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## Actuaries/Benefit Consultants

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### Fairview Township Non-Uniformed Employees' Pension Plan Actuarial Valuation as of January 1, 2002

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Table of Contents**

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Comments and Certification

Summary of Principal Plan Benefit Provisions (SPPB)

Actuarial Assumptions and Methods

Section 1 - Summary of Plan Assets and Summary of Plan Membership

Section 2 - Act 205 Funding Calculations

Section 3 - Supplemental Information for GASB Reporting

Section 4 - Participant Information

    Demographic Data for Active Members

    Demographic Data for Retired Members and Members Terminated with Vesting

    Active Members

    Vested Former Members

    Retired Members and Beneficiaries

    Voluntary Employee Contribution Accounts

**Fairview Township Non-Uniformed Employees' Pension Plan**  
**Actuarial Valuation as of January 1, 2002**  
**Comments and Certification**

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The purpose of the valuation report is to determine the actuarial status of the Plan. The report does not serve as the basis for satisfying any reporting requirements under Act 205.

The Summary of Principal Plan Benefit Provisions page provides a summary of the basic plan benefit provisions in effect as of January 1, 2002.

The Actuarial Assumptions and Methods page is a summary of actuarial assumptions and methods used in determining the actuarial status of the Plan.

Section 1 of the report provides a summary of plan assets and summary of plan membership.

The market value of the fund as of December 31, 2001, is \$2,103,924. This includes Voluntary Employee Contribution Accounts totaling \$6,802. The net dollar-weighted rate of investment return during 2001 was -2.04%.

As of January 1, 2002, there are 26 active members with total annual payroll for pension purposes of \$940,489. There are also 7 retired members currently receiving benefits under the Plan totaling \$50,710 annually, 1 spouse beneficiary of a deceased member currently receiving benefits under the Plan totaling \$5,460 annually and 6 vested former members entitled to deferred benefits under the Plan totaling \$8,373 annually.

Section 2 of the report provides the Act 205 funding calculations.

As of January 1, 2002, there is an unfunded actuarial accrued liability under the Plan of \$464,701. The normal cost of the Plan, which is the cost of benefits being accrued during the current year, is \$117,792, which is 12.5% of covered payroll.

Page 3 of Section 2 shows the analysis of the change in the unfunded actuarial accrued liability from January 1, 2001, to January 1, 2002. There was an actuarial loss during the period of \$251,568.

Page 4 of Section 2 illustrates the minimum municipal obligation for the Plan. The financial requirement of the Plan is \$181,495. This includes the normal cost, \$117,792, assumed annual administrative expenses, \$16,803, and amortization of the unfunded actuarial accrued liability, \$46,900. The financial requirement is reduced by expected member contributions to the Plan during 2002, \$18,809. This results in a minimum municipal obligation of \$162,686. If the Township allocates \$81,178 of general municipal pension system State aid received during 2002 to the Plan, there is a net minimum municipal obligation of \$81,508. This calculation of the minimum municipal obligation is for illustrative purposes only since the calculation of the minimum municipal obligation for purposes of determining the Township's required contribution to the Plan is prepared through the budgeting process by September 30 each year for the upcoming calendar year.

Page 5 of Section 2 indicates the actuarial present value of accumulated plan benefits. As of January 1, 2002, the total actuarial present value of accumulated plan benefits is \$1,948,502. This compares to net assets available for benefits of \$2,103,924.

Section 3 of the report provides supplemental information for reporting under Governmental Accounting Standards Board Statements No. 25 and 27.

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Comments and Certification**

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Section 4 of the report provides information on the plan participants.

**Actuarial Certification**

To the best of my knowledge this report is complete and accurate, based upon the data furnished to us. The data with respect to receipts and disbursements and assets of the Plan was furnished by Provident Mutual Life Insurance Company and Mellon Bank, N.A. The data with respect to participants and beneficiaries was furnished by Fairview Township.

The information as contained in this report is a projection of liabilities based upon stated assumptions and is not an exact statement of the Plan's ultimate benefits and liabilities.

I certify that all costs, liabilities, rates of interest, and other factors under the Plan have been determined on the basis of actuarial assumptions and methods, each of which is reasonable (taking into account the experience of the Plan and reasonable expectations) or which, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption and method were reasonable, and which, in combination, offer my best estimate of anticipated experience under the Plan.

An approximation technique for the valuation of the disability benefit has been utilized due to the unavailability of any generally accepted disability table based upon municipal pension experience. The approximation technique for the valuation of the disability benefit is a loading factor of 5.00% added to basic pension costs. This same approximation technique has been used in prior actuarial valuations of the Plan. It is my best estimate that the use of the approximation technique will cause little or no distortion in the valuation results.

4/22/2002

Date

David H. Killick

David H. Killick, F.S.A.

Consulting Actuary

Enrolled Actuary No. 02-03880

DHK/SNW

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Summary of Principal Plan Benefit Provisions**

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**Eligibility**

A full-time non-uniformed employee joins the Plan on his date of employment.

**Normal Retirement**

A Class 2 employee is eligible for normal retirement after attainment of age 65, or after attainment of age 60 and completion of 25 years of service, if earlier. A Class 1 employee is eligible for normal retirement after attainment of age 60 or completion of 25 years of service, if earlier.

The normal retirement pension is payable monthly during the member's lifetime, with payments guaranteed for the first 120 months.

The amount of monthly pension is equal to 2.0% of average monthly pay multiplied by the number of years of service completed by the member at retirement, up to a maximum of 25 years. For members hired prior to January 1, 2001, the amount of monthly pension is equal to 1.5% of average monthly pay multiplied by the number of years of service completed by the member at retirement, if greater.

Average monthly pay is based upon the final plan year preceding retirement.

**Late Retirement**

If a member continues working after his normal retirement date, his pension does not start until he actually retires. The late retirement benefit is equal to the benefit accrued to the late retirement date.

**Early Retirement**

A member is eligible for early retirement after attainment of age 55. The early retirement benefit is the benefit accrued to the date of early retirement, reduced 1/2 of 1% for each month early.

**Disability Retirement**

If a member becomes totally and permanently disabled and qualifies for Social Security disability payments, he is eligible for a disability pension. The disability pension is equal to the benefit accrued to the date of disability.

**Death Benefits**

The death benefit for an active member is a refund of his contribution with interest.

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Summary of Principal Plan Benefit Provisions**

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**Vesting**

A member's benefits are always 100% vested. The vested benefit is a deferred pension beginning at normal retirement equal to the benefit accrued to the date of termination. The member may elect a lump sum cash settlement in lieu of a deferred pension.

**Accrued Pension**

The benefit accrued at any date other than the normal retirement date is equal to the projected normal retirement benefit multiplied by the ratio of the number of years of service to date to the total number of years of service projected at normal retirement.

**Contributions**

Members contribute 2.0% of pay.

Member contributions are credited with 5.0% interest.

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Actuarial Assumptions and Methods**

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**Interest**

7.00%

**Salary**

6.00% Annual Increase

**Withdrawal**

Table D-1: Rates of withdrawal at selected ages:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	5.5000%	35	2.5000%	50	0.0000%
25	5.0000%	40	1.0000%	55	0.0000%
30	4.0000%	45	0.5000%	60	0.0000%

**Mortality**

UP1984 Table with 5 year postretirement age setback for females

**Disability**

Loading of 5.0% added to basic pension costs.

**Retirement**

Normal Retirement Age, or age on valuation date, if greater.

**Preretirement Death Benefit**

Liabilities computed on the assumption that all participants will have spouses of the same age at the date of eligibility for the benefit.

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Actuarial Assumptions and Methods**

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**Expenses**

Provision for administrative expenses added to normal cost.

**Inflation**

Moderate inflation based on long term historical average rates is a component of the actuarial assumptions used herein. Provision is not made for advance funding of sharply higher rates of inflation experienced in some years. The effects of such higher rates are reflected in the funding after their occurrence.

**Actuarial Value of Assets**

Market Value as determined by the trustee.

**Actuarial Cost Method**

Entry Age Normal

Fairview Township Non-Uniformed Employees'  
Pension Plan  
Actuarial Valuation  
as of January 1, 2002

Section 1

Summary of Plan Assets and Summary of Plan Membership

Fairview Township Non-Uniformed Employees' Pension Plan  
 Actuarial Valuation as of January 1, 2002  
**Receipts and Disbursements**

Market Value at 1/1/2001		\$ 2,114,837.03
<b>Receipts</b>		
Employer Contributions Received	\$	6,545.00
Employee Contributions Received		18,471.18
State Contributions Received		81,178.00
Investment Income		
Interest Received	\$	125.73
Dividends Received		810.89
Accrued Income at 1/1/2001		(94.70)
Accrued Income at 12/31/2001		623.00
Total Investment Income		1,464.92
Change in Market Value		
Realized Gain/Loss	\$	15,116.65
Unrealized Gain/Loss		(60,113.00)
Net Change in Market Value		(44,996.35)
Total Receipts		62,662.75
<b>Disbursements</b>		
Monthly Benefit Payments	\$	(56,772.52)
Administrative Expenses		(16,803.41)
Total Disbursements		(73,575.93)
Market Value at 12/31/2001		\$ 2,103,923.85
Approximate Net Dollar-Weighted Rate of Investment Return		(2.04%)

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002

**Assets, Liabilities and Reserves**

**Assets**

Cash	\$	2.04
Money Markets		1,336.87
Provident Mutual Insurance Contract		1,414,797.92
<b>Mutual Funds</b>		
EB Intermediate Bond Fund	\$	137,029.92
EB Active Core Bond Fund		136,288.90
EB International Equity Fund		68,412.78
EB Stock Fund		120,038.78
EB FPA Core Mid Cap Stock Fund		106,680.18
EB FPA Core Large Cap Stock Fund		118,713.46
Total		<u>687,164.02</u>
Total Assets in Fund	\$	2,103,300.85
Accrued Income		<u>623.00</u>
Total Assets	\$	2,103,923.85

**Liabilities**

Total Liabilities		<u>0.00</u>
Net Assets	\$	<u><u>2,103,923.85</u></u>

**Reserves**

Market Value of Assets	\$	2,103,923.85
Voluntary Employee Contribution Accounts		<u>(6,801.98)</u>
Reserves for Benefits	\$	<u><u>2,097,121.87</u></u>

Fairview Township Non-Uniformed Employees' Pension Plan  
 Actuarial Valuation as of January 1, 2002  
**Summary of Plan Membership**

<b>Active Members</b>	Number of Members	Annual Payroll
Active Members as of 1/1/2001	26	
New Members During the Period	1	
Returned to Active	0	
<b>Members No Longer Active:</b>		
Retired with Disability Benefit	0	
Retired with Service Retirement Benefit	0	
Separated with Deferred Benefit	(1)	
Separated with Refund of Contributions	0	
Separated with Neither Deferred Benefit nor Refund of Contributions	0	
Deceased	0	
Total	(1)	
Active Members as of 1/1/2002	26	\$ 940,489
<b>Vested Former Members</b>	Number of Members	Annual Benefit
Vested Former Members as of 1/1/2001	5	
Separated with Deferred Benefit	1	
Beneficiary of Deceased Participant	0	
Returned to Active	0	
Retired with Service Retirement Benefit	0	
Deceased or Paid in Full	0	
Vested Former Members as of 1/1/2002	6	\$ 8,373
<b>Retired Members</b>		
Retired Members as of 1/1/2001	7	
Retired with Service Retirement Benefit	0	
Deceased or Paid in Full	0	
Retired Members as of 1/1/2002	7	\$ 50,710
<b>Spouse Beneficiaries of Deceased Members</b>		
Spouse Beneficiaries of Deceased Members as of 1/1/2001	1	
Additional Spouse Beneficiaries of Deceased Members	0	
Deceased	0	
Spouse Beneficiaries of Deceased Members as of 1/1/2002	1	\$ 5,460

Fairview Township Non-Uniformed Employees'  
Pension Plan  
Actuarial Valuation  
as of January 1, 2002

Section 2

Act 205 Funding Calculations

Fairview Township Non-Uniformed Employees' Pension Plan  
 Actuarial Valuation as of January 1, 2002  
**Unfunded Actuarial Accrued Liability and Normal Cost**

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**Unfunded Actuarial Accrued Liability**

Actuarial Present Value of Future Benefits

Active Members Retirement Pension Benefits	\$	3,391,887
Active Members Vested Withdrawal Benefits		14,794
Active Members Disability Benefits		169,597
Active Members Refund of Member Contributions		28,649 <sup>1</sup>
Vested Former Members Benefits		11,851
Retired Members Benefits		442,417
Surviving Spouses Benefits		<u>41,502</u>
<b>Total</b>	<b>\$</b>	<b>4,100,697</b>
Actuarial Present Value of Future Normal Costs		<u>(1,538,874)</u>
Actuarial Accrued Liability	<b>\$</b>	<b>2,561,823</b>
Reserve for Benefits		<u>(2,097,122)</u>
Unfunded Actuarial Accrued Liability	<b>\$</b>	<b><u>464,701</u></b>
 <b>Normal Cost</b>		
Normal Cost	<b>\$</b>	<b><u>117,792</u></b>
Normal Cost as a Percentage of Annual Payroll		<u>12.5%</u>

<sup>1</sup> Accumulated Member Contributions Without Interest as of 1/1/2002 = \$147,124  
 Accumulated Member Contributions With Interest as of 1/1/2002 = \$215,707

Fairview Township Non-Uniformed Employees' Pension Plan  
 Actuarial Valuation as of January 1, 2002  
**Amortization of Unfunded Actuarial Accrued Liability**

Initial Date	Initial Amount	Outstanding Balance	Amortization Amount	Remaining Amortization	Nature
January 1, 2001	\$ 220,276	\$ 213,133	\$ 21,086	16 Years	Active Amendment
January 1, 2002	251,568	251,568	25,814	15 Years	Actuarial Loss
<b>Total</b>	<b>\$ 471,844</b>	<b>\$ 464,701</b>	<b>\$ 46,900</b>		

Projected plan year in which the unfunded accrued liability is fully amortized is 2017.

**Aggregation of Changes in Unfunded Actuarial Accrued Liability**

Date of Aggregation	Aggregated Target Date	Outstanding Balance	Amortization Amount	Remaining Amortization
January 1, 2002	2017	<u>\$ 464,701</u>	<u>\$ 46,900</u>	16 Years

Fairview Township Non-Uniformed Employees' Pension Plan  
 Actuarial Valuation as of January 1, 2002  
**Analysis of the Change in the Unfunded Actuarial Accrued Liability**

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Unfunded Actuarial Accrued Liability at 1/1/2001	\$	220,276
<b>Additions</b>		
Normal Cost	\$ 122,967	
Administrative Expenses	16,803	
Interest on Unfunded Actuarial Accrued Liability, Normal Cost, and Administrative Expenses	<u>24,615</u>	
Total		164,385
<b>Contributions</b>		
Employer Contributions	\$ (6,545)	
Employee Contributions	(18,471)	
State Contributions	(81,178)	
Interest on Contributions	<u>(1,925)</u>	
Total		(108,119)
Adjustment for Funding Deviation		(63,409)
Modification in the Benefit Plan		0
Change in Actuarial Assumptions		0
<b>Actuarial Loss</b>		
Investment Loss	\$ 190,920	
Experience Gain	(2,761)	
Funding Deviation	<u>63,409</u>	
Total		<u>251,568</u>
Unfunded Actuarial Accrued Liability at 1/1/2002	\$	<u><u>464,701</u></u>

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Illustration of Minimum Municipal Obligation**

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Financial Requirements

Normal Cost	\$ 117,792	
Administrative Expenses	16,803 <sup>1</sup>	
Amortization of Unfunded Actuarial Accrued Liability	<u>46,900</u>	
Total		\$ 181,495
Expected Member Contributions		<u>(18,809)</u>
Minimum Municipal Obligation		\$ 162,686
Estimated Allocation of General Municipal Pension System State Aid		<u>(81,178)</u>
Net Minimum Municipal Obligation		<u><u>\$ 81,508</u></u>

<sup>1</sup> Total Administrative Expenses for Plan Year 1/1/2001 to 12/31/2001 - \$ 16,803

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
**Actuarial Present Value of Accumulated Plan Benefits**

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Vested Benefits		
Retired Members	\$ 483,919	
Other Members	1,464,583	
Total Vested Benefits	<u>1,948,502</u>	\$ 1,948,502
Nonvested Benefits		<u>0</u>
Total Actuarial Present Value of Accumulated Plan Benefits		<u>\$ 1,948,502</u>
Net Assets Available for Benefits as of 1/1/2002		<u>\$ 2,103,924</u>

Fairview Township Non-Uniformed Employees'  
Pension Plan  
Actuarial Valuation  
as of January 1, 2002

Section 3

Supplemental Information for GASB Reporting

Fairview Township Non-Uniformed Employees' Pension Plan  
Actuarial Valuation as of January 1, 2002  
Supplemental Information for GASB Statement Nos. 25 & 27 Reporting

**Schedule of Funding Progress**

Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
1/1/1992	\$ 850,704	\$ 1,053,804	\$ 203,100	80.7%	\$ 598,875	33.9%
1/1/1993	988,350	1,214,377	226,027	81.4%	643,725	35.1%
1/1/1994	1,127,139	1,346,286	219,147	83.7%	696,036	31.5%
1/1/1995	1,279,573	1,431,398	151,825	89.4%	712,846	21.3%
1/1/1996	1,414,930	1,513,503	98,573	93.5%	700,407	14.1%
1/1/1997	1,525,611	1,491,619	(33,992)	102.3%	660,697	(5.1%)
1/1/1998	1,623,618	1,715,649	92,031	94.6%	776,281	11.9%
1/1/1999	1,854,980	1,745,404	(109,576)	106.3%	772,909	(14.2%)
1/1/2000	2,087,599	1,890,218	(197,381)	110.4%	818,915	(24.1%)
1/1/2001	2,107,756	2,328,032	220,276	90.5%	923,403	23.9%
1/1/2002	2,097,122	2,561,823	464,701	81.9%	940,489	49.4%

**Schedule of Contributions from the Employer and Other Contributing Entities**

Year	Annual Required Contribution	Contributions From Employer	Percentage Contributed
1992	\$ 76,324	\$ 75,360	98.7%
1993	74,600	76,953	100.0%+
1994	88,957	88,957	100.0%
1995	88,617	88,617	100.0%
1996	69,087	69,870	100.0%+
1997	69,166	69,166	100.0%
1998	74,711	74,711	100.0%
1999	81,720	81,720	100.0%
2000	75,038	75,038	100.0%
2001	87,723	87,723	100.0%

The above information was determined as part of the actuarial valuations at the dates listed. Additional information as of the current actuarial valuation:

Amortization Method: Level Dollar Closed  
Remaining Amortization Period: 16 Years

Other Actuarial Assumptions and Methods stated previously in report.

<sup>1</sup> Includes general municipal pension system State aid