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July 21, 2009

Mr. Kirk Bednar The City of Brentwood Assistant City Manager 5211 Maryland Way Brentwood, TN 37027

Dear Kirk:

The attached report summarizes the results of an actuarial valuation as of July 1, 2009 and July 1, 2010 for The City of Brentwood. We trust this report will be helpful in the formulation of policy with respect to the operation and financing of the plan.

The opportunity to serve The City of Brentwood is appreciated, and we will be pleased to supplement this report in any way, as you request.

The actuarial valuation summarized in this report has been performed utilizing generally accepted actuarial principles and is based on actuarial assumptions, each of which is considered to be reasonable taking into account the experience of the plan and which, in combination, represent a best estimate of the anticipated experience of the plan.

Sincerely,

David L. Shaub, F.S.A. Principal

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Edward B. Scott, F.S.A. Consulting Actuary

cc: Michael Worsham

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# THE CITY OF BRENTWOOD POST EMPLOYMENT BENEFITS OTHER THAN PENSIONS

GASB 45 VALUATION AND REPORT AS OF JULY 1, 2009 AND JULY 1, 2010

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### SUMMARY OF REPORT

An actuarial valuation of the postemployment medical and life insurance benefits provided by The City of Brentwood has been performed as of July 1, 2009 and July 1, 2010. The purpose of the valuation is to determine the Annual Required Contributions for The City of Brentwood under selected actuarial cost methods and amortization methods as prescribed by Statement No. 45 of the Governmental Accounting Standards Board.

On the basis of the valuation, it has been determined that the Annual Required Contribution for the years ending June 30, 2010 and June 30, 2011 for the plan, as described in the Schedule of Benefit, are as follows:

## **Annual Required Contribution**

Entry Age Normal, 30-Year Level Percentage Amortization

	2009 - 2010	2010 - 2011	% Increase
Number of employees covered	238	238	0.00%
Total projected payroll	\$12,792,110	\$13,095,851	2.37%
Average per employee	\$53,748	\$55,025	2.37%
Annual Required Contribution	\$636,866	\$659,800	3.60%
% of Payroll	4.98%	5.04%	1.20%
Projected Payouts	\$61,063	\$71,025	16.31%
% of Payroll	0.48%	0.54%	12.50%
Net Cost	\$575,803	\$588,775	2.25%
% of payroll	4.50%	4.50%	0.00%

## Yearly Comparison of Selected Plan Information

	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011
Number of Participants				
Actives	229	229	238	238
Retirees	9	9	9	9
Annual Projected Payroll	\$11,302,574	\$11,302,574	\$12,792,110	\$13,095,851
Average Projected Earnings	\$49,356	\$49,356	\$53,748	\$55,025
Present Value of Benefits	\$10,996,000	\$10,996,000	\$13,314,369	\$14,068,385
Unfunded Accrued Liability	\$5,544,000	\$3,798,000	\$4,758,705	\$4,998,745
Market Value of Assets (BOY)	\$0	\$2,173,389	\$2,354,471	\$3,107,768
Actuarial Value of Assets (BOY)	\$0	\$2,300,104	\$2,776,979	\$3,406,762
Annual Funding Levels				
Normal Cost	\$379,000	\$379,000	\$443,897	\$451,200
% of Payroll	3.35%	3.35%	3.47%	3.45%
Annual Required Contribution	\$598,000	\$536,000	\$636,866	\$659,800
% of Payroll	5.29%	4.74%	4.98%	5.04%
Projected Payouts	\$41,000	\$41,000	\$61,063	\$71,025
% of Payroll	0.36%	0.36%	0.48%	0.54%
Net Cost	\$557,000	\$495,000	\$575,803	\$588,775
% of Payroll	4.93%	4.38%	4.50%	4.50%
Actual Trust Contributions	\$2,260,000	\$515,000	N/A	N/A
% of Payroll	20.00%	4.56%	N/A	N/A





## **Net OPEB Obligation**

	 2007 - 2008	 2008 - 2009	 2009 - 2010	 2010 - 2011
Net OPEB Obligation – July 1	\$ 0	\$ (1,688,006)	\$ (1,749,078)	\$ (1,749,078)
Annual Required Contribution Interest on Net OPEB Obligation	\$ 598,000 0	\$ 536,000 (101,280)	\$ 636,866 (107,568)	\$ 659,800 (107,568)
Adjustment on Annual Required Contribution Annual OPEB Cost	\$ 0 598,000	\$ <u>59,126</u> 493,846	\$ 61,309 590,607	\$ 61,309 613,541
Annual Employer Trust Contribution	\$ (2,260,000)	\$ (515,000)	\$ (529,544)	\$ (542,516)
Employer Payments for Retiree Benefits Total Contribution	\$ (26,006) (2,286,006)	\$ (39,918) (554,918)	\$ (61,063) (590,607)	\$ (71,025) (613,541)
Increase in Net OPEB Obligation	\$ (1,688,006)	\$ (61,072)	\$ 0	\$ 0
Net OPEB Obligation – June 30	\$ (1,688,006)	\$ (1,749,078)	\$ (1,749,078)	\$ (1,749,078)

# SUMMARY OF BENEFITS

	<b>Employees Hired</b> <b>Before July 1, 2005</b>	Employees Hired On or After July 1, 2005	
Eligibility	20 years or service & minimum age 55 at retirement	Same	
Pre-65 Plan Coverage	Covered under same group plan as active employees	Same	
Pre-65 Cost (Retiree Only)	City pays 100%	Percent City pays of years of service as <u>Yrs.</u> 20-25 25+	
Pre-65 Cost (Dependents)	Retiree pays 50% - City pays 50%	Retiree pay	s 100%
Post-65 Plan Coverage	Direct reimbursement to retiree towards cost of private Medicare supplement policy	None	2
Retiree Life Insurance	City pays 100% for \$50K policy value reduces at age 70 & 75	City pays 100% for to age 65	r \$50K policy

### ASSUMPTIONS

## **Summary of Actuarial Assumptions and Methods**

#### Current Assumptions (Sample Values per 1,000 Lives)

	ATTAINED AGE			
	20	35	50	60
Mortality Rates				
RP 2000 Table – Male	.34	.77	2.14	4.88
RP 2000 Table – Female	.19	.48	1.68	3.93
Withdrawal Rates				
Estimated Experience (1 <sup>st</sup> Year Select)	210	180	120	0
Estimated Experience (2 <sup>nd</sup> Year Select)	190	150	100	0
Estimated Experience (Ultimate)	160	47	7	0
Disability Rates*				
General Government – Male	.41	1.27	5.27	14.39
General Government – Female	.35	1.60	5.43	11.39
Fire/Police – Male	1.13	3.23	8.60	14.53
Fire/Police – Female	.66	2.90	8.43	13.46

\* Once an employee has met the retirement eligibility requirements, the disability decrement was no longer applied to that individual.

#### **Post-Disability Mortality Rates**

75% of Pension Benefit Guaranty Corporation – Male	36.20	20.90	28.70	45.20
Pension Benefit Guaranty Corporation – Female	26.30	21.40	25.70	33.10

#### **Retirement Rates**

<b>General Government</b>		<b>Fire/P</b>	olice
Age	Rate	Age	Rate
55-59	10%	55-59	50%
60-64	25%	60	100%
65	100%		

Fi	re/Police Chief	Fire/Police Supe	
Age	Rate	Age	<u>Rate</u>
65	100%	62	100%

### **Date of Valuation**

January 1, 2009

### **Discount Rate**

6.15%

#### **Long-Term Rate of Return**

6.15% based on the following investment allocation:

Savings Oriented Portfolio	30%
Conservation Growth Portfolio	40%
Traditional Growth Portfolio	30%

Portfolio Name	Investment Mix		
Savings Oriented	75% bonds,	25% stocks	
Conservative Growth	60% bonds,	40% stocks	
Traditional Growth	40% bonds,	60% stocks	

The combined distribution is 58.5% bonds and 41.5% stocks.

#### **Salary Scale**

Salaries increase at 6% per year

#### **Actuarial Valuation Method**

Entry Age Normal Method. A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s).

#### **Asset Valuation Method**

Market Value

#### Health Care Cost Trend Rate

9% graded uniformly to 5% over 8 years

### ASSUMPTIONS

### **Full Eligibility Date**

Employees are fully eligible for postretirement medical and life insurance once they reach age 55 with 20 years of service. For General Government valuation purposes, eligibility is set at reaching the earlier of age 55 with 30 years of service, or age 60 with 20 years of service, which is the first date an employee is eligible for postretirement medical and life insurance benefits as well as an unreduced TCRS retirement benefit. Fire and Police employees are eligible at age 55 with 20 years of service or upon reaching age 60 with any amount of service. Officials who retire at age 55 with 10 years of service are eligible for medical coverage, but the retiree pays 100% of the cost.

#### **Disability Eligibility**

It is assumed that employees are eligible for medical benefits upon disability if they have 5 years of service. Health insurance coverage terminates at age 65.

#### **Medical Benefits - Coordination with Medicare**

Benefits for retirees are deemed to be similar to those benefits provided for actives. The retiree medical plan is assumed to be the primary plan of benefits prior to age 65. Once the retiree reaches age 65, the City of Brentwood reimburses a portion of a Medicare Supplemental Plan purchased by the retiree, discussed in the cost sharing section below. Medicare benefits are assumed to be those statutory benefits effective as of the valuation date for all future periods.

#### **Retiree Cost Sharing Provisions for Medical Coverage**

No retiree contributions are required for pre-65 retiree coverage for participants hired prior to July 1, 2005. Participants hired on or after July 1, 2005 will pay 25% of the premium if they have less than 25 years of service, and 10% of the premium if they have 25 years of service or more. For those employees who retired prior to July 1, 2002, the City reimburses the retiree for 100% of the cost of the post-65 Medicare Supplemental Plan which the retiree chooses to purchase independently. Employees hired before July 1, 2005 that retire after July 1, 2002 also receive a reimbursement from the City for a post-65 Medicare Supplemental Plan. However, there is an annual cap of 50% of the lowest priced employee-only group health insurance coverage. For 2009 that premium amount is \$386.92 per month, for a reimbursement maximum of \$2,322. Employees hired on or after July 1, 2005 do not receive a reimbursement from the City for a post-65 Medicare Supplemental Plan.

#### Annual Per Capita Claim Costs – Age 65

For employees retiring after July 1, 2002, the post-65 claims are equal to the cap, which increases with trend. For those who retired prior to July 1, 2002, the post-65 claims are actual amounts provided by the City of Brentwood.

Pre-65	\$ 10,042
Post-65 Cap	\$ 2,362

Annual claims costs are assumed to decrease 3% per year until age 45. Vision claims and administration expenses are included. Claims costs are assumed to increase at the health care cost trend rate.

### ASSUMPTIONS

#### **Election of Future Postretirement Coverage**

Participants hired before July 1, 2005 - Assume 100% of eligible retirees elect coverage and 75% of spouses elect coverage.

Participants hired on or after July 1, 2005 - Assume 90% of eligible retirees elect coverage and 50% of spouses elect coverage.

#### **Investment of Plan Funds**

The Plan assets are held in custody and invested in accordance with the investment policy authorized by the City of Brentwood OPEB Investment Committee.

#### **Dependents**

Participants hired before July 1, 2005 - The City of Brentwood contributes 50% of the cost of premiums for the spouses of retirees until the earlier of the spouse reaching age 65, or the retiree reaching age 65, at which time spouses no longer receive medical coverage.

Participants hired on or after July 1, 2005 - The City of Brentwood does not contribute toward the cost of premiums for the spouses of retirees. However, coverage is offered until the earlier of the spouse reaching age 65, or the retiree reaching age 65, at which time spouses no longer receive medical coverage.

#### **Death of Retiree**

Upon the death of a retiree, the surviving spouse is no longer eligible for coverage.

#### Life Insurance Benefit

Participants hired before July 1, 2005 - Retirees are eligible for a \$50,000 life insurance policy, which reduces to \$32,500 at age 70, and reduces to \$22,500 at age 75.

Participants hired on or after July 1, 2005 - Retirees are eligible for a \$50,000 life insurance policy to age 65.

It is assumed that administration expenses for life insurance benefits will be \$675 in the first year of the valuation, increasing 3.0% annually.

#### **Amortization Period**

30 years (closed)

# PLAN ASSETS

### **Balance Sheet, June 30, 2008**

	June 30, 2007		June 30, 2008		
Total Assets	\$	0	\$	2,173,389	
Liabilities	\$	0	\$	0	
Reserve for plan participants	\$	0	\$	2,173,389	

# **Summary of Operations**

Trust Fund, July 1, 2007	\$ 0
Increases	
Employer Contributions	\$ 2,260,000
Net Investment Gains	(86,611)
Total increases	\$ 2,173,389
Decreases Benefit payments* Other Expenses	\$ 0 0
Total decreases	\$ 0
Trust Fund, June 30, 2008	\$ 2,173,389
Actuarial value for funding purposes	\$ 2,300,104

\* No benefit payments were made from the Trust Fund.

### PLAN ASSETS

# **Development of Valuation Assets**

The development of valuation assets as of July 1, 2008 for the plan is presented below	:	
(1) Valuation assets, July 1, 2007	\$	0
(2) Expected interest on prior year assets to June 30, 2008		0
(3) Contribution for 2007-2008 plan year		2,260,000
(4) Expected interest on contributions to June 30, 2008		103,461
(5) Benefit payments since July 1, 2007 *		0
(6) Expected interest on benefit payments to June 30, 2008		0
(7) Expected assets, June 30, 2008	\$	2,363,461
(8) Market value of assets, June 30, 2008		2,173,389
(9) Adjustment to expected assets, $((8) - (7))/3$		(63,357)
(10) Value of assets, June 30, 2008, (7) + (9), but within 20% of market value	\$	2,300,104
Market value assets, June 30, 2008	\$	2,173,389
Receivable contribution		0
Total	\$	2,173,389

\*No benefit payments were made from the Trust Fund.

### **ACTUARIAL COMPUTATIONS**

### **Actuarial Balance Sheet as of July 1**

•		2009	2010
Assets	Actuarial Asset Value	\$ 2,776,979	\$ 3,406,762
	Unfunded Accrued Liability	4,758,705	4,998,745
	Present Value of Future Normal Costs	5,778,685	5,662,878
	Total	\$13,314,369	\$14,068,385
Liabilities			
	Present Value of Benefits		
	Active Participants	\$12,771,705	\$13,352,216
	Inactive Participants	542,664	716,169
	Total	\$13,314,369	\$14,068,385

## **Determination of Annual Required Contribution**

The funding requirements for the plan are equal to the normal cost plus the amortization bases of annual outstanding balances. An interest adjustment has been added to reflect payment at the midpoint of the fiscal year.

	2009 - 2010	2010 - 2011
Normal Cost	\$ 443,897	\$ 451,200
Sum of Amortized Bases	174,245	189,201
Interest	18,724	19,399
Annual Required Contribution	\$ 636,866	\$ 659,800

### **ACTUARIAL COMPUTATIONS**

### **Sensitivity Testing of Actuarial Assumptions**

The results of this valuation must be viewed as estimates of the actual results that will occur in the future. It is important to realize that actual results will likely be either higher or lower than these estimates. In addition, certain assumptions are more critical to the valuation results. The impact caused by change or volatility in these key assumptions can be illustrated by providing valuation results after varying these assumptions. In particular, sensitivity results are shown below for the revision of two key assumptions: (a) increasing the health care cost trend assumption from 9% grading to 5% over 8 years to 10% grading to 6% over 8 years and (b) increasing the discount rate from 6.15% to 7.15%.

<u> 2009 – 2010 Plan Year Comparison</u>			
	<b>Base Results</b>	<b>Revisions</b> (a)	Revisions (b)
Normal Cost	\$ 443,897	\$ 550,968	\$ 357,414
Sum of Amortized Bases	174,245	229,012	156,170
Interest	18,724	23,627	18,044
Annual Required Contribution	\$ 636,866	\$ 803,607	\$ 531,628
ARC as a percentage of projected pay	4.98%	6.28%	4.16%

### FINANCIAL DISCLOSURE

## **Schedule of Funding Progress**

	Actuarial	Actuarial Accrued Liability	Unfunded			UAAL as a
Actuarial	Value of	(AAL) –	AAL	Funded	Covered	Percentage of
Valuation	Assets	Entry Age	(UAAL)	Ratio	Payroll	Covered Payroll
Date	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
07/01/2007	\$0	\$5,544,000	\$5,544,000	0.0%	\$11,302,574	49.1%
07/01/2008	\$2,300,104	\$7,137,913	\$4,837,809	32.2%	\$11,876,269	40.7%

## **Schedule of Employer Contributions**

Plan Year	Annual OPEB Cost	Total Contribution	Percentage Contributed
2007-2008	\$598,000	\$2,286,006	382.3%
2008-2009	\$493,846	\$ 554,918*	112.4%
2009-2010	\$590,607	TBD	TBD
2010-2011	\$613,541	TBD	TBD

\*Includes a projected Employer Payment for Retiree Benefits amount of \$39,918.