Kent County Levy Court

Actuarial Valuation of the Pension Plan of Kent County, Delaware As of January 1, 2013

January 31, 2013

January 31, 2013

Pension Review Committee
Kent County Levy Court
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Grant Thornton LLP is pleased to present the results of this January 1, 2013 actuarial valuation of the Pension Plan of Kent County, Delaware ("Plan"). This valuation report includes information related to determining contribution requirements of the Plan for 2013 and the disclosure information for the fiscal year ending June 30, 2013.

Specifically, the purposes of this valuation are:

- to review and report the funded status of the plan under Chapter 83, Section 17 of the Kent County Code,
- to serve as a guideline for contributions recommended for the fiscal year, and
- to provide financial disclosure information required under GASB Statement Nos. 25 and 27.

The information presented in this report is based on our understanding of the provisions of the Plan and a reasonable interpretation of applicable federal and state statutes and regulations. If you have any questions or would like to discuss the results contained in the report further, please let us know.

Respectfully submitted,

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Executive Summary

Kent County Levy Court ("County") provides pension benefits to employees who meet certain criteria. These pension benefits are described under Chapter 83 of the Kent County Code ("Code") and are commonly referred to as the Pension Plan of Kent County, Delaware ("Plan"). This report presents the results of the actuarial valuation of the Plan for purposes of determining the contribution requirements for the 2013 actuarial valuation year and provides financial disclosure information as of the County's fiscal year ending June 30, 2013.

Contribution Requirements

Under section 17 of Chapter 83 of the Code, an actuary shall at least biennially review the pension fund and shall report to the County government whether any additional sums of money are needed to keep the pension fund actuarially sound so that sufficient funds will always be available to pay the benefits provided.

Historically, the County has adopted a funding policy that accounts for current benefit accruals and amortizes any unfunded liability over a 30 year period. Based on the actuarial methods and assumptions used in this valuation, and the Code in effect on January 1, 2013, the recommended contribution is determined to be $1,418,125 which is a decrease of ($60,529) over the recommended contribution from 2012.

Actuarial Valuation Year:		2013		2012		2011
Contribution Requirement	$	1,418,125	$	1,478,654	$	1,527,494
Employee Contribution		153,269[1]		143,774[2]		125,141
Net County Contribution	$	1,264,856	$	1,334,880	$	1,402,353

The Plan's funded status, based on the actuarial value of assets, experienced a small decrease since the previous valuation as the table below indicates.

		January 1, 2013		January 1, 2012
Present Value of Benefits	$	44,815,382	$	42,590,706
Market Value of Assets		26,885,272		24,639,402
Unfunded Amount	$	17,930,110	$	17,951,304
Actuarial Accrued Liability	$	34,348,336	$	32,426,481
Actuarial Value of Assets	$	28,139,969	$	26,576,144
Unfunded Actuarial Accrued Liability	$	6,208,367	$	5,850,337
Funded Ratio		81.9%		82.0%

The major reasons for the decreased contribution are:

- Small actuarial gains due to lower than expected actual salary increases,
- Market Value of Assets gains due to a 10.70% return during 2012 (see pages 7-8 for further details).

[1] Represents estimated employee contributions for the 2013 Calendar Year.
[2] Actual employee contributions paid during the 2012 Calendar Year.

Plan Assets

Pursuant to Section 17 of Chapter 83 of the Code, the County shall establish and maintain a pension fund which shall be used for the purpose of paying the benefits provided. Each year the County makes contributions to the trust, and the trust pays related expenses and benefit payments to participants. The trust also generates income from its investments that are used to help pay for the benefit payments and plan expenses in future years.

The trustee reports the market value of assets that includes the net changes in the appreciation or depreciation of the investments held. In order to smooth any temporary fluctuations in these asset values, we have employed an actuarial value of assets in determining plan costs. Plan assets used for this valuation are:

	January 1, 2013	January 1, 2012
Actuarial Value of Assets	$ 28,139,969	$ 26,576,144
Market Value of Assets	$ 26,885,272	$ 24,639,402

Plan Participants

A file of employee data was provided by the County which contained basic indicative, compensation and employment information for each employee. While an audit of the data was not made, a thorough check was done, reconciling the prior valuation data with the new data. This data was checked for internal consistency and for consistency with the prior year. A full summary of participant information is shown in Section V.

Plan Participants

		January 1, 2013	January 1, 2012
1.	Active Employees	285	281
2.	Retirees	157	153
3.	Survivors	20	18
4.	Disabled	1	2
5.	Deferred Vested	99	99
6.	Total Participants	562	553

Actuarial Assumptions and Methods

A full listing of the actuarial assumptions is outlined in Section VI of the report. There were not any changes in assumptions or methods from the previous actuarial valuation.

Actuarial Certification

This report presents the results of the actuarial valuation of the Pension Plan of Kent County, Delaware.

The purpose of this valuation is to:

- review and report the funded status of the plan under Chapter 83 Section 17 of the Kent County Code; and
- serve as a guideline for contributions to be made for the fiscal year.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Kent County Levy Court. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of the review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results.

In our opinion, all calculations and procedures are in conformity with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the results comply with the requirements of the applicable Statements of Financial Accounting Standards and the Internal Revenue Code including the economic and demographic assumptions used which are based on plan experience and reflect the economic market conditions as appropriate.

We are available to answer any questions regarding this material or to provide explanations and further details, as may be appropriate. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Brett Schwab, ASA, EA, MAAA
Actuary, Compensation and Benefits Practice
Grant Thornton LLP
January 31, 2013

Unfunded Actuarial Accrued Liability

Under section 17 of Chapter 83 of the Code, an actuary shall at least biennially review the pension fund and shall report to the County government whether any additional sums of money are needed to keep the pension fund actuarially sound so that sufficient funds will always be available to pay the benefits provided.

In this section we determine the contribution requirements to the trust based on the results of the actuarial valuation.

The cost method used to determine the funded status of the Plan and the annual contribution requirements is the Projected Unit Credit Actuarial Cost Method. This is an individual type cost method that directly defines an actuarial accrued liability and normal cost. It is consistent with the method mandated for financial disclosure of private sector pension obligations.

Calculation of Unfunded Actuarial Accrued Liability as of January 1, 2013

1.	Actuarial Accrued Liability		
	Actives	$	14,774,042
	Retirees		19,574,294
	Total	$	34,348,336
2.	Actuarial Value of Assets		28,139,969
3.	Unfunded Actuarial Accrued Liability	$	6,208,367

Normal Cost

Under the Projected Unit Credit Actuarial Cost Method the normal cost is a direct allocation to the current year of the present value of projected benefits for each active participant in the Plan. The normal cost for the 2013 actuarial valuation year is $866,652 or approximately 6.6% of annual compensation.

Range of Contributions

The annual contribution is comprised of the normal cost plus an amortization of the unfunded actuarial accrued liability amortized over a period of years.

The table below displays the County's gross contribution under four scenarios ranging from an immediate payment of the unfunded liability to a 30 year amortization of the unfunded liability. Note that these contributions are not reduced by the picked up employee contributions.

	Actuarial Valuation Year		
	2013	2012	2011
Immediate Funding of Unfunded Liability	$ 7,641,020	$ 7,277,348	$ 6,864,710
5-Year Amortization of Unfunded Liability	$ 2,421,578	$ 2,424,239	$ 2,397,826
20-Year Amortization of Unfunded Liability	$ 1,498,988	$ 1,554,854	$ 1,597,630
30-Year Amortization of Unfunded Liability	$ 1,418,125	$ 1,478,654	$ 1,527,494

Historically, the County has adopted a funding policy that amortizes any unfunded liability over a 30 year period. Based on the actuarial methods and assumptions used in this valuation and the Code in effect on January 1, 2013, the recommended contribution is determined to be $1,418,125.

Development of Annual Required Contribution

The recommended contribution does not differ significantly from the Annual Required Contribution (ARC), and therefore is used to determine the Annual Pension Cost and the Net Pension Obligation accrual under Statement No. 27 of the Governmental Accounting Standards Board ("GASB 27").

Development of Annual Pension Cost and Net Pension Obligation

The Annual Pension Cost is based on the adjusted ARC and Net Pension Obligation (NPO) at the beginning of the year. The exhibit below develops the Annual Pension Cost and reconciles the NPO over the course of the year.

		2013	2012
1.	Funding interest rate	8.00%	8.00%
2.	Net Pension Obligation (NPO) as of Beginning of Fiscal Year	(1,484,303)	(1,578,142)
3.	Annual Required Contribution (ARC)	1,478,654	1,527,494
4.	Interest on NPO at rate (1) to End of Fiscal Year	(118,744)	(126,251)
5.	Adjustment to the ARC	211,247	220,090
6.	Annual Pension Cost: (3)+(4)+(5)	1,571,157	1,621,333
7.	Annual Employer contribution	(1,478,654)	(1,527,494)
8.	Change in NPO: (6)-(7)	92,503	93,839
9.	NPO as of End of Fiscal Year: (2)+(8)	(1,391,800)	(1,484,303)

Schedule of Funding Progress

The Schedule of Funding Progress described in paragraph 37 of Statement No. 25 of the Governmental Accounting Standards Board ("GASB 25") calls for the information shown in the table below for a period of six consecutive fiscal years. The exhibit below covers the last five fiscal years for which either Grant Thornton has performed an actuarial valuation or for which we were provided information. We will update this table further as needed but only pursuant to a discussion with your auditors.

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll
	(a)	(b)	(b) – (a)	(a) / (b)	(c)	(b) – (a) / (c)
December 31, 2006	$21,511,292	$24,187,574	$2,676,282	88.9%	$10,529,856	25.4%
December 31, 2008	$21,577,386	$22,831,005	$1,253,620	94.5%	$12,645,748	9.9%
December 31, 2009	$23,116,843	$29,270,573	$6,153,730	79.0%	$12,031,063	51.1%
December 31, 2010	$25,098,216	$30,482,965	$5,384,749	82.3%	$12,081,049	44.6%
December 31, 2011	$26,576,144	$32,426,481	$5,850,337	82.0%	$12,687,170	46.1%
December 31, 2012	$28,139,969	$34,348,336	$6,208,367	81.9%	$13,186,023	47.1%

Note: The Actuarial Accrued Liability determined as of December 31, 2009 and going forward is according to the Projected Unit Credit cost method. Previous to that, the Actuarial Accrued Liability was determined according to the Frozen Entry Age cost method.

Plan Assets

The benefits under the Plan are funded by contributions regularly made to the Trust. The Trustee holds and invests the accumulated monies and disburses from the fund any benefits that become payable upon retirement, death or termination of employment.

The market value of assets is presented below.

		12/31/2012		12/31/2011
Market Value of Assets	$	26,885,272	$	24,639,402

Since the prior valuation, the fund has changed as indicated below.

Trust Receipts and Disbursements

		2013		2012
Assets at Beginning of Year	$	24,639,402	$	24,616,083
Additions:				
Contributions		1,527,494		1,554,217
Income from Dividends and Interest on Investments		182,389		135,895
Realized and Unrealized Gains on Investments		2,604,123		396,971
Total Additions	$	4,314,006	$	2,087,083
Deductions:				
Benefit Payments		(1,898,947)		(1,886,340)
Administrative Expenses		(169,189)		(177,424)
Total Deductions	$	(2,068,136)	$	(2,007,043)
Net Additions	$	2,245,870	$	23,319
Assets at End of Year (excluding receivable)	$	26,885,272	$	24,639,402

An actuarial value of assets is used in determining Plan costs. This method was developed to smooth the effect of temporary fluctuations in asset market values to reduce volatility in the contribution requirements.

The expected actuarial value of assets is calculated by assuming the previous year's value (including receipts and disbursements) earned the valuation interest rate of 8.00%. This expected value is restricted to within 10% of the actual market value. The Plan realizes an actuarial gain if the expected value is less than 90% of the market value or an actuarial loss if more than 110%. No gain or loss from investments is realized as long as the expected actuarial value of assets is within 10% of the market value. Any long term difference between the actual and assumed earnings of the fund will ultimately be reflected in the costs of the Plan.

The actuarial value of assets is determined in the table below.

Actuarial Value of Assets

		2013	2012
1.	Actuarial Value of Assets at Beginning of Year	$ 26,576,144	$ 25,098,216
2.	Contributions	1,527,494	1,554,217
3.	Benefit Payments	(1,898,947)	(1,886,340)
4.	Expenses	(169,189)	(177,424)
5.	Interest at 8% per annum on:		
	A. Actuarial Value of Assets	2,126,092	2,007,857
	B. Contributions	61,100	62,169
	C. Benefit Payment and Expenses	(82,725)	(82,551)
	D. Net Interest	$ 2,104,467	$ 1,987,475
6.	Expected Actuarial Value of Assets	28,129,969	26,576,144
7.	Market Value of Assets	26,885,272	24,639,402
8.	Market Value Floor	24,196,745	22,175,462
9.	Market Value Ceiling	29,573,799	27,103,342
10.	Actuarial Value of Assets at End of Year	$ 28,139,969	$ 26,576,144

Plan Participants

This actuarial valuation is based on participation data provided by the County. Participation in the Plan is based on Section 3, Chapter 83 of the Code and includes current employees of the County who satisfy eligibility requirements for participation in the Plan and former employees who are receiving or are entitled to receive a benefit under the Plan.

The number of Plan participants included in this valuation is described below.

Plan Participants

		January 1, 2013	January 1, 2012
1.	Active Employees	285	281
2.	Retirees	157	152
3.	Survivors	20	19
4.	Disabled	1	2
5.	Deferred Vested	99	99
6.	**Total Participants**	**562**	**553**

Data reconciliation between the current and prior valuation dates is shown below.

	Actives	Deferred Vested	Disabled	Retirees	Survivors	**Total**
At 1/1/2012	**281**	**99**	**2**	**153**	**18**	**553**
Changes Due to:						
New Entrants	17	0	0	0	0	**17**
Return from Disability	1	0	(1)	0	0	**0**
Non-Vested Terms	(4)	0	0	0	0	**(4)**
Vested Terms	(4)	4	0	0	0	**0**
Disabled	0	0	0	0	0	**0**
Retired	(7)	(4)	0	11	0	**0**
Death, no Survivor	0	0	0	(3)	(1)	**(4)**
Death with Survivor	0	0	0	(4)	4	**0**
Data Change	1	0	0	0	(1)	**0**
Total Change	**4**	**0**	**(1)**	**4**	**2**	**9**
At 1/1/2013	**285**	**99**	**1**	**157**	**20**	**562**

Assumptions and Methods

The assumptions and methods displayed in this section were selected from the complete set of assumptions used to calculate liabilities for the plan. Kent County Levy Court has reviewed the assumptions and recommended to the actuary that they be used.

A. Discount Rate

The nominal rate used to discount liabilities is 8.00%.

B. Mortality Rates

Mortality for the valuation is the RP-2000 Combined Healthy Table. Select mortality rates are listed below.

Mortality Assumptions		
	Base Rates	
Age	Male	Female
20	0.00035	0.00019
30	0.00044	0.00026
40	0.00108	0.00071
50	0.00214	0.00168
60	0.00675	0.00506
70	0.02221	0.01674
80	0.06437	0.04588
90	0.18341	0.13168
100	0.34456	0.23747
110	0.40000	0.36462
>=120	1.00000	1.00000

C. Salary Scale

Compensation was assumed to increase 3.50% per annum.

D. Cost Method

The Projected Unit Credit Cost Method.

E. Asset Valuation Method

An actuarial value of assets is used. On each valuation date, the expected assets are determined by increasing the previous actuarial value of assets and the net receipts and disbursements at the valuation interest rate. This expected value is used, but it is limited to be within 10% of the market value.

F. Disability Rates

Disability for the valuation is based on reports of the Society of Actuaries. Select disability rates are listed below.

Disability Assumptions		
	Base Rates	
Age	Male	Female
20	0.00077	0.00077
25	0.00077	0.00077
30	0.00091	0.00091
35	0.00116	0.00116
40	0.00203	0.00203
45	0.00358	0.00358
50	0.00617	0.00617
55	0.01075	0.01075
60	0.01397	0.01397
65	0.00000	0.00000

G. Retirement Rates

Select retirement rates are listed below.

Retirement Assumptions		
	Base Rates	
Age	Male	Female
55	0.10000	0.10000
56	0.00000	0.00000
57	0.00000	0.00000
58	0.00000	0.00000
59	0.00000	0.00000
60	0.10000	0.10000
61	0.10000	0.10000
62	0.20000	0.20000
63	0.10000	0.10000
64	0.10000	0.10000
65	1.00000	1.00000

H. Termination Rates

Ultimate termination rates for the valuation are based on Table T-5 as set forth by the Actuaries Pension Handbook. Termination rates in the first four years of an employee's service are taken as a multiple of Table T-5. Select termination rates by age and period of service are listed below.

Termination Assumptions					
	Years of Service				
Age	1	2	3	4	5+
20	0.15877	0.13892	0.11908	0.09923	0.07938
25	0.15448	0.13517	0.11586	0.09655	0.07724
30	0.14444	0.12638	0.10833	0.09027	0.07222
35	0.12553	0.10984	0.09415	0.07846	0.06276
40	0.10301	0.09013	0.07726	0.06438	0.05150
45	0.07951	0.06957	0.05963	0.04969	0.03975
50	0.05125	0.04485	0.03844	0.03203	0.02563
55	0.01879	0.01644	0.01409	0.01174	0.00939
60	0.00180	0.00158	0.00135	0.00113	0.00090
65	0.00000	0.00000	0.00000	0.00000	0.00000

Plan Provisions

The following summary of plan provisions represents our understanding of Article 1, Section 83 of the Code of Kent County referred to as the Kent County Employee Retirement Program.

Employees who retire from the County may be eligible for pension benefits pursuant to the provisions below.

Effective Date	June 18, 1957
Covered Employee	An employee with Kent County who receives a regular salary directly from Kent County and receives or is eligible to receive County paid benefits including the following: Elected officials of Kent County; Board of Assessment members; and Part-time employees with more than 1,000 hours per calendar year.
Average Monthly Base Salary	The highest 36 consecutive months of Salary.
Salary	Annual compensation approved and paid by the County government for the position(s) held, excluding overtime or special pay for any calendar year where the covered employee worked at least 1,000 hours. Payroll deductions shall not reduce the annual compensation (salary) amount.
Service	Regular employment as a covered employee with Kent County for more than 1,000 hours in any calendar year. If a covered employee had similar employment with New Castle County, Sussex County of the State of Delaware prior to June 27, 1986, such years of service shall be recognized and included for pension benefits, provided that such covered employee at Kent County on or before June 27, 1986.
Retirement Pension Benefit	**Employees Hired On or Before December 21, 2010** The monthly pension payable shall be 2% of the Average Monthly Base Salary multiplied by the number of years of Service. **Employees Hired After December 21, 2010** The monthly pension payable shall be 1.85% of the Average Monthly Base Salary multiplied by the number of years of Service.
Normal Retirement	**Employees Hired On or Before June 29, 2010** Age 62 with 5 years of Service **Employees Hired After June 29, 2010** Age 62 with 8 years of Service
Early Retirement	A Covered Employee may retire prior to age 62 upon satisfying: Any age and 30 years of Service, or Age 55 and 20 years of Service, or Age 60 and 15 years of Service. Amount is Vested Benefit payable at actual retirement date.

Disability	A Covered Employee who shall become disabled while in Covered Employment and covered under County-provided long-term disability insurance shall be considered as remaining in Covered Employment until they retire or the cessation of disability insurance if earlier.
Death Benefit	Upon the death of a Vested Covered Employee who has not commenced receipt of a Retirement Pension Benefit the beneficiary shall be entitled to receive a death benefit as follows: • 50% of the Retirement Pension Benefit the Covered Employee would have received had they terminated employment on the date of death, survived to the earliest retirement age and elected to retire with a single life annuity if the beneficiary is a surviving spouse; or • 50% of the Retirement Pension Benefit the Covered Employee would have received had they terminated employment on the date of death, survived to the earliest retirement age and elected to retire with a 50% Joint and Survivor Annuity if the beneficiary is not a surviving spouse.
Form of Payment	The Retirement Pension Benefit payable at retirement can be paid in any of the actuarially equivalent optional forms of payment: <u>Lump Sum</u> - a single lump sum (not available if the lump sum amount exceeds $3,500); <u>Life Only</u> - Equal monthly payments for life; <u>100% Joint & Survivor</u> - Equal monthly payments for life with 100% of the monthly payment continuing to a surviving beneficiary upon the Covered Employees death; <u>75% Joint & Survivor</u> - Equal monthly payments for life with 75% of the monthly payment continuing to a surviving beneficiary upon the Covered Employees death; <u>50% Joint & Survivor</u> - Equal monthly payments for life with 50% of the monthly payment continuing to a surviving beneficiary upon the Covered Employees death; <u>10 Year Certain & Life</u> - Equal monthly payments for life with the first 120 monthly payments guaranteed; or <u>5 Year Certain & Life</u> - Equal monthly payments for life with the first 60 monthly payments guaranteed.
Employee Contributions	**<u>Employees Hired On or Before December 21, 2010</u>** Effective July 1, 2009, 1% of base salary payable over the normal pay periods shall be contributed by each eligible covered employee. **<u>Employees Hired After December 21, 2010</u>** Effective December 21, 2010, 3% of base salary over $6,000 payable over the normal pay periods shall be contributed by each eligible covered employee.
One-Time Retirement Incentive	Subject to an early retirement election, vested employees who were eligible for retirement benefits between February 1, 2009, and June 30, 2009 and retired before June 1, 2009, received the option of a special one-time retirement incentive of $15,000 or five additional years of service, at the employee's option.