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**Lake Havasu Unified School District**

**GASB 45 Valuation and OPEB Expense**

As of June 30, 2015

For Fiscal Year  
Beginning July 1, 2015  
Ending June 30, 2016

**Prepared by:**



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February 2017

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February 22, 2017

David K. Stewart, Principal  
Strategic Advisor Employee Benefits  
Insurance Professionals of AZ  
3521 E. Brown Rd #101  
Mesa, AZ 85213

Dear Dave:

United Health Actuarial Services, Inc. has valued the postretirement benefits available to retirees of the Lake Havasu Unified School District (“Lake Havasu”) as of July 1, 2015. This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Employee data, contribution rates, and premium rates were provided by Lake Havasu (via Strategic Advisor Employee Benefits acting as their representative).

Contrary to our initial understanding, the plan is not funded with irrevocable plan assets, therefore no asset data was considered. Please note that this represents a change from the prior valuation.

The values presented in this report have been reasonably determined in accordance with the actuarial assumptions and methods stated herein. I am available to answer any questions on the material contained in this report, or to provide explanations or further details as may be appropriate.

I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. I am not aware of any relationship that could create a conflict of interest, or that would impair my objectivity.

United Health Actuarial Services, Inc.



Ben Brandon, FSA, MAAA  
Consulting Actuary

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## SECTION I

### VALUATION OVERVIEW

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#### **INTRODUCTION**

The Government Accounting Standards Board (GASB) finalized rules for reporting and cost recognition of post-retirement benefits other than pensions (OPEB) through GASB Statements 43 and 45 in June 2004.

This report presents the results of a valuation, prepared as of July 1, 2015 in accordance with GASB 45, of the Lake Havasu Unified School District's ("Lake Havasu's") plan of post-retirement health benefits. The determination of the Annual OPEB Cost under GASB 45 for the fiscal year ending June 30, 2016 is summarized in the following pages. A valuation of a post-retirement benefit plan under GASB 45 consists of the projection and discounting of the benefit, administrative expense, and income streams expected to be generated by the covered group under the terms of the plan.

#### **OVERVIEW**

Lake Havasu sponsors a single-employer health care plan that provides health benefits to certain retirees and spouses. All employees hired prior to July 1, 2005 are immediately eligible for post-retirement benefits if they accumulate 15 years of continuous service and retire prior to Medicare eligibility. The benefit includes medical, dental, vision and life insurance coverage until the retiree is Medicare eligible.

Lake Havasu is a self-funded plan that appears to pay retiree claims as they arise. Though there was a significant fund set up to pay retiree benefits a few years ago, it is our understanding that the funds have been used to provide benefits to actives (as well as retirees) in practice. This arrangement does not appear to qualify as OPEB plan assets under GASB 43 or 45, and therefore, this valuation ignores these assets.

GASB requires Lake Havasu to accrue the amount of Annual OPEB Cost each year. The offsetting liability is then reduced by the difference between the retirees' claims and their contributions. The liabilities in this valuation are being amortized over 24 years as that is the remaining period left to the original 30-year closed amortization period. This is the method implied by the prior actuarial reports and it closely tracks the period remaining for the closed group (no future entrants) of actives and retirees (hired prior to July 1, 2005) to receive benefits.

**SECTION II**

**VALUATION SUMMARY**

**POST RETIREMENT BENEFIT OBLIGATIONS**

Post Retirement Benefit Obligations for Health Benefits Under GASB 45 as of July 1, 2015
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Actuarial Accrued Liability (AAL)	<u>Total</u>	<u>Contracts</u>
Actives not yet eligible to receive benefits	\$1,974,857	284
Actives eligible for disability benefits	\$3,886,310	75
Retirees	<u>\$2,595,066</u>	41
 Total Actuarial Accrued Liability for Health	 \$8,456,233	
 OPEB Plan Assets	 \$0	
 Unfunded Actuarial Accrued Liability	 \$8,456,233	
 Additional obligation attributable to service after July 1, 2015	 <u>\$2,910,025</u>	
 Actuarial Present Value of Benefits as of July 1, 2015	 \$11,366,258	

Breakdown of AAL By Member Age		AAL for Benefits	
		<u>Under 65</u>	<u>65 and Over</u>
Actives not yet eligible to receive benefits			
Under 65	255	\$1,974,857	\$0
Actives eligible to receive benefits			
Under 65	75	\$3,886,310	\$0
Retirees			
Under 65	41	\$2,595,066	\$0

## SECTION II

### VALUATION SUMMARY

(Continued)

#### CALCULATION OF ANNUAL OPEB COST

The derivation of Annual OPEB Cost for the fiscal year commencing July 1, 2015, is shown separately for health benefits as follows:

Annual OPEB Cost Under GASB 45 for Health Benefits For Fiscal Beginning July 1, 2015		
a.	Actuarial Accrued Liability (AAL) as of 7/1/15	\$8,456,233
b.	OPEB Plan Assets as of 7/1/15	\$0
c.	Unfunded Actuarial Accrued Liability (a. – b.)	\$8,456,233
d.	Number of Years Remaining	24
e.	Amortization of Unfunded AAL (sum of bases)	\$465,285
f.	Normal Cost	<u>\$298,040</u>
g.	Annual Required Contribution (before interest) (e. + f.)	\$763,325
h.	Interest to End of Year at 3.5%	<u>\$26,716</u>
i.	Annual Required Contribution (ARC) (g. + h.)	\$790,041
j.	Adjustment to the ARC	(\$46,414)
k.	Interest on Net OEB Obligation	\$27,000
l.	Annual OPEB Cost for Health Benefits for 2015 (i.+ j.+k.)	\$770,627
m.	Estimated Contributions Made	(\$367,877)
n.	Net OPEB at July 1, 2015	\$771,428
o.	Net OPEB at July 1, 2016 (l.+m.+n.)	\$1,174,178

## SECTION II

### VALUATION SUMMARY

(Continued)

#### DEVELOPMENT OF AMORTIZATION BASES

The derivation of the 7/15 amortization basis is as follows:

a.	Actual UAAL as of 7/1/15	\$8,456,233
b.	Expected UAAL as of 7/1/15 (roll-forward from prior valuation)	\$2,636,527
c.	Experience (Gain)/Loss as of 7/1/15 (a. – b.)	\$5,819,706
d.	(Gain)/Loss as of 6/30/15 (prior val – partial amortization)	(\$1,728,483)
e.	Total (Gain)/Loss as of 7/1/15 (c. + d.)	\$4,091,223
f.	Amortization Factor (24 years – matches remaining on UAAL)	16.62
g.	Amortization Amount (e./f.)	\$246,157

#### AMORTIZATION BASES

Effective Date	Original Amount	Amortization Period	Discount Rate	Amortization Amount	Year Remaining	Amount Remaining
7/1/2009	\$4,586,418	30	2.5%	\$219,128	24	\$4,043,068
7/1/2015	\$4,091,223	24	3.5%	\$246,157	24	\$4,091,223
			<b>Total</b>	<b>\$465,285</b>		

## SECTION III

### ACTUARIAL METHODOLOGY

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#### POPULATION VALUED

The valuation is based on a closed group. Current employees and retirees as of June 30, 2015 only are considered. No provision is made for future hires.

#### ACTUARIAL COST METHOD

The actuarial calculations were performed in accordance with the Projected Unit Credit Actuarial Cost Method as allowed under GASB 45.

Benefits are projected and the actuarial present value of benefits are determined for each individual included in the actuarial valuation. Benefits are earned over the period from the date of hire to full eligibility date and are allocated as follows:

1. all valuation years preceding the measurement date;
2. the current valuation year; and
3. all subsequent valuation years.

The sum of the actuarial present values of benefits allocated to the current valuation year determined above for all individuals is the Normal Cost for the valuation year.

The sum of the actuarial present values of benefits allocated to all valuation years preceding the measurement date determined above is the Actuarial Accrued Liability (AAL). The excess of the AAL over the actuarial value of plan assets is the Unfunded Actuarial Accrued Liability.

The Unfunded Actuarial Accrued Liability is being amortized over 24 years as that is the remaining period left to the original 30-year closed amortization period. This is the method implied by the prior actuarial reports and it closely tracks the period remaining for the closed group (no future entrants) of actives and retirees (hired prior to July 1, 2005) to receive benefits. The amortized amount is actually the sum of the amortized initial UAAL (from 2010 valuation) and the accumulated (Gain)/Loss as of 7/1/15. Both amortization schedules are due to complete in 24 years.

The sum of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability is the Annual Required Contribution, which with interest at the valuation rate, determines the Annual OPEB Cost.

#### ACTUARIAL VALUE OF PLAN ASSETS

It is our understanding there are no plan assets recognized under GASB rules as the existing fund is not irrevocable for retiree benefits and has in fact been used to pay for the benefits of active employees.



## SECTION IV

### ACTUARIAL ASSUMPTIONS

(Continued)

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Disability Incidence of disability rates are from 2015 valuation report for the Arizona Retirement System. Illustrative rates are shown below:

<u>Age</u>	<u>Disability Rate per 1,000</u>
40	1.583
45	2.449
50	3.649
55	4.280
60	4.655

Participation and Dependents of Retirees 100% of actives hired prior to July 1, 2005 who retire will participate in the plan and 25% of these individuals will have a spouse who participates. Males are assumed to be 3 years older than female spouses.

### ECONOMIC AND COST ASSUMPTIONS

Discount 3.5% per annum.

Annual Retiree Per Capita Costs

It was determined that retiree claims experience had low credibility due to the small size of the retiree population and that we had insufficient data to calculate the per capita active costs. Therefore, the 2015 per capita health care costs for the retiree medical plan were determined based on Lake Havasu's plan designs and associated manual rates from the Watson Towers Wyatt 2016 HealthMAPs Medical Rating Manual. As a reasonableness check, we compared these values to the COBRA rates provided by Lake Havasu and found them to be within an acceptable range. For the considerably smaller ancillary benefits (vision and dental), we relied on the COBRA rates provided by Lake Havasu. Illustrative costs are shown below:

<u>Age</u>	<u>Medical</u>	<u>Dental</u>	<u>Vision</u>
59	\$10,516	\$324	\$132
62	\$11,659	\$359	\$146

The above costs reflect an aging curve of 3.5% per year and a 10% administrative expense assumption.

**SECTION IV**

**ACTUARIAL ASSUMPTIONS**

(Continued)

Retiree Contributions                      Lake Havasu bases contributions for active and retirees on the same set of premium rates that are a blended rate of the anticipated costs of the two populations. The monthly amounts for 2016 are as follows:

<u>Medical</u>	<u>Dental</u>	<u>Vision</u>	<u>Life</u>
\$578.50	\$27.00	\$11	\$10

Lake Havasu charges the retirees the difference between these rates and \$5,800 per year (\$4,000 cap from Lake Havasu and \$1,800 from the State). Dependents pay the entire premium. Note that this cap does not protect Lake Havasu from the higher costs generated by retirees as compared to the active working population. Hence this implied subsidy adds to Lake Havasu’s liability beyond that of the \$4,000 cap described above.

Health Care Cost Trend                      Trend rates are used to anticipate increases in medical benefit costs expected to be experienced by the retiree health plan in each future year.

Fiscal Year Ending	Health
Change <u>Over Prior</u>	<u>Trend</u>
2017	7.00%
2018	6.75%
2019	6.50%
2020	6.25%
2021	6.00%
2022	5.75%
2023	5.50%
2024	5.25%
2025+	5.00%

Benefit Plans & Eligibility                      Lake Havasu sponsors a single-employer health care plan that provides health benefits to retirees and spouses. The benefits provided include medical, dental and vision coverage as well as a \$20,000 life insurance benefit (2 participants have a \$250,000 face amount). Active employees are immediately eligible to retire when they accumulate 15 years of service. The benefits are also restricted to those employees who were hired prior to July 1, 2005. All benefits (dependents

included) cease upon the retiree's death or when they are Medicare eligible.

#### Cadillac Tax

As part of the Patient Protection and Affordable Care Act (PPACA), there will be a new 40% excise tax, also known as the Cadillac tax, beginning in 2020. The tax will be applied to benefits above the 2020 limit of \$10,200 for individuals and \$27,500 for families (\$11,850 for retirees ages 55-64 with individual coverage and \$30,950 for retirees ages 55-64 with family coverage). The limits will be increased by the CPI + 1.0% in 2021 and by the CPI each year thereafter. UHAS has estimated the impact of this provision and has included the associated liability within this report. Note the liability was grossed-up to reflect the excise charge will not be tax deductible to the TPA/carrier and the associated income tax will be passed on to the plan.

## SECTION V

### TEN YEAR PROJECTION

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#### CALCULATION OF PRESENT VALUES

Using the actuarial assumptions, the number of retired participants is projected each year in the future. The costs are projected for each future year at each age using the trend and aging assumptions. The projected costs less projected retiree contributions are multiplied by the expected number of retirees in each future year to produce the expected net cost. Shown below are the net costs and expected average retirees for the next ten fiscal years. Future retirees are only derived from those employed as of June 30, 2015 (a closed group).

<u>Fiscal Year</u>	<u>Net Cost</u>	<u>Retirees</u>
2015	\$380,589	44.9
2016	\$472,008	50.4
2017	\$586,714	56.6
2018	\$600,261	54.0
2019	\$659,433	54.8
2020	\$664,022	52.5
2021	\$718,417	50.6
2022	\$729,350	46.3
2023	\$711,008	45.5
2024	\$704,060	45.4

These net costs are then discounted using the valuation interest rate to determine the present value of the projected liabilities.

#### ACTUARIAL CALCULATIONS

Actuarial calculations reflect a long-term perspective that involves estimates of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

These actuarial calculations are based on our understanding of the plan as it exists at the time of the valuation and are very sensitive to the expected subsidy by Lake Havasu for retirees' costs in excess of contribution rates.