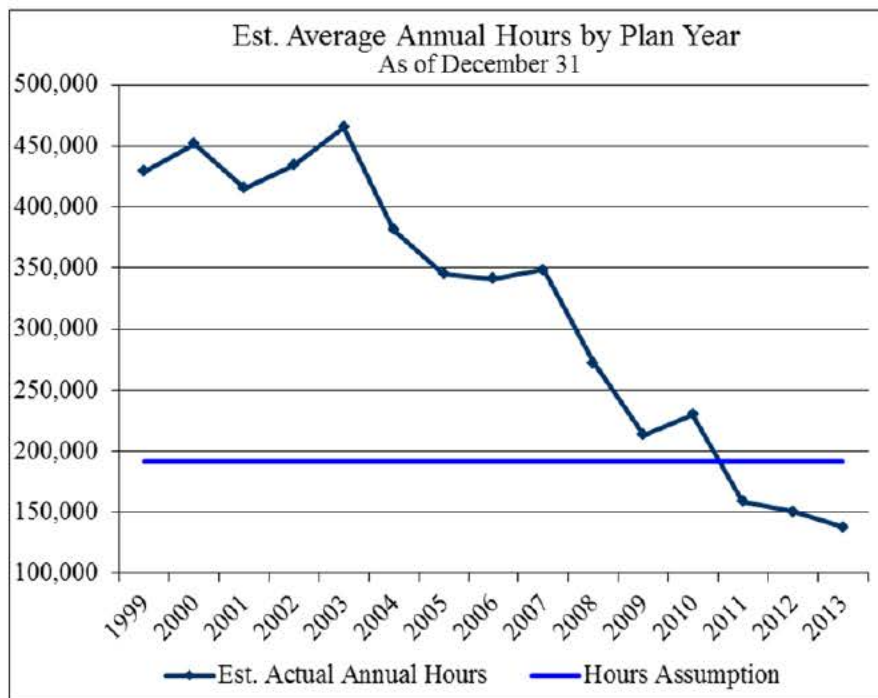
The performance of the actuarial and market value of assets as measured by the rate of return over the last 15 years is lower than the market value performance. As seen in the table above, the market value return in 2013 was 14.0%. On an actuarial basis, this 2013 return will be recognized over a five-year period.



#### 4.4.3 Employment

Plan Years Ending Dec 31	Contribution Income	Average Number of Actives	Average Hourly Contribution Rate	Employment Hours for Valuation*
1999	\$ 1,582,312	465	\$ 4.30	429,102
2000	1,951,078	364	4.35	451,551
2001	1,746,713	298	4.00	415,472
2002	1,776,555	307	4.22	434,189
2003	2,072,205	317	4.78	465,315
2004	1,920,424	313	5.39	381,478
2005	1,905,835	291	5.71	345,052
2006	2,035,681	277	6.31	341,557
2007	2,459,030	267	7.06	348,305
2008	2,228,212	245	8.17	272,620
2009	2,009,200	233	9.41	213,593
2010	2,480,621	225	10.78	230,167
2011	1,992,893	206	12.54	158,976
2012	2,016,684	186	13.39	150,611
2013	1,843,878	179	13.39	137,706

The employment assumption included in the valuation is 192,000 hours per year. This assumption should be set at a level that represents a long-term average.

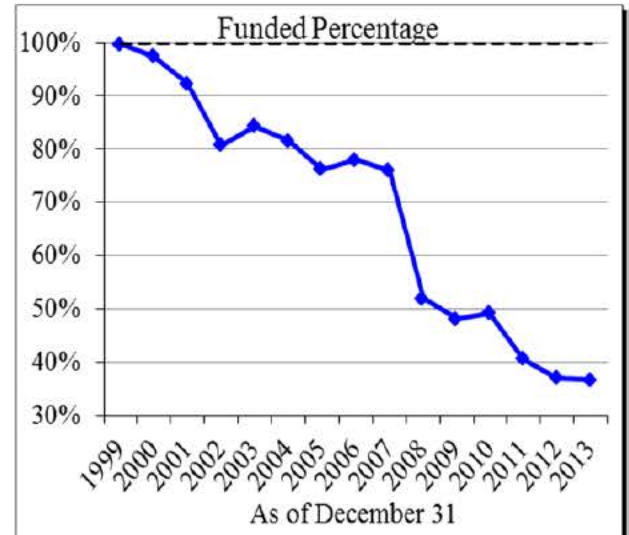


\*Total hours for valuation is derived by dividing actual contributions by last year's projected contribution rate, and will not necessarily match reported hours by the Plan Office.



#### 4.4.4 Funded Percentage

Plan Years Ending <u>Dec 31</u>	Market Value of <u>Assets</u>	Present Value of Accrued <u>Benefits</u>	Funded <u>Percentage</u>
1999	\$ 45,985,528	\$ 46,137,456	99.7%
2000	46,013,972	47,234,288	97.4%
2001	44,516,263	48,242,952	92.3%
2002	40,980,198	50,789,178	80.7%
2003	43,856,690	52,037,384	84.3%
2004	43,690,276	53,550,407	81.6%
2005	43,531,191	57,166,662	76.1%
2006	45,797,900	58,736,590	78.0%
2007	45,263,564	59,606,865	75.9%
2008	31,966,921	61,534,903	51.9%
2009	32,154,846	66,769,116	48.2%
2010	32,828,413	66,752,647	49.2%
2011	27,201,622	66,978,548	40.6%
2012	26,128,846	70,599,287	37.0%
2013	25,576,496	69,749,742	36.7%



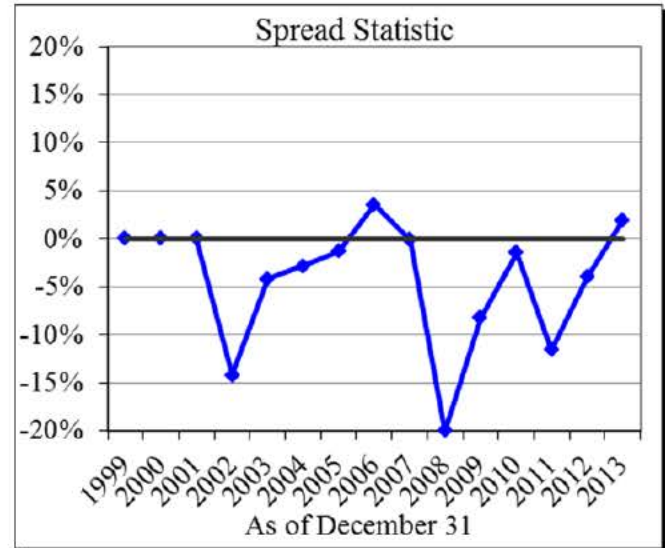
The Funded Percentage is a statistic commonly followed by Trustees. In the past, the ratio of the market value of assets to the Present Value of Accrued Benefits was highlighted. However, with the passage of the Pension Protection Act, the ratio of the actuarial value of assets to the Present Value of Accrued Benefits is used as one of the components to determine a plan's status at each annual zone certification. In addition, this ratio will be used for annual participant notices. This Funded Percentage compares the actuarial value of assets to the value of benefits accrued as of the valuation date.

The fact that the Funded Percentage is under 100% means that there are unfunded accumulated benefits when valuing the Plan on an ongoing basis. It does not necessarily imply that the Plan is underfunded on a long term basis because it makes no consideration of future contributions relative to future costs. The margin is the best single statistic to get a sense of how well funded the Plan is on a long-term basis.

Based on the actuarial value of assets of \$25,074,815 the Funded Percentage is 35.9% as of December 31, 2013.

#### 4.4.5 Actuarial Value of Assets Expressed as a % of Market Value

Plan Years Ending Dec 31	Actuarial Value of Assets	Actuarial Assets as a Percent of Market
1999	\$ 45,985,528	100.0%
2000	46,013,972	100.0%
2001	44,516,263	100.0%
2002	46,787,441	114.2%
2003	45,699,632	104.2%
2004	44,943,873	102.9%
2005	44,093,174	101.3%
2006	44,182,701	96.5%
2007	45,328,098	100.1%
2008	38,360,305	120.0%
2009	34,815,596	108.3%
2010	33,302,885	101.4%
2011	30,357,468	111.6%
2012	27,162,775	104.0%
2013	25,074,815	98.0%



The three primary measures that help an actuary assess how well funded a plan is on a long-term basis are:

1. Margin,
2. Gain/loss analysis and an assessment of assumptions, and
3. Spread, defined as the difference between the market and actuarial value of assets expressed as a percentage of the market value of assets.

The margin and assumptions were covered in earlier sections.

The third factor is the Spread statistic. When positive it represents a cushion to help offset potential future unfavorable investment experience. Conversely, when the actuarial value is greater than the market value the Spread turns negative. When this is the case future investment returns over and above the assumed return are necessary over time to restore the market value of assets equal to the actuarial value.

As of December 31, 2013, the Spread is 2.0%.



#### 4.5 Pension Protection Act

The Plan continues to be in the Red Zone as of December 31, 2013 because it is under 65% funded and is projected to have a funding deficiency within the next four years. A summary of the Zone Status is as follows:

<u>Date Summary</u>		
<u>January 1</u>		<u>PPA Status</u>
2008	Status	Seriously Endangered
	Expiration of CBA(s) covering 75% of active participants as of actuarial certification date:	5/31/2008
	Funding Improvement Period: (15 years for Orange Zone):	1/1/2009-12/31/2023
2009	Status without regard to freezing	Critical
	Frozen Status (after application of WRERA)	Seriously Endangered
2010	Status	Critical
	Expiration of CBA(s) covering 75% of active participants as of actuarial certification date:	5/31/2011
	Adoption Period:	3/31/2010 - 12/31/2011
	Rehabilitation Period:	1/1/2012 - 12/31/2021
2011-2014	Status	Critical

The Trustees have implemented a Rehabilitation Plan (RP) as per the PPA. A summary of the history of the Rehabilitation Plan is as follows:

#### Original Rehabilitation Plan

##### Benefit Changes

- The Lump Sum option for surviving spouses was suspended effective April 23, 2010 as required by law.
- The benefit rate on and after January 1, 2010 will depend on the date on which the Participant first earned Future Service Credit. If that date is prior to June 1, 2004, the benefit rate will be \$50 (payable monthly) for all Years of Future Service Credit after December 31, 2009. Otherwise, the benefit rate will be \$37.50 for the first ten Years of Future Service Credit and \$50.00 for all subsequent service on and after December 31, 2009. The ten year period is measured from date of hire.
- A year of Future Service Credit is credited for each 1,000 hours, with 1/10 of a Year credited for each 100 hours worked. No Future Service Credit will be credited if less than 200 hours are worked in a Plan Year
- Unreduced Early Retirement at age 62 with 5 years of Vesting Service was replaced with unreduced Early Retirement at age 62 with 20 years of Future Service Credit, with no limitation on Service earned in each Plan Year.

Contribution Increases

	Contrib.		Contrib.
<u>June 1</u>	<u>Rate</u>	<u>June 1</u>	<u>Rate</u>
2010	\$11.34	2017	16.39
2011	13.39	2018	16.89
2012	13.39	2019	17.39
2013	14.39	2020	17.89
2014	14.89	2021	18.39
2015	15.39	2022+	18.89
2016	15.89		

**2011 Update to the Rehabilitation Plan**

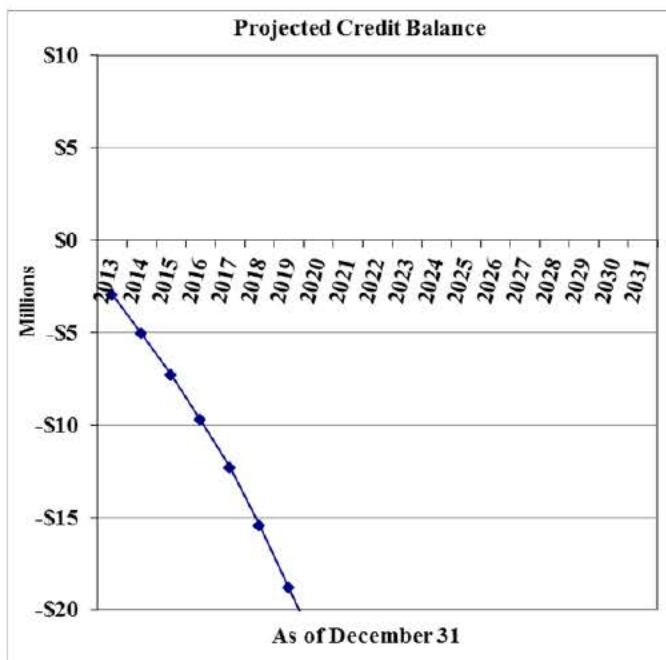
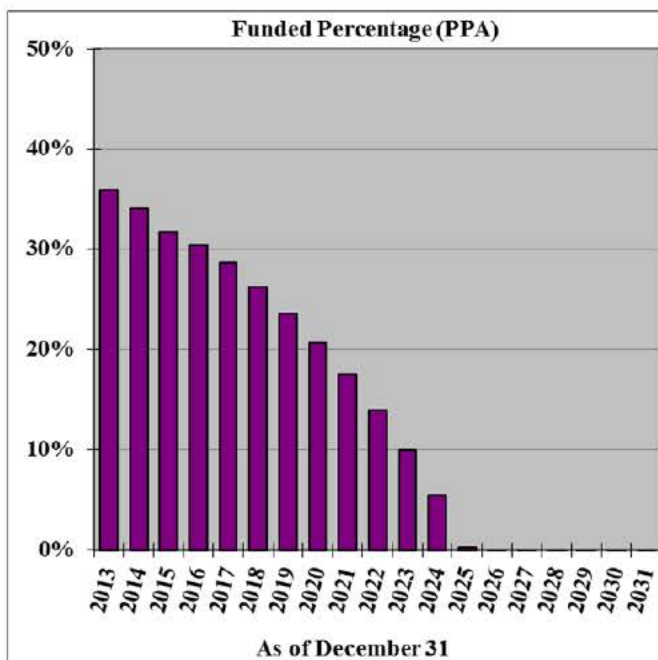
Effective January 1, 2012, accrued benefits will be frozen and will equal the benefit accrued through December 31, 2011.

**2012 Update to the Rehabilitation Plan**

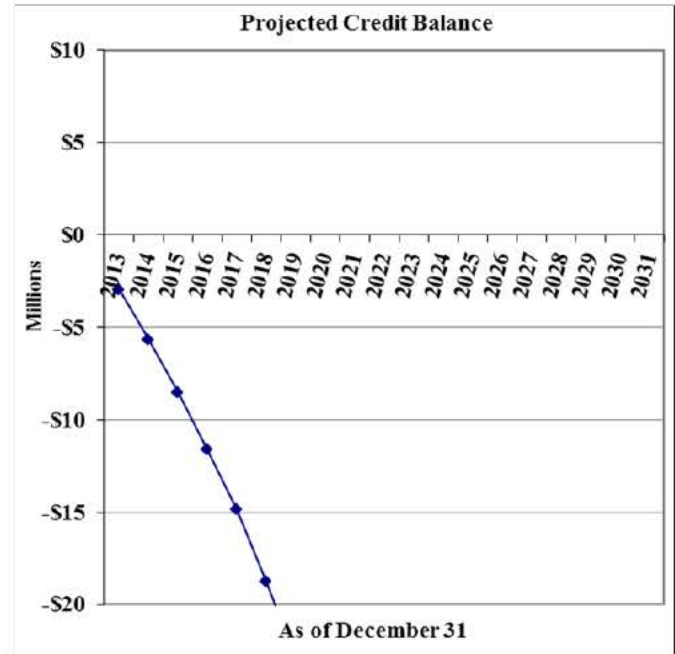
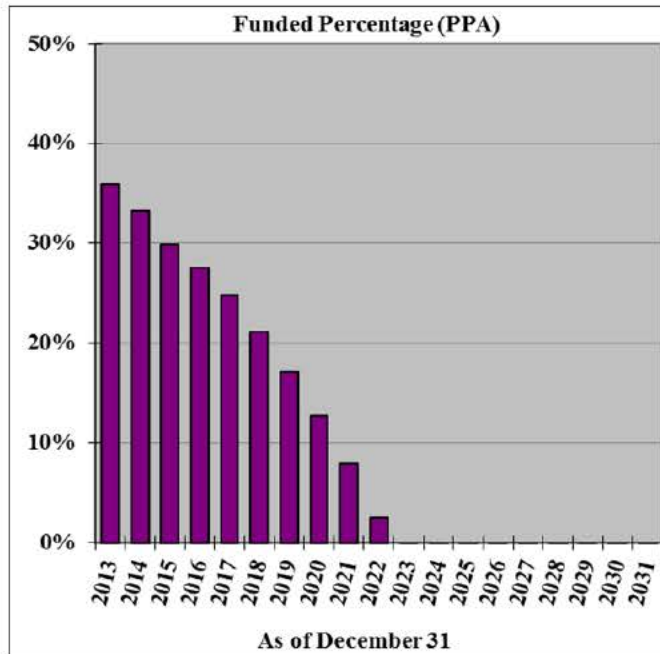
Effective March 21, 2013, the Board of Trustees decided to freeze the contribution rate at \$13.39 and suspend the following benefits until 5/31/2017:

- All Early Retirement Benefits
- Disability Retirement Benefits
- The Family Survivor and Single Sum Death Benefit
- The "Pop Feature" on Joint & Survivor benefits

The following charts project the funded percentage and credit balance into the future assuming that there are no gains or losses on demographic assumptions and that the market value of assets returns the assumed rate of 6.75%.



The Plan has experienced an average of 150,000 hours over the past three years. This is below the employment assumption of 192,000 hours. The graphs below show the Plan's sensitivity to staying at 150,000 hours.





## 5. ASC No. 960 Disclosures

### 5.1 Present Value of Accumulated Plan Benefits

As of December 31, 2013

A. Present Value of Vested Benefits:

1. Participants currently receiving payments	\$ 48,148,698
2. Other vested benefits	<u>21,573,509</u>
3. Subtotal vested benefits	\$ 69,722,207

B. Present Value of Non-Vested Benefits 27,535

C. Present Value of Accumulated Benefits (A+B) \$ 69,749,742

The ASC No. 960 values were computed using the same assumptions as those used for determining funding requirements.

### 5.2 Reconciliation of Changes in Present Value of Accumulated Benefits

A. Present Value of Accumulated Benefits at Prior Valuation Date	\$ 70,599,287
B. Changes During the Year Due to:	
1. Benefits accumulated and net gains	\$ 124,887
2. Benefits paid	(5,552,487)
3. Assumption changes	0
4. Method changes	0
5. Plan amendments	0
6. Passage of time	<u>4,578,055</u>
7. Total change	\$ (849,545)
C. Present Value of Accumulated Benefits at Current Valuation Date	\$ 69,749,742



## 6. Government Reporting

### 6.1 Summary of Assumptions and Methods

These are the assumptions used for the ongoing valuation calculations, unless otherwise noted.

Mortality	RP- 2000 Sex Distinct Table with Blue Collar adjustment using scale BB improvement from year 2000.
Withdrawal	Table T-5
Disability	SOA 1973 Disability Model XXVI
Retirement Age	100% at age 65 for both Active and Inactive Vested Participants.
Definition of Active	A member must have worked 100 or more hours in the year to be included in the valuation.
Future Employment	1,000 hours
Percent Married	100%
Age of Spouse	Females are 2 years younger than their spouses.
Net Investment Return	6.75%
Administrative Expenses	\$285,000 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 market return and the expected return on the actuarial value, and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method	Unit Credit

#### RPA '94 Current Liability Assumptions

Interest	3.64%. Last year, 3.78% was used.
Mortality	RP-2000 as per IRC § 1.430(h)(3)-1

## 6.2 Summary of Plan Provisions

<b>Plan Year:</b>	January 1 through December 31
<b>Participation</b>	400 hours of covered employment
<b>Vesting Service</b>	One year for each year in which at least 250 hours of covered employment or 1,000 hours of related service is earned in a plan year; there is no partial credit
<b>Future Service Credit</b>	One-seventh of a year of Future Service Credit for each 100 hours of covered employment worked in a plan year, without limit.

Effective 1/1/2010, one-tenth of a year of Future Service Credit for each 100 hours of covered employment worked in a plan year, without limit, if at least 200 hours of credited service are earned in the plan year. For purposes of meeting eligibility requirements, no more than one year of Future Service Credit is recognized in any year

**Vesting** 100% vesting after 5 years of Vesting Service

**Break In Service** A "break year" is a plan year in which the participant earns less than 100 hours of eligibility service. After one break year (three consecutive break years prior to 2000) service and participation are forfeited if not vested. Such service and participation will be restored upon return to employment if 100 hours of Future Service Credit or 500 hours of vesting service are earned in a plan year, provided that the number of consecutive break years did not equal or exceed the greater of five years or the prior number of vesting years.

### Normal Retirement:

**Eligibility** Age 65, with five years of Plan participation

**Amount** For retirements after 1/1/2010, the monthly accrued benefit is the sum of A and B where:

**A.** Prior to 12/31/1990, monthly accrued pension multiplied by a factor:

<u>Local</u>	<u>Factor</u>
29	100%
Others	115%

**B.** After 1/1/1991: a multiplier times Future Service Credit earned under this plan:  
Multiplier

<u>Group</u>	<u>1/1/1991- 12/31/2009</u>	<u>1/1/2010- 12/31/2011</u>	<u>After 12/31/2011</u>
If hired prior to 6/1/2004	\$75	\$50	\$ 0*
If hired on and after 6/1/2004	\$50	\$37.50 for the first 10 years of service then \$50 for each year in excess of 10.	\$ 0*

*\*As part of the Rehabilitation Plan, accrued benefits were frozen as of 12/31/2011.*

**Normal Form** Payable for life



<b>Early Retirement:</b>									
Eligibility	<b>Currently unavailable (i.e. "suspended through 5/31/2017")</b> Age 55 with 15 years of Future Service Credit (counting no more than one year in any plan year) or ten years of vesting service, or on or after 10/1/1996, age 62 with 5 years of vesting service.								
Amount	Normal Retirement amount reduced .25% for each month prior from age 65 to age 60 then .50% for each month prior from age 60 to age 55. There is no reduction under any of the following situations:								
	<table> <tr> <th>Age</th><th>Years of Future Service Credit</th></tr> <tr> <td>62</td><td>20</td></tr> <tr> <td>60</td><td>30*</td></tr> <tr> <td>58</td><td>35*</td></tr> </table>	Age	Years of Future Service Credit	62	20	60	30*	58	35*
Age	Years of Future Service Credit								
62	20								
60	30*								
58	35*								
	*For these eligibility purposes, no more than one year of Future Service Credit can be counted in any plan year.								
<b>Disability: Currently unavailable (i.e. "suspended through 5/31/2017")</b>									
Eligibility	Under age 65 and 15 years of eligibility for disability level "A" (ten years of eligibility service for disability level "B") and receiving Social Security Disability benefits								
Amount	Same as normal for level "A" (if disability level "B", reduced by 1/4 of 1% per month that disability date precedes age 65 to a maximum reduction of 50%)								
<b>Deferred Vested Benefit:</b>									
Eligibility	Ten (10) years of vesting service								
Amount	Accrued Normal Retirement amount commencing at first unreduced retirement age, or Early Retirement reduced amount if eligible prior to Normal Retirement								
<b>Pre-Retirement Surviving Spouse's Pension:</b>									
Eligibility	Death of a vested participant with a surviving spouse of one year								
Amount	50% of the benefit the participant would have received had he or she retired the day before he or she died and elected the joint and 50% survivor option. If the participant died prior to eligibility for an early retirement pension, the spouse's benefit is deferred to the participant's earliest retirement date.								
<b>Family Pension Death: Currently unavailable (i.e. "suspended through 5/31/2017")</b>									
Eligibility	Vested								
Amount	Employer Contributions less any pension payments made payable over the life time of the named beneficiary								
<b>Optional Form of Benefit:</b>									
	<ul style="list-style-type: none"> <li>➤ 50% Joint and Survivor with Pop-up (<b>Pop-up is currently suspended</b>)</li> <li>➤ 75% Joint and Survivor with Pop-up (<b>Pop-up is currently suspended</b>)</li> </ul>								

### 6.3 Plan History

Effective Date	Benefit Change
3/21/2013	<p>The following benefits will be suspended (i.e. unavailable) through May 31, 2017 for those Participants not yet in pay status as of March 21, 2013:</p> <ul style="list-style-type: none"> <li>e. All Early Retirement Benefits</li> <li>f. Disability Retirement Benefits</li> <li>g. The Family Survivor and Single Sum Death Benefit</li> <li>h. The "Pop Feature" on Joint &amp; Survivor benefits</li> </ul>
1/1/2012	<p>Actives:</p> <ul style="list-style-type: none"> <li>➤ Accrued benefits are frozen.</li> </ul>
1/1/2010	<p>Actives:</p> <ul style="list-style-type: none"> <li>➤ One-tenth of a year of Service Credit for each 100 hours of Covered Employment worked in a plan year, without limit, if at least 200 hours of Service Credit are earned in the plan year.</li> </ul> <p>Actives/Inactives:</p> <ul style="list-style-type: none"> <li>➤ Unreduced Early Pension Benefit at age 62 with 5 years of Vesting Service was eliminated and replaced with an unreduced Early Pension Benefit at age 62 with 20 years of Pension Service.</li> </ul>
1/1/2000	<p>Actives:</p> <ul style="list-style-type: none"> <li>➤ The unit monthly pension benefit was increased to \$75 (must work 100 hours in 1999 to get the \$75 a credit from 1991 to present for anyone who retires 1/1/2000 or after).</li> </ul> <p>Retirees:</p> <ul style="list-style-type: none"> <li>➤ An increase of ½ of 1% (.050%) from the date of retirement if retired before 1/1/1999.</li> <li>➤ A 13th check issued 2/1/2000 (not eligible if retired in 1999 or later).</li> </ul>
1/1/1999	<p>Actives:</p> <ul style="list-style-type: none"> <li>➤ The unit monthly pension benefit was increased to \$65 for each year of pension service earned after 1990.</li> <li>➤ The federally required 5-Year vesting rule was adopted</li> </ul> <p>Retirees:</p> <ul style="list-style-type: none"> <li>➤ all retirees whose effective date of pension was before 1/1/99 received a permanent increase based on years on pension (.65% per year retired).</li> </ul>
1/1/1996	<p>Actives:</p> <ul style="list-style-type: none"> <li>➤ The unit monthly pension benefit was increased to \$50 for each year of pension service earned after 1990.</li> <li>➤ Early Pension: <ul style="list-style-type: none"> <li>○ Eligibility was expanded to include 10 years of Vesting Service.</li> <li>○ No reduction in the if the participant is at least age 62 and has at least 5 years of Vesting Service.</li> </ul> </li> </ul>



#### 6.4 Contribution Rates

Effective Date	Hourly Contribution to Plan
7/1/1983	\$ 2.15
7/1/1984	2.25
7/1/1985	2.35
7/1/1986	2.50
6/1/1988	2.55
1/1/1989	2.50
6/1/1991	2.65
6/1/1994	2.75
6/1/1995	2.90
6/1/1996	2.60
6/1/1997	4.15
6/1/1998	3.25
6/1/1999	4.30
6/1/2000	4.35 (4.40*)
6/1/2001	4.00 (4.05*)
6/1/2002	4.22 (4.36*)
6/1/2003	4.78 (4.80*)
6/1/2004	5.39
6/1/2005	5.71
6/1/2006	6.31
6/1/2007	7.59
6/1/2008	8.59
2/1/2009	8.84
6/1/2009	9.49 (9.99*)
1/1/2010	10.20 (10.25*)
6/1/2010	11.34 (11.44*)**
6/1/2011	13.34 (13.44*)
8/1/2011	\$13.39 (13.49*)

\* Westchester, Rockland, and Putnam

\*\* Includes an 85¢ diversion from the Health and Welfare Fund

## 6.5 Funding Standard Account and Minimum Required Contributions

Rules for determining minimum required and maximum deductible contributions are set forth in IRC Sections 412 and 404, respectively. Since deductibility may be affected by factors not considered here, the deductibility and timing of contributions should be reviewed with tax counsel.

	<u>Actual</u> <u>2013</u>	<u>Projected</u> <u>2014</u>
For Plan Year ending December 31:		
Charges to the Credit Balance:		
a. Funding Deficiency	\$ 366,134	\$ 2,943,678
b. Normal cost	285,000	285,000
c. Amortization charges	5,701,717	5,701,717
d. Interest on above	<u>428,817</u>	<u>602,802</u>
e. Total charges	\$ 6,781,668	\$ 9,533,197
Credits to Credit Balance:		
f. Credit Balance at beginning of year	\$ 0	\$ 0
g. Employer contributions	1,843,878	2,570,880
h. Amortization credits	1,815,213	1,719,358
i. Interest on above	<u>178,899</u>	<u>194,655</u>
j. Total credits	\$ 3,837,990	\$ 4,484,893
Credit Balance/(Funding Deficiency) at end of Year	\$ (2,943,678)	\$ (5,048,304)
Minimum Required Contribution (e - (f + h) x (1.0725))	\$ 4,843,928	\$ 7,697,782
Minimum Without Regard to the Credit Balance (e - h x 1.0725))	\$ 4,843,928	\$ 7,697,782

The Plan's Credit Balance represents a cumulative measure of all prior contributions (since the initial ERISA effective date) against all prior minimum requirements. If cumulative contributions exceed cumulative minimums, then the Plan will maintain a Credit Balance which can be used to offset any current year minimum requirements. As of December 31, 2013, the Plan has a Credit Balance of \$(2,943,678). The minimum requirement for the year ending December 31, 2014 is \$7,697,782 after recognition of the Credit Balance.

## 6.6 Maximum Deductible Contribution

A. Traditional Maximum Deductible	\$ 6,591,635
B. 140% of Current Liability, less Actuarial Value of Assets	\$ 112,201,963
C. Greater of A or B	\$ 112,201,963

The maximum allowable deduction for the fiscal year ending December 31, 2014 is \$ 112,201,963. To be deductible for a given fiscal year, a contribution should be made by the time the tax return for that fiscal year is filed with the IRS (including extensions). Specific advice on the deductibility of contributions and timing should be reviewed with your tax counsel.

## 6.7 Current Liability at Beginning of Year

Current liability is the present value of accrued benefits under the Plan using actuarial assumptions as prescribed by the Retirement Protection Act of 1994 (RPA '94). The liability is determined using the same assumptions used to determine the Plan's funding requirements, except for the interest rate and mortality table. These values are used for specific, prescribed purposes.

### RPA '94 Current Liability

A. Assumptions:	
1. Interest rate	3.64%
2. Mortality table	RP-2000 per IRC §1.430(h)(3)-1
B. RPA '94 Current Liability	
	<u>Total Benefits</u>
1. Retirees and beneficiaries receiving payments	\$ 59,882,252
2. Inactive vested participants	14,842,440
3. Actives	
(a) Non-vested benefits	62,083
(b) Vested benefits	21,994,740
(c) Total Active	\$ 22,056,823
4. Total (1 + 2 + 3(c))	\$ 96,781,515
C. Expected Increase in Liability	\$ 0
D. Expected Benefits Accruing During the Year	\$ 5,489,487



**6.8 Amortization Schedule for Minimum Required Contribution**  
**Amortization Charges as of 1/1/2013**

<u>Date Established January 1</u>	<u>Base Type</u>	<u>Outstanding Balance</u>	<u>Years Remaining</u>	<u>Amortization Amount</u>
1998	Combined Charges	\$ 1,459,765	4	\$ 401,437
1999	Plan Change	3,600,413	20	312,205
2000	Plan Change	2,643,872	21	224,000
2000	Actuarial Loss	627,589	6	122,390
2001	Assumption Change	2,162,195	22	179,336
2001	Actuarial Loss	656,234	7	113,075
2002	Actuarial Loss	1,746,832	8	271,391
2003	Actuarial Loss	3,122,128	9	444,141
2003	Assumption Change	378,424	24	30,233
2004	Actuarial Loss	1,592,737	10	209,983
2005	Actuarial Loss	1,628,725	11	200,941
2006	Actuarial Loss	1,244,091	12	144,780
2006	Assumption Change	2,525,505	27	192,731
2007	Actuarial Loss	835,806	13	92,358
2008	Assumption Change	759,916	14	80,182
2009	Actuarial Loss - Assets	6,877,629	25	540,462
2009	Actuarial Loss - Other	1,065,694	15	107,884
2010	Actuarial Loss - Assets	2,821,664	25	221,734
2010	Actuarial Loss - Other	1,024,456	16	99,913
2010	Assumption Change	4,097,499	16	399,620
2011	Actuarial Loss	533,044	12	62,033
2012	Actuarial Loss	1,644,577	13	181,729
2012	Assumption Change	93,486	13	10,330
2013	Actuarial Loss	2,234,157	14	235,736
2013	Assumption Change	7,800,767	14	823,093
Total Charges		\$ 53,177,205		\$ 5,701,717

**Amortization Credits as of 1/1/2014**

<u>Date Established January 1</u>	<u>Base Type</u>	<u>Outstanding Balance</u>	<u>Years Remaining</u>	<u>Amortization Amount</u>
2001	Plan Change	\$ (1,171,453)	17	\$ (110,461)
2002	Assumption Change	(1,448,546)	18	(132,474)
2005	Plan Change	(962)	21	(82)
2008	Actuarial Gain	(406,918)	9	(57,886)
2008	Method Change	(3,029,998)	4	(833,253)
2010	Plan Change	(957,483)	11	(118,128)
2013	Plan Change	(4,333,059)	14	(457,200)
2014	Actuarial Gain	(97,537)	15	(9,874)
Total Credits		\$ (11,445,956)		\$ (1,719,358)
Net Charges/(Credits)		\$ 41,731,249		\$ 3,982,359

**6.9 Equation of Balance**

A. Net Outstanding Balance of Bases	\$ 41,731,249
B. Credit Balance	<u>(2,943,678)</u>
C. Unfunded Actuarial Accrued Liability (A-B)	\$ 44,674,927

## 7. Data Summary

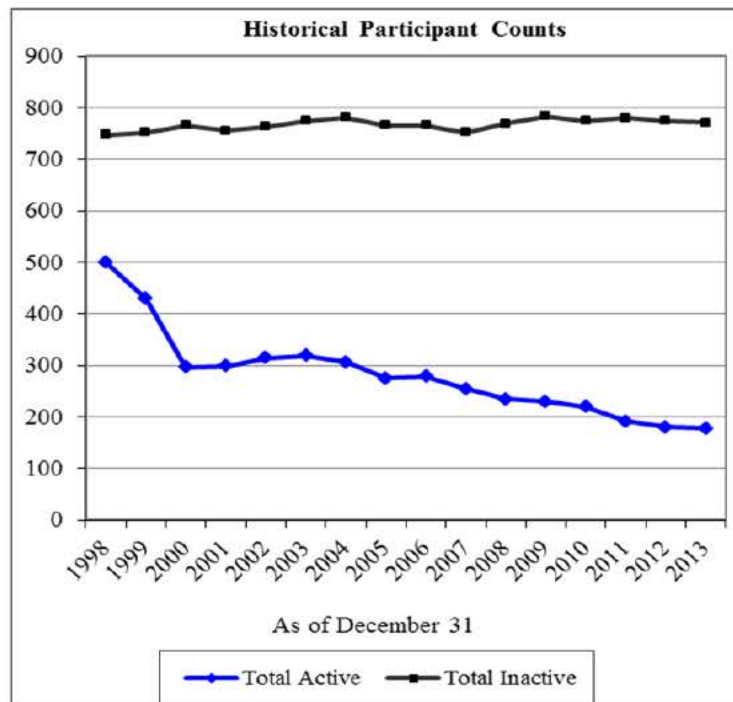
### 7.1 Flow of Lives

	<u>Actives</u>	<u>Inactive Vested</u>	<u>Disabled</u>	<u>Retired &amp; Beneficiaries</u>	<u>Total</u>
Beginning of year	180	157	54	563	954
To inactive vested	(16)	16			
Terminated non-vested	(17)				(17)
To retired	(5)	(3)		8	
To disabled					
Alternate Payee				1	1
Deaths			(2)	(27)	(29)
New Beneficiaries				12	12
Returned to work	6	(6)			
New entrants	30				30
Data Refinements		(4)		2	(2)
End of year	178	160	52	559	949



## 7.2 Historical Participation

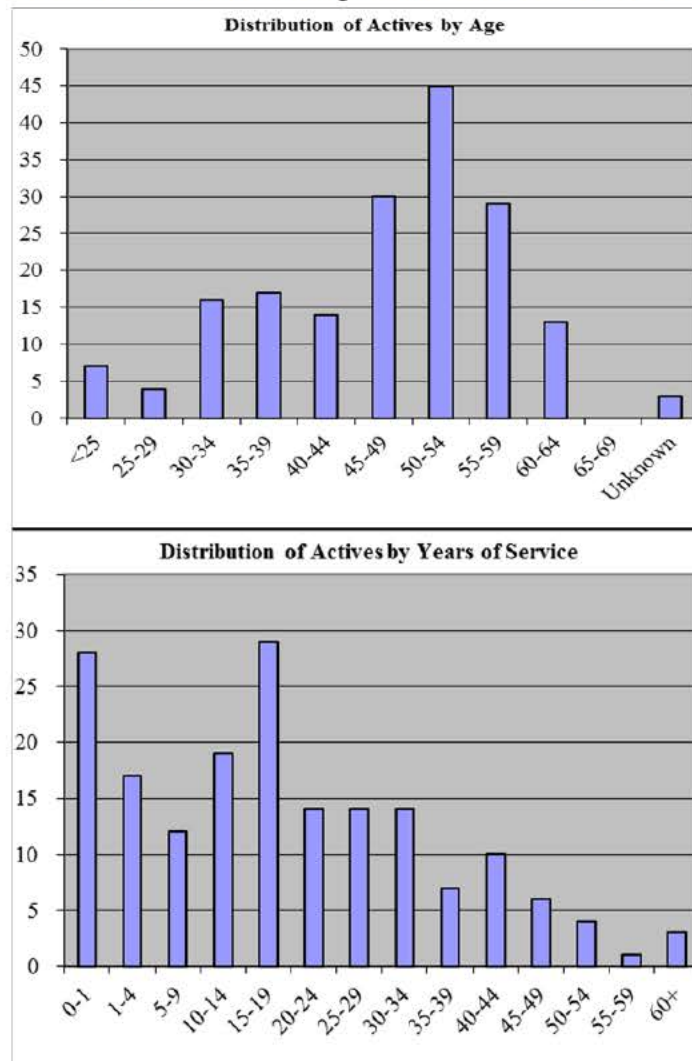
<u>As of December 31</u>	<u>Retired</u>	<u>Separated Vested</u>	<u>Active</u>	<u>Total</u>
1998	610	137	499	1,246
1999	620	132	430	1,182
2000	604	162	297	1,063
2001	614	141	299	1,054
2002	622	141	314	1,077
2003	625	150	319	1,094
2004	629	152	307	1,088
2005	627	139	275	1,041
2006	627	138	278	1,043
2007	619	133	255	1,007
2008	613	156	235	1,004
2009	613	170	230	1,013
2010	621	153	220	994
2011	617	163	192	972
2012	617	157	180	954
2013	611	160	178	949



### 7.3 Actives by Age and Future Service Credit

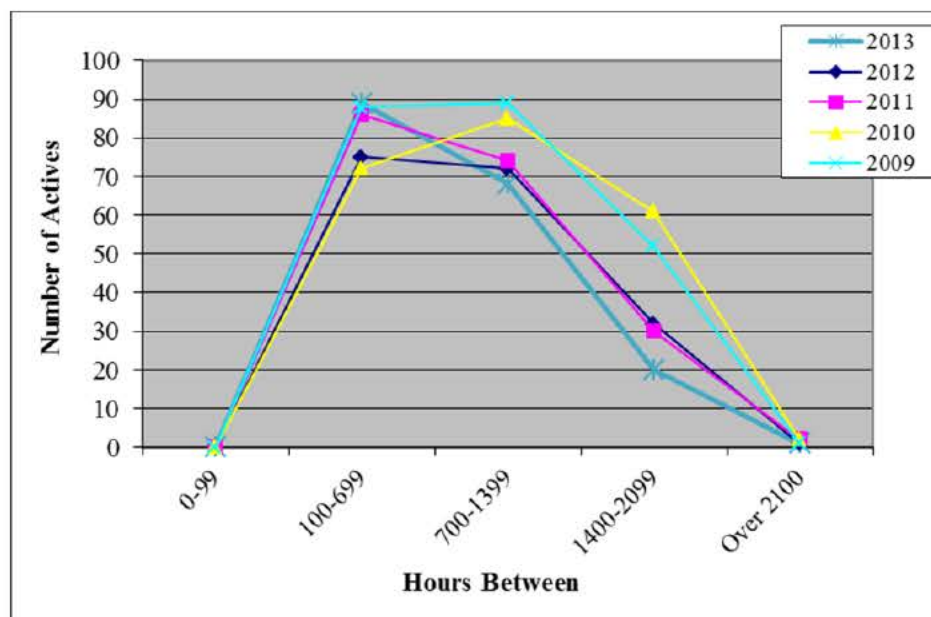
Age at Val	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Total
<25	6		1												7
25-29	2	1	1												4
30-34	4	2	1	4	5										16
35-39	8	2	2	3		2									17
40-44		6	2	2	2			1		1					14
45-49	4	3	2	3	3	4	2	2		5	1	1			30
50-54		2	2	3	8	5	10	3	1	4	4	1	1	1	45
55-59	1	1	1	3	9	2		6	4		1			1	29
60-64				1	2	1	2	2	2			2		1	13
65-69															0
Unknown	3														3
Total	28	17	12	19	29	14	14	14	7	10	6	4	1	3	178

The average age of the actives is 48.4 and the average Future Service Credit is 19.6 years.



#### 7.4 Distribution of Service Worked by Actives

<u>Hours</u>	<u>Count</u>
100-199	15
200-299	17
300-399	12
400-499	22
500-599	8
600-699	15
700-799	12
800-899	12
900-999	15
1000-1099	8
1100-1199	12
1200-1299	3
1300-1399	6
1400-1499	6
1500-1599	3
1600-1699	2
1700-1799	4
1800-1899	3
1900-1999	2
2000-2099	0
2100+	1
Total	178





## 7.5 Distribution of Periodic Benefits

The following table analyzes those who retired and commenced periodic benefits as of 12/31/2013.

### New Pensioners

<u>Class</u>	<u>Number</u>	Average <u>Age</u>	<u>Range of Monthly Pension</u>		
			<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Alternate Payee	1	58.4	168	168	168
Disability					
Early	6	62.3	618	2,207	3,972
Normal	4	71.0	42	655	1,388
Survivor	<u>12</u>	<u>82.7</u>	<u>73</u>	<u>342</u>	<u>916</u>
Total	23	74.3	42	876	3,972

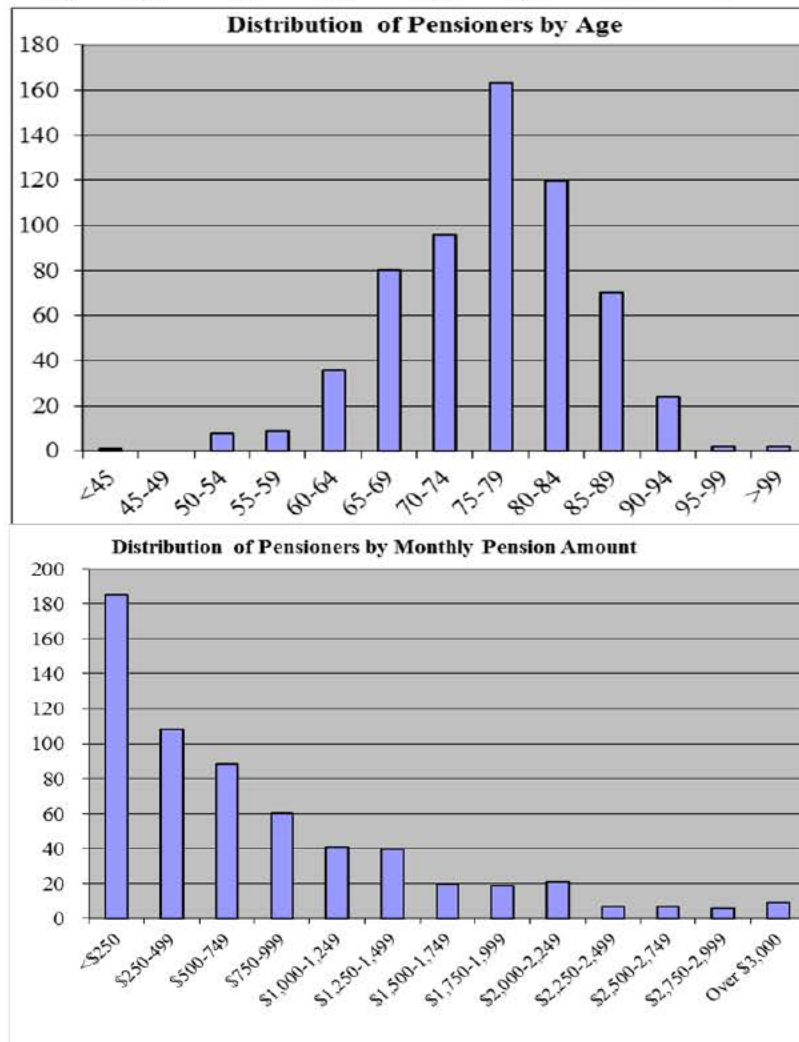
The following table analyzes those who are receiving periodic benefits on 12/31/2013.

### All Pensioners

<u>Class</u>	<u>Number</u>	Average <u>Age</u>	<u>Range of Monthly Pension</u>		
			<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>
Alternate Payee	5	58.7	168	544	1,321
Disability	52	67.5	114	1,157	2,643
Early	292	75.7	33	956	3,972
Normal	137	81.0	32	621	3,083
Survivor	<u>125</u>	<u>78.5</u>	<u>19</u>	<u>299</u>	<u>1,278</u>
Total	611	76.6	19	760	3,972

## 7.6 Distribution of Retirees Monthly Pensions

Age at Val	Under \$ 250	250- 499	500- 749	750- 999	1000- 1249	1250- 1499	1500- 1749	1750- 1999	2000- 2249	2250- 2499	2500- 2749	2750- 2999	Over \$ 3000	Total
<45	1													1
45-49														0
50-54			1			1	1	1	2			1	1	8
55-59	2	2			1	1		1	1				1	9
60-64	4	6	5	4		5	1	3	1		1	1	5	36
65-69	9	10	15	8	5	4	5	5	5	5	4	3	2	80
70-74	29	14	12	10	4	6	5	2	9	2	2	1		96
75-79	52	22	20	20	18	15	7	6	3					163
80-84	42	27	22	10	10	7	1	1						120
85-89	28	21	10	7	3	1								70
90-94	14	6	3	1										24
95-99	2													2
>99	2													2
Total	185	108	88	60	41	40	20	19	21	7	7	6	9	611



## 7.7 Distribution of Separated Vested Participant Accrued Monthly Pensions

### Accrued Monthly Normal Pension

Age at Val	Under \$250	250- 499	500- 749	750- 999	1000- 1249	1250- 1499	1500- 1749	1750- 1999	2000- 2249	2250- 2499	2500- 2749	2750- 2999	Over \$3000	Total
<25														0
25-29	2													2
30-34		1			1		1							3
35-39	1	1	4	4	1									11
40-44		3	7	4	2	2	1	1						20
45-49	1	5	4	9	3	1	3	2			1		1	30
50-54		2	12	5	7	3	4	1	3			1	1	39
55-59		6	9	6	3	3	4	1	1	1				34
60-64	2	2	4	3	2	1					1	1		16
65-69	2		1											3
70-74	1	1												2
Total	9	21	41	31	19	10	13	5	4	1	2	2	2	160

The average age of the terminated vested participants is 51.1, and the average monthly pension is \$967.

