

Montague County, Texas  
(Montague, Texas)

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GASB Statement No. 45 - OPEB Reporting  
(Postemployment Benefits Other than Pension)

Actuarial Valuation  
For the Fiscal Year Ending  
September 30, 2016

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*Report: February 17, 2017*

February 17, 2017

Jennifer Essary  
County Auditor  
Montague County  
101 Franklin Street  
Montague, Texas 76251

**Re: GASB 45 OPEB Actuarial Valuation for Fiscal Year Ending September 30, 2016**

Dear Ms. Essary,

CapRisk presents the following FY2016 GASB 45 report, summarizing the results of the OPEB valuation performed by our consulting actuary for Montague County. Please note all references to FY2016 are for the 12-month period ending September 30, 2016.

The medical plan has an implicit subsidy by the employer sponsor, so there are costs determined under GASB 45 that are higher than the apparent cost of the contributions that would be paid by retirees.

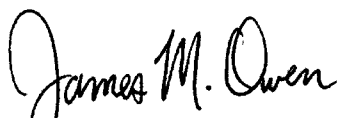
It is our understanding that the County is first adopting GASB 45 for FY2016. The County also provides a lifetime monthly benefit of \$ 200 to retirees who have at least 15 years of service with the County at the time of retirement. It is our further understanding that there is no stipulation that this benefit be used for the cost of the health insurance plan. Based on this, it is our opinion that this is a retirement benefit and not a health insurance benefit subject to GASB 45. Therefore, this benefit is excluded from the report.

This analysis has been performed using generally accepted actuarial principles and in accord with all relevant Actuarial Standards of Practice.

Thank you for the opportunity to work on this assignment. Please let us know should you have any questions or require additional information regarding this report.

Best Regards,

CAPRISK CONSULTING GROUP:



James M. Owen, Managing Principal  
877.747.5238, Ext. 411 / JOwen@CapRiskGroup.com

Cc: Wilfred L. Thornthwaite, Consulting Actuary

# Montague County, Texas

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## Postemployment Benefits Other than Pension Actuarial Valuation

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### SCOPE OF STUDY

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CapRisk Consulting Group was engaged by **Montague County, Texas** to provide an actuarial valuation of the liabilities for postemployment benefits other than pension (“OPEB”) for the fiscal year ending September 30, 2016. The following report includes:

- Annual Required Contribution (“ARC”) for the fiscal year.
- Annual OPEB Cost (“AOC”) for the fiscal year.
- Projected Net OPEB Obligation (“NOO”) for the fiscal year.

The County adopted GASB Statement No. 45 (“GASB 45”) for the fiscal year beginning October 1, 2015. This report has been prepared on that basis. All references to FY2016 are for the 12-month period ending September 30, 2016.

This report has been prepared by Wilfred L. Thornthwaite, FSA, MAAA, Consulting Actuary for the firm. Other members of the firm also assisted in this project.

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**EXECUTIVE SUMMARY**

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Montague County ("Montague") provides medical and dental coverage to eligible retirees. The retiree pays 100% of the contribution for the medical and dental coverage elected. The coverage may be continued to age 65.

We have determined that the dependent medical coverage and dental coverage are not subsidized by the employer and are excluded from the actuarial valuation for purposes of GASB 45.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 was enacted on December 8, 2003. As a result of this legislation, employers providing drug coverage to Medicare eligible retirees, that is, at least actuarially equivalent to the standard benefit provided by Medicare, may be eligible to receive a federal subsidy.

GASB has taken the position that any federal subsidy received should be reported as revenue to the plan sponsor and not used as an offset to the GASB 45 liabilities. This report is prepared on that basis.

This summary identifies the value of benefits at October 1, 2015 and costs for the 2016 Fiscal Year:

	Total Benefits	Present Value	Amount
Present Value of all Projected Benefits	49,170	NA	49,170
Present Value of Benefits Earned to Date (Actuarial Accrued Liability)	22,665	NA	22,665
FY 2016 Annual Required Contribution (ARC)			3,809
FY 2016 Annual OPEB Cost			3,809
FY 2016 Expected Net OPEB Payments [includes implicit subsidy]			0

This section presents detailed valuation results for the County's Plan.

- ▶ The **Present Value of all Projected Benefits** is the total present value of all expected future benefits, based on certain actuarial assumptions. The Present Value of all Projected Benefits is a measure of total liability or obligation. Essentially, this present value is the value (on the valuation date) of the benefits promised current and future retirees. The Plan's present value of all projected benefits (at October 1, 2015) is **\$ 49,170**. All of this liability is for current employees.
- ▶ The **Actuarial Accrued Liability** is the liability or obligation for benefits earned through the valuation date, based on certain actuarial methods and assumptions. The Plan's Actuarial Accrued Liability (at October 1, 2015) is **\$ 22,665**. All of this liability is for current employees. The Actuarial Accrued Liability represents **46.10%** of the present value of all projected benefits.
- ▶ **Service Cost** is the value of benefits expected to be earned during the year, again based on certain actuarial methods and assumptions. The 2016 Fiscal Year Service Cost is **\$ 2,475**.

The results were calculated based upon plan provisions, as provided by the County, along with certain demographic and economic assumptions as recommended by our consulting actuary with guidance from the GASB statement.

#### **Demographic Assumptions**

Data was provided by the County as of February, 2017. Appropriate adjustments in this data were made for the actuarial valuation. There is no assumption for future hires.

#### **Economic Assumptions**

The GASB statement requires that the discount rate used to determine the retiree healthcare liabilities should be the estimated long-term yield on the "investments that are expected to be used to finance the payment of benefits". Since the County does not pre-fund the retiree healthcare liabilities, we have used a discount rate of **4.00%**.

The trend assumption is used to project the growth of the expected claims over the lifetime of the healthcare recipients. The GASB statement does not require a particular source for information to determine healthcare trends, but it does recommend selecting a source that is "publicly available, objective and unbiased".

Our consulting actuary developed the trend assumption utilizing the short term rates expected for the County medical plan along with other secondary data regarding long-term health cost trends.

The balance of this report provides greater detail for the above results.

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**PRINCIPAL VALUATION RESULTS**

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The following highlights Montague's recognition of the above amounts:

- ▶ The October 1, 2015 assets are \$ 0
- ▶ The FY 2016 Annual Required Contribution (ARC) is \$ 3,809.
- ▶ Expected FY 2016 net OPEB payments are \$ 0 (including \$ 0 in direct employer paid contributions).

The following table shows results by active, deferred vested and retired employee groups:

	Initial Results	Medicare Payments Required	
<b>Present Value of Projected Benefits</b>			
Actives	49,170	NA	49,170
Retirees	0	NA	0
	<b>49,170</b>		
<b>Actuarial Accrued Liability</b>			
Actives	22,665	NA	22,665
Retirees	0	NA	0
	<b>22,665</b>		
<b>Assets</b>			0
<b>Unfunded Actuarial Accrued Liability</b>			22,665
<b>Service Cost</b>			2,475

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**ACCOUNTING INFORMATION**

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The adoption date for the new GASB OPEB Accounting Standard was for the Fiscal Year beginning October 1, 2015. The following shows the Annual Required Contribution (ARC), Annual OPEB Cost (AOC), and the projected September 30, 2016 Net OPEB Obligation (NOO).

**Annual Required Contribution (ARC)**

The Standard sets the method for determining Montague's postemployment benefits accrual, the Annual Required Contribution (ARC), to include both the value of the benefits earned during the year (Service Cost) and an amortization of the Unfunded Actuarial Accrued Liability. Accordingly, the following table shows Montague's 2016 Fiscal Year Annual Required Contribution (ARC) based on a 30-year amortization of the Unfunded Actuarial Accrued Liability as a level dollar amount.

Fiscal Year Ending September 30, 2016	
Service Cost	2,475
Unfunded Actuarial Accrued Liability Amortization	1,334
<b>Annual Required Contribution (ARC)</b>	<b>3,809</b>

**Annual OPEB Cost (AOC)**

If there is a prior year obligation, the Annual OPEB Cost should reflect an adjustment for the obligation including both an interest adjustment and amortization of the prior year OPEB obligation.

Annual Required Contribution (ARC)	3,809
Interest on Prior Year Net OPEB Obligation	0
Amortization of Prior Year Net OPEB Obligation	(0)
<b>Total Annual OPEB Cost (AOC)</b>	<b>3,809</b>

**Annual OPEB Cost Summary (After adoption, a 3-year display will be shown):**

Fiscal Year Ending	Annual OPEB Cost	Percentage of Total OPEB Cost	Net OPEB Obligation
September 30, 2016	3,809	00.00%	3,809
September 30, 2017			
September 30, 2018			

\* Based on expected net OPEB benefit payments (including expected mortality) over the next five years.

**Projected September 30, 2016 Net OPEB Obligation (NOO)**

Based on the Annual OPEB Cost developed above, the following is the projected September 30, 2016 Net OPEB Obligation (NOO):

October 1, 2015 Net OPEB Obligation (NOO)	0
Annual OPEB Cost (AOC)	3,809
Expected Net Retiree Costs*	(0)
Expected September 30, 2016 Net OPEB Obligation (NOO)	3,809

\* Based on expected net OPEB benefit payments of \$0.

**Required Supplementary Information**

Below is the projected schedule of funding progress:

Measurement Date	Contributions	Required Annual Contributions	Unfunded Amount	Unfunded Amount as a Percentage of Total OPEB Cost	Unfunded Amount as a Percentage of Total OPEB Obligation	
October 1, 2015	0	22,665	22,665	0.00%	3,997,878	5.67%
	0			0.00%		
	0			0.00%		



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## ACTUARIAL CERTIFICATION

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Thornthwaite & Co. was retained by CapRisk Consulting Group, on behalf of Montague County, to perform a valuation of its postretirement welfare plan benefits in accordance with GASB Statement No. 45. This valuation has been prepared based on our interpretation of GASB No. 45 and using generally accepted actuarial principles and practices.

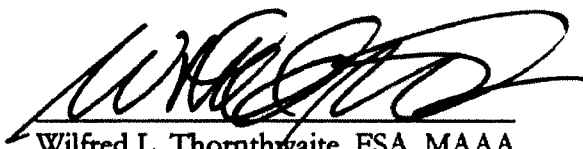
The consulting actuary is member of the Society of Actuaries and the American Academy of Actuaries and meets their "General Qualification Standards for Prescribed Statements of Actuarial Opinion" related to postretirement welfare plan benefits.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and financial data. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed the information for reasonableness. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The actuarial assumptions employed in the development of postretirement welfare plan costs have been selected by the plan sponsor, with the concurrence of Thornthwaite & Co. GASB 45 requires that each significant assumption individually represent the best estimate of a particular future event.

The results shown in this report are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results, since the Actuarial Standards of Practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this report could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The information contained in this report was prepared for the internal use of Montague County and its auditors in connection with the actuarial valuation of postretirement welfare plan benefits. It is not intended for, or necessarily suitable for, other purposes. Further distribution or use of all or part of this report to other parties is expressly prohibited without Thornthwaite & Co.'s prior written consent.

  
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Wilfred L. Thornthwaite, FSA, MAAA  
Consulting Actuary

February 17, 2017  
Date

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## DEMOGRAPHIC INFORMATION

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The following table summarizes active and retiree demographic information for the medical plan. This reflects the benefits, as of October 1, 2015, based on data provided by the client.

State	Employee Only	Employee & Family
Active (= 97)	93	4
Retired (= 0)	0	0
<b>Total = 97</b>	<b>93</b>	<b>4</b>

Adjusted for terminations and new hires during the fiscal year ending September 30, 2016.

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## SUMMARY OF PRINCIPAL PLAN PROVISIONS

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### Plan Provisions

#### Medical Benefits

Eligibility	Retirement under the Texas County and District Retirement System at the earlier of a) age 60 with 5 years of service, b) 30 years of service without regard to age, and c) the sum of age plus service equals 75. The retiree must have 10 years of continuous service with the County at the time of retirement to participate in the retiree health plan.
Postretirement contributions	The retiree contributes 100% of the medical premium for the coverage tier selected.
Medical Plan Benefit	Benefits are provided through the Texas Association of Counties Health and Employee Benefits Pool.  Coverage continues to Medicare eligibility age.
Other Benefits	Dental benefit are available. The retiree pays 100% of the premium.  All benefits continue to age 65 if contributions are paid.

**Change in Plan Provisions** None noted.

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**METHODS AND ASSUMPTIONS**

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**Actuarial Method**

Projected Unit Cost Method

**Service Cost**

Determined for each employee as the Actuarial Present Value of Benefits allocated to the valuation year. The benefit attributed to the valuation year is that incremental portion of the total projected benefit earned during the year in accordance with the plan's benefit formula. This allocation is based on each participant's service between date of hire and date of expected termination.

**Accumulated Post-Retirement Benefit Obligation**

The Actuarial Present Value of Benefits allocated to all periods prior to the valuation year.

**Discount Rate**

4.00% (1.00% real rate of return plus 3.00% inflation)

**Average Per Capita Claim Cost:** Determined as of October 1, 2015

Age	Medical
50	9,900
51	10,147
52	10,401
53	10,661
54	10,927
55	11,200
56	11,481
57	11,768
58	12,062
59	12,363
60	12,672
64	13,988

**Health Care Cost Trend**

Level 5.50%.

<b>Mortality</b>	RP-2014 Total Mortality Table with Projection MP-2015
<b>Turnover</b>	Rates varying by age/service/gender. Sample rates:
	Age 25            Age 40            Age 55
	21.00%          16.00%          1.30%
<b>Disability</b>	None assumed
<b>Retirement Rates</b>	Rates vary by age, with an average retirement age of 60.
<b>Retiree Contributions</b>	Retiree pays the full active employee contribution rate for the medical and dental coverage.
<b>Data Assumptions</b>	
<i>Age Difference/% Married</i>	Males are assumed to be 3 years older than females, 50% married.
<i>Coverage</i>	100% of all retirees under age 65 who have healthcare coverage will continue with the same coverage until eligibility for Medicare. 10% of active employees will elect individual coverage at retirement.
<b>Valuation Methodology and Terminology</b>	
	We have used GASB accounting methodology to determine the postretirement medical benefit obligations.
<b>Amortization Period</b>	
	The period used to determine amortization costs for the initial Unfunded Actuarial Accrued Liability is a level period for 30 years on an open basis.
<b>Valuation Date</b>	October 1, 2015

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## GASB OPEB SUMMARY

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The Government Accounting Standards Board ("GASB") has issued Statements No. 43 and 45 for the recognition and disclosure for public entities sponsoring other (than pensions) post-retirement benefit plans.

This section summarizes pertinent issues from the above statements and includes comments about GASB's OPEB standard.

### **Why Pay-As-You-Go Accounting Will Be Unacceptable**

The GASB believes, like the FASB, that other post-retirement benefits, like pensions, are a form of deferred compensation. Accordingly, GASB is saying these benefits should be recognized (in the plan sponsor's financial statement) when earned by employees, rather than when paid out. Under SFAS 106, pay-as-you-go accounting is replaced with accrual accounting for these benefits. *This approach is similar to (although more restrictive than) GASB's approach under Statements No. 43 and 45.*

### **Allocating Costs (Attribution)**

The FASB defines attribution as the process of assigning other post-retirement benefit cost to periods of employee service. SFAS 106 specifies how (the attribution method) and over what accounting periods (attribution period) the postretirement benefits promise must be allocated.

The attribution (actuarial cost) method specified by SFAS 106 is the "projected unit credit actuarial cost method". This method attributes an equal amount of the total postretirement benefit to each year of service during the "attribution period".

The attribution period is the period over which the total postretirement benefit is earned. Unless the plan states that post-retirement are not earned until a later date, the attribution period is from the employee's hire date until the employee is first eligible for the benefit.

The GASB statements do not restrict entities to a single attribution method, but instead allow plan sponsors (and actuaries) to choose from several acceptable methods (similar to GASB 27). GASB allows six attribution methods and allows attribution to the expected retirement age rather than the earliest eligibility age.

### **Defining the Plan**

SFAS 106 refers to the substantive plan as the basis for accounting. The substantive plan may differ from the written plan in that it reflects the employer's cost sharing policy based on past practice or communication of intended changes, or a past practice of cost increases in monetary benefits. Under SFAS 106, the substantive plan is the basis for allowing recognition of potential future changes to the plan. GASB follows FASB's lead on this issue, requiring entities to recognize the underlying promise, not just the written plan.

One GASB requirement relates to the implied subsidy when retirees participate in the active healthcare plan, but are charged a rate based on a composite active and retiree experience. Under the GASB standard, even if an organization does not otherwise subsidize the benefit, then the organization will have to recognize an OPEB obligation for the implied subsidy.

### Actuarial Assumptions

SFAS 106 says actuarial assumptions should be explicit. This means each individual assumption should represent the actuary's best estimate. GASB also, generally, requires explicit assumptions.

GASB requires that the discount rate be based on the source of funds used to pay the benefits. This means that the underlying expected long-term rate of return on plan assets for funded plans. However, since the source of funds for unfunded plans is usually the organization's general fund, and organizations are usually restricted by applicable State law as to what investments they can have in their general fund, unfunded plans will need to use a relatively low discount rate.

### Transition Issues

Because historical annual required contribution information will rarely be available, GASB has taken a prospective approach on transition issues. This means there is no requirement for any initial transition obligation.

### Effective Dates

The new standard has staggered effective dates, similar to GASB Statement No. 34, as follows:

	Annual Revenue	
Phase I	≥ \$ 100 million	December 15, 2006
Phase II	≥ \$ 10 million but < \$ 100 million	December 15, 2007
Phase III	< \$ 10 million	December 15, 2008