

University of Kentucky
Post-retirement Medical Design Study
Update Based on GASB Exposure Draft

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I. Background/Purpose

- The University of Kentucky currently provides a health credit toward purchase of lifetime medical coverage to its retirees. A small life insurance benefit is provided to a closed group of eligibles.
- In anticipation of a proposed GASB standard requiring accrual accounting (similar to FAS 106) for non-pension post-retirement benefit programs sponsored by governmental employers, Mercer produced an estimate of UK's retiree medical/life liabilities in January 2002. Based on updated information from UK relative to turnover and retirement rates, Mercer produced revised (lower) liabilities in May 2002. In early January 2003, Mercer presented revised valuation results based on several alternative plan design changes suggested by both UK and Mercer. This was completed before the GASB exposure draft was issued.
- In February 2003, GASB issued its long-anticipated exposure draft of accounting standards for "Other Post-employment Benefits" (OPEB). A comment deadline of April 30, 2003 was established.
- This document is relatively informal as it is intended to be used primarily for discussion purposes. Because there is not yet an official GASB accounting standard for these benefits, this is not a formal valuation report. When the need arises, we will be happy to produce a more polished, formal actuarial report for general distribution.
- In order to produce an "apples-to-apples" comparison, all data and actuarial assumptions are the same as those included in Mercer's May 2002 and January 2003 reports.
- Note that the life insurance liabilities are included in all these numbers, but these liabilities are minimal.

II. Key Cost Drivers

- Medical inflation (trend)
- Lifetime post-65 coverage
- Current retirees

IV. GASB for OPEB vs. FAS 106

	<u>FAS-106</u>	<u>GASB</u>
<i>Funding Method</i>	Projected Unit Credit	Any of 6 recognized methods
<i>Attribution</i>	From beginning of credited service to full eligibility date	As under the regular application of the funding method
<i>Discount Rate</i>	Current high quality fixed income investments	Estimated long-term yield on investments expected to be used to finance benefits
<i>Long-Term Rate of Return</i>	Estimated long-term rate of earnings on plan assets	Not separately identified from discount rate
<i>Amortization Method</i>	Straight line without interest	Level dollar amounts or level percentage of pay
<i>Amortization Period</i>	Generally over expected working lifetime; 20 years for transition obligation with immediate recognition permitted	Maximum 30 years for initial unfunded actuarial accrued liability (UAAL) as well as plan amendments and gains and losses
<i>Gain/Loss Recognition</i>	10% corridor permitted	Fully recognized in UAAL
<i>Expense Calculation</i>	Service cost plus interest cost minus expected asset return plus or minus amortizations of transition obligation, prior service costs, and gains or losses	Normal cost plus or minus amortization of UAAL

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Summary of Actuarial Assumptions

Measurement Date July 1, 2002

Discount Rate 7.25%

Mortality 1983 Group Annuity Mortality for Males and Females

Withdrawal Termination rates based on a study of 3 years of data.

Rates at Select Ages	Select Period (from-to)				Ultimate 4 years +	
	Age	0-1	1-2	2-3		3-4
	20	76.98%	59.78%	33.62%	27.14%	12.27%
	25	65.80%	48.05%	29.64%	25.04%	11.39%
	30	56.27%	38.64%	25.34%	21.91%	9.46%
	35	48.15%	31.09%	21.68%	19.20%	7.87%
	40	41.23%	25.04%	18.57%	16.84%	6.56%
	45	35.33%	20.18%	15.92%	14.80%	5.48%
	50	30.30%	16.29%	13.67%	13.03%	4.59%

Disability None Assumed

Retirement Rates	Age	Rate
	50-54	1%
	55	5%
	56-59	3%
	60-61	5%
	62	20%
	63-64	10%
	65	40%
	66	25%
	67	20%
	68-69	15%
	70	20%
	71-79	10%
	80+	100%

Marital Status
 Percentage married 70%
 Age difference of spouse Males are assumed to be 3 years older than females.

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Summary of Plan Provisions

Retirement Eligibility	Rule of 75 with 15 years minimum of required service
Benefits	
Medical	<p>Medical benefits for retirees are provided through self-insured arrangements through a choice of four plans pre-Medicare and one post-Medicare plan option.</p> <p>Retirees receive a credit equal to approximately 90% of the cost of the least expensive pre-Medicare plan for single coverage. Retirees must pay the difference between the credit and the rate for the plan option chosen. The projected credit for 2002-2003 is \$249/mo. This credit is assumed to increase at the Health Care Cost Trend Rates. surviving spouses of retirees receive a continuation of the credit at 50% of the credit for retirees.</p> <p>For retirees and their dependents under 65, this creates a "hidden" employer subsidy which results from the fact that the actual cost of providing coverage at those ages exceeds the active premium rate.</p> <p>Retirees age 65 and older are required to pay the difference between the credit and post-Medicare plan cost. This arrangement post-Medicare generates no "hidden" employer subsidy.</p> <p>For additional information on specific benefits please refer to the respective plan agreements.</p>
Required Contributions	Retirees and surviving spouses are required to pay the difference between the premium for the medical plan and tier they elect and the credit outlined above.
Life Insurance	Employees hired before August 1, 1965 receive \$5,000 lifetime insurance benefits after retirement.

III. GASB Exposure Draft

- A GASB exposure draft addressing accounting for non-pension post-retirement benefits was issued in February 2003. The comment deadline is April 30, 2003.
- Liabilities in this study have been estimated in accordance with our understanding of the provisions of the recent exposure draft.
- Objectives of this GASB project
 - to recognize other post-employment benefit costs over employees' active service
 - to provide relevant information regarding:
 - ◆ actuarial accrued liabilities for promised benefits associated with past service
 - ◆ the annual cost of OPEB and its contribution to the total cost of government services
 - ◆ the progress (or lack thereof) made in funding the plan
 - to report OPEB costs/liabilities in a manner consistent with pensions
- Effective dates for employers
 - Phase 1 governments (annual revenues > \$100 million): periods beginning after June 15, 2006
 - Phase 2 governments (annual revenues > \$10 million but < \$100 million): after June 15, 2007
 - Phase 3 governments (less than \$10 million annual revenues): after June 15, 2008
 - Early implementation is encouraged

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Comparison of GASB Exposure Draft to FAS 106 for Select Funding Methods

FAS 106 Methodology	Current Plan	Scenario A ¹	Scenario B ²
EPBO	\$ 447,701,015	\$ 245,757,081	\$ 280,752,751
APBO	\$ 350,969,430	\$ 204,163,628	\$ 221,617,141
Service cost at beginning of year	\$ 11,129,316	\$ 4,369,173	\$ 5,711,713
Projected cash flow	\$ 8,952,191	\$ 9,007,182	\$ 9,007,182
Amortization period for prior service base under FAS 106	9.4	11.4	11.4
Calculation of annual Net Periodic Postretirement Benefit Cost (NPPBC)			
Service cost	\$ 11,936,191	\$ 4,685,938	\$ 6,125,812
Interest cost	\$ 25,120,767	\$ 14,475,352	\$ 15,740,732
Amortization of prior service cost	\$ 37,337,173	\$ 17,909,090	\$ 19,440,100
Total	\$ 74,394,131	\$ 37,070,380	\$ 41,306,644

Funding Method (based on level dollar amounts):

B-1 Unit Credit Actuarial Cost Method

Unfunded Actuarial Accrued Liability (UAAL)	\$ 350,969,430	\$ 204,163,628	\$ 221,617,141
Normal cost at beginning of year	\$ 11,129,316	\$ 4,369,173	\$ 5,711,713
Amortization factor based on 30 years and 7.25% - immediate	12.1037	12.1037	12.1037
Calculation of Annual Required Contribution (ARC)			
Normal cost end of year	\$ 11,936,191	\$ 4,685,938	\$ 6,125,812
Amortization of UAAL	\$ 28,996,961	\$ 16,867,921	\$ 18,309,924
Total ARC	\$ 40,933,152	\$ 21,553,859	\$ 24,435,736

Future years ARC may include amortizations of:
plan changes, assumption changes, (gain)/loss and funding method changes

B-4 Aggregate Actuarial Cost Method

Total present value of benefits	\$ 447,701,015	\$ 245,757,081	\$ 280,752,751
Calculation of Annual Required Contribution (ARC)			
Calculation of normal cost			
Present value future benefits	\$ 447,701,015	\$ 245,757,081	\$ 280,752,751
Present value of future service	80,367	80,367	80,367
Normal cost accrual rate	\$ 5,570.71	\$ 3,057.94	\$ 3,493.38
Active headcount	11,515	11,515	11,515
Normal cost	\$ 64,146,726	\$ 35,212,179	\$ 40,226,271
Normal cost adjusted to year end	\$ 68,797,364	\$ 37,765,062	\$ 43,142,676
Total ARC	\$ 68,797,364	\$ 37,765,062	\$ 43,142,676

Future years ARC may include Amortizations of:
plan changes, assumption changes, and funding method changes
(gains and/or losses are spread into the normal cost under this method)

¹ Account based plan with max of \$50,000 account, pro-rata award based on 25 years of service, unused amounts earn 4% interest, and current retiree credit capped at \$6,000 (surviving spouse at \$3,000)

² Account based plan starting at \$50,000 in 2003 increasing 4% per year, pro-rata award based on 25 years of service, and current retiree credit capped at \$6,000 (surviving spouse at \$3,000)

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Summary of Actuarial Assumptions

Participation Rate	<u>Medical</u>		<u>Life</u>
	<u>Current Plan</u>	<u>Scenario A&B</u>	
	Retirees	95.0%	100.0%
	Spouses	47.5%	100.0%
			N/A
Pre 65 Claim Costs	<u>Age</u>	<u>Male</u>	<u>Female</u>
	Annual amounts for males	50	\$ 3,063
	and females at selected ages	55	\$ 3,896
	before Medicare	60	\$ 5,062
		62	\$ 5,662
		64	\$ 6,334
		65	\$ 6,699
		\$ 5,969	
Health Care Cost Trend Rates	<u>Plan Year</u>	<u>Assumed</u>	
	<u>Beginning in</u>	<u>Increase</u>	
	2002-2003	13.00%	
	2004	12.00%	
	2005	10.00%	
	2006	9.00%	
	2007	8.00%	
	2008	7.00%	
	2009	6.00%	
	2010	5.50%	
2011+	5.25%		
Summary of Data	<u>Eligible for:</u>		
		<u>Medical</u>	<u>Life</u>
	Number of participants in study		
	Inactives (excluding spouses)	2,184	889
	Surviving spouses	134	-
	Active fully eligible	1,815	120
	Actives not fully eligible	9,700	-
	Subtotal	13,833	1,009
	Spouses of inactives with medical coverage	510	-
	Total including spouses	14,343	1,009