

Lauterbach & Amen, LLP  
27W457 Warrenville Road  
Warrenville, IL 60555-3902

Actuarial Valuation  
as of May 1, 2014



VILLAGE OF ALSIP, ILLINOIS  
POSTRETIREMENT HEALTH  
PLAN

Actuarial Valuation Date: May 1, 2014  
Utilizing Data as of April 30, 2015  
For Fiscal Year-End April 30, 2015 Financial Statement Reporting

***LAUTERBACH & AMEN, LLP***



# Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

## VILLAGE OF ALSIP, ILLINOIS POSTRETIREMENT HEALTH PLAN

Actuarial Valuation Date: May 1, 2014

Utilizing Data as of April 30, 2015

For Fiscal Year-End April 30, 2015 Financial Statement Reporting

---

### **Submitted by:**

Lauterbach & Amen, LLP  
630.393.1483 Phone  
[www.lauterbachamen.com](http://www.lauterbachamen.com)

### **Contact:**

Todd A. Schroeder  
October 2, 2015

***LAUTERBACH & AMEN, LLP***



## TABLE OF CONTENTS

---

DISCLOSURES AND LIMITATIONS .....	1
MANAGEMENT SUMMARY .....	2
Summary of Actuarial Valuation .....	3
Notes to the Financial Statements .....	4
Notes to the Financial Statements - Continued .....	5
Comments and Analysis.....	6
ANNUAL REQUIRED CONTRIBUTION AND BALANCE SHEET DETAIL.....	7
Annual Required Contribution (“ARC”) Development .....	8
Balance Sheet Item and Expense Development .....	9
Actuarial Numbers by Group .....	10
PARTICIPANT DATA.....	11
Counts and Statistics .....	12
VALUATION PROCEDURES .....	13
Actuarial Methods.....	14
Actuarial Assumptions .....	15
Actuarial Assumptions – Continued.....	16
Actuarial Assumptions – Continued.....	17
Actuarial Assumptions – Continued.....	18
Summary of Eligibility and Coverage .....	19
Summary of Eligibility and Coverage - Continued .....	20
Development of Starting Claims Costs .....	21
GLOSSARY OF TERMS .....	22
GASB 45 Terminology .....	23
GASB 45 Terminology – Continued.....	24



## DISCLOSURES AND LIMITATIONS

This report documents the results of the Actuarial valuation of the Village of Alsip, Illinois Postretirement Health Plan. The purpose is to report the financial statement entries for the Annual Financial Report. Determinations for purposes other than reporting for the financial statements may be significantly different from the results herein.

The results in this report are based on information and data submitted by the Village of Alsip, Illinois Postretirement Health Plan including studies performed by prior actuaries. We did not prepare the actuarial valuations for the years prior to May 1, 2014. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness, as appropriate, based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The Village of Alsip, Illinois Postretirement Health Plan selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in this valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. There is no relationship between Village of Alsip, Illinois Postretirement Health Plan and Lauterbach & Amen, LLP that impairs our objectivity.

The information contained in this report was prepared for the use of the Village of Alsip, Illinois Postretirement Health Plan in connection with our actuarial valuation. It is not intended or necessarily suitable for other purposes. It is intended to be used in its entirety to avoid misrepresentations.

Respectfully Submitted,  
LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA





## MANAGEMENT SUMMARY

Summary of Actuarial Valuation  
Notes to the Financial Statements  
Comments and Analysis

---

## MANAGEMENT SUMMARY

---

### SUMMARY OF ACTUARIAL VALUATION

This report details the data, assumptions, and underlying methodology used in the GASB 45 actuarial valuation as of May 1, 2014. The following exhibit illustrates the Actuarial Accrued Liability (“AAL”), Annual Required Contribution (“ARC”), Annual OPEB Cost, and Net OPEB Obligation.

	As of Actuarial Valuation Date 5/1/2014
<b>Actuarial Accrued Liability (AAL)</b>	
Actives Fully Eligible	\$3,931,164
Actives Not Yet Fully Eligible	15,243,253
Retirees and Dependents	24,539,834
<b>TOTAL AAL</b>	<b>\$43,714,250</b>

	Fiscal Year 2015
<b>Annual Required Contribution (ARC), Annual OPEB Cost and Net OPEB Obligation</b>	
<b>Annual Required Contribution (ARC)</b>	<b>\$2,848,448</b>
<b>Annual OPEB Cost</b>	<b>\$2,863,381</b>
<b>Net OPEB Obligation (end of the year)</b>	<b>\$4,208,070</b>

Refer to the “GASB Terminology” section of this report for definitions of the GASB 45 terminology.

The Net OPEB Obligation (“NOO”) at the end of the year is based on expected benefit payments of \$895,182 for retiree medical coverage by the Village for the period 5/1/2014 to 4/30/2015. A portion of this amount is based on the cost sharing provisions. In addition, a portion is related to the increase in active premiums due to the presence of retirees in the determination of blended retiree/active premiums. To the extent that actual payments paid through the end of the fiscal year are different, the NOO will change.

The NOO is based on the starting NOO for Fiscal Year 2015 of \$2,239,871. If the starting NOO is different, the results for April 30, 2015 will change.



## MANAGEMENT SUMMARY

### NOTES TO THE FINANCIAL STATEMENTS

	Fiscal Year 2015
<b>Annual OPEB Cost and Net OPEB Obligation</b>	
Annual Required Contribution	\$2,848,448
Interest on Net OPEB Obligation	89,595
Adjustment to Annual Required Contribution	(74,662)
Annual OPEB Cost	\$2,863,381
Estimated Employer Contributions (Payments)	(895,182)
Change in Net OPEB Obligation	\$1,968,199
Net OPEB Obligation – beginning of the year	2,239,871
Net OPEB Obligation – end of the year	\$4,208,070
Annual OPEB Cost (charge to the Income Statement)	\$2,863,381
Percentage of Annual OPEB Cost Contributed	31%
Net OPEB Obligation at end of the year (Balance Sheet Asset / Liability)	\$4,208,070
<b>Funded Status</b>	
Actuarial Accrued Liability (AAL)	\$43,714,250
Actuarial Value of Assets	0
Unfunded Actuarial Accrued Liability (UAAL)	\$43,714,250
Funded Ratio (Assets as a percentage of AAL)	0%
Annual Covered Payroll	\$8,634,879
UAAL as a Percentage of Covered Payroll	506%
<b>Actuarial Methods and Assumptions</b>	
Measurement Date	April 30, 2015
Investment Rate of Return	
Expected Return on Plan Assets	Not Applicable
Expected Return on Employer's Assets	4.00%
Rate of Compensation Increase	4.00%



## *MANAGEMENT SUMMARY*

---

### NOTES TO THE FINANCIAL STATEMENTS - CONTINUED

<b>Assumed Health Care Trend Rates</b>	
Initial Health Care Cost Trend Rate	4.90%
Second Year Health Care Cost Trend Rate	8.50%
Ultimate Health Care Cost Trend Rate	5.50%
Fiscal Year the Ultimate Rate is Reached	FY 2029
<b>Additional Information</b>	
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent
Amortization Period (years)	30
Method Used To Determine Actuarial Value of Assets	Not Applicable

Trend information shown is for Village Medical Plan coverage.





## *MANAGEMENT SUMMARY*

---

### **COMMENTS AND ANALYSIS**

#### Village Costs

Implicit Village costs for retiree coverage are predicated on costs being higher for retirees than the premium charged for coverage that blends active and retired members. We have revised the determination method for implicit costs to calculate gross costs on an age-specific basis, and compare to the blended premium to generate implicit retiree costs.

#### Assumptions

We have revised the expected increases in Medical costs to 4.90% in the first year of the projection and 8.50% in the second year of the projection. Long-term, ultimate increases in medical costs have been set at 5.50%.

The expected rate of return on Village assets has remained the same at 4.00%.

The mortality, retirement, termination, and disability tables have been changed to reflect more current trends in police and fire populations.

Based on the current retiree population, it was assumed that 50% of IMRF employees and 75% of Firefighters and Police Officers in retirement will elect for spousal coverage.

The changes in the assumptions were made to better reflect the future anticipated experience in the Plan.





## ANNUAL REQUIRED CONTRIBUTION AND BALANCE SHEET DETAIL

Annual Required Contribution (“ARC”) Development  
Balance Sheet Item and Expense Development

---

# ***ANNUAL REQUIRED CONTRIBUTION AND BALANCE SHEET DETAIL***

---

## **ANNUAL REQUIRED CONTRIBUTION (“ARC”) DEVELOPMENT**

### **Calculation of Normal Cost Component**

a. Normal Cost	\$1,337,794
b. Interest on Normal Cost	<u>53,512</u>
c. Normal Cost Component	\$1,391,306

### **Calculation of Amortization Component**

d. Actuarial Accrued Liability (AAL)	\$43,714,250
e. Actuarial Value of Assets	<u>0</u>
f. Unfunded Actuarial Accrued Liability (UAAL)	\$43,714,250
g. Amortization Period (years)	30
h. Investment Rate of Return	0.00%
i. Amortization Factor	30.0000
j. Annual Amortization	1,457,142
k. Interest on Amortization Payment	<u>0</u>
l. Amortization Component	\$1,457,142

### **Calculation of ARC**

Normal Cost Component	\$1,391,306
Amortization Component	<u>1,457,142</u>
Annual Required Contribution	\$2,848,448



# ***ANNUAL REQUIRED CONTRIBUTION AND BALANCE SHEET DETAIL***

---

## **BALANCE SHEET ITEM AND EXPENSE DEVELOPMENT**

### **Calculation of Annual OPEB Cost**

Annual Required Contribution (ARC)	\$2,848,448
Interest on Net OPEB Obligation	89,595
Adjustment to Annual Required Contribution	<u>(74,662)</u>
Annual OPEB Cost	\$2,863,381

### **Calculation of Net OPEB Obligation**

Net OPEB Obligation – beginning of the year	\$2,239,871
Annual OPEB Cost	2,863,381
Estimated Employer Contributions (Payments)	<u>(895,182)</u>
Net OPEB Obligation – end of the year	\$4,208,070

Refer to the “GASB Terminology” section of this report for definitions of the GASB 45 terminology.

The Net OPEB Obligation (“NOO”) at the end of the year is based on expected benefit payments of \$895,182 for retiree medical coverage by the Village for the period 5/1/2014 to 4/30/2015. A portion of this amount is based on the cost sharing provisions. In addition, a portion is related to the increase in active premiums due to the presence of retirees in the determination of blended retiree/active premiums. To the extent that actual payments paid through the end of the fiscal year are different, the NOO will change.

The NOO is based on the starting NOO for Fiscal Year 2015 of \$2,239,871. If the starting NOO is different, the results for April 30, 2015 will change.



## ***ANNUAL REQUIRED CONTRIBUTION AND BALANCE SHEET DETAIL***

---

### **ACTUARIAL NUMBERS BY GROUP**

<b>Division</b>	<b>Normal Cost</b>	<b>Active Liability</b>	<b>Retired Liability</b>	<b>Total Liability</b>	<b>ARC</b>	<b>Expected Payments</b>	<b>Actives</b>	<b>Retirees</b>	<b>Total</b>
IMRF	290,989	4,843,846	4,354,572	9,198,419	597,603	224,225	39	20	59
Police	538,575	6,634,168	9,931,990	16,566,157	1,090,780	337,302	40	28	68
Fire	561,742	7,696,402	10,253,272	17,949,674	1,160,064	333,655	37	27	64
<b>Total</b>	<b>1,391,306</b>	<b>19,174,416</b>	<b>24,539,834</b>	<b>43,714,250</b>	<b>2,848,448</b>	<b>895,182</b>	<b>116</b>	<b>75</b>	<b>191</b>





## PARTICIPANT DATA

Counts and Statistics

---

## VALUATION PROCEDURES

---

### COUNTS AND STATISTICS

	<b>Fiscal Year</b>
	<b>2015</b>
Census Date	April 30, 2015
<b>Participants</b>	
Actives Fully Eligible to Retire	15
Actives Not Yet Fully Eligible to Retire	101
Retirees and Dependents	<u>75</u>
<b>TOTAL</b>	<b>191</b>
<b>Average Ages</b>	
Actives Fully Eligible to Retire	58.9
Actives Not Yet Fully Eligible to Retire	38.7
Retirees and Dependents	65.4
<b>Average Service</b>	
Actives Fully Eligible to Retire	20.5
Actives Not Yet Fully Eligible to Retire	10.4





## VALUATION PROCEDURES

Actuarial Methods  
Actuarial Assumptions  
Summary of Eligibility and Coverage  
Development of Starting Claims Costs

---



## ***VALUATION PROCEDURES***

---

### **ACTUARIAL METHODS**

<b>Measurement Date</b>	4/30/2015
<b>Data Collection Date</b>	4/30/2015
<b>Participant Data</b>	Employee and Retiree data was supplied by the plan sponsor as of the census date. Data on persons receiving benefits was supplied by the plan sponsor.
<b>Actuarial Cost Method</b>	Entry Age Normal (Level Percent of Pay)
<b>Asset Valuation Method</b>	Not Applicable
<b>Benefits Not Included</b>	Dental and Vision

### **Nature of Actuarial Calculations**

The results documented in this report are estimates based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximated or deemed immaterial, and, therefore, are not valued. Assumptions may be made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that significant items in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately.

Actual future experience will differ from the assumptions used in the calculations. As these differences arise, the expense for accounting purposes will be adjusted in future valuations to reflect such actual experience.

A range of results different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision which is not inherent in actuarial calculations.



## VALUATION PROCEDURES

---

### ACTUARIAL ASSUMPTIONS

<b>Discount Rate</b>	4.00%																																
<b>Salary Increase Rate</b>	4.00%																																
<b>Expected Rate of Return on Assets</b>	Not Applicable																																
<b>Health Care Trend</b> (FY = Fiscal Year)	<table><tr><td><u>Period</u></td><td><u>Medical</u></td></tr><tr><td>FY 15 to FY 16</td><td>4.90%</td></tr><tr><td>FY 16 to FY 17</td><td>8.50%</td></tr><tr><td>FY 17 to FY 18</td><td>8.50%</td></tr><tr><td>FY 18 to FY 19</td><td>8.00%</td></tr><tr><td>FY 19 to FY 20</td><td>8.00%</td></tr><tr><td>FY 20 to FY 21</td><td>7.50%</td></tr><tr><td>FY 21 to FY 22</td><td>7.50%</td></tr><tr><td>FY 22 to FY 23</td><td>7.00%</td></tr><tr><td>FY 23 to FY 24</td><td>7.00%</td></tr><tr><td>FY 24 to FY 25</td><td>6.50%</td></tr><tr><td>FY 25 to FY 26</td><td>6.50%</td></tr><tr><td>FY 26 to FY 27</td><td>6.00%</td></tr><tr><td>FY 27 to FY 28</td><td>6.00%</td></tr><tr><td>FY 28 to FY 29</td><td>5.50%</td></tr><tr><td>Ultimate</td><td>5.50%</td></tr></table>	<u>Period</u>	<u>Medical</u>	FY 15 to FY 16	4.90%	FY 16 to FY 17	8.50%	FY 17 to FY 18	8.50%	FY 18 to FY 19	8.00%	FY 19 to FY 20	8.00%	FY 20 to FY 21	7.50%	FY 21 to FY 22	7.50%	FY 22 to FY 23	7.00%	FY 23 to FY 24	7.00%	FY 24 to FY 25	6.50%	FY 25 to FY 26	6.50%	FY 26 to FY 27	6.00%	FY 27 to FY 28	6.00%	FY 28 to FY 29	5.50%	Ultimate	5.50%
<u>Period</u>	<u>Medical</u>																																
FY 15 to FY 16	4.90%																																
FY 16 to FY 17	8.50%																																
FY 17 to FY 18	8.50%																																
FY 18 to FY 19	8.00%																																
FY 19 to FY 20	8.00%																																
FY 20 to FY 21	7.50%																																
FY 21 to FY 22	7.50%																																
FY 22 to FY 23	7.00%																																
FY 23 to FY 24	7.00%																																
FY 24 to FY 25	6.50%																																
FY 25 to FY 26	6.50%																																
FY 26 to FY 27	6.00%																																
FY 27 to FY 28	6.00%																																
FY 28 to FY 29	5.50%																																
Ultimate	5.50%																																
<b>Retiree Contribution Trend</b>	Same as Health Care Trend																																



## VALUATION PROCEDURES

---

### ACTUARIAL ASSUMPTIONS – CONTINUED

#### Retirement Rates

100% of the L&A Assumption Study Cap Age 65 for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.100	53	0.180
51	0.100	54	0.180
52	0.100	55	0.180

100% of the L&A Assumption Study for Police 2012 Cap Age 65. Sample Rates as Follows:

Age	Rate	Age	Rate
50	0.170	53	0.170
51	0.170	54	0.220
52	0.170	55	0.220

IMRF Rates for IMRF.

#### Withdrawal Rates

100% of the L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.049	40	0.008
30	0.030	45	0.004
35	0.016	50	0.002

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.064	40	0.019
30	0.047	45	0.012
35	0.031	50	0.007

IMRF Rates for IMRF.



## VALUATION PROCEDURES

---

### ACTUARIAL ASSUMPTIONS – CONTINUED

#### Disability Rates

100% of the L&A Assumption Study for Firefighters 2012.  
Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.004
30	0.000	45	0.007
35	0.002	50	0.012

100% of the L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.001	40	0.005
30	0.002	45	0.006
35	0.004	50	0.007

IMRF Rates for IMRF.

#### Mortality Rates

L&A Assumption Study for Firefighters 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.000
30	0.000	45	0.001
35	0.000	50	0.001

L&A Assumption Study for Police 2012. Sample Rates as Follows:

Age	Rate	Age	Rate
25	0.000	40	0.001
30	0.000	45	0.001
35	0.001	50	0.002

IMRF Rates for IMRF.



## VALUATION PROCEDURES

### ACTUARIAL ASSUMPTIONS – CONTINUED

**Claims** See accompanying tables for sample HCA claims data.

HCA				
Age	Retiree		Spouse	
	Male	Female	Male	Female
50	\$7,315	\$8,752	\$12,590	\$12,728
55	\$9,285	\$9,979	\$12,571	\$12,085
60	\$11,620	\$12,008	\$13,335	\$12,753
64	\$13,751	\$14,368	\$14,419	\$14,712
65	\$6,462	\$6,752	\$6,776	\$6,914
70	\$7,725	\$8,071	\$8,100	\$8,265
75	\$8,387	\$8,764	\$8,604	\$8,974
80	\$8,991	\$9,395	\$9,207	\$9,620
85	\$9,403	\$9,825	\$9,619	\$10,060
89+	\$9,592	\$10,023	\$9,809	\$10,263

**Election at Retirement** Coverage election at retirement is assumed at the following rates:

<b>Police</b>	100%
<b>Fire</b>	100%
<b>IMRF</b>	100%
<b>Disability</b>	100%
<b>PSEBA</b>	100%

### Participation

100% of active IMRF, Police Officers, and Firefighters are assumed to continue the current participation in the active medical plan into the retiree medical plan upon retirement. If an employee has waived active medical coverage they are assumed not to participate in the retiree medical plan.

### Marriage Status

75% of Firefighters and Police Officers and 50% of IMRF employees are assumed to elect medical coverage for spouses in retirement.



## VALUATION PROCEDURES

---

### SUMMARY OF ELIGIBILITY AND COVERAGE

#### Eligibility Provisions

*Full-Time Employees- IMRF, Police, and Fire*

Full-Time Village employees age 50 with at least 20 years of service are covered.

#### Medical/Prescription Coverage

*Types of Coverage:*

Blue Cross Blue Shield HCA Medical Plan

*Coverage Provisions:*

*All Retirees – IMRF, Police, and Fire*

If an Employee retires at a minimum age of 50 with at least 20 years of service, the Employee will pay a % of the premium for whichever plan tier (Single, Family, etc) they elect based on the graduated scale shown below. The Village pays the remaining applicable %.

Age	Years of Service	% Paid by Retiree
50 – 54	20	50%
55 - 65	20	25%
	21	24%
	22	23%
	23	22%
	24	21%
	25	20%
	26	19%
	27	18%
	28	17%
	29	16%
	30	15%
65+	20	10%

Eligible employees who leave employment voluntarily prior to age 50 and for whom the State of Illinois requires continued coverage, will be required to pay 100% of current COBRA rates until age 50 and entrance into a pension retirement program. Upon those criteria being met, (age 50 and entrance into a pension retirement program), the Retiree portion of the premium will be reduced to 50% until age 65. After age 65, the Retiree portion is further reduced to 10% of the premium.



## ***VALUATION PROCEDURES***

---

### **SUMMARY OF ELIGIBILITY AND COVERAGE - CONTINUED**

If an Employee is duty-disabled, the Employee will pay 15% of the premium for whichever plan tier they elect up to age 65. After age 65, the Employee portion is further reduced to 10% of the premium. The Village pays the remaining applicable percentage.

Dependent coverage may continue should the Retiree terminate coverage, with the Dependent paying for COBRA coverage for 18 months.

Dependent coverage may continue should the Retiree pass away, with the Dependent paying for the coverage at the deceased retiree's rate of premium as well as the age of the dependent.

Coverage is Secondary to Medicare once the Retiree is eligible.



## ***VALUATION PROCEDURES***

---

### **DEVELOPMENT OF STARTING CLAIMS COSTS**

Starting costs for the Village Plans were developed based on premiums charged for coverage. The insurance carrier charges actives and retirees the same premium rates. According to GASB 45, when an employer provides benefits to both active employees and retirees through the same plan, the benefits to retirees should be segregated and measured independently for actuarial measurement purposes. The projection of future retiree benefits should be based on claims costs, or age-adjusted premiums approximating claims costs, for retirees. As such, premiums were estimated for under-65 retirees and their spouses as if they were rated on a stand-alone basis. The results were then disaggregated into age-specific starting costs based on average ages and assumptions on the relationship between costs and increasing age.







## GLOSSARY OF TERMS

---

## ***GLOSSARY OF TERMS***

---

### **GASB 45 TERMINOLOGY**

**Actuarial Accrued Liability (“AAL”)** – The AAL is the actuarial present value of future benefits based on employees’ service rendered to the measurement data using the selected actuarial cost method. It is that portion of the Actuarial Present Value of plan benefits and expenses allocated to prior years of employment. It is not provided for by future Normal Costs.

*Retirees & Dependents* – Former employees who have satisfied the age and service requirement and are currently receiving postretirement health care benefits

*Actives Fully Eligible* – Active employees who have satisfied the age and service requirement for postretirement health care benefits

*Actives Not Fully Eligible* – Active employees who have not yet satisfied the age and service requirement for postretirement health care benefits

**Normal Cost** – The Normal Cost is the present value of future benefits earned by employees during the current fiscal year. It is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

**Unfunded Actuarial Accrued Liability (“UAAL”)** – The excess of the AAL over the Actuarial Value of Assets. The UAAL is amortized over a period either in level dollar amounts or as a level percentage of projected payroll. For an unfunded plan, the UAAL is equal to the AAL.

$$\begin{aligned} \text{UAAL} &= \text{AAL} \\ &\quad - \text{Actuarial Value of Assets} \end{aligned}$$

The maximum amortization period for the UAAL is 30 years. The minimum amortization period for a decrease in liability as a result of a method change is 10 years.

**Annual Required Contribution (“ARC”)** – The ARC is the “required” cash contribution to the plan in order to keep up with benefit accruals and payments. It is an amount that would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability if paid on an ongoing basis. If the plan were funded, the ARC would equal the employer’s periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the GASB 45 parameters. For non-funded plans, this amount is calculated and used to increase the net unfunded OPEB obligation.

$$\begin{aligned} \text{ARC} &= \text{Normal Cost} \\ &\quad + \text{Amortization of the UAAL} \\ &\quad + \text{Interest Adjustment} \end{aligned}$$



## ***GLOSSARY OF TERMS***

---

### **GASB 45 TERMINOLOGY – CONTINUED**

***Net OPEB Obligation (“NOO”)*** – The NOO is the cumulative difference between past amounts expensed and past amounts actually contributed. If expense is greater than contributions, there will a liability. Conversely, if contributions are greater than the expense, there will be an asset.

$$\begin{aligned}\text{NOO} = & \text{NOO at the Beginning of the Year} \\ & + \text{Annual OPEB Cost} \\ & - \text{Actual Contributions}\end{aligned}$$

The Net OPEB Obligation is represented as a balance sheet liability in the Statement of Net Assets.

***Annual OPEB Cost*** – Also referred to as the “expense” the Annual OPEB Cost is an accrual-basis measure of the periodic cost of an employer’s participation in a defined benefit OPEB plan. The Annual OPEB Cost is recorded as an expense and disclosed in the government-wide financial statement. It is the annual charge to the Income Statement.

$$\begin{aligned}\text{Annual OPEB Cost} = & \text{ARC} \\ & + \text{Interest on Net OPEB Obligation} \\ & - \text{Adjustment to the ARC}\end{aligned}$$

