

January 1, 2013 Actuarial Valuation of Postemployment Benefits Under GASB Statement No. 45 For Fiscal Years Ending 2013 and 2014

August 15, 2013



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January 1, 2013 Actuarial Valuation of Postemployment Benefits

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January 1, 2013 Actuarial Valuation of Postemployment Benefits

#### Introduction and Actuarial Certification

This report presents an actuarial valuation of Other Postemployment Benefits (OPEB) for the Ramsey County (the County). The 'Other' refers to postemployment benefits other than pensions. Accounting for OPEB is required under Government Accounting Standards Board Statement No. 45 (GASB 45).

## Purpose of the valuation

The purpose of this valuation is to provide the County's GASB 45 accounting information. It is important to recognize that calculations performed for other purposes may yield significantly different results. Other considerations are summarized in the Important Notices section of this report.

#### Basis for the valuation

In conducting the valuation, we have used the following information as of January 1, 2013:

- the provisions of the substantive OPEB for the medical plan
- census data
- · premiums and claims experience information

All plan provisions, premiums, claims experience, and census data were provided by the County. The premiums, claims experience and census data used were reviewed and considered to be reasonable, but not formally audited.

A summary of the data, assumptions, methods, and plan provisions used to prepare the results, including changes from the prior valuation, can be found in the Actuarial Basis section of this report.

# **County Funding**

In 2005, the County began appropriating money in its General Fund to segregate it for future OPEB liabilities.

In 2008, the County established an Internal Service Fund (the "OPEB Fund") for future OPEB liabilities separate from the General Fund and allocated previously designated amounts as well as 2008 through 2012 contributions to the OPEB Fund. As of December 31, 2012, a total of approximately \$43 million is on deposit in the OPEB Fund for future OPEB liabilities.

On November 20, 2012, the County Board authorized the County Manager to replace the current OPEB Internal Service Fund with a new revocable OPEB Trust Fund. In this action, the County Board authorized administration of this fund to be done by Public Employees Retirement Association (PERA) and the investment of the trust to be administered by the State Board of Investment. The \$43 million in the OPEB Internal Service Fund was transferred to the trust by December 31, 2012.

#### Changes from the prior valuation

Changes to the plan provisions and actuarial assumptions reflected in this valuation are described at the end of each of those sections in this report. Significant changes include a change in the discount rate to reflect a higher expected long term rate of return on the assets used to pay benefits. The new revocable trust assets are invested partially in investments with a higher expected long term rate of return. The increase in the discount rate from 5% to 5.88% resulted in a 10% decrease in liability. In addition, the new 2013 plan premiums and per capita claims costs were lower than expected compared to the prior year's valuation projections, resulting in a significant 19% decrease in the liability. Also, higher than expected retiree costshare premiums resulted in a 7% decrease in the liability.

January 1, 2013 Actuarial Valuation of Postemployment Benefits

## Introduction and Actuarial Certification (continued)

Below is a summary of all changes:

- Retiree premiums were updated to current levels.
- The portion of retiree premiums that members are responsible for were updated to current levels.
- The discount rate was changed from 5% to 5.88%.
- Withdrawal, retirement and mortality rates were updated to the rates used in the 2012 PERA valuations for general employees and police and fire.
- The implicit subsidy for dental coverage was assumed to be negligible due to new assumptions regarding the potential cost and utilization increases at older ages.
- An implicit subsidy for HP Major Medical coverage was added to reflect our understanding that the premium was not designed to cover the full cost of non-Medicare eligible retirees over age 65.
- The percent of future retirees electing coverage at retirement decreased slightly for a select group of employees.
- The percent of future retirees assumed to elect spouse coverage at retirement decreased slightly for a select group of employees.
- The percent of future retirees electing each medical plan at retirement changed to the plan elections outlined in the Medical Elections assumptions section.

#### **Actuarial certification**

To the best of our knowledge, this report is complete and accurate and all costs and liabilities under the plan were determined in accordance with generally accepted actuarial principles and practices. Upon receipt of the valuation report, the County should notify us if you disagree with any information contained in the report or if you are aware of any information that would affect the results that has not been communicated to us. The report will be deemed final and acceptable to the County unless you notify us otherwise.

The undersigned actuaries are Members of the American Academy of Actuaries and meet the Qualification Standards of the Academy to render the actuarial opinion contained herein. We are available to answer questions on the material contained in the report or to provide explanations or further detail, as may be appropriate. We are not aware of any material direct or indirect financial interest or relationship that could create a conflict of interest or impair the objectivity of our work.

Brenda K. Hardy, ASA, EA, MAAA

Granda K. Hardy

**Consulting Actuary** 

Christopher L. Grabrian, ASA, EA, MAAA (Health claims and assumptions)

Christopher I. Gralier

August 15, 2013

L/D/C/R: 4/gg/bh/sb



Summary of Results			
	1/1/2011	_	1/1/2013
A. Participants			
1. Actives electing coverage	3,398		3,176
2. Actives waiving coverage	300		441
3. Retirees electing coverage	1,776	_	1,832
4. Total	5,474		5,449
B. Funded Status			
1. Actuarial Accrued Liability (AAL) \$	307,634,820	\$	220,835,832
2. Market value of assets	0		0
3. Unfunded Actuarial Accrued Liability (UAAL) (1 2.)	307,634,820	-	220,835,832
4. Estimated payroll for the year	216,821,530		220,027,341
5. UAAL as a percentage of payroll	141.9%		100.4%
	FYE 2011		FYE 2013
C. Annual Required Contribution (ARC) <sup>(1)</sup>	27,331,359	\$	20,515,463
D. Reconciliation of Net OPEB Obligation	FYE 2011		FYE 2013
1. Net OPEB Obligation as of January 1 \$	57,672,977	\$	85,818,056
2. Annual OPEB Cost	26,463,298		19,406,819
3. Estimated employer contributions	12,759,080		12,672,081
4. Net OPEB Obligation as of December 31 (1. + 2 3.)	71,377,195	\$	92,552,794
	FYE 2012		FYE 2014
5. Net OPEB Obligation as of January 1 \$	71,377,195	\$	92,552,794
6. Annual OPEB Cost	27,100,871		19,651,007
7. Estimated employer contributions	12,660,010		13,406,859
8. Net OPEB Obligation as of December 31 (5. + 6 7.) \$	85,818,056	\$	98,796,942

<sup>(1)</sup> Note that Annual Required Contribution is a misleading term; no annual cash contribution is required to fund OPEB benefits. The ARC is a component of the Annual OPEB Cost, and the latter is the annual expense the County is required to recognize in its financial statements. See page 9 for more detail on the County's Annual OPEB Cost.



Benefit Obligations, Assets and Funded Status					
A. Benefit Obligations		1/1/2011		1/1/2013	
Present value of benefits paid by retiree and employer	Ċ	539,300,833	\$	373,886,917	
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2. Present value of benefits paid by retiree (contributions)	-	157,450,895	-	110,839,435	
3. Present value of benefits paid by employer (1 2.)		381,849,938		263,047,482	
4. Present value of obligation attributed to future service	_	74,215,118	_	42,211,650	
5. Actuarial Accrued Liability (AAL) (3 4.)	\$	307,634,820	\$	220,835,832	
B. Market Value of Assets - Irrevocable Trust	\$	0	\$	0	
C. Funded Status					
1. Actuarial Accrued Liability	\$	307,634,820	\$	220,835,832	
2. Market Value of Assets	_	0	_	0	
3. Unfunded Actuarial Accrued Liability (UAAL) (1 2.)	\$	307,634,820	\$	220,835,832	
D. Effect of 1% Increase in Discount Rate (Expected Asset Return)					
1. Percent change in Actuarial Accrued Liability		-12.5%		-10.7%	
2. Percent change in Annual OPEB Cost		-6.0%		-3.3%	

# E. Revocable Trust

			Early Retiree	
		Investment	Reinsurance	
Year	Transfers In	Earnings	Program <sup>(1)</sup>	Total
2012	\$ 6,314,755	\$ 35,399	\$ 0	\$ 6,350,154
2011	3,027,326	14,534	899,739	3,941,599
2010	2,348,428	38,545	548,331	2,935,304
2009	1,520,918	39,717	0	1,560,635
2008	3,948,904	342,487	0	4,291,391
2007	23,290,254	915,652	0	24,205,906
Total	\$ 40,450,585	\$ 1,386,334	\$ 1,448,070	\$ 43,284,989

<sup>&</sup>lt;sup>(1)</sup>This funding from the Federal government's Affordable Care Act's Early Retiree Reinsurance Program. The County credits this revenue to the Retiree Insurance Fund.

# Breakdown of Actuarial Accrued Liability by Fund - Retirees

A. Breakdown of AAL	<u>Pre 65</u>	<u>Post 65</u>	<u>Total</u>
1. Early Retirees	24 424 504	47 029 724	20 0/2 425
a. Fund 11101 b. Fund 11102	21,124,504	16,938,631	38,063,135
	5,739,089	6,346,808	12,085,897
c. Fund 12101	184,553	227,729	412,282
d. Fund 12202	0	170.953	0
e. Fund 12302	80,193	179,853	260,046
f. Fund 12401	0	0	0
g. Fund 12901	0	0	0
h. Fund 13301	0	0	0
i. Fund 13901	0	0	0
j. Fund 14001	0	0	0
k. Fund 21101	597,842	439,243	1,037,085
l. Fund 21102	421,115	352,864	773,979
m. Fund 22102	343,964	349,874	693,838
n. Fund 22105	0	0	0
o. Fund 22109	0	0	0
p. Fund 22110	0	0	0
q. Fund 22112	0	0	0
r. Fund 22113	425,691	390,671	816,362
s. Fund 31110	<u>0</u>	<u>0</u>	<u>0</u>
t. Total	28,916,951	25,225,673	54,142,624
2. Regular Retirees			
a. Fund 11101	2,495,756	37,152,697	39,648,453
b. Fund 11102	981,307	20,907,668	21,888,975
c. Fund 12101	17,109	1,392,370	1,409,479
d. Fund 12202	0	71,363	71,363
e. Fund 12302	168,334	1,156,332	1,324,666
f. Fund 12401	0	0	0
g. Fund 12901	0	41,246	41,246
h. Fund 13301	0	0	0
i. Fund 13901	0	0	0
j. Fund 14001	0	0	0
k. Fund 21101	68,946	2,370,229	2,439,175
l. Fund 21102	86,725	1,307,552	1,394,277
m. Fund 22102	42,593	1,360,634	1,403,227
n. Fund 22105	0	0	0
o. Fund 22109	0	0	0
p. Fund 22110	0	0	0
q. Fund 22112	174,999	1,000,739	1,175,738
r. Fund 22113	0	0	0
s. Fund 31110	<u>0</u>	<u>33,278</u>	<u>33,278</u>
t. Total	4,035,769	66,794,108	70,829,877
/	.,,.	,,	,,

# Breakdown of Actuarial Accrued Liability by Fund - Actives

	Actua	Actuarial Accrued Liability			
A. Breakdown of AAL	Pre 65	Post 65	<u>Total</u>		
1. Actives					
a. Fund 11101	29,206,102	24,810,751	54,016,853	2,541,909	
b. Fund 11102	10,002,897	11,398,564	21,401,461	981,964	
c. Fund 12101	1,036,945	1,348,291	2,385,236	90,563	
d. Fund 12202	4,141	45,706	49,847	1,902	
e. Fund 12302	1,475,543	1,977,515	3,453,058	112,057	
f. Fund 12401	331,373	538,022	869,395	33,000	
g. Fund 12501	58,419	40,226	98,645	4,875	
h. Fund 12901	466,371	496,917	963,288	39,686	
i. Fund 13301	526,944	737,295	1,264,239	68,912	
j. Fund 13901	2,909	0	2,909	439	
k. Fund 14001	428,781	247,728	676,509	45,875	
l. Fund 21101	1,178,609	1,094,364	2,272,973	111,976	
m. Fund 21102	1,024,656	992,149	2,016,805	88,617	
n. Fund 21104	10,928	7,402	18,330	1,930	
o. Fund 22101	1,603,813	887,795	2,491,608	121,195	
p. Fund 22102	733,631	807,189	1,540,820	71,122	
q. Fund 22105	0	0	0	0	
r. Fund 22109	7,954	8,802	16,756	1,883	
s. Fund 22110	41,579	42,178	83,757	3,938	
t. Fund 22112	571,400	509,162	1,080,562	42,050	
u. Fund 22113	576,781	581,268	1,158,049	53,493	
v. Fund 31110	<u>2,231</u>	<u>0</u>	<u>2,231</u>	<u>294</u>	
w. Total	49,292,007	46,571,324	95,863,331	4,417,680	

January 1, 2013 Actuarial Valuation of Postemployment Benefits

Actuarial Accrued Liability		
	1/1/2011	1/1/2013
A. By Status and Coverage Period		
1. Actives		
a. Coverage before 65	\$ 56,534,355	\$ 49,292,007
b. Coverage after 65	91,457,816	46,571,324
c. Total	147,992,171	95,863,331
2. Retirees		
a. Coverage before 65	33,161,321	32,952,720
b. Coverage after 65	126,481,328	92,019,781
c. Total	159,642,649	124,972,501
3. All participants		
a. Coverage before 65	89,695,676	82,244,727
b. Coverage after 65	217,939,144	138,591,105
c. Total	\$ 307,634,820	\$ 220,835,832
B. By Status and Subsidy Type		
1. Actives		
a. Implicit Subsidy	\$ 25,575,418	\$ 13,491,508
b. Direct Subsidy	122,416,753	82,371,823
c. Total	147,992,171	95,863,331
2. Retirees		
a. Implicit Subsidy	19,044,952	11,114,461
b. Direct Subsidy	140,597,697	113,858,040
c. Total	159,642,649	124,972,501
3. All participants		
a. Implicit Subsidy	44,620,370	24,605,969
b. Direct Subsidy	263,014,450	196,229,863
c. Total	\$ 307,634,820	\$ 220,835,832

January 1, 2013 Actuarial Valuation of Postemployment Benefits

Annual Required Contribution and Annual OPEB Cost					
		FYE 2013		Projected <sup>(1)</sup> FYE 2014	
A. Annual Required Contribution	_				
1. Normal Cost	\$	4,417,680	\$	4,417,680	
2. Amortization of the UAAL		14,958,466		15,271,265	
3. Interest to end of fiscal year on 1. and 2.		1,139,317		1,157,710	
4. Annual Required Contribution	\$	20,515,463	\$	20,846,655	
B. Annual OPEB Cost					
1. Annual Required Contribution (ARC)	\$	20,515,463	\$	20,846,655	
2. Interest on the Net OPEB Obligation (NOO)		5,046,102		5,442,104	
3. Adjustment to the ARC (NOO amortization)		(6,154,746)		(6,637,752)	
4. Annual OPEB Cost (1. + 2. + 3.)	\$ <sup>-</sup>	19,406,819	\$ <b>-</b>	19,651,007	

<sup>(1)</sup> FYE 2014 results are projected using current plan provisions, census data and funding presented in this valuation. If significant changes in provisions, census or funding occur, then a new valuation is required under GASB accounting rules.



# Change in Unfunded Actuarial Accrued Liability

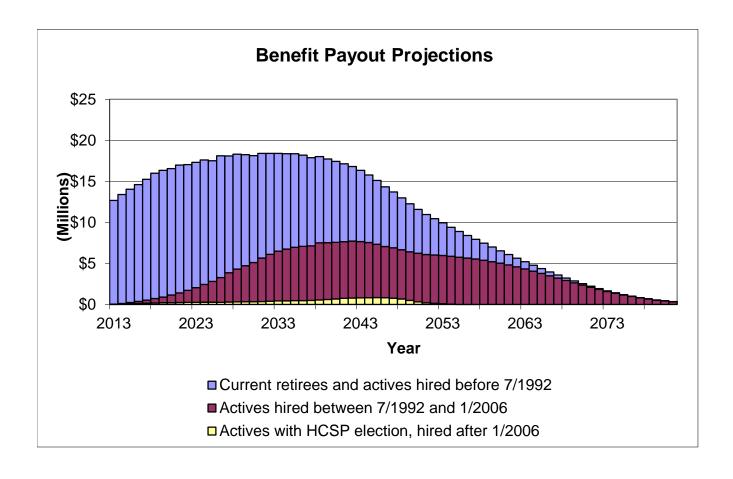
1. Expected Actuarial Accrued Liability as of January 1, 2013  a. AAL as of January 1, 2011  b. Normal costs for fiscal years ending 2011 and 2012  c. Benefit payments for fiscal years ending 2011 and 2012  d. Interest on a., b. and c.  e. Expected AAL as of January 1, 2013 (a. + b c. + d.)  2. (Gains)/losses  a. Due to experience different than expected  i. Census  ii. Per capita claims costs and premiums  iii. Per capita claims costs and premiums  iii. Retiree-paid premiums  b. Due to changes in actuarial assumptions  i. Discount rate  iii. Healthcare trend rates  iv. Retirement rates  v. Mortality rates  v. Mortality rates  v. Mortality rates  c. Total (gains)/losses  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  8. Asset (gain) or loss  1. Expected asset value as of January 1, 2013  a. ASset value as of January 1, 2011  \$ 007,634,820  13,941,472  25,241,909  13,941,472  25,419,090  327,463,428  25,419,090  327,463,428  26,541,909  327,463,428  27,463,428  27,463,428  27,463,428  27,463,428  27,463,428  27,463,428  27,463,428  27,463,428  27,463,428  28,8919  37,463,428  327,463,428  3
b. Normal costs for fiscal years ending 2011 and 2012 c. Benefit payments for fiscal years ending 2011 and 2012 d. Interest on a., b. and c. e. Expected AAL as of January 1, 2013 (a. + b c. + d.)  2. (Gains)/losses a. Due to experience different than expected i. Census i. Per capita claims costs and premiums iii. Retiree-paid premiums b. Due to changes in actuarial assumptions i. Discount rate ii. Healthcare trend rates iii. Withdrawal rates iv. Retirement rates v. Mortality rates v. Mortality rates v. Mortality rates c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  13,941,472 25,419,090 25,419,090 31,306,226 325,419,090 327,463,428 327,463,
c. Benefit payments for fiscal years ending 2011 and 2012       25,419,090         d. Interest on a., b. and c.       31,306,226         e. Expected AAL as of January 1, 2013 (a. + b c. + d.)       327,463,428         2. (Gains)/losses       327,463,428         a. Due to experience different than expected       \$         i. Census       58,919         ii. Per capita claims costs and premiums       (65,102,738)         iii. Retiree-paid premiums       (19,661,408)         b. Due to changes in actuarial assumptions       0         ii. Discount rate       (25,227,161)         iii. Healthcare trend rates       0         iiii. Withdrawal rates       1,966,259         iv. Retirement rates       9,095,285         v. Mortality rates       690,600         vi. Participation and coverage rates       (8,447,352)         c. Total (gains)/losses       (106,627,596)         3. Change in actuarial methods       0         4. Plan amendments       0         5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)       \$ 220,835,832          B. Asset (gain) or loss         1. Expected asset value as of January 1, 2013
d. Interest on a., b. and c.       31,306,226         e. Expected AAL as of January 1, 2013 (a. + b c. + d.)       327,463,428         2. (Gains)/losses       327,463,428         a. Due to experience different than expected       \$         i. Census       58,919         ii. Per capita claims costs and premiums       (65,102,738)         iii. Retiree-paid premiums       (19,661,408)         b. Due to changes in actuarial assumptions       (25,227,161)         ii. Healthcare trend rates       0         iii. Withdrawal rates       1,966,259         iv. Retirement rates       9,095,285         v. Mortality rates       690,600         vi. Participation and coverage rates       (8,447,352)         c. Total (gains)/losses       (106,627,596)         3. Change in actuarial methods       0         4. Plan amendments       0         5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)       \$ 220,835,832          B. Asset (gain) or loss         1. Expected asset value as of January 1, 2013
e. Expected AAL as of January 1, 2013 (a. + b c. + d.)  2. (Gains)/losses  a. Due to experience different than expected  i. Census  58,919  ii. Per capita claims costs and premiums  (65,102,738)  iiii. Retiree-paid premiums  (19,661,408)  b. Due to changes in actuarial assumptions  i. Discount rate  (25,227,161)  ii. Healthcare trend rates  0  iiii. Withdrawal rates  1,966,259  iv. Retirement rates  9,095,285  v. Mortality rates  690,600  vi. Participation and coverage rates  c. Total (gains)/losses  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  8. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
2. (Gains)/losses a. Due to experience different than expected i. Census 58,919 ii. Per capita claims costs and premiums (65,102,738) iii. Retiree-paid premiums (19,661,408) b. Due to changes in actuarial assumptions i. Discount rate (25,227,161) ii. Healthcare trend rates 0 iii. Withdrawal rates 1,966,259 iv. Retirement rates 9,095,285 v. Mortality rates 690,600 vi. Participation and coverage rates c. Total (gains)/losses c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  8. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
a. Due to experience different than expected i. Census i. Census ii. Per capita claims costs and premiums iii. Retiree-paid premiums b. Due to changes in actuarial assumptions i. Discount rate ii. Healthcare trend rates iii. Withdrawal rates iv. Retirement rates v. Mortality rates v. Mortality rates c. Total (gains)/losses c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
i. Census  ii. Per capita claims costs and premiums  iii. Retiree-paid premiums  b. Due to changes in actuarial assumptions  i. Discount rate  ii. Healthcare trend rates  iii. Withdrawal rates  iv. Retirement rates  v. Mortality rates  v. Mortality rates  c. Total (gains)/losses  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  6 (55,102,738)  (19,661,408)  (25,227,161)  (26,627,596)  (37,64,252)  (406,627,596)  (38,447,352)  (406,627,596)  (406,62
ii. Per capita claims costs and premiums iii. Retiree-paid premiums  b. Due to changes in actuarial assumptions i. Discount rate ii. Healthcare trend rates iii. Withdrawal rates iv. Retirement rates v. Mortality rates v. Mortality rates c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  (65,102,738) (19,661,408) (25,227,161) (25,227,16
iii. Retiree-paid premiums b. Due to changes in actuarial assumptions i. Discount rate ii. Healthcare trend rates iii. Withdrawal rates iv. Retirement rates v. Mortality rates v. Mortality rates c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  (19,661,408) (25,227,161) (25,227,161) (19,66,259 (19,662,259 (19,662,259 (19,662,259 (19,662,259 (19,662,259 (19,622,596 (106,627,596) (106,627,596
b. Due to changes in actuarial assumptions i. Discount rate ii. Healthcare trend rates 0 iii. Withdrawal rates 1,966,259 iv. Retirement rates 9,095,285 v. Mortality rates 9,095,285 v. Mortality rates 690,600 vi. Participation and coverage rates C. Total (gains)/losses 1. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
i. Discount rate ii. Healthcare trend rates 0 iii. Withdrawal rates iv. Retirement rates v. Mortality rates v. Mortality rates c. Total (gains)/losses c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
ii. Healthcare trend rates  iii. Withdrawal rates  iv. Retirement rates  v. Mortality rates  vi. Participation and coverage rates  c. Total (gains)/losses  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
ii. Healthcare trend rates  iii. Withdrawal rates  iv. Retirement rates  v. Mortality rates  vi. Participation and coverage rates  c. Total (gains)/losses  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
iv. Retirement rates  v. Mortality rates  v. Mortality rates  vi. Participation and coverage rates  c. Total (gains)/losses  c. Total (gains)/losses  (106,627,596)  3. Change in actuarial methods  4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
v. Mortality rates 690,600 vi. Participation and coverage rates c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
vi. Participation and coverage rates c. Total (gains)/losses 3. Change in actuarial methods 4. Plan amendments 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
c. Total (gains)/losses (106,627,596) 3. Change in actuarial methods 0 4. Plan amendments 0 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.) \$ 220,835,832  B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
c. Total (gains)/losses (106,627,596) 3. Change in actuarial methods 0 4. Plan amendments 0 5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.) \$ 220,835,832   B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
4. Plan amendments  5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.)  6. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
5. Actual AAL as of January 1, 2013 (1.e. + 2.c. + 3. + 4.) \$ 220,835,832  B. Asset (gain) or loss  1. Expected asset value as of January 1, 2013
B. Asset (gain) or loss 1. Expected asset value as of January 1, 2013
1. Expected asset value as of January 1, 2013
1. Expected asset value as of January 1, 2013
arribbe raide as of saffacity in Esti
b. Contributions for fiscal years ending 2011 and 2012
c. Benefit payments for fiscal years ending 2011 and 2012 0
d. Interest to January 1, 2013 on a., b. and c.
e. Expected asset value as of January 1, 2013 (a. + b c. + d.)
2. Gain/(loss)
3. Actual assets as of January 1, 2013 (1.e. + 2.) \$ 0
C. Change in Unfunded Actuarial Accrued Liability (UAAL)
1. UAAL as of January 1, 2011 (A.1.a B.1.a.) \$ 307,634,820
2. Expected change in the UAAL 19,828,608
3. Expected UAAL as of January 1, 2013 (A.1.e B.1.e.) 327,463,428
4. Change in UAAL due to (gains)/losses (A.2.c B.2.) (106,627,596)
5. Change in UAAL due to actuarial methods (A.3.)
6. Change in UAAL due to plan amendments (A.4.)
7. UAAL as of January 1, 2013 (3. + 4. + 5. + 6.) \$\frac{220,835,832}{}

		Projected Benefit Pa	ayments	
(a)	(b)	(c)	(d)	(e)=(b)-(c)-(d)
Fiscal Year	Retiree Claims and	Retiree	Employer Paid Premiums Direct Subsidy	
Ending	Admin Costs	Paid Premiums	(Pay as you go cost)	Implicit Subsidy
2013	\$ 14,642,358	\$ 1,970,277	\$ 10,499,793	\$ 2,172,288
2014	15,821,478	2,414,619	11,137,032	2,269,827
2015	16,889,990	2,851,333	11,745,190	2,293,467
2016	17,910,461	3,301,801	12,280,461	2,328,199
2017	19,009,395	3,757,200	12,798,682	2,453,513
2018	20,194,369	4,203,611	13,361,683	2,629,075
2019	20,960,347	4,610,354	13,734,786	2,615,207
2020	21,551,006	5,000,276	14,025,889	2,524,841
2021	22,393,579	5,403,476	14,425,682	2,564,421
2022	22,817,882	5,769,136	14,605,451	2,443,295
2023	23,456,026	6,145,013	14,917,837	2,393,176
2024	24,126,297	6,506,045	15,234,141	2,386,111
2025	24,305,098	6,780,793	15,319,496	2,204,809
2026	25,242,411	7,129,326	15,806,635	2,306,450
2027	25,568,666	7,478,624	15,889,704	2,200,338
2028	26,081,692	7,768,886	16,138,128	2,174,678
2029	26,278,086	8,028,172	16,237,361	2,012,553
2030	26,392,677	8,262,390	16,306,121	1,824,166
2031	26,990,392	8,581,289	16,563,834	1,845,269
2032	27,315,472	8,897,389	16,569,737	1,848,346
2033	27,582,731	9,178,819	16,594,352	1,809,560
2034	27,821,646	9,442,601	16,615,304	1,763,741
2035	28,103,223	9,735,579	16,668,287	1,699,357
2036	28,188,746	10,000,438	16,592,107	1,596,201
2037	28,153,243	10,266,853	16,409,900	1,476,490
2038	28,637,077	10,625,490	16,411,510	1,600,077
2039	28,687,480	10,958,888	16,163,021	1,565,571
2040	28,676,939	11,249,872	15,901,665	1,525,402
2041	28,704,544	11,571,567	15,621,422	1,511,555
2042	28,591,279	11,784,401	15,281,876	1,525,002
2043	28,248,097	11,910,284	14,861,069	1,476,744

Notes: The projections are based on current participants and do not include any future entrants (closed group projections). Total employer GASB contributions equal to (d) + (e) above.



# **Breakdown of Projected Benefit Payments**



January 1, 2013 Actuarial Valuation of Postemployment Benefits

Valuation Results - Net OPEB Obligation and Schedule of Employer Contributions					
		FYE 2013	_	Projected <sup>(1)</sup> FYE 2014	
A. Net OPEB Obligation (NOO)					
1. Annual Required Contribution	\$	20,515,463	\$	20,846,655	
2. Interest on NOO		5,046,102		5,442,104	
3. Adjustment to ARC		(6,154,746)		(6,637,752)	
4. Annual OPEB Cost	-	19,406,819	_	19,651,007	
5. Estimated Employer contributions <sup>(2)</sup>					
a. OPEB trust		n/a		n/a	
b. Implicit subsidy benefits		2,172,288		2,269,827	
c. Direct subsidy benefits		10,499,793		11,137,032	
d. Total		12,672,081		13,406,859	
6. Increase (decrease) in NOO (4 5.d.)		6,734,738		6,244,148	
7. Net OPEB Obligation at beginning of fiscal year		85,818,056		92,552,794	
8. Net OPEB Obligation at end of fiscal year	\$	92,552,794	\$	98,796,942	

# **B.** Schedule of Employer Contributions

Fiscal Year Ending	_	Annual OPEB Cost	Estimated Employer Contributions <sup>(2)</sup>		% of Annual OPEB Cost Contributed	_	Net OPEB Obligation
2013	\$	19,406,819	\$	12,672,081	65.3%	\$	92,552,794
2014		19,651,007		13,406,859	68.2%		98,796,942

Valuation Results - Required Supplementary Information						
(a)	(b)	(c)	(d)=(c)-(b) Unfunded	(e)=(b)/(c)	(f)	(g)=(d)/(f)
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Actuarial Accrued Liability	Funded Ratio	Estimated Covered Payroll	UAAL as a % of Payroll
1/1/2013	\$ 0	\$ 220,835,832	\$ 220,835,832	0.0%	\$ 220,027,341	100.4%

<sup>(2)</sup> These are estimated employer contributions and include the pay as you go direct contributions plus implicit subsidy costs. Financial statements should use actual employer contributions which will change the year-end NOO and subsequent calculations of Interest on NOO and Adjustment to ARC.



<sup>(1)</sup> FYE 2014 results are projected using current plan provisions, census data and funding presented in this valuation. If significant changes in provisions, census or funding occur, then a new valuation is required under GASB accounting rules.

# Historical Financial Statement Disclosure Information

# A. Schedule of Employer Contributions

Fiscal Year Ending	_	Annual OPEB Cost	 Annual Employer Contribution	OPI	f Annual EB Cost tributed	_	Net OPEB Obligation
2007	\$	29,213,298	\$ 9,632,905	3	33.0%	\$	19,580,393
2008		28,931,009	14,365,487	4	49.7%		34,145,915
2009		24,384,488	12,337,151	5	50.6%		46,193,252
2010		24,210,802	12,731,077	5	52.6%		57,672,977
2011		26,463,298	12,759,080	4	48.2%		71,377,195
2012		27,100,871	12,660,010	4	46.7%		85,818,056

# **B. Funded Status**

(a)		(b)		(c)		(d)=(c)-(b)	(e)=(b)/(c)		(f)	(g)=(d)/(f)
						Unfunded				
Actuarial		Actuarial Value of		Actuarial Accrued		Actuarial Accrued	Funded		Estimated Covered	UAAL as
Valuation Date		Assets		Liability		Liability	Ratio		Payroll	a % of Payroll
	•	7135613	-		-			•		- ayron
1/1/2007	\$	0	\$	315,651,119	\$	315,651,119	0.0%	\$	184,854,555	170.8%
1/1/2009		0		272,698,609		272,698,609	0.0%		201,065,043	135.6%
1/1/2011		0		307,634,820		307,634,820	0.0%		216,821,530	141.9%
1/1/2013		0		220,835,832		220,835,832	0.0%		220,027,341	100.4%

# **Summary of Plan Participants**

This section presents the demographic information for the active employees and retired participants included in the OPEB valuation. The actuarial valuation was based on January 1, 2013 census data provided by the County. The following exhibits summarize the personnel characteristics of the data used for the valuation.

# A. Medical

d. UCare for Seniorse. Total with coverage

f. Total without coverage

1. Active employees <sup>(1)</sup>	Single	Single+1	Family	Total
a. HealthPartners Distinctions	1,854	0	1,322	3,176
b. Total with coverage	1,854	0	1,322	3,176
c. Total without coverage				441
d. Total active employees				3,617
e. Average age				47.4
f. Average service				13.3
g. Average annual pay				60,831
2. Retirees	Single	Single+1	Family	Total
a. HealthPartners Distinctions	297	0	112	409
b. HealthPartners Major Medical (non-Medicare eligible plan)	21	0	3	24
c. HealthPartners Freedom and HealthPartners National	828	500	32	1,360

g. Total retirees	1,886
h. Average age with coverage	68.7

25



0

39

54

1,832

<sup>(1)</sup> Active counts exclude 29 employees hired after 1/1/2013. Also, participants who retired after 1/1/2013 were treated as active for valuation purposes.

January 1, 2013 Actuarial Valuation of Postemployment Benefits

## **Summary of Plan Provisions**

#### A. Eligibility

At retirement, employees of the County receiving a retirement or disability benefit, or eligible to receive a benefit, from a PERA pension plan may participate in the County's group medical insurance plan. The County does not contribute to any other benefit programs.

County employees are participants in either the PERA Coordinated Plan, PERA Police & Fire Plan or the PERA Correctional Plan. Retirement and disability eligibility for these pension plans are as follows:

#### PERA Coordinated Plan

#### Retirement:

- Hired before 7/1/1989: The earlier of 1) age 65 and at least 1 year of service, 2) age 55 and vested, 3) any age and at least 30 years of service, or 4) age plus service total at least 90
- Hired after 6/30/1989: The earlier of 1) the age when first eligible for full Social Security benefits (not to exceed age 66) and at least 1 year of service or 2) age 55 and vested

Disability: Total and permanent disability and vested

#### Vesting:

- Hired before July 1, 2010: vested after 3 years
- Hired after June 30, 2010: vested after 5 years

# PERA Police & Fire Plan and PERA Correctional Plan

#### Retirement:

• The earlier of 1) age 65 and at least 1 year of service, 2) age 50 and vested

In the line of duty disability: Any age and any service Regular disability: Any age and 1 year of service

## Vesting:

- Hired before July 1, 2010: vested after 3 years
- Hired after June 30, 2010: partially vested after 5 years

County employees who meet the eligibility requirements upon retirement are eligible for health benefits as described on the following pages.



#### RAMSEY COUNTY

January 1, 2013 Actuarial Valuation of Postemployment Benefits

## Summary of Plan Provisions (continued)

#### B. Plan Premiums

Eligible participants and their dependents are allowed access to the health plans and contribute the following plan premiums effective January 1, 2013. Participants meeting additional requirements are eligible for a direct subsidy of the premium paid by the County as described in items D. and E. below.

		Family	Family
		(spouse with	(spouse without
Plan Name	Single	Medicare A & B)	Medicare A & B)
HealthPartners Distinctions (under age 65)	\$ 794.21	\$ 1,045.21	\$ 1,892.78
HealthPartners Major Medical (65+ non-Medicare eligible plan)	704.09	N/A	1,410.17
HealthPartners Freedom and HealthPartners National (65+ Medicare eligible plan)	251.00	502.00	1,045.21
UCare for Seniors (65+ Medicare eligible plan)	237.00	474.00	N/A
Medicare Part B	104.90	209.80	N/A

# C. Implicit Subsidy

The implicit subsidy is provided to all retirees and dependents who elect non-Medicare medical coverage, provided the retiree has satisfied the applicable pension plan requirements described in item A. Eligibility.

The implicit subsidy is the difference between the actual and apparent cost of OPEB coverage. The actual cost for early retirees is usually higher than the average perperson premium for the active/retiree group. Plans in which retirees pay the average active/retiree rate (the apparent cost) give rise to an implicit rate subsidy: the employer pays the difference between the actual and apparent cost.

#### D. Direct Subsidy

Participants meeting the following eligibility receive a County direct subsidy as described below according to County Board resolutions:

Employees hired before July 1, 1992 with County pays full defined county

20,800 hours of service or 10,400 hours of service if retiring under PERA disability	contribution
Employees hired between July 1, 1992 and January 1, 2006 with 41,600 hours of service (excluding those who made a one-time election to participate in Health Care Savings Plan (HCSP))	County pays 50% of the defined county contribution for 20 years of service, plus an additional 4% per year of service beyond 20, up to a maximum of 90% of the defined county contribution

Other eligible participants who do not Retiree may continue medical coverage meet years of service requirements or hired after January 1, 2006 and those electing to participate in HCSP

by paying the full premium

Premium Paid by County



January 1, 2013 Actuarial Valuation of Postemployment Benefits

# **Summary of Plan Provisions (continued)**

# E. Defined County Contribution

Participants meeting the following eligibility receive a defined County contribution toward the premium as described below:

Group	Premium Paid by County
Retirees under age 65	County pays same contribution as paid for active employees (in 2013 participant pays \$40 per month for single coverage and \$480.74 for family coverage)
Retirees age 65 and over who retired before January 1, 1996	County pays full premium
Retirees age 65 and over who retired on or after January 1, 1996	County pays contribution not exceeding the county contribution for active employees, except member will pay at least \$45 per month for single coverage and at least \$100 per month for family coverage

# F. Additional County Benefit

Employees who retired prior to July 1, 1990 are reimbursed for Medicare B premiums by the County.

# **Summary of Plan Provisions (continued)**

G. Plan benefits effective January 1, 2013

Medical Plans					
Benefit HealthPartners Distinction					
Deductible					
Individual	\$ 25.00				
Family	75.00				
Annual OOP Max					
Individual	\$ 1,000.00				
Family	2,000.00				
Coinsurance	100%				
Prescription Drugs					
Deductibles					
Individual	\$ N/A				
Family	N/A				
Annual OOP Max					
Individual	\$ 1,000.00				
Family	2,000.00				
Copays					
30-Day Generic	\$ 12.00				
30-Day Formulary	35.00				
Specialty	20% up to 200				
Coinsurance					
After Rx Deductib	ole N/A				
After Rx Copay	N/A				

H. Changes to postemployment medical benefits Since the last valuation the following changes have been made:

- Retiree premiums were updated to current levels.
- The portion of retiree premiums that members are responsible for were updated to current levels.

January 1, 2013 Actuarial Valuation of Postemployment Benefits

## **Summary of Plan Provisions (continued)**

#### I. Severance

Participants meeting the following eligibility receive a severance from the County as described below:

# **AFSCME Group**

General County, Community Human Services, Licensed Practical Nurses, Workforce Solutions, Lake Owasso Residence, Ramsey County Care Center, Parks and Recreation, and Public Health Registered Nurses

#### Severance Benefit

Option A: daily pay times one-half of unused sick days\* up to a maximum of \$13,000

Option B: \$210 per year of service for years 1 through 10 plus \$280 per year for years 11 through 20 plus \$350 per year for years over 20, up to a maximum of \$7,000

## Eligibility

Option A: 10 years of service with at least 480 hours of unused accumulated sick leave

Option B: 20 years (41,600 hours) of service

\* Employees are assumed to accumulate future unused sick leave based on the current average unused sick days of the eligible group. It is assumed each employee would accrue 35 hours of sick leave per year.

Because GASB only applies to severance Option B, we have not included severance liability when Option A is projected to be larger than Option B.

J. Changes to severance benefits

Since the last valuation the following changes have been made:

None

January 1, 2013 Actuarial Valuation of Postemployment Benefits

# **Summary of Actuarial Assumptions**

A. General Information

Valuation Date January 1, 2013

Census Date January 1, 2013

Benefits Valued Medical coverage and select severance benefits

**B.** Economic Assumptions

Discount Rate 5.88%

Investment Return 5.88%

	Expected	Portion
	Investment	Assumed to
Basis:	Return	Pay Benefits
General Assets	4.40%	46%
Other Designated Assets (Revocable Trust)	7.16%	54%

Inflation Rate

General 3.00% Healthcare 4.00%

Healthcare Trend

Rates

Annual increases in per capita claims costs and plan premiums are as follows:

	medical		
•	Pre-65	Post-65	
Initial year:	8.00%	6.00%	
Ultimate year:	5.00%	5.00%	
Years to ultimate year:	6	2	

Increases in Direct Subsidy and Retiree

**Premiums** 

Assumed to increase with healthcare trend rates.



January 1, 2013 Actuarial Valuation of Postemployment Benefits

## **Summary of Actuarial Assumptions (continued)**

#### C. Medical Elections

**Current Retirees** 

Participation
 Coverage Level
 Current retirees are assumed to continue coverage for life.
 Current retirees are assumed to elect dependent coverage

based on their current elections.

• Plan Election Current retirees already over age 65 are assumed to continue

coverage in their current plan. Current retirees under age 65 are assumed to continue coverage in their current plan until age 65. Upon reaching age 65, retirees are assumed to follow

the plan elections outlined below for future retirees.

#### **Future Retirees**

- Participation (of those currently electing coverage)
- Hired before 7/1/1992
- Hired between 7/1/1992 and 1/1/2006 with 41,600 hours
- Hired between 7/1/1992 and 1/1/2006 with less than 41,600 hours
- Hired after 1/1/2006 or made onetime HCSP election
- Coverage Level (of those assumed to elect coverage)
- Hired between 7/1/1992 and

- Hired before 7/1/1992

- 1/1/2006 with 41,600 hours
   Hired between 7/1/1992 and
- 1/1/2006 with less than 41,600 hours
- Hired after 1/1/2006 or made onetime HCSP election
- Plan Election

100% are assumed to elect coverage at retirement for life. 75% are assumed to elect coverage at retirement for life.

50% are assumed to elect coverage at retirement for life.

50% are assumed to elect coverage at retirement for life.

65% are assumed to elect single coverage

35% are assumed to elect single + spouse coverage

70% are assumed to elect single coverage

30% are assumed to elect single + spouse coverage

80% are assumed to elect single coverage

20% are assumed to elect single + spouse coverage

80% are assumed to elect single coverage

20% are assumed to elect single + spouse coverage

Future retirees are assumed to elect coverage in their current plan until age 65.

Upon reaching age 65, retirees currently under age 65 and future retirees are assumed to be Medicare eligible and elect plan coverage as outlined below:

		Freedom	
	Major	and	<b>UCare</b> for
Distinctions	Medical	National	Seniors
N/A	N/A	98%	2%



January 1, 2013 Actuarial Valuation of Postemployment Benefits

# **Summary of Actuarial Assumptions (continued)**

# D. Demographic Assumptions

Correctional employees are assumed to decrement according to the Police & Fire rates outlined in this demographics assumptions section.

## Withdrawal

General Employees

Select and ultimate rates used in the July 1, 2012 Minnesota General Employees Retirement Plan actuarial valuation. Ultimate rates after the third year are shown in the City Rate Tables on page 25. Select rates are as follows:

	First Year	Second Year	Third Year
Male	40.0%	15.0%	10.0%
Female	40.0%	15.0%	10.0%

• Police & Fire

Select and ultimate rates used in the July 1, 2012 Minnesota Public Employees Police & Fire Plan actuarial valuation. Ultimate rates after the third year are shown in the Police & Fire Rate Tables on page 26. Select rates are as follows:

First Year	Second Year	Third Year
8.0%	5.0%	3.5%

Disability None Assumed

# **Summary of Actuarial Assumptions (continued)**

# D. Demographic Assumptions (continued)

#### Retirement

• General Employees Rates used in the July 1, 2012 Minnesota General Employees Retirement Plan

actuarial valuation. Rates are shown in the table below.

• Police & Fire Rates used in the July 1, 2012 Minnesota Public Employees Police & Fire Plan actuarial valuation, with modifications before age 55. Rates are shown in the table below.

	General Employees		Police & Fire
Age	Rule of 90	Other	
50	n/a	n/a	0%
51	n/a	n/a	0%
52	n/a	n/a	0%
53	n/a	n/a	0%
54	n/a	n/a	0%
55	20%	6%	30%
56	20%	6%	20%
57	20%	<b>6</b> %	20%
58	20%	7%	20%
59	20%	8%	20%
60	20%	8%	25%
61	25%	12%	25%
62	35%	20%	35%
63	25%	16%	35%
64	25%	18%	35%
65	35%	35%	50%
66	25%	25%	50%
67	20%	20%	50%
68	20%	20%	50%
69	20%	20%	50%
70	20%	20%	100%
71+	100%	100%	100%



January 1, 2013 Actuarial Valuation of Postemployment Benefits

## **Summary of Actuarial Assumptions (continued)**

# D. Demographic Assumptions (continued)

Mortality

General Employees

Healthy Pre-retirement: RP 2000 non-annuitant generational mortality, white collar adjustment, male rates set forward 5 years and female rates set back 3 years.

Healthy Post-retirement: RP 2000 annuitant generational mortality, white collar adjustment, male rates no age adjustment and female rates set back 2 years.

Disabled: RP 2000 disabled retiree mortality, male rates set back 4 years and female rates set forward 7 years.

Sample rates are shown in the General Employees Rate Tables beginning on page 25.

· Police & Fire

Healthy Pre-retirement: RP 2000 non-annuitant generational mortality, white collar adjustment, male rates set back 2 years, female rates set back 2 years.

Healthy Post-retirement: RP 2000 annuitant generational mortality, white collar adjustment, without age adjustments.

Disabled: RP 2000 annuitant mortality, white collar adjustment, male rates set forward 8 years and female rates set forward 8 years.

Sample rates are shown in the Police & Fire Rate Tables beginning on page 26.

Spouse Age Difference

• Future retirees

Retirees

Husbands are assumed to be three years older than their wife

Actual spouse date of birth

Medicare Eligibility

We have assumed 100% of current and future retirees under age 65 will become Medicare eligible at age 65. We used actual data for members currently age 65 or older.



Healthy Post-Retirement(2)

# **RAMSEY COUNTY**

January 1, 2013 Actuarial Valuation of Postemployment Benefits

# **Summary of Actuarial Assumptions (continued)**

Healthy Pre-Retirement(1)

# D. Demographic Assumptions (continued)

General Employees Rate Tables

	Mortali	Mortality Rates		ty Rates
Age	Male	Female	Male	Female
20	0.0376%	0.0184%	0.0345%	0.0188%
25	0.0353%	0.0194%	0.0376%	0.0197%
30	0.0591%	0.0223%	0.0353%	0.0235%
35	0.0890%	0.0363%	0.0591%	0.0401%
40	0.1342%	0.0527%	0.0890%	0.0562%
45	0.1978%	0.0763%	0.1342%	0.0837%
50	0.2747%	0.1229%	0.5983%	0.1344%
55	0.4263%	0.1863%	0.5433%	0.2898%
60	0.6725%	0.2832%	0.6606%	0.4685%
65	0.9823%	0.4540%	1.1634%	0.7420%
70	3.7834%	0.7017%	1.9275%	1.2394%
75	6.4368%	2.0665%	3.3634%	2.0903%

	Withdrawal Ultimate Rates		Disabled Mortality Rates	
Age	Male	Female	Male	Female
20	8.40%	8.40%	2.1332%	0.7104%
25	6.90%	6.90%	2.1907%	0.7146%
30	5.40%	5.40%	2.2236%	0.7231%
35	3.90%	4.20%	2.2236%	0.7209%
40	3.00%	3.50%	2.2038%	0.8568%
45	2.50%	3.00%	2.1713%	1.2830%
50	2.00%	2.50%	2.2604%	1.7734%
55	0.00%	0.00%	2.8606%	2.3511%
60	0.00%	0.00%	3.5024%	3.0860%
65	0.00%	0.00%	4.1698%	4.2215%
70	0.00%	0.00%	4.9932%	5.8661%
75	0.00%	0.00%	6.3151%	8.0354%

<sup>(2)</sup> Rates shown are the base RP 2000 annuitant generational mortality, white collar adjustment, male rates no age adjustment and female rates set back 2 years.



<sup>(1)</sup> Rates shown are the base RP 2000 non-annuitant generational mortality, white collar adjustment, male rates set forward 5 years and female rates set back 3 years.

# **Summary of Actuarial Assumptions (continued)**

# D. Demographic Assumptions (continued)

Police & Fire Rate Tables

	•	Retirement <sup>(1)</sup>	Healthy Post-Retirement <sup>(2)</sup> Mortality Rates	
	Mortali	ty Rates		
Age	Male	Female	Male	Female
20	0.0316%	0.0188%	0.0345%	0.0191%
25	0.0373%	0.0197%	0.0376%	0.0207%
30	0.0393%	0.0235%	0.0353%	0.0284%
35	0.0481%	0.0401%	0.0591%	0.0466%
40	0.0766%	0.0562%	0.0890%	0.0645%
45	0.1124%	0.0837%	0.1342%	0.1016%
50	0.1711%	0.1344%	0.5983%	0.2447%
55	0.2398%	0.2015%	0.5433%	0.3489%
60	0.3545%	0.3107%	0.6606%	0.5617%
65	0.5637%	0.4979%	1.1634%	0.9110%
70	0.8525%	0.7591%	1.9275%	1.5185%
75	3.0387%	2.2970%	3.3634%	2.5717%

	Withdrawal Ultimate Rates		Disabled Mortality Rates	
Age	Male	Female	Male	Female
20	6.01%	6.01%	0.0371%	0.0224%
25	3.24%	3.24%	0.0467%	0.0385%
30	1.90%	1.90%	0.0755%	0.0545%
35	1.46%	1.46%	0.1107%	0.0810%
40	1.26%	1.26%	0.1671%	0.1285%
45	0.91%	0.91%	0.5499%	0.2763%
50	0.50%	0.50%	0.5392%	0.4454%
55	0.11%	0.11%	0.8725%	0.7245%
60	0.00%	0.00%	1.5098%	1.2210%
65	0.00%	0.00%	2.5619%	2.0593%
70	0.00%	0.00%	4.5410%	3.4444%
75	0.00%	0.00%	8.0546%	5.8100%



<sup>(1)</sup> Rates shown are the base RP 2000 non-annuitant generational mortality, white collar adjustment, male rates set back 2 years, female rates set back 2 years.

<sup>(2)</sup> Rates shown are the base RP 2000 annuitant generational mortality, white collar adjustment, with no age adjustments.

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# **Summary of Actuarial Assumptions (continued)**

# E. Per Capita Claims Costs

Medical

Per capita claims costs were developed using claims, premiums, fees and enrollment information provided by the County. The results contained herein are highly dependent on the accuracy and credibility of the data provided to us. The claims experience was adjusted for aging, plan values, participant status and coordination with Medicare, if applicable. Sample monthly costs by plan and age are below:

			Freedom	
		Major	and	UCare for
Age	Distinctions	Medical	National	Seniors
40	\$ 566	\$ N/A	\$ N/A	\$ N/A
45	653	N/A	N/A	N/A
50	753	N/A	N/A	N/A
55	879	N/A	N/A	N/A
60	1,041	N/A	N/A	N/A
64	1,220	N/A	N/A	N/A
65	N/A	767	251	237
70	N/A	882	251	237
75	N/A	993	251	237
80	N/A	1,092	251	237
85	N/A	1,145	251	237
90+	N/A	1,173	251	237

**Aging Factors** 

Increases in medical costs from one age to the next are based on the factors shown below:

Age	Aging Factor
18 - 49	3.10%
50 - 54	3.33%
55 - 59	3.60%
60 - 64	4.20%
65 - 69	3.00%
70 - 74	2.50%
75 - 79	2.00%
80 - 84	1.00%
85 - 89	0.50%
90+	0.00%



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## **Summary of Actuarial Assumptions (continued)**

## F. Assumption Changes

Since the last valuation the following changes have been made:

- The discount rate was changed from 5% to 5.88%.
- Withdrawal, retirement and mortality rates were updated to the rates used in the 2012 PERA valuations for general employees and police and fire.
- The implicit subsidy for dental coverage was assumed to be negligible due to new assumptions regarding the potential cost and utilization increases at older ages.
- An implicit subsidy for HP Major Medical coverage was added to reflect our understanding that the premium was not designed to cover the full cost of non-Medicare eligible retirees over age 65.
- The percent of future retirees electing coverage at retirement decreased slightly for a select group of employees.
- The percent of future retirees assumed to elect spouse coverage at retirement decreased slightly for a select group of employees.
- The percent of future retirees electing each medical plan at retirement changed to the plan elections outlined in the Medical Elections assumptions section.

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## **Summary of Actuarial Methods**

#### A. Actuarial Cost Method

OPEB liability and annual costs were calculated using the Projected Unit Credit cost method. This method attributes OPEB linearly to each assumed decrement age based on the ratio of a participant's accrued service on the valuation date to their projected service at each decrement age.

#### B. Amortization Method

GASB accounting rules allow several options for amortizing an OPEB plan's Unfunded Actuarial Accrued Liability (UAAL). The County has chosen to amortize the entire UAAL as a level dollar amount over a 30-year (the maximum period allowed) open period. This method will re-amortize the UAAL each year over 30 years. The County should be aware that amortization payments under this method means that, absent actuarial gains, the current UAAL will never be fully recognized.

#### C. Funding Policy

The County has assets designated for OPEB. These assets are not in a GASB 45 qualified irrevocable trust and are not allowed to be used in determining the plan's unfunded actuarial accrued liability (UAAL). As a result, for accounting purposes, the funding policy is considered to be the pay-as-you-go method under which contributions to the plan are generally made at the same time and in the same amount as retiree benefits and expenses become due.

#### D. Data Methods

The County provided census and financial information for the valuation and we have relied on this data in preparing the results in this report. The data was reviewed for reasonableness and consistency, but we have not performed a complete audit.

## E. Covered Payroll

Covered payroll information for the fiscal year ending December 31, 2013 was provided by the County.



January 1, 2013 Actuarial Valuation of Postemployment Benefits

#### Summary of Healthcare Assumptions and Methods

#### A. Per Capita Claims Costs

Non-Medicare Eligible When premiums for non-Medicare (pre-65) retirees are determined using a blend of active employee and pre-65 retiree experience, it creates an implicit subsidy to the pre-65 retirees. The subsidy is equal to the difference between the pre-65 retiree's expected true costs (claims and administration fees) and apparent costs (blended premium charged) of coverage.

To develop non-Medicare (pre-65) retiree per capita claims costs for the plans we first determine the per member per year (PMPY) cost using the plan's blended active employee and non-Medicare retiree membership and fiscal year 2012 blended premiums. The blended group PMPY cost was then allocated into PMPY claims and administrative costs. The blended group PMPY claims cost was then converted to an age 65 non-Medicare retiree claims cost by adjusting for the difference between the age and utilization of the blended group and non-Medicare retirees at age 65. PMPY retiree claims costs for all pre-65 non-Medicare retirement ages were developed by applying the pre-65 aging factors shown in the Summary of Actuarial Assumptions. Final per capita claims costs are equal to the PMPY administration cost added to each individual pre-65 age PMPY retiree claims cost.

Medicare Eligible We have assumed that premiums for Medicare eligible retirees are based on Medicare eligible retiree experience and equal the expected true cost of retiree coverage. As a result, there is no implicit subsidy for these benefits.

#### B. Healthcare Cost Trend

Trend is a forecast of per capita claims cost increases due to factors such as price inflation, utilization, government-mandated benefits, and new treatments, therapies and technology. Trend is not the same as annual changes in plan costs which reflect group demographics, changes in plan design, administrative fees, reinsurance costs and changes in participant contributions.

The trend assumption is comprised of three elements: (1) the initial trend rate, (2) the grade-down period to the ultimate trend rate, and (3) the ultimate trend rate itself. The medical trend rates are based on published survey data, medical plan type and long-term expectations. Actual plan sponsor healthcare costs will differ from the assumption since we cannot precisely predict the factors affecting trend and annual plan costs in the future. This assumption is merely one estimate among a wide range of possibilities.



#### **Important Notices**

#### Purpose and Scope of the Valuation

This valuation has been prepared exclusively for the County and solely to provide GASB 45 accounting information. It is important to recognize that calculations performed for other purposes (such as benefit design, investment policy, or plan funding) may yield significantly different results.

A valuation report is only a snapshot of a plan's estimated financial condition at a single point in time. A plan's total cost will depend on many factors and variables that are uncertain and unknowable at the current valuation date.

Actuarial valuations are extremely complex and it's possible that data, computer coding, and mathematical errors could occur during the valuation process. Errors in a valuation discovered after its preparation may be corrected by revising the current valuation or in a subsequent year's valuation.

#### **Assumptions and Methods**

Since modeling all possible future outcomes is not possible or practical, the valuation is based on a single set of data, assumptions, methods, and plan provisions which satisfy current GASB 45 accounting requirements. We may also use estimates or simplifications to model future events in an efficient and cost-effective manner, so long as we believe that these simplifying techniques do not affect the reasonableness of the valuation results.

The County is responsible for selecting the assumptions, methods, and funding policies used to prepare the valuation. The selections used in this report are only one of a wide range of possibilities (each of which may be considered reasonable), but have been chosen as a single "best estimate" by the County. If the County is interested in analyzing the effect of different assumption sets on the valuation results, then we suggest a sensitivity analysis to be performed at a later date.

To the extent that actual plan experience differs from the valuation assumptions, actuarial gains and losses will occur and be amortized over future periods. A summary of the actuarial assumptions and methods used in this valuation are summarized in the Actuarial Basis section of the report.

#### Impact of Amortization Method

GASB 45 accounting rules require selection of a method for amortizing the unfunded actuarial accrued liability (UAAL) when calculating the ARC and Annual OPEB Cost. For the current valuation, the County has elected to amortize the UAAL as a level dollar amount over a 30-year open period (i.e. the entire UAAL is reamortized over a new 30-year period each year). Amortization over an open period means that, absent actuarial gains, the current UAAL will never be fully recognized.



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#### **Important Notices (continued)**

#### Accuracy of Substantive Plan Information and Census Data

For purposes of this valuation, we have assumed that the County has validated our summary of the substantive plan provisions and has provided us with any relevant information regarding interpretation of the plan provisions and changes to the plan terms since the prior valuation.

The County is solely responsible for the validity, accuracy and comprehensiveness of this information. If any data or plan provisions supplied are not accurate and complete, the valuation results may differ significantly. Moreover, different interpretations of the substantive plan may produce substantially different valuation results.

## **Funding Considerations**

The County is solely responsible for selecting funding and investment policies. Actuarial valuations do not affect the ultimate cost of a plan, only the timing of contributions and Annual OPEB Cost. If contributions over time are lower or higher than necessary, then future contribution levels can be adjusted to fund the plan at the desired level.

This report has not been prepared to develop a funding policy for the County's OPEB plan. For example, the Annual Required Contribution (ARC) calculated under GASB rules is an accounting term and may or may not be the appropriate level of funding for the plan. If the County would like to analyze different funding policies, then we suggest a separate funding policy study to be completed at a later date.



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## **Accounting Requirements and Valuation Considerations**

This section summarizes the applicable accounting requirements for the plan and describes important considerations and methods used to complete the valuation.

#### Accounting Information under GASB 43 and GASB 45

The Governmental Accounting Standards Board (GASB) finalized Statements No. 43 (GASB 43 for funded OPEB plans) and 45 (GASB 45 for employers) in 2004. The statements' objectives are to establish uniform standards of financial reporting by state and local governmental entities for postemployment benefit plans other than pension benefits (OPEB plans). This includes benefits such as postemployment medical, dental, and life insurance benefits.

For OPEB plans sponsored by governmental entities, these GASB Statements require certain standards and disclosures of plan and fund information including financial reporting of plan assets, liabilities of plan, changes in net assets, funded status and funding progress of the plan, and contributions to the plan in comparison to the annual required contributions of the employer (ARC).

#### **Valuing Postretirement Health Benefits**

Determining the value of future healthcare benefits is challenged by the fact that assumptions must be made about many future events that are especially hard to predict. Future increases in healthcare costs are affected by many factors, including:

- OPEB inflation
- Utilization
- · Technological advances
- Cost shifting (i.e., increases in private plans' costs in non-managed programs due to uninsured claims, changes in the Medicare payment structure, and increased emphasis on managed care programs)
- Cost leveraging (i.e., erosion of fixed deductibles and out-of-pocket maximums)

OPEB obligations are also heavily influenced by demographic assumptions such as:

- Withdrawal rates (i.e., employees terminating before receiving benefits)
- Retirement rates (i.e., employees retiring at various ages and subsidy levels)
- Mortality rates (i.e., how long employees and spouses will receive benefits)
- Election rates (i.e., retirees electing to participate, electing which plan, and electing spouse coverage or not)

The Summary of Actuarial Assumptions and Methods section outlines the assumptions used in this valuation.



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## Accounting Requirements and Valuation Considerations (continued)

## **Estimating Healthcare Costs**

Estimating future healthcare costs involves calculating a starting claims plus administration cost on a percovered-individual basis, as well as developing an assumption regarding future healthcare cost increase rates.

For insured plans, the premiums represent a blended average cost of both active and retired individuals. Since older, pre-65 retirees generally incur higher claims than younger active employees, GASB requires employers to value retiree liability based on retirees' estimated true costs rather than anticipated premium costs. Age-adjusted claims are developed and used to value the OPEB liability.

Another important concept is "community rating" where premiums are developed based on a large pool of commingled participating employers. In this case, it is current actuarial practice to not value an implicit subsidy so long as the participating employer in question is a small proportion of the entire population and their specific claims experience, good or bad, is assumed to not affect the community-rated premiums. It should be noted, though, that this implicit subsidy treatment for community-rated plans is under review and may be reduced or eliminated upon the issuance of revised actuarial standards of practice in the near future.

#### Impact of Legislative Changes

The legislative and regulatory environment have many implications for OPEB plans. Changes to current rules and implementation of new legislation are difficult to predict but could have a dramatic impact on the value of future plan benefits. These include:

- Changes to government medical programs, such as Medicare, when applicable. Under the Medicare
  Modernization Act of 2003 (MMA), a new prescription drug program called Medicare Part D was
  established. GASB requirements state that the determination of the actuarial accrued liabilities, the
  annual required contribution, and the annual OPEB cost should be done without reduction for Medicare
  Part D payments.
- Effect of the Patient Protection Affordable Care Act. Many of the Act's provisions and methods of implementation have not yet been clarified. Effectively estimating specific provisions of the Act at this time is not feasible. As guidance is released we will reflect any potential impact to your plan.



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## **Glossary of Selected Terms**

This section provides the definitions of applicable terminology in the actuarial valuation, with references to both the Governmental Accounting Standards Nos. 43 (GASB 43) and 45(GASB 45).

**Actuarial Cost Method** - a procedure for determining the actuarial present value of benefits and for developing an allocation of such value to time periods.

**Actuarial Present Value of Benefits** - the value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a set of actuarial assumptions.

**Actuarial Accrued Liability (AAL)** - the portion of the actuarial present value which is not provided for by future normal costs, determined under the actuarial cost method.

**Annual OPEB Cost** - the OPEB expense recognized in the employer's financial statements.

**Annual Required Contribution (ARC)** - the basis for the annual OPEB cost shown in the employer's financial statements. This term is misleading: no annual cash contribution is actually required to fund OPEB benefits.

Discount Rate - the interest rate used to adjust liabilities and obligations for the time value of money.

**GASB Statement No. 43** - the Governmental Accounting Standards Statement Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans

**GASB Statement No. 45** - the Governmental Accounting Standards Statement Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

Implicit Subsidy or Implicit Rate Subsidy - the difference between the actual and apparent cost of OPEB coverage. The actual cost for early retirees is higher than the average per-person premium for the active/retiree group. Plans in which retirees pay the average active/retiree rate (the apparent cost) give rise to an implicit rate subsidy: the employer pays the difference between the actual and apparent cost.

**Medicare** - a U.S. government program of hospitalization insurance and voluntary medical insurance for persons aged 65 and over and for certain disabled persons under 65.

**Medicare Part B** - provides medical insurance coverage for services such as physician's services, outpatient services, and home health care. Participation under Part B is voluntary, and beneficiaries pay monthly premiums. Part B is also called Supplementary Medical Insurance.

**Medicare Part D** - also called the Medicare prescription drug benefit, is a federal program to subsidize the costs of prescription drugs for Medicare beneficiaries in the United States. It was enacted as part of the Medicare Modernization Act of 2003 (MMA) and went into effect on January 1, 2006.

**Net OPEB Obligation (NOO)** - the OPEB liability (asset) at transition, if any and the cumulative difference since the effective date of Statement No. 45 between annual OPEB cost and the employer's contributions.

**Normal Cost** - the portion of the actuarial present value which is allocated to the valuation year by the actuarial cost method.

Valuation Date - the date as of which assets and liabilities are measured for this OPEB valuation.