

***Beaver Valley  
Geriatric Center Administrative  
Employees Retirement Plan***

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***Actuarial Report January 1, 2005***

**September 16, 2005**

**HayGroup**

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for

**Beaver County Employes' Retirement Board**

**CONFIDENTIAL**

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September 16, 2005

Beaver County Employees' Retirement Board  
Court House  
Third Street  
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We are pleased to present the results of our actuarial valuation of the Beaver Valley Geriatric Center Administrative Employee Pension Plan as of January 1, 2005.

The primary purpose of this report is to investigate and fully and fairly disclose the actuarial position of the System as of January 1, 2005 and to establish the proper appropriation of the 2005 plan year. Highlights of the valuation are presented on page 1, followed by schedules which summarize the asset information, underlying calculations, participant data, plan benefits and actuarial assumptions.

In Schedule A is shown a list of the total assets by classification, as provided by the County as of January 1, 2005.

Schedule B shows the actuarial balance summary of the plan as of January 1, 2005. The liabilities were determined from the actuarial valuation of the plan based upon the data submitted by the Geriatric Center.

The certified annual appropriation of \$0 required for the Beaver Valley Geriatric Center Administrative Employees Pension Plan Retirement System for 2005 is determined in Schedule C.

Schedule D shows the age and service profile of the active members on January 1, 2005.

The current benefit and contribution provisions of the plan are summarized in Schedule E.

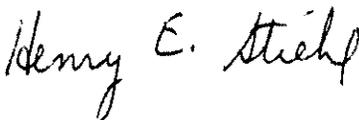
Schedule F summarizes the actuarial assumptions and cost methods used for determining costs. The Asset Valuation Method used is Market Value to comply with GASB standards which state that investments should be reported at the fair value at the reporting date.

On the basis of the actuarial methods, assumptions and major plan provisions summarized in this report and in reliance on the member data and statement of the Fund's assets furnished by the County, to the best of our knowledge the information in this report is complete and accurate.

In our opinion this report presents fairly the financial and actuarial position of the Beaver Valley Geriatric Center Administrative Employees Pension Plan as of January 1, 2005 in accordance with generally accepted actuarial principles, and on the basis of actuarial assumptions and methods which, in the aggregate, are reasonable (taking into account past experience under the plan and reasonable expectations) and which in combination represent my best estimate of anticipated experience.

Respectfully submitted,

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## *I. Valuation Highlights*

|   | January 1,<br>2002 | January 1,<br>2003 | January 1,<br>2004 | January 1,<br>2005 |
|---|--------------------|--------------------|--------------------|--------------------|
| Range of Contributions:                               |                    |                    |                    |                    |
| Standard  | \$ 0               | \$ 0               | \$ 0               | \$ 0               |
| Actuarial Value of Assets**                           | 8,217,311          | 7,472,226          | 8,206,201          | 8,349,657          |
| Actuarial Present Value of Accumulated Plan Benefits: |                    |                    |                    |                    |
| Vested benefits *                                     | 4,932,346          | 5,315,008          | 5,486,961          | 5,515,447          |
| Non-Vested Benefits                                   | 0                  | 0                  | 0                  | 0                  |
| Total   | 4,932,346          | 5,315,008          | 5,486,961          | 5,515,447          |
| Active Participants:                                  |                    |                    |                    |                    |
| Number  | 25                 | 23                 | 22                 | 19                 |
| Average Compensation                                  | 46,840             | 50,486             | 52,087             | 54,446             |
| Total Compensation                                    | 1,170,992          | 1,161,173          | 1,145,909          | 1,034,482          |
| Pensioners and Beneficiaries:                         |                    |                    |                    |                    |
| Number  | 41                 | 40                 | 41                 | 41                 |
| Total Annual Pension                                  | 281,290            | 295,289            | 311,443            | 359,233            |
| Terminated Vested Participants:                       |                    |                    |                    |                    |
| Number  | 24                 | 24                 | 24                 | 24                 |
| Total Annual Pension                                  | \$ 72,457          | \$ 72,457          | \$ 72,457          | \$ 72,457          |

\* Does not include employee contributions.

\*\* Market Value.

## **II. Schedules**

### **Schedule A**

#### **Plan Assets**

| <b>Plan Assets December 31, 2004</b>                                |                        |
|---|------------------------|
|   | <b>Market Value</b>    |
| Cash Equivalents  | \$ 303,468.11          |
| Government Securities   | \$ 1,101,216.09        |
| Corporate Bonds   | \$ 2,007,339.62        |
| Common Stock  | \$ 4,877,307.35        |
| Foreign Securities  | \$ 60,326.17           |
| Net Assets (Market Value) Available for Benefits, December 31, 2004 | <u>\$ 8,349,657.34</u> |

**Schedule A--Continued**

| <b>Reconciliation Of Assets</b>                                    |    | <b>Market Value</b> |
|--|----|---------------------|
| 1. Total Assets December 31, 2003                                  | \$ | 8,206,200.77        |
| 2. Increases   |    |                     |
| (a) Employer Appropriation for 2004                                | \$ | 0.00                |
| (b) Employee Contributions   | \$ | 5,342.66            |
| (c) Net Investment Income  | \$ | 504,138.94          |
| (d) Miscellaneous  | \$ | 2,323.02            |
| (e) Total Increase   | \$ | 511,804.62          |
| 3. Decreases   |    |                     |
| (a) Refund of Employee Contributions                               | \$ | 0.00                |
| (b) Retirement Allowances Paid (including withholding taxes)       | \$ | 368,348.05          |
| (c) Death Benefits   | \$ | 0.00                |
| (d) Miscellaneous  | \$ | 0.00                |
| (e) Total Decreases  | \$ | 368,348.05          |
| 4. Total Assets (Market Value) December 31, 2004 (1) + (2e) - (3e) | \$ | <u>8,349,657.34</u> |

**Actuarial Value Of Assets  
January 1, 2005**

The December 31, 2004 market value of assets, \$8,349,657.34 was used as the actuarial value of assets as of January 1, 2005.

**Schedule B**

**Actuarial Balance Sheet January 1, 2005**

| <b>Assets</b>  |                        |
|--|------------------------|
| Present Assets                                       |                        |
| National City Trust                                  | \$ 8,349,657.34        |
| Reserve For Future Liabilities                       | (968,950.31)           |
| <i>Total Assets</i>                                  | <u>\$ 7,380,707.00</u> |
| <b>Liabilities</b>                                   |                        |
| Actuarial Present Value of Accumulated Plan Benefits |                        |
| Vested Benefits:                                     |                        |
| Active Participants                                  | \$ 2,624,519.00        |
| Retired Participants                                 | \$ 2,346,013.00        |
| Terminated Participants                              | \$ 544,916.00          |
| Employee Contributions                               | \$ 76,238.00           |
| Total Vested Benefits                                | \$ 5,591,686.00        |
| Non-Vested Benefits:                                 | \$ 0.00                |
| Total Accumulated Benefits                           | \$ 5,591,686.00        |
| Actuarial Present Value of Future Benefit Accruals   | 0.00                   |
| Active Participants                                  | \$ 1,789,021.00        |
| <i>Total Liabilities</i>                             | <u>\$ 7,380,707.00</u> |

## Schedule C

### Development of Normal Cost January 1, 2005

|  |                 |
|--|-----------------|
| 1. Actuarial present value of projected benefits                                     |                 |
| (a) Active participants  |                 |
| Retirement benefits  | \$ 4,057,027.00 |
| Termination benefits   | 9,169.00        |
| Disability benefits  | 230,657.00      |
| Death benefits   | 116,687.00      |
| Total  | \$ 4,413,540.00 |
| (b) Retired participants and beneficiaries   | 2,346,013.00    |
| (c) Terminated vested participants   | 544,916.00      |
| (d) Employee contributions   | 76,238.00       |
| (e) Total  | \$ 7,380,707.00 |
| 2. Actuarial value of assets (see Schedule A)  | 8,349,657.34    |
| 3. Actuarial present value of future normal costs:<br>(1) - (2) (not less than zero) | 0.00            |
| 4. Actuarial present value of future compensation                                    | 7,389,313.00    |
| 5. Normal cost accrual rate: (3) / (4)   | 0%              |
| 6. Current compensation for active participants under age 62 (nearest birthday)      | \$ 1,034,481.00 |
| 7. Total normal cost (ARC) as of January 1, 2005: (5) x (6)                          | \$ 0.00         |

### Schedule D

#### Age, Service and Average Salary Profile of the Active Participants on January 1, 2005.

| Males -- Full Years of Service to January 1, 2005 |     |     |       |       |       |       |     |       |                |
|---|-----|-----|-------|-------|-------|-------|-----|-------|----------------|
| Age   | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Total | Average Salary |
| 0-19  | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 20-24   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 25-29   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 30-34   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 35-39   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 40-44   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 45-49   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 50-54   | 0   | 0   | 0     | 0     | 0     | 0     | 1   | 1     | \$ 60,534      |
| 55-59   | 0   | 0   | 0     | 0     | 0     | 0     | 1   | 1     | \$ 61,393      |
| 60-64   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 65 +  | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| <b>Total</b>                                      | 0   | 0   | 0     | 0     | 0     | 0     | 2   | 2     | \$ 60,963      |

Average Age: 54.50  
Average Service: 33.50

| Females -- Full Years of Service to January 1, 2005 |     |     |       |       |       |       |     |       |                |
|---|-----|-----|-------|-------|-------|-------|-----|-------|----------------|
| Age   | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Total | Average Salary |
| 0-19  | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 20-24   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 25-29   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 30-34   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 35-39   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 40-44   | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| 45-49   | 0   | 0   | 0     | 0     | 0     | 2     | 1   | 3     | \$ 48,639      |
| 50-54   | 0   | 0   | 0     | 0     | 0     | 5     | 4   | 9     | \$ 54,754      |
| 55-59   | 0   | 0   | 0     | 0     | 0     | 0     | 3   | 3     | \$ 51,127      |
| 60-64   | 0   | 0   | 0     | 0     | 0     | 1     | 1   | 2     | \$ 60,234      |
| 65 +  | 0   | 0   | 0     | 0     | 0     | 0     | 0   | 0     | \$ 0           |
| <b>Total</b>  | 0   | 0   | 0     | 0     | 0     | 8     | 9   | 17    | \$ 53,680      |

Average Age: 53.53  
Average Service: 29.65

## **Schedule E**

### **Summary of Principal Plan Provisions**

|                                      |   |
|--------------------------------------|---|
| <b>Type of Plan</b>                  | The Plan is a defined benefit plan.   |
| <b>Effective Date</b>                | The Plan became effective January 21, 1975.   |
| <b>Eligibility for Participation</b> | All full-time, non-union employees of the Beaver Valley Geriatric Center as of May 20, 1978 are eligible.   |
| <b>Definitions</b>                   | <p><b>Plan Year:</b> A Plan Year is a 12-month period beginning on January 1 and ending on December 31.</p> <p><b>Past Service:</b> Years and portions of a year (number of days over 365) through 1971.</p> <p><b>Future Years:</b> The number of calendar years after 1971 during which a participant works 1,000 hours.</p> <p><b>Accrued Benefit:</b> A monthly benefit equal to 1.0% of Average Monthly Earnings multiplied by Past Service, plus 1.5% of Average Monthly Earnings multiplied by Future Service, reduced by any monthly amount payable from the Beaver County Retirement Plan.</p> <p><b>Compensation:</b> Total compensation, not to exceed that of the highest paid elected official.</p> <p><b>Average Monthly Earnings:</b> The total compensation of the participant in the 36 consecutive months of employment which produce the highest total, divided by 36.</p> |
| <b>Retirement Benefits</b>           | <p><b>Normal Retirement</b></p> <p><i>Normal Retirement Date:</i> The first day of the month coincident with or next following a participant's 60th birthday.</p> <p><i>Normal Retirement Benefit:</i> A monthly benefit equal to the Accrued Benefit.</p>  |

## **Schedule E--Continued**

### **Early Retirement**

#### **Retirement Benefits**

*Early Retirement Date:* The first day of any month after the participant has both attained age 50 and completed at least 20 Vesting Years.

*Early Retirement Benefit:* The Accrued Benefit commencing at age 60, or a benefit reduced by 1/180% per month for each of the first 60 months, and 1/360 per month for each additional year by which the Early Retirement Date precedes the Normal Retirement Date.

### **Postponed Retirement**

*Postponed Retirement Date:* The first day of any month after the participant's Normal Retirement Date.

*Postponed Retirement Benefit:* The accrued benefit as of the Postponed Retirement Date.

### **Termination Benefit**

**Eligibility:** Eight years of service.

**Termination Benefit:** The Accrued Benefit, with payments commencing the first day of the month coincident with or next following the participant's 60th birthday.

### **Death Benefits**

#### **Pre-retirement Spouse's Benefit**

**Eligibility:** Ten years of service.

**Spouse's Benefit:** A lump sum equal to the actuarial present value of the participant's Accrued Benefit as of the date of his death.

**Post-retirement Spouse's Benefit:** None, except as provided by the election of an optional form of payment.

***Schedule E--Continued***

**Disability Benefit**

**Eligibility:** Five years of service and permanently and totally disabled in accordance with the Federal Social Security Act.

**Disability Benefit:** The Accrued Benefit as of the date of disability.

## Schedule F

### Actuarial Assumptions

#### Actuarial Assumptions for Cost Calculations

**Interest:** 7½% per annum, compounded annually.

**Salary Increases:** 3% per annum increase from 2002 to 2003 with each subsequent year increasing by .25% increments until the ultimate assumed rate of 4.5% is attained for 2009 and later years.

**Mortality:** 1983 Group Annuity Mortality Table for males.

**Withdrawal:** Withdrawal rates from Table T-2 of the Actuary's Pension Handbook were assumed.

Sample rates are illustrated below:

| Age | Rates of Withdrawal |
|-----|---------------------|
| 25  | 5.3%                |
| 30  | 5.1                 |
| 35  | 4.7                 |
| 40  | 3.5                 |
| 45  | 1.8                 |
| 50  | .4                  |

**Retirement:** All active employees were assumed to retire at age 62, or immediately if over age 62.

**Disability:** Rates of disability as adopted from 1964 OASDI experience (Males).

**Disabled Life Mortality:** Pragmatic Disabled Life Continuance Table.

**Expenses:** None.

**Asset Valuation Method:** Market Value.

***Schedule F--Continued***

**Actuarial Assumptions for  
Calculation of Actual  
Present Value of  
Accumulated Plan Benefits**

Same as above except no future salary or taxable wage base increases were assumed.

**Actuarial Cost Methods**

The Aggregate Actuarial Cost Method was used to determine liabilities and costs related to retirement termination, death and disability benefits. Under this method the value of present assets are subtracted from the present value of all future benefit payments. The difference is spread evenly over the future service of all members as a level percent of covered earnings. The normal cost includes an adjustment for gains and losses due to actuarial experience.

Benefits related to nonvested terminated participants are not valued even though benefits might be reinstated if any such participants are rehired.