

GENEVA COMMUNITY UNIT SCHOOL DISTRICT 304
RETIREE HEALTH INSURANCE PLAN

ACTUARIAL VALUATION
AS OF JUNE 30, 2014

October 20, 2015

Ms. Donna V. Oberg
Assistant Superintendent – Business Services
Geneva Community Unit School District 304
227 N. Fourth Street
Geneva, Illinois 60134

**Re: Actuarial Valuation of the Geneva Community Unit School District 304
Retiree Health Insurance Plan As of June 30, 2014 for GASB Statement No. 45**

Dear Ms. Oberg:

We are pleased to submit our actuarial report on the actuarial valuation of the Geneva Community Unit School District 304 Retiree Health Insurance Plan as of June 30, 2014 for purposes of GASB Statement No. 45.

The report consists of eight Sections and one Appendix as follows:

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We would be pleased to discuss any aspects of this report with you at your convenience.

Respectfully submitted,



Sandor Goldstein, F.S.A
Consulting Actuary

A. PURPOSE AND SUMMARY

Under GASB Statement No. 45, actuarial liabilities and the annual required contribution need to be determined for the Geneva Community Unit School District 304 Retiree Health Insurance Plan. We have therefore performed an actuarial valuation as of June 30, 2014 of the Geneva Community Unit School District 304 Retiree Health Insurance Plan. The purpose of the valuation was to determine the total actuarial liability and annual required contribution for the retiree health insurance benefits provided under the plan for financial reporting purposes pursuant to GASB Statement No. 45.

This report is intended to present the results of the valuation. The results of the valuation are summarized below:

1. Total Actuarial Liability	\$	556,567
2. Actuarial Value of Assets		0
3. Unfunded Actuarial Liability		556,567
4. Annual Required Contribution For Year Beginning July 1, 2014		67,824

B. DATA USED FOR THE VALUATION

Participant Data. The participant data required to carry out the valuation was supplied by the staff of Geneva Community Unit School District 304. The membership of the plan as of June 30, 2014, on which the valuation was based, is summarized in Exhibit 1. It can be seen that there were 167 active employees and 3 retirees currently receiving benefits included in the valuation.

EXHIBIT 1

Summary of Membership Data

1. Number of Retiree Currently Receiving Benefits	3
2. Number of Active Employees	<u>167</u>
3. Total Number of Members	<u>170</u>
4. Average Age of Active Employees	50.9
5. Average Age of Retired Members	62.2
6. Average Years of Service of Active Employees	9.4

Assets. Assets are not being accumulated in advance for the payment of retiree health insurance benefits. The benefits are paid by the employer on a “pay-as-you-go” basis. Therefore, the net assets of the plan as of June 30, 2014 are equal to \$0.

C. PLAN PROVISIONS

Our valuation was based on the provisions of the Plan in effect as of June 30, 2014. The provisions of the plan are summarized below:

Non-certified retirees and their dependents are able to stay on the district's medical insurance plan until age 65 by paying 100% of the required premium. These required premiums are intended to represent the average total cost of the plan for all participants. An HMO and three PPO plan are available for retirees. Since there is only one eligible employee in the PPO 1500 plan, we have only considered the HMO plan, the PPO 400 plan and the PPO 750 plan in the valuation.

Retiree Premiums

As of July 1, 2014, retirees were required to pay the following monthly premiums, which are intended to cover the average cost per participant in the health insurance plan:

HMO

<u>COVERAGE</u>	<u>MONTHLY PREMIUM</u>
Single	\$ 544.71
Family	\$ 1,490.56

PPO 400

<u>COVERAGE</u>	<u>MONTHLY PREMIUM</u>
Single	\$ 793.23
Family	\$ 2,062.36

PPO 750

<u>COVERAGE</u>	<u>MONTHLY PREMIUM</u>
Single	\$ 652.53
Family	\$ 1,696.54

Implicit Employer Subsidy

The retiree premiums under the plan are based on the average cost for all participants in the plan. The difference between the higher age-related costs for retirees and the average cost for all participants in the plan represents an employer subsidy for providing retiree health insurance benefits that needs to be accounted for under GASB Statement No. 45.

After age 65, retirees and their dependents pay the full amount of the Medicare supplement premium. We have assumed that the Medicare supplement premiums are self supporting and that there is no implicit subsidy for Medicare eligible retirees.

D. ACTUARIAL ASSUMPTIONS AND COST METHOD

In performing the actuarial valuation of the retiree health insurance program for purposes of GASB Statement No. 45, we used such parameters and assumptions as are prescribed in GASB Statement No. 45 for actuarial valuations of retiree health insurance benefits. These parameters and assumptions are described below:

Interest Rate Assumption

Under GASB Statement No. 45, if no assets have been accumulated under a retiree health insurance program, the interest rate assumption is to be based on the investments of the employer. As governmental employers are able to invest only in short term, fixed income securities, we have used an interest rate assumption of 4.5% in performing the actuarial valuation of the retiree health insurance program.

Medical Trend Rate Assumption

One of the most important assumptions is the medical trend rate assumption used to increase per member medical costs in future years. The medical trend rate assumption that we have used starts at 7.5% in 2015 and gradually declines to 5.0% by the year 2020 as follows:

<u>Year</u>	<u>Medical Trend</u>
2015	7.5%
2016	7.0%
2017	6.5%
2018	6.0%
2019	5.5%
2020 and later	5.0%

Per Retiree Monthly Costs

The monthly premiums for retirees to participate in the health insurance plan represent the average monthly cost per participant of the health insurance benefits provided under the plan.

GASB Statement No. 45 provides that projection of future retiree health care benefits should be based on actuarial standards issued by the Actuarial Standards Board. Actuarial Standard of Practice No. 6 provides that actuaries should consider the variation of health care costs by age and should use appropriate age bands if the costs vary significantly.

We have therefore developed age-adjusted costs per retiree that are equivalent to the above average costs per participant by using the Aging Curve for Health Care Costs that is included in Table 4 of the study Aging Curves for Health Care Costs in Retirement, by Jeffrey P. Petertil, published in the July 2005 issue of the *North American Actuarial Journal*.

The percent increases in health care costs by age that are shown in Table 4 of the above paper are as follows:

<u>Age Band</u>	<u>Representative One Year Aging Factor</u>
50-54	3.3%
55-59	3.6%
60-64	4.2%
65-69	3.0%
70-74	2.5%
75-79	2.0%
80-84	1.0%
85-89	0.5%
90 and over	0.0%

Applying the above rates of increases in health care costs by age, we developed costs per retiree by five-year age groups that were equivalent to the above average costs per participant. This was done separately for each of the three health insurance plans which were considered. For this purpose the participants in the PPO 1500 plan were considered to be in the PPO 750 plan. The costs per retiree by five-year age groups were developed so the total of the age-adjusted costs was equal to the total of the average costs for each plan.

Using the above approach and taking into account the number of participants in each plan, we developed the following age adjusted total monthly total costs per retiree:

HMO

<u>Age-Band</u>	<u>Age-Adjusted Monthly Cost Per Retiree</u>
55-59	\$ 622.78
60-64	\$ 754.05

PPO 400

<u>Age-Band</u>	<u>Age-Adjusted Monthly Cost Per Retiree</u>
55-59	\$ 656.36
60-64	\$ 794.72

PPO 750

<u>Age-Band</u>	<u>Age-Adjusted Monthly Cost Per Retiree</u>
55-59	\$ 749.38
60-64	\$ 907.34

We determined the employer's monthly cost per retiree by deducting the retiree premiums from the above total monthly cost per retiree.

Participation Rates and Spouse Coverage

We have assumed that 75% of current active employees will participate in the retiree health insurance plan. We have assumed that 50% will have Family coverage.

Demographic Assumptions

Mortality Rates. The RP-2000 Combined Table, projected to 2014, was used.

Termination Rates. For support staff with less than 8 years of service termination rates varying by age and service were used. The following is a sample of the termination rates that were used:

<u>Years of Service</u>	<u>Rate of Termination</u>	
	<u>Male Less than 8 Years Service</u>	<u>Female Less than 8 Years Service</u>
0	.1790	.2461
3	.1316	.1810
7	.0684	.0941

Rate of Termination

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	.0530	.0720
30	.0410	.0610
35	.0330	.0490
40	.0270	.0390
45	.0230	.0320
50	.0200	.0270

Retirement Rates. Rates of retirement for each age from 55 to 70 were used. For support staff, higher rates of retirement are used for ages 55-59 if the employee has over 35 years of service. The following is a sample of the retirement rates that were used:

Rate of Retirement

<u>Age</u>	<u>Male IMRF</u>	<u>Female IMRF</u>
55	.0725	.0575
60	.1200	.1000
65	.2500	.2300
70	1.0000	1.0000

Actuarial Cost Method. The projected unit credit actuarial cost method was used for the valuation. This method allocates a cost to each year of an employee's service on the basis of service credits earned by the employee during the year. The portion of costs allocated to past years of service is called the accrued liability, and the portion allocated to the current year is called the normal cost.

E. ACTUARIAL LIABILITY

The actuarial liability as determined under the valuation for the various classes of members is summarized in Exhibit 3. The total actuarial liability is then compared with the actuarial value of assets in order to arrive at the unfunded actuarial liability.

As of June 30, 2014, the total actuarial liability for retiree health insurance benefits provided under the plan is \$556,567, the actuarial value of assets is \$0 and the unfunded actuarial liability is \$556,567.

EXHIBIT 3

Actuarial Liability as of June 30, 2014

1. Actuarial Liability for Active Members	\$ 533,461
2. Actuarial Liability for Members Receiving Benefits	<u>23,106</u>
3. Total Actuarial Liability	<u>\$ 556,567</u>
4. Actuarial Value of Assets	<u>0</u>
5. Unfunded Actuarial Liability	<u>\$ 556,567</u>

F. NORMAL COST

The normal cost for the year beginning July 1, 2014, is shown below. The total normal cost is \$47,549.

Normal Cost For Year Beginning July 1, 2014

	<u>Dollar Amount</u>
Total Normal Cost	\$ 47,549

G. ANNUAL REQUIRED CONTRIBUTION FOR GASB STATEMENT NO. 45

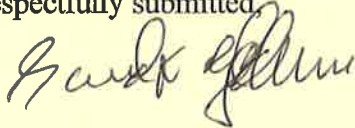
Pursuant to GASB Statement No. 45, we have calculated the annual required contribution for the year beginning July 1, 2014 as the normal cost plus a 30-year amortization of the unfunded actuarial liability as a level percent of payroll. Therefore, the annual required contribution (ARC) for the year beginning July 1, 2014 for purposes of GASB Statement No. 45 is as follows:

1. Total normal cost	\$ 47,549
2. Annual amount to amortize the unfunded liability over 30 years as a level percent of payroll	<u>20,275</u>
3. Annual required contribution (1 + 2)	<u>\$ 67,824</u>

H. CERTIFICATION

This actuarial report has been prepared in compliance with financial reporting requirements applicable to post-retirement benefit plans of governmental employers as provided in GASB Statement No. 45, including the Actuarial Standards of Practice relating to postretirement benefits other than pensions.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Sandor Goldstein".

Sandor Goldstein, F.S.A.
Consulting Actuary

Appendix 1

Glossary of Terms used in Report

1. Actuarial Present Value. The value of an amount or series of amounts payable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.
2. Actuarial Cost Method or Funding Method. A procedure for determining the actuarial present value of pension plan benefits and for determining an actuarially equivalent allocation of such value to time periods, usually in the form of a normal cost and an actuarial accrued liability.
3. Normal Cost. That portion of the present value of pension plan benefits, which is allocated to a valuation year by the actuarial cost method.
4. Actuarial Accrued Liability or Accrued Liability. That portion, as determined by a particular actuarial cost method, of the actuarial present value of pension benefits which is not provided for by future normal costs.
5. Actuarial Value of Assets. The value assigned by the actuary to the assets of the pension plan for purposes of an actuarial valuation.
6. Unfunded Actuarial Liability. The excess of the actuarial liability over the actuarial value of assets.
7. Projected Unit Credit Actuarial Cost Method. A cost method under which the present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age.
8. Actuarial Assumptions. Assumptions as to future events affecting pension costs.
9. Actuarial Valuation. The determination, as of the valuation date, of the normal cost, actuarial liability, actuarial value of assets, and related actuarial present values for a retirement benefit plan.