

AGENDA

WASHOE COUNTY, NEVADA OPEB TRUST FUND
BOARD OF TRUSTEES

December 15, 2016 at 11:00 a.m.

Comptroller's Large Conference Room
Washoe County Administrative Complex, Building D, 2nd Floor
1001 E. 9th Street - Reno, Nevada 89512

NOTE: Items on the agenda may be taken out of order; combined with other items; removed from the agenda; moved to the agenda of another later meeting; moved to or from the Consent section; or may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later. Items listed in the Consent section of the agenda are voted on as a block and will not be read or considered separately unless removed from the Consent section.

Facilities in which this meeting is being held are accessible to the disabled. Persons with disabilities who require special accommodation or assistance (e.g. sign language, interpreters or assisted listening devices) at the meeting should notify the Washoe County Comptroller's Office at 328-2552, 24 hours prior to the meeting.

Time Limits. Public comments are welcomed during the Public Comment periods for all matters, whether listed on the agenda or not, and are limited to two minutes per person. Additionally, public comment of two minutes per person will be heard during individual action items on the agenda. Persons are invited to submit comments in writing on the agenda items and/or attend and make comment on that item at the Trustee's meeting. Persons may not allocate unused time to other speakers.

Forum Restrictions and Orderly Conduct of Business. The Washoe County OPEB Trust Board of Trustees conducts the business of the OPEB Trust Fund during its meetings. The presiding officer may order the removal of any person whose statement or other conduct disrupts the orderly, efficient or safe conduct of the meeting. Warnings against disruptive comments or behavior may or may not be given prior to removal. The viewpoint of a speaker will not be restricted, but reasonable restrictions may be imposed upon the time, place and manner of speech. Irrelevant and unduly repetitious statements and personal attacks which antagonize or incite others are examples of speech that may be reasonably limited.

Responses to Public Comments. The Board of Trustees can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The Open Meeting Law does not expressly prohibit responses to public comments by the Board. However, responses from Trustees to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Board of Trustees will consider, Trustees may choose not to respond to public comments, except to correct factual inaccuracies, ask for staff action or to ask that a matter be listed on a future agenda. The Board may do this either during the public comment item or during the following item: "*Trustee's/Staff announcements, requests for information, topics for future agendas and statements relating to items not on the agenda".

This Agenda for the meeting has been posted at the following locations: Washoe County Administration Building (1001 E. 9th Street, Bldg. A), Washoe County Courthouse-Second Judicial District Court (75 Court Street), Washoe County Downtown Reno Library (301 S. Center Street), Sparks Justice Court (1675 Prater Way #107) the Washoe County Website at www.washoecounty.us/finance/OPEB.htm, and the Nevada Public Notice Website (<https://notice.nv.gov>).

Support documentation for items on the agenda that is provided to the Washoe County, Nevada OPEB Trust Board of Trustees is available to members of the public at the Washoe County Comptroller's Office (1001 E. 9th Street, Room D-200 Reno, Nevada) Jeri Renshaw, Administrative Secretary (775) 328-2552.

All items numbered or lettered below are hereby designated **for possible action** as if the words "for possible action" were written next to each item (NRS 241.020). An item listed with asterisk (*) is an item for which no action will be taken.

- * 1. Roll call.
- * 2. Public Comments. Comments heard under this item will be limited to two minutes per person and may pertain to matters both on and off the Board of Trustee's agenda. The Board will also hear public comment during individual action items, with comment limited to two minutes per person. Comments are to be made to the Board as a whole.
- 3. Review and discussion of discount rate to be used in future actuarial valuations for participating plans.
- * 4. Adjourn.



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December 14, 2016

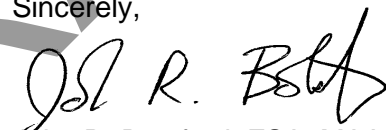
Mr. Russell O. Morgan, CPA
Senior Accountant – Health Benefits
Washoe County
1001 East Ninth Street
Reno, Nevada 89512

Washoe County
GASB 45 Actuarial Valuation of Post Employment Benefits as of July 1, 2016

Dear Russ:

I am pleased to enclose a draft copy of the above-titled Milliman report. If you have questions about this report, please give me a call at (415) 394-3740.

Sincerely,


John R. Botsford, FSA, MAAA
Consulting Actuary

JRB:dy
enc.

Washoe County

GASB 45 Actuarial Valuation of
Post Employment Benefits Other than Pension as of July 1, 2016

Prepared by:

John R. Botsford
FSA, MAAA

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December 14, 2016



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Washoe County
1001 East Ninth Street
Reno, Nevada 89512

**Washoe County –
GASB 45 Actuarial Valuation of Post Employment Benefits as of July 1, 2016**

At the request of the Washoe County, we have completed an actuarial valuation of post employment benefits as of January 1, 2016.

The purpose of this report is to determine the Annual Required Contribution and required financial disclosures under the Governmental Accounting Standards Board Statement No. 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (GASB 45). Our determinations reflect the procedures and methods prescribed in GASB 45.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by Washoe County's staff. This information includes but is not limited to employee census data, financial information and plan provisions. While Milliman has not audited the financial and census data, they have been reviewed for reasonableness and are, in our opinion, sufficient and reliable for the purposes of our calculations. If any of this information as summarized in this report is inaccurate or incomplete, the results shown could be materially affected and this report may need to be revised.

The values provided in this report are estimates only. They represent results if actual experience exactly matches the assumptions used. Actual experience will likely differ and continued monitoring of experience should be performed and adjustments made to the assumptions as necessary. Reliance on information contained in this report by anyone for anything other than the intended purpose puts the relying entity at risk of being misled.

All costs, liabilities, rates of interest, and other factors for the Plan have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Plan. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations which, in combination, represent our best estimate of anticipated experience for the Plan. The expected investment return on assets has been selected by Washoe County management and should represent a best estimate of anticipated experience under the Plan. We believe this assumption chosen by the County to be reasonable for its intended purpose.

This valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions.

While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Washoe County has the final decision regarding the appropriateness of the assumptions and actuarial cost methods.

Actuarial computations presented in this report under GASB Statement No. 45 are for purposes of assisting the Washoe County in fulfilling its financial accounting requirements. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Washoe County's funding policy and goals. The calculations in this report have been made on a basis consistent with our understanding of the Plan provisions described in Appendix A of this report, and of GASB Statement No. 45. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the Washoe County. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) Washoe County may provide a copy of Milliman's work, in its entirety, to Washoe County's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the Washoe County.
- (b) Washoe County may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuary is independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, the report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Actuarial Standards of Practice of the American Academy of Actuaries. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

John R. Botsford, FSA, MAAA
Consulting Actuary

JRB:dy

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Introduction

Milliman, Inc. (“Milliman”) has been retained by the Washoe County (“County”) to provide a GASB 45 actuarial valuation of its post employment benefit (OPEB) plans. In our valuation we:

- Project expected payouts for future years
- Calculate the present value of total benefits
- Calculate the actuarial liability (present value of benefits attributable to past service)
- Determine the Annual Required Contribution (ARC) and annual OPEB expense under GASB Statement No. 45
- Prepare the financial statement disclosures relating to the funded status of the plan

Background

Eligible retirees are allowed coverage in the County’s health and life benefit programs. Retirees can choose between the Self Funded Group Health Plan (SFGHP) and an HMO Plan. Health benefits include medical, vision and dental coverage. Employees hired before 1997 (exact date varies by bargaining group) will receive a County paid benefit of 50% of the retiree's premium w/ 10 years of county service, 75% w/ 15 years and 100% w/ 20 or more years. Employees hired after 1997 (exact date varies by bargaining group) and before July 1, 2010, will receive a County paid benefit equal to the Non-State Retiree Subsidy Adjustment described in the Nevada PEBP. Employees hired on or after July 1, 2010, will receive no health care contributions by Washoe County, but may continue health plan coverage by paying the entire premium.

Appendix A provides a more detailed summary of benefits.

Rationale for Significant Assumptions

With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well.

Discount Rate. GASB 45 requires that the interest rate used to discount future benefit payments back to the present day be based on the expected rate of return on any investments set aside in a dedicated trust to pay for these benefits. The discount rate of 7.00% used in this valuation was selected by the County and reflects the investment policy and asset allocation of the State of Nevada’s Retiree Benefit Investment Fund (RBIF) as shown below.

Asset Class	Asset Allocation
Foreign Developed Equity	21.00%
U.S. Fixed Income	30.00%
U.S. Large Cap Equity	49.00%

We reviewed this investment return assumption, and believe it to be reasonable based on the above asset allocation.

Health Cost Trend. We derived the health cost inflation trend assumptions based on the “Getzen” model developed by the Society of Actuaries. Please see Appendix B for an explanation of the trend model.

Retirement, Withdrawal and Disability Rates. Nevada PERS completed an experience study for employees and retirees in 2015. Based on the results of this study, Nevada PERS developed new assumed rates of retirement, withdrawal and disability (“new rates”).

For the 2014 valuation we used the termination, retirement and disability rates used by the Nevada PERS before the 2015 Experience Study for employees/retirees (the “previous rates”). In selecting assumptions for the 2016 valuation we compared Washoe County’s recent experience to both the Nevada PERS new rates and previous rates. We found that for assumed rates of retirement, the previous rates more closely reflected the experience of Washoe County than the new rates. Conversely, the new termination rates were a better match to the experience of Washoe County than the previous rates. Based on this, the 2016 valuation uses the Nevada PERS termination rates developed from the 2015 experience study and uses retirement rates that were in use prior to the experience study. Since the County’s population size is not large enough to develop credible disability rates, we used the latest NV PERS disability rates for this valuation.

We also used the latest mortality table published by the Society of Actuaries: RP-2014 Mortality, Male & Female, projected generationally from the 2006 base year using the MP-2016 projection scale.

Demographic assumptions regarding disability, mortality, retirement, and termination are described in Appendix B. Actual experience will likely differ and continued monitoring of experience should be performed and adjustments made to the assumptions as necessary.

Spouse Coverage. Retirees pay 100% of any dependent coverage. However, the spouse rates charged to retirees are premium rates based on combined active and retiree (without Medicare) claims experience. Since retiree claims tend to be higher than active claims, the County is providing an implicit rate subsidy for spouses of retirees. GASB 45 requires that such a subsidy be valued in determining accounting liabilities and annual expense. The County provided us with actual spouse data for current retirees. Based on this data, we assumed that 25% of future retirees would elect health coverage for their spouses.

Health Plan Election. For Tier 1 employees, we have assumed that 100% will elect medical coverage upon retirement. 60% of active Tier 1 employees who are under age 65 are assumed to elect SFGHP coverage at retirement; 40% of active Tier 1 employees who are under age 65 are assumed to elect HMO coverage.

For Tier 1 active employees and Tier 1 retirees who have not yet reached age 65, we assume that 70% will enroll in Medicare Parts A and B once they reach age 65. Among these who enroll in Medicare, we assume that 20% will enroll in the Senior Care Plus (SCP) Medicare Advantage Plan, 48% will enroll in SFGHP coverage and 32% will enroll in HMO coverage.

We have assumed that 85% of Tier 2 employees and 50% of Tier 3 employees will elect medical coverage upon retirement. 60% of active Tier 2 and tier 3 employees who are under age 65 are assumed to elect SFGHP coverage at retirement; 40% of active Tier 2 and Tier 3 employees who are under age 65 are assumed to elect HMO coverage.

For Tier 2 and 3 active employees and Tier 2 and 3 retirees who have not yet reached age 65, we assume that all will enroll in Medicare Parts A and B, and that 9% will elect SFGHP coverage at age 65, 6% will elect HMO coverage, and 85% will elect coverage in the SCP Plan. We have also

assumed that 75% of the active employees who elect medical coverage upon retirement will also elect dental coverage. The above health plan election assumptions were based on an analysis of plan elections made by retiring County employees.

A complete summary of the actuarial assumptions is presented in Appendix B.

Results of Study

The valuation results are summarized in the following exhibit and use the following terms:

The **Present Value of Benefits** is the present value of projected benefits (projected claims less retiree contributions) discounted at the valuation interest rate (7.00%).

The **Actuarial Accrued Liability (AAL)** is the present value of benefits that are attributed to past service only. The portion attributed to future employee service is excluded. For retirees, this is equal to the present value of benefits.

The **Normal Cost** is the portion of the County provided benefit attributable to employee service in the current year. Employees who are not eligible for benefits are assumed to have an equal portion of the present value of benefits attributed to each year of service from date of hire to expected retirement age.

The **Annual Required Contribution (ARC)** (plus a small adjustment if the ARC in prior years is not fully funded) is the amount the County would be required to report as an expense for the 2016-2017 fiscal year under GASB 45. The ARC is equal to the Normal Cost plus an amount to amortize the Unfunded AAL over 30 years in a "closed" basis from June 30, 2011, i.e. the remaining amortization period as of June 30, 2016 is 25 years.

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	July 1, 2016	July 1, 2014
Active Employees	2,311	2,257
Retirees and Surviving Spouses	<u>1,512</u>	<u>1,381</u>
Total Participants	3,823	3,683
Covered Retired Spouses	161	170
Present Value of Benefits	\$ 479,812,000	\$ 404,353,000
Actuarial Accrued Liability	\$ 429,637,000	\$ 339,643,000
Assets	<u>168,927,000</u>	<u>146,484,000</u>
Unfunded Actuarial Accrued Liability	\$ 260,710,000	\$ 193,159,000
Normal Cost (as of end of year)	\$ 6,926,000	\$ 8,535,000
Annual Required Contribution (ARC)	\$ 23,088,000	\$ 19,943,000

Impact of Changes from Last Valuation

The Actuarial Accrued Liability increased by approximately \$90.0 million since the last valuation. The following is a summary of changes since the last valuation and their approximate impact on the Actuarial Accrued Liability (AAL). See Exhibit 6 for a reconciliation of the Actuarial Accrued Liability.

Variability of Results

The results contained in this report represent our best estimates. However, variation from these or any other estimates of future retiree medical costs is not only possible but probable. Actual future costs may vary significantly from estimates in this report.

Exhibit 1. Projected Pay-as-you-go County Costs

The table below illustrates the projected pay-as-you-go County costs of providing retiree health benefits. The projections only consider the closed group of existing employees and retirees. The projected County costs shown below are equal to the projected retiree claims costs less the expected premiums charged to retirees participating in the retiree health plan.

Year	FY Ending June 30	Current Retirees	Future Retirees	Total Projected County Costs
1	2017	\$15,080,000	\$437,000	\$15,517,000
2	2018	15,693,000	1,248,000	16,941,000
3	2019	16,485,000	2,096,000	18,581,000
4	2020	17,082,000	3,064,000	20,146,000
5	2021	17,724,000	4,051,000	21,775,000
6	2022	18,259,000	5,016,000	23,275,000
7	2023	18,708,000	6,226,000	24,934,000
8	2024	19,389,000	7,394,000	26,783,000
9	2025	19,844,000	8,613,000	28,457,000
10	2026	20,432,000	9,801,000	30,233,000
11	2027	21,054,000	11,018,000	32,072,000
12	2028	21,668,000	12,515,000	34,183,000
13	2029	22,229,000	13,739,000	35,968,000
14	2030	22,822,000	15,253,000	38,075,000
15	2031	23,204,000	16,901,000	40,105,000

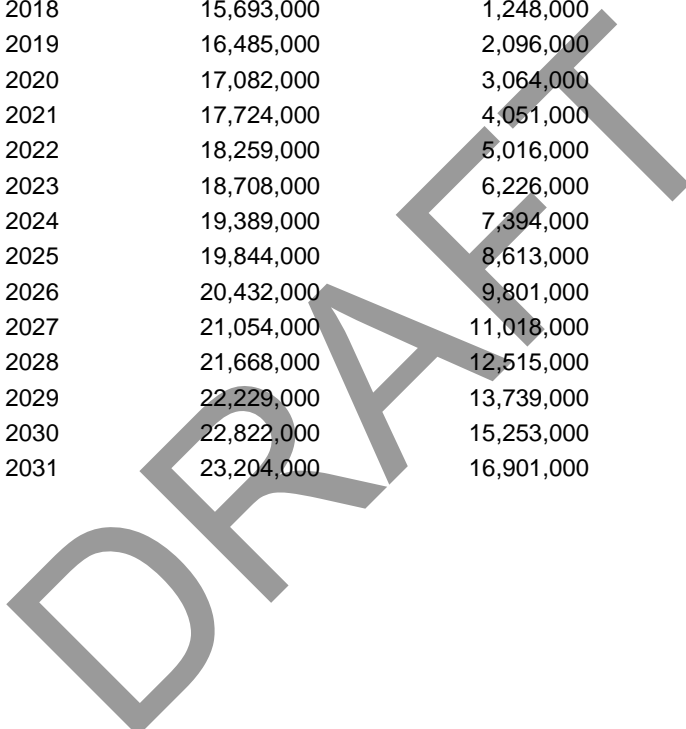


Exhibit 2. Liabilities and Normal Cost

The **Present Value of Benefits** is the actuarial present value of benefits expected to be paid for all retirees and covered employees.

The **Actuarial Accrued Liability (AAL)** is the actuarial present value of benefits attributed to employee service rendered prior to the valuation date. The AAL equals the present value of benefits multiplied by a fraction equal to service to date over service at expected retirement.

The **Normal Cost** is the actuarial present value of benefits attributed to one year of service. This equals the present value of benefits divided by service at expected retirement. Since retirees are not accruing any more service, their normal cost is zero.

	July 1, 2016	July 1, 2014
Present Value of Benefits		
Actives	\$ 200,397,000	\$ 197,705,000
Retirees	<u>279,415,000</u>	<u>206,648,000</u>
Total	\$ 479,812,000	\$ 404,353,000
Actuarial Accrued Liability		
Actives	\$ 150,222,000	\$ 132,995,000
Retirees	<u>279,415,000</u>	<u>206,648,000</u>
Total	\$ 429,637,000	\$ 339,643,000
Normal Cost	\$ 6,473,000	\$ 7,977,000

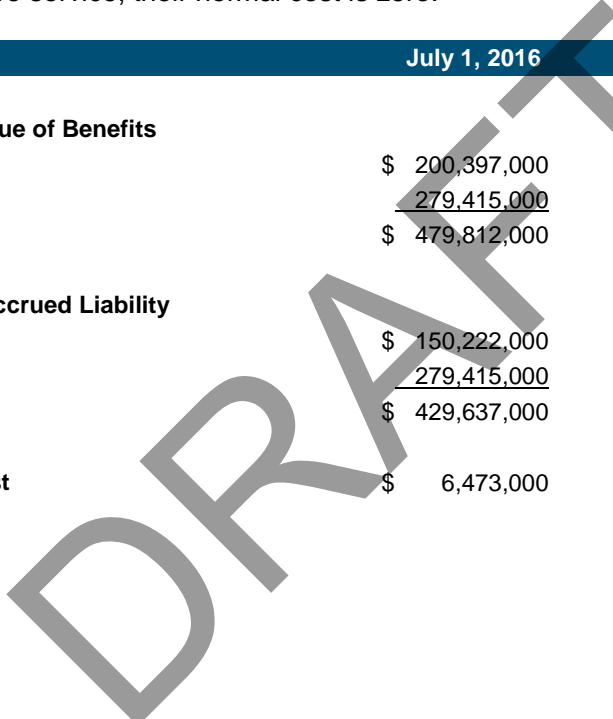


Exhibit 3. Unfunded Actuarial Accrued Liability

The Unfunded Actuarial Accrued Liability (UAAL) is the actuarial liability offset by any assets set-aside to provide retiree health benefits. This is equal to the value of the retiree health benefits accrued to date that has not been funded. The UAAL must be amortized over a period not exceeding 30 years and included in the ARC amount (shown in Exhibit 5) each year. The UAAL is being amortized as a level percentage of payroll over 30 years on a “closed” basis from June 30, 2011, i.e. the remaining amortization period as of June 30, 2016 is 25 years. We have assumed the County’s payroll will increase 3.5% per year for this purpose.

July 1, 2016	
Unfunded Actuarial Liability (UAAL)	
Actuarial Accrued Liability	\$ 429,637,000
Reserve Fund ¹	<u>168,927,000</u>
Unfunded Actuarial Accrued Liability	\$ 260,710,000
Funded percentage	39.3%
 Amortization of UAAL for ARC	
UAAL	\$ 260,710,000
Amortization Period	25 years
Level % of Payroll Amortization Factor	17.2598
Amortization Amount – July 1, 2016	\$ 15,105,000
Interest to end of year	1,057,000
Amortization Amount – June 30, 2017	\$ 16,162,000

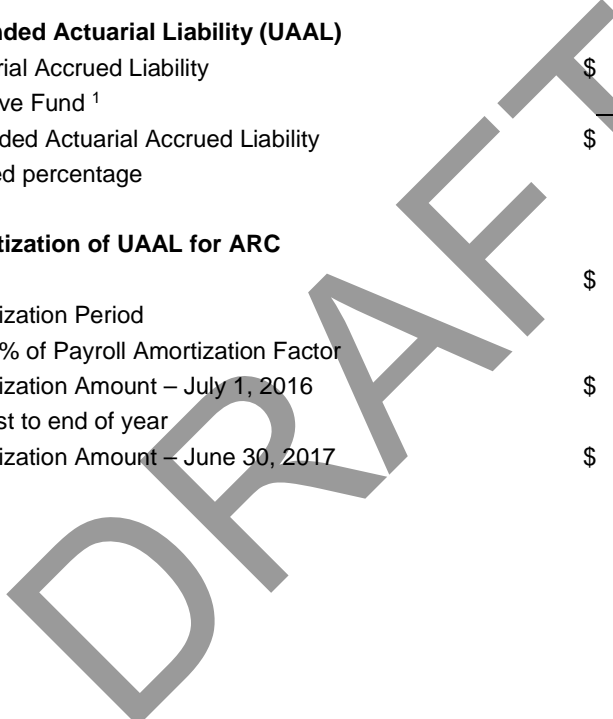


Exhibit 4. Required Financial Statement Disclosures

The following table shows the calculation of the Annual Required Contribution and Net OPEB Obligation.

	FOR THE FISCAL YEAR ENDING	
	June 30, 2017	June 30, 2016
Determination of Annual Required Contribution		
Normal Cost at year end	\$ 6,926,000	\$ 9,083,000
Amortization of UAAL	<u>16,162,000</u>	<u>11,863,000</u>
Annual Required Contribution (ARC)	\$ 23,088,000	\$ 20,946,000
Determination of Net OPEB Obligation		
Annual Required Contribution	\$ 23,088,000	\$ 20,946,000
Interest on prior year Net OPEB Obligation	21,000	(209,000)
Adjustment to ARC	<u>(18,000)</u>	<u>169,000</u>
Annual OPEB Cost	\$ 23,091,000	\$ 20,906,000
Retiree Benefit Payments Paid by Employer	TBD	0
County Contributions Made to Trust	<u>TBD</u>	<u>(17,613,000)</u>
Increase in Net OPEB Obligation	TBD	3,293,000
Net OPEB Obligation – beginning of year	\$ 305,000	\$ (2,988,000)
Net OPEB Obligation – end of year	\$ TBD	\$ 305,000

* Contributions for the 2016-2017 fiscal year will not be known until after the end of the fiscal year. GASB 45 defines contributions for this purpose to be the County's pay-as-you-go costs during the year and contributions made to a separate, irrevocable trust.

The following table shows the annual OPEB cost and net OPEB obligation for the prior 3 years.

Fiscal Year Ended	Annual OPEB Cost	Percentage of OPEB Cost Contributed	Net OPEB Obligation
06/30/2014	\$ 18,689,000	95.10%	\$ (2,231,000)
06/30/2015	19,910,000	103.80%	(2,988,000)
06/30/2016	20,906,000	84.25%	305,000

Funded Status and Funding Progress. As of July 1, 2016, the most recent actuarial valuation date, the plan was 39.3% funded. The actuarial accrued liability for benefits was \$429.6 million, and the actuarial value of assets was \$168.9 million, resulting in an unfunded accrued liability of \$260.7 million.

Exhibit 5. Required Supplementary Information

The following table shows a schedule of Funding Progress required under GASB 45.

Actuarial Valuation Date	Actuarial Value of Assets ¹	AAL Unit Credit	UAAL	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
07/01/2012	\$ 91,263,000	\$ 287,185,000	\$ 195,922,000	31.8%	n/a	n/a
07/01/2014	146,484,000	339,643,000	193,159,000	43.1%	n/a	n/a
07/01/2016	168,927,000	429,637,000	260,710,000	39.3%	n/a	n/a

¹ Assets reported for 7/1/2016 are unaudited plan net assets as of 7/1/2016 provided by the County.

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Exhibit 6. Reconciliation of the Actuarial Accrued Liability

The following table shows a reconciliation of the Actuarial Accrued Liability (AAL) from 2014 to 2016.

	(in Millions)
Actuarial Accrued Liability as of July 1, 2014	\$ 339.6
Value of Benefits Accrued (Normal Cost for 2 years from July 2014 to June 2016)	17.6
Increase in AAL due to 2 year decrease in discount period	48.8
Decrease due to expected retiree benefits from July 2014 to June 2016	(24.2)
Increase due to demographic and health cost changes different than expected from the last valuation	3.4
Increase due to update to medical trend assumption	5.4
Decrease due to change in enrollment and plan election assumptions	(9.6)
Increase due to change in mortality assumption	25.2
Increase due to changes in termination and disability retirement assumptions	7.7
Increase due to change from projected unit credit to entry age normal cost method	<u>15.7</u>
Actuarial Accrued Liability as of July 1, 2016	\$ 429.6
Total change in Actuarial Accrued Liability from 2014 to 2016	\$ 90.0

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Appendix A. Summary of Benefits

Below is a summary of our understanding of the County's retiree benefit program. Special provisions apply to persons employed by the County between May 3, 1977 and January 13, 1981, under which such persons retain the County subsidy even if employment is terminated prior to retirement. Special provisions also apply to elected officials. The effects of these special provisions are not being valued within this actuarial study.

Eligibility

All employees who retire from County employment and receive monthly payments under the Public Employees Retirement System (PERS) of Nevada are eligible to participate in the plan.

In addition, employees who have terminated employment prior to retirement may enroll in the County's health coverage upon commencing retirement if the County is that individual's last public employer. These persons must show evidence of good health and are subject to a 12 month pre-existing condition limitation.

Retiree health and welfare benefits are provided under three contribution "tiers". Tier 1 includes all employees employed on July 1, 1996 and hired prior to the dates shown in the table below. Tier 2 includes all employees hired after the Tier 1 "exclusion" dates in the table below and before July 1, 2010. Tier 3 includes all employees hired on or after July 1, 2010.

Employee Association	Tier 1 Exclusion Date for Employees Hired After
Confidential (non-represented)	September 17, 1997
WCEA (non-supervisory)	September 17, 1997
WCEA (supervisory)	September 17, 1997
WCSDA (non-supervisory)	January 1, 1998
WCSSDA (supervisory)	July 1, 1998
WCDA (investigators)	February 11, 1998
WCPAA (attorneys)	April 29, 1998
Non-represented attorneys in DA/PD	April 29, 1998
WCNA (nurses)	August 26, 1998
WC Elected Officials	September 29, 1999

Benefit Plans

<i>Medical</i>	Identical benefits as provided to active employees. Retirees can elect coverage under either the Self-Funded Group Health Plan or the HMO Health Plan. Medicare eligible retirees may also choose the Senior Care Plus Medicare Advantage Plan. The Group Health Plan has full coordination of benefits integration with Medicare.
<i>Prescription Drug</i>	Identical benefits as provided to active employees.
<i>Vision</i>	Identical benefits as provided to active employees.
<i>Dental</i>	Retirees after 1/1/96 have the option, upon retirement, to retain dental benefits with the retiree paying the full premium.

Life Insurance

Life insurance coverage is provided to those retirees enrolling in either of the health care benefit plans offered by the County. The amount of coverage provided for the retiree varies according to the retiree's age as indicated below:

Under age 65	\$ 20,000
Age 65 to 69	13,000
Age 70 and over	7,000

The amount of coverage provided to covered dependents and surviving spouses of deceased retirees is indicated below:

Spouse	\$ 1,000
Child under 14 days	none
Child 14 days to 6 months	100
Child 6 months and over	1,000

Dependents' Benefits

Coverage is available for dependents of the retiree including a spouse and any unmarried children who are under age 26 or disabled and incapable of self-support.

Survivor Benefits

Upon the death of the retiree, benefits may be continued to the surviving spouse for his/her remaining lifetime. Spouses are required to pay 100% of the premium.

Retiree Contributions

For eligible retirees, the County pays a portion of the retiree's premium based on years of County service. Retirees pay 100% of the premium for dependent coverage. Employees must retire directly from the County to be eligible for the County contribution (i.e., individuals seeking reinstatement are not eligible for this payment regardless of their prior years of service with the County).

Exception: Persons employed by the County between May 3, 1977 and January 13, 1981, retain the County subsidy even if employment is terminated prior to retirement.

For Tier 1 retirees, the retiree's contribution is determined as follows, except for the cost of dental benefits which is 100% paid for by the retiree, regardless of service:

Years of Service	Tier 1 Retiree Contribution
Less than 10	100%
10 but less than 15	50%
15 but less than 20	25%
20 or more	0%

For Tier 2 retirees, the retiree's contribution is the monthly premium amount set by the County less a County paid premium subsidy as described in the following table:

Years of Service	Under Age 65	Over Age 65
5	\$108.39	\$57.50
6	141.31	69.00
7	173.73	80.50
8	206.14	92.00
9	238.56	103.50
10	270.98	115.00
11	303.40	126.50
12	335.81	138.00
13	368.23	149.50
14	400.65	161.00
15	433.07	172.50
16	465.48	184.00
17	497.90	195.50
18	530.32	207.00
19	562.73	218.50
20	595.15	230.00

Tier 3 employees are not eligible for any County contribution toward retirement health benefits but may elect to continue coverage in the County health plans upon retirement at the retiree's own expense.

Appendix B. Actuarial Cost Method and Assumptions

The actuarial cost method described below is one of several acceptable cost methods described in GASB 45, and the assumptions represent our best estimate of anticipated future experience based on information provided to us. Note, that the ultimate responsibility of selecting/approving the actuarial cost method and assumptions lies with the County and its auditor.

Actuarial Cost Method

In June 2015, the Governmental Accounting Standards Board adopted GASB 75 which will replace GASB 45. The new standard, which will be first effective for the County for the 2018 fiscal year, contain significant changes from the current standard. One such change is the required use of the Individual Entry Age Normal Level Percent of Pay cost method.

Under this method, Normal Cost is calculated as a percent of salary that remains constant over an individual's working lifetime such that when the normal costs for all years of service are summed, the result is the individual's present value of projected benefits. The sum of normal costs attributable to all years of service prior to the valuation date is the actuarial accrued liability. Retirees have a normal cost of zero.

In determining the Annual Required Contribution, the Unfunded AAL is amortized as a level percentage of expected payroll over 30 years on a closed basis from June 30, 2011, i.e. the remaining amortization period as of June 30, 2016 is 25 years. The actuarial value of assets is equal to the market value of assets as of the valuation date.

Economic Assumptions

Discount Rate 7.00% effective annual rate, chosen by Washoe County

GASB 45 requires that the interest rate used to discount future benefit payments back to the present be based on the expected rate of return on any investments set aside to pay for these benefits. Washoe County selected a 7.00% discount rate based on the investments held in the Nevada Retirement Benefits Investment Fund (RBIF). 7.00% was used in the prior valuation.

Demographic Assumptions.

Mortality RP-2014 Male and Female Healthy Annuitant mortality tables adjusted to reflect Mortality Improvement Scale MP-2016 from the 2006 base year, and projected forward using projection scale MP-2016 on a generational basis.

Salary Scale

For purposes of allocating normal costs under the Entry Age Normal cost method, we used the salary increase assumptions used by NV PERS. The salary increase assumptions are shown below:

Service	Regular	Sheriffs
0	8.00%	8.00%
1	8.00	8.00
2	8.00	8.00
3	8.00	8.00
4	8.00	8.00
5	3.00	3.00
6	3.00	3.00
7	3.00	3.00
8	3.00	3.00
9	3.00	3.00
10	3.00	3.00
11	3.00	3.00
12	3.00	3.00
13 +	3.00	3.00

Retirement

The tables below list the probabilities an active employee will retire or terminate from the County in a single year.

Age	REGULAR		SHERIFFS	
	< 30 Years	30 or More	< 20 Years	20 or More
50-54	4%	25%	6%	20%
55-59	5%	30%	20%	20%
60	30%	30%	20%	20%
61	20%	20%	25%	25%
62-64	25%	25%	25%	25%
65	30%	30%	100%	100%
66-69	30%	30%		
70	100%	100%		

Withdrawal

Service	Regular	Sheriffs
0	16.50%	14.00%
1	12.50%	6.50%
2	9.70%	5.75%
3	7.30%	4.75%
4	6.60%	4.25%
5	5.00%	3.50%
6	4.00%	3.00%
7	3.50%	2.25%
8	3.25%	1.90%
9	3.00%	1.75%
10	2.75%	1.50%
15+	1.50%	0.50%

Disability Retirement

Age	Regular	Sheriffs
22	0.01%	0.06%
27	0.02%	0.06%
32	0.06%	0.10%
37	0.09%	0.18%
42	0.21%	0.35%
47	0.35%	0.56%
52	0.57%	0.52%
57	0.75%	0.50%

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Other Assumptions

Benefit Costs

Below is a summary of the monthly budgeted premium rates of all retiree benefits per retiree and per dependent for July 1, 2015 to December 31, 2016.

Plans	Medicare Ineligible or Opted Out	Medicare Enrolled
Self-Funded Group Health Plan (SFGHP)		
Retiree	\$715.97	\$486.36
Dependent	706.93	476.22
HMO		
Retiree	\$731.93	\$553.46
Dependent	704.49	524.91
Senior Care Plus		
Retirees	N/A	\$136.81
Dependent	N/A	125.00
Dental		
Retiree	\$61.20	\$61.20
Dependent	57.12	57.12

Below is a summary of the monthly budgeted premium rates of all retiree benefits per retiree and per dependent for Calendar Year 2017.

Plans	Medicare Ineligible or Opted Out	Medicare Enrolled
Self-Funded Group Health Plan (SFGHP)		
Retiree	\$774.65	\$577.02
Dependent	750.36	552.73
HMO		
Retiree	\$723.24	\$550.17
Dependent	692.84	519.76
Senior Care Plus		
Retirees	N/A	\$178.66
Dependent	N/A	165.00
Dental		
Retiree	\$59.10	\$59.10
Dependent	54.97	54.97

Retiree Contribution Basis

The retiree's contribution is based on the actual budget rates.

Health Costs

Washoe County sets the same premiums (SFGHP and HMO) for retirees (without Medicare) as for active employees. Therefore, the retiree premium rates are being subsidized by the inclusion of active lives in setting rates. (Premiums calculated only based on retiree health claims experience would have resulted in higher retiree premiums.)

To account for the fact that per member health costs vary depending on age (higher health costs at older ages), we calculated equivalent Per Member Per Month (PMPM) costs that vary by age based on the age distribution of covered members (employees/retirees and dependents), and based on relative cost factors by age. The relative cost factors were developed from the Milliman Health Cost Guidelines. Based on the approved premium rates for July 1, 2015 through December 31, 2016 and relative age cost factor assumptions, we developed age adjusted monthly PMPM health and dental costs for the 2016-2017 fiscal year as shown in the following tables:

**Pre-65 Retirees (All Tiers) and Tier 1 Post-65 Retirees Who Have Not Enrolled in Medicare
Age Adjusted Medical PMPM Costs for FY 2016**

Age	RETIREES		SPOUSES	
	Male	Female	Male	Female
55	\$ 786	\$ 870	\$ 915	\$ 998
60	1,017	1,022	1,146	1,150
64	1,247	1,143	1,330	1,222
65	1,310	1,169	1,367	1,222
70	1,446	1,307	1,509	1,366
75	1,596	1,450	1,666	1,515
80	1,762	1,601	1,840	1,673
85	1,946	1,767	2,031	1,847

**Retirees Enrolled Medicare A and B (All Tiers)
Assumed Medical PMPM Costs for FY 2016**

Age	RETIREES		SPOUSES	
	Male	Female	Male	Female
65	410	437	410	437
70	504	502	504	502
75	559	548	559	548
80	599	584	599	584
85	630	608	630	608

**Retirees Enrolled Medicare A Only (All Tiers)
Age Adjusted Medical PMPM Costs for FY 2016**

Age	RETIREES		SPOUSES	
	Male	Female	Male	Female
65	\$1,041	\$ 877	\$1,041	\$ 877
70	1,149	980	1,149	980
75	1,269	1,087	1,269	1,087
80	1,401	1,200	1,401	1,200
85	1,547	1,325	1,547	1,325

Age Adjusted Dental PMPM Costs for FY 2016

Age	RETIREES		SPOUSES	
	Male	Female	Male	Female
55	\$54	\$57	\$68	\$71
60	60	62	74	76
65	65	64	79	78
70 and Over	68	64	82	78

Participation

The assumed participation is as follows:

Tier	% of Retirees Participating
Tier 1	100%
Tier 2	85%
Tier 3	50%

Plan Election

Employees who elect medical coverage at retirement are assumed to elect the following plans:

Retirees under age 65 (all tiers)

SFGHP	60%
HMO	40%

Tier 1 retirees age 65 or over not enrolled in Medicare A & B

SFGHP	60%
HMO	40%

Tier 1 retirees age 65 or over enrolled in Medicare A & B

SFGHP	48%
HMO	32%
SCP	20%

Tier 2 and Tier 3 retirees age 65 or over

SFGHP	9%
HMO	6%
SCP	85%

All retirees, all tiers

Dental	75%
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Dependent Coverage

20% of future retirees are assumed to elect coverage for their spouses.

<i>Medicare Eligibility</i>	<p>70% of active employees hired prior to the Tier 1 exclusive dates (see Appendix A), and 100% hired thereafter are assumed to enroll in Medicare Parts A&B at age 65.</p> <p>Of current Tier 1 retirees under age 65, 70% are assumed to become Medicare eligible at age 65. For retirees and spouses age 65 and over, we have used the Medicare status provided by the County.</p>
<i>Spouse Age</i>	<p>Female spouses are assumed to be three years younger than male spouses, on average. Actual ages were used for current spouses receiving benefits from the County.</p>
<i>Reinstatement</i>	<p>Persons terminating County employment prior to retirement are assumed not to apply for reinstatement.</p>

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Medical Inflation

The medical cost inflation trend used in this valuation was derived from the “Getzen Model” published by the Society of Actuaries for developing long term medical cost trends. These trend rate assumptions include provisions of the Consolidated Appropriations Act of 2016 signed into law on December 18, 2015, which delays the Excise Tax by two years, makes the tax a deductible business expense and removes the health insurer fee in calendar year 2017. A Federal excise tax will apply for high cost health plans beginning in 2020. A margin to reflect the impact of the excise tax in future years is reflected in the assumed trend. Also the “Getzen” model was updated to reflect latest economic growth factors. The development of the trend rates was based on assumed general inflation of 3.0% per year. The following table shows the assumed rate increases in future years for Medical premiums.

PRE 65 –		POST 65 –		POST 65 –	
YEAR	% INFLATION	YEAR	HMO & PPO % INFLATION	YEAR	SCP % INFLATION
2016 - 2017	Actual	2016 - 2017	Actual	2016 - 2017	Actual
2017 - 2018	6.75%	2017 - 2018	7.50%	2017 - 2018	7.50%
2018 - 2019	6.25%	2018 - 2019	6.50%	2018 - 2019	6.50%
2019 - 2020	6.00%	2019 - 2020	5.75%	2019 - 2020	5.75%
2020 - 2024	5.75%	2020 - 2025	5.50%	2020 - 2025	5.50%
2024 - 2026	6.00%	2025 - 2030	5.75%	2025 - 2042	5.75%
2026 - 2027	6.25%	2030 - 2031	6.00%	2042 - 2062	5.50%
2027 - 2028	6.50%	2031 - 2032	6.50%	2062 - 2067	5.25%
2028 - 2030	6.75%	2032 - 2035	6.75%	2067 - 2070	5.00%
2030 - 2041	6.50%	2035 - 2036	6.50%	2070 +	4.75%
2041 - 2044	6.25%	2036 - 2037	6.75%		
2044 - 2051	6.00%	2037 - 2041	6.50%		
2051 - 2064	5.75%	2041 - 2047	6.25%		
2064 - 2067	5.50%	2047 - 2056	6.00%		
2067 - 2070	5.25%	2056 - 2065	5.75%		
2070 - 2073	5.00%	2065 - 2067	5.50%		
2073 +	4.75%	2067 - 2070	5.25%		
		2070 - 2073	5.00%		
		2073 +	4.75%		

Dental Inflation

3.00%

Appendix C. Summary of Participant Data

The employee and retiree census was provided by the County as of July 1, 2016.

Regular Employees

Age	YEARS OF SERVICE							Total
	Under 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30&Over	
Under 25	13	0	0	0	0	0	0	13
25-29	88	7	0	0	0	0	0	95
30-34	122	44	18	1	0	0	0	185
35-39	121	63	49	12	0	0	0	245
40-44	70	47	89	40	2	0	0	248
45-49	113	39	85	60	11	1	0	309
50-54	109	38	74	47	11	7	1	287
55-59	114	35	62	49	10	7	2	279
60-64	58	27	42	41	5	10	1	184
65-over	<u>30</u>	<u>7</u>	<u>21</u>	<u>11</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>70</u>
Totals	838	307	440	261	39	25	5	1,915

Average Age: 46.8
 Average Years of Service: 10.7

Sheriffs

Age	YEARS OF SERVICE							Total
	Under 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30&Over	
Under 25	2	1	0	0	0	0	0	3
25-29	48	3	0	0	0	0	0	51
30-34	23	26	12	0	0	0	0	61
35-39	14	22	28	3	0	0	0	67
40-44	22	10	29	22	2	0	0	85
45-49	32	9	19	22	12	2	0	96
50-54	13	3	2	2	0	2	0	22
55-59	3	0	2	3	0	0	0	8
60-64	0	0	1	1	0	0	0	2
65-over	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>
Totals	158	74	93	53	14	4	0	396

Average Age: 39.7
 Average Years of Service: 10.9

County Plan Retirees and Surviving Spouses

Age	HEALTH PLAN ELECTION			Total
	SFGHP	HMO	SCP	
Under 50	10	20	0	30
50-54	56	32	0	88
55-59	103	75	0	178
60-64	197	87	1	285
65-69	215	71	71	357
70-74	181	55	37	273
75-79	105	25	12	142
80-84	67	20	10	97
85 & Over	<u>53</u>	<u>4</u>	<u>5</u>	<u>62</u>
Totals	987	389	136	1,512

Average Retirees' Age: 67.3

Note: The totals above include 13 surviving spouses

Note: We also valued 161 spouses for current retirees

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