

4500 Kruse Way, Suite 200 Lake Oswego, OR 97035 www.independentactuaries.com

February 8, 2017

Howard George Business Manager Southern Oregon ESD 101 North Grape St. Medford, Oregon 97501-2718

Southern Oregon Education Service District Early Retirement Program Re:

July 1, 2016 Actuarial Valuation Report

Dear Howard:

We are pleased to enclose three copies of the Actuarial Valuation Report for Southern Oregon Education Service District's Early Retirement Program (ERP) as of July 1, 2016, to be applied to the reporting periods ending June 30, 2017 and June 30, 2018.

A summary of results can be found on page 2 of the report.

If you have any questions on the enclosed, please contact me at 503.601.0870.

Sincerely,

Steven L. Diess, EA, MAAA

email: SteveDiess@indact.com

Stun S. Tien

SLD/jh/mp

Enclosures



AS OF JULY 1, 2016



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ACTUARIAL CERTIFICATION

The purpose of this report is to summarize the results of the Actuarial Valuation of Southern Oregon Education Service District's Early Retirement Program as of July 1, 2016.

This report includes a summary of the employee data and financial information as of July 1, 2016. This report also provides the actuarial cost requirements of the plan as required under GASB Statements 73 and 75 for the fiscal years ending June 30, 2017 and June 30, 2018.

All information submitted to us by the Plan Administrator has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit.

To the best of our knowledge, this report is complete and accurate. The calculations are performed in accordance with generally accepted actuarial principles and practices. Each material assumption is, in our opinion, individually reasonable and falls within the best estimate range, taking into account past experience and reasonable future expectations, and is consistent with each other material assumption.

The results presented in this report are based on assumptions that represent our best estimate of anticipated plan experience, within the constraints of currently applicable laws and regulations.

The undersigned credentialed actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sum L. Tieu	February 8, 2017	
Steven L. Diess, EA, MAAA	Date	
Totald	February 8, 2017	
Joshua Harris	Date	

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SUMMARY OF RESULTS

	_	Stipend	 Medical
As of June 30, 2017			
Total Pension/OPEB Liability	\$	307,336	\$ 5,161,244
Deferred Outflows	\$	N/A	\$ N/A
Deferred Inflows		N/A	N/A
Fiscal Year Ending June 30, 2017			
Pension/OPEB Expense/(Credit)	\$	113,403	\$ 3,216,774
As of June 30, 2018			
Total Pension/OPEB Liability	\$	259,846	\$ 4,767,361
Deferred Outflows	\$	0	\$ 0
Deferred Inflows		0	0
Fiscal Year Ending June 30, 2018			
Pension/OPEB Expense/(Credit)	\$	16,531	\$ 288,410



DISCUSSION AND ANALYSIS

Overview

Southern Oregon Education Service District (the District) sponsors an Early Retirement Program (ERP) with three main components, as follows:

- Stipend Benefits Certain retirees are eligible to receive a monthly stipend payable until eligibility
 for full Social Security benefits, but in no event more than ten years of payments. The stipend
 amount is generally a flat dollar amount, except for pre-age 60 Licensed retirees, whose stipend
 is based on the current year's substitute rate. This pension-type benefit is required to be valued
 under GASB Statement 73.
- Explicit Medical Benefits The District may pay all or a portion of a retiree's medical premium until Medicare eligibility. This explicit benefit is required to be valued under GASB Statement 75.
- Implicit Medical Benefits In addition to the explicit medical benefits for certain retirees, continued medical coverage is offered to the District's eligible retirees and their spouses and dependents until Medicare eligibility. The active premium rate (whether paid by the District or by the retiree) still applies. However, in some cases the premium itself does not represent the full cost of covering these retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy", and is required to be valued under GASB Statement 75.

GASB Statement 73 and 75

GASB Statements 73 and 75 are closely related. Statement 73 prescribes the reporting requirements for sponsors of pension-type benefits, and Statement 75 prescribes the reporting requirements for sponsors of Other (than Pension) Post-Employment Benefits ("OPEBs").

Statement 73 is first effective for fiscal years beginning after June 15, 2016, and Statement 75 is first effective for fiscal years beginning after June 15, 2017. Earlier application is encouraged by the GASB. It is our understanding that Southern Oregon ESD will first apply the provisions of Statements 73 and 75 in the fiscal year ending June 30, 2017.

There are three dates to define under Statements 73 and 75: the Fiscal Year-End, the Measurement Date, and the Actuarial Valuation Date. The Measurement Date must be no earlier than the end of the prior fiscal year, and the Actuarial Valuation Date must be no earlier than 30 months prior to the Fiscal Year-End.



DISCUSSION AND ANALYSIS (Concluded)

For purposes of this report, we are using an Actuarial Valuation Date of July 1, 2016, and Measurement Dates of June 30, 2017 and June 30, 2018. This will allow the Southern Oregon ESD to use the results developed in this report in the financial statements for the fiscal years ending in 2017 and 2018.

Projected benefit payments are shown on pages 10 and 11. For stipends and explicit medical benefits, the payments are the benefits expected to be paid by Southern Oregon ESD for current and future retirees. For implicit medical benefits, the amounts represent each year's projected implicit rate subsidy.

Under each statement, the Total Pension (or OPEB) Liability (TPL/TOL) is determined. This is equal to the present value of the portion of future expected benefit payments that is considered to have been already earned by participants. The statements require that the TPL/TOL be determined using the Entry Age Normal actuarial funding method.

Further, to illustrate the sensitivity of the TPL/TOL to changes in discount rate, the Statements require that the TPL/TOL be disclosed in the footnotes to the financial statements using a discount rate 100 basis points lower and higher than the baseline rate. Similarly, the sensitivity of the TOL to changes in assumed healthcare trend rates must also be disclosed. The development of the TPL/TOL at the various discount and healthcare trend rates is shown on pages 14 and 20.

For the first year that Statements 73 and 75 are implemented, the entire TPL/TOL will be recorded as a liability on the Statement of Net Position. In the second year, a lower TOL/TPL will be recorded (it is lower due to the fact that this is a mature population, with substantial benefits being paid out in the near-term).

In subsequent years, as shown on pages 15 and 21, changes in TPL/TOL due to actuarial gains or losses or due to changes in assumptions are amortized over the average expected future working lifetime of participants, with unamortized amounts treated as deferred outflows or inflows of resources. Summaries of deferred outflows and inflows of resources under Statements 73 and 75, respectively, are shown on pages 16 and 22.

The expense that is recorded on the Statement of Activities is equal to the change in TPL/TOL, plus or minus changes in deferred outflows or inflows, plus employer contributions for the year. For the fiscal year ending June 30, 2017 (the first year of implementation), this expense equals the June 30, 2017 TPL/TOL, minus the June 30, 2016 Net Pension/OPEB Obligation (as determined under GASB Statements 27 and 45), plus employer contributions for the year. The development of expense for the fiscal year ending June 30, 2018 is shown on pages 17 and 23, along with a parallel development categorizing expense items as Operating Expenses or Financing Expenses.



OUTLINE OF PLAN PROVISIONS

The following is a summary of the major ERP provisions as understood as of the valuation date. It should not be relied on for the purpose of determining actual benefits under the ERP.

The ERP is composed of three components: an early retirement salary stipend (Stipend Benefit), District-paid health premiums (Explicit Medical Benefit), and an implicit medical subsidy (Implicit Medical Benefit).

Retirement Eligibility The retiree must be eligible for benefits from Oregon PERS.

Eligibility requirements under Oregon PERS are as follows:

Tier 1 or Tier 2 members: Earlier of age 55, or any age with 30 years of service.

OPSRP members: Age 55 with 5 years of service.

Stipend Benefit

Eligible Class of Employees Administrative¹ and Confidential – Retire with at least 10 years of

service with the District.

Classified - Not eligible.

Licensed – Employed by the District prior to January 1, 2001.

Benefit Duration Paid until full social security age or 10 years, whichever comes

first.

Benefit Amount Administrative and Confidential – Monthly stipend of \$325.

Licensed – Monthly stipend of \$275 at age 60 and older. Under age 60 they receive a monthly stipend equal to three days of the current year's substitute rate; however, the retiree can be asked to work up to three days per month in return for this benefit.

Explicit Medical Benefit

Eligible Class of Employees Administrative, Confidential and Licensed - Same as for the

stipend benefit, described above.

Classified - Employed by the District prior to July 1, 2000.

Benefit Duration Provided until the earlier of age 65 or the death of the retiree

(survivor benefits are not paid).

¹Includes Administrators, Business Managers, and Superintendent.



OUTLINE OF PLAN PROVISIONS (Continued)

Explicit Medical Benefit (cont.)

Benefit Amount District-paid single or couple medical/prescription drug coverage

(eligible Administrative and Licensed retirees also receive dental and vision coverage). The retiree will not be out-of-pocket any

more than their active counterpart.

For the 2016-17 plan year, there is a cap in place on District-paid premiums of \$1,108 per month for employee and spouse coverage (\$520 for single coverage). This cap does not apply to Classified participants, and is expected to inflate in future years

at a rate of 5% per year.

Implicit Medical Benefit

Eligible Class of Employee All classes of employee are eligible to continue coverage upon

retirement.

Dependent Eligibility Qualified spouses, domestic partners, and children may qualify

for coverage.

Benefit Duration Coverage for retirees and eligible dependents continues until

Medicare eligibility for each individual (or until dependent

children become ineligible).

Benefit Amount There is an implicit subsidy for the MODA plans with respect to

retired employees because the medical premium rates charged for coverage typically are less than actual expected retiree claims costs. This is due to medical premium rates being determined by

blending both active employee and retiree experience.



OUTLINE OF PLAN PROVISIONS (Concluded)

Current Premiums

Monthly premiums effective July 1, 2016 are as follows:

MODA	Employee	Employee	Employee		
Health Plans	Only	and Spouse	and Child	Family	Composite
Birch	603.45	1,327.57	1,146.56	1,870.71	1,436.19
Cedar	543.88	1,196.52	1,033.37	1,686.06	1,294.42
Dogwood	473.82	1,042.44	900.31	1,468.93	1,127.73
Evergreen	419.00	921.80	796.12	1,298.92	997.22

MODA					
Synergy / Summit	Employee	Employee	Employee		
Health Plans	Only	and Spouse	and Child	Family	Composite
Birch	543.09	1,194.82	1,031.89	1,683.63	1,292.57
Cedar	489.48	1,076.88	930.04	1,517.46	1,164.98
Dogwood	426.45	938.21	810.28	1,322.05	1,014.96
Evergreen	377.11	829.64	716.51	1,169.04	897.49

	Employee	Employee	Employee		
Dental Plans	Only	and Spouse	and Child	Family	Composite
MODA Plan 1	62.47	123.75	137.62	203.79	151.94
MODA Plan 2	55.74	110.34	124.02	183.04	136.41
MODA Plan 6	41.25	81.65	82.87	126.60	94.81

	Employee	Employee	Employee		
Vision Plans	Only	and Spouse	and Child	Family	Composite
Pearl	17.61	38.79	33.50	54.66	40.25



PARTICIPANT STATISTICS

	Administrative	Classified	Confidential	Licensed	Total
Participant Counts					
Number of Active Participants	11	144	2	64	221
Number of Inactive Participants	2	22	3	16	43
Total Number of Participants	13	166	5	80	264
Participant Statistics					
Active Participants					
Average Age	54.6	47.7	47.0	50.5	48.9
Average Service	14.5	8.5	18.9	9.4	9.1
Inactive Participants					
Average Age	62.0	59.4	63.1	61.3	60.5



ASSET SUMMARY

The Plan is not funded at this time.



PROJECTED BENEFIT PAYMENTS

ACCOUNTING UNDER GASB STATEMENT 73 PROJECTED BENEFIT PAYMENTS

Fiscal Year									
Ending	Admin	istrative	Classi	fied	Conf	idential	_1	Licensed	 Total
2017	\$	5,187	\$	0	\$	5,850	\$	59,364	\$ 70,401
2018		6,297		0		3,885		53,838	64,021
2019		4,213		0		4,810		47,641	56,664
2020		4,939		0		4,530		40,023	49,493
2021		6,499		0		2,163		31,121	39,784
2022		8,663		0		2,551		22,257	33,471
2023		7,796		0		2,920		12,953	23,669
2024		6,610		0		3,138		10,612	20,361
2025		8,585		0		3,290		8,086	19,961
2026		3,524		0		3,395		2,268	9,187



PROJECTED BENEFIT PAYMENTS (Concluded)

ACCOUNTING UNDER GASB STATEMENT 75 PROJECTED BENEFIT PAYMENTS EXPLICIT BENEFIT

Fiscal Year								
Ending	Admi	nistrative	(Classified	Confidential	_	Licensed	 Total
2017	\$	9,861	\$	211,838	\$ 18,982	\$	139,194	\$ 379,875
2018		13,696		234,880	13,870		128,532	390,978
2019		11,127		214,771	17,033		131,755	374,686
2020		16,257		206,705	19,831		107,429	350,222
2021		18,207		218,583	6,669		83,210	326,669
2022		18,604		220,737	8,332		51,260	298,933
2023		11,530		181,622	10,096		20,190	223,437
2024		5,593		159,569	11,471		7,960	184,593
2025		11,000		133,260	12,698		5,692	162,650
2026		15,641		108,263	13,814		6,653	144,371

IMPLICIT BENEFIT

Fiscal Year										
Ending	Administrative		(Classified	Confidential	_	Licensed	_	Total	_
2017	\$	13,231	\$	126,876	\$ 20,255	\$	100,044	\$	260,407	
2018		17,109		161,280	9,997		102,929		291,316	
2019		15,368		155,871	12,869		116,925		301,032	
2020		20,594		169,828	16,027		105,810		312,259	
2021		16,195		183,454	3,490		86,451		289,591	
2022		21,653		189,561	4,823		65,082		281,119	
2023		23,200		166,061	6,466		43,509		239,236	
2024		17,959		154,416	8,084		26,655		207,114	
2025		8,808		123,825	9,800		22,193		164,625	
2026		6,726		104,593	11,710		22,277		145,306	



STIPEND BENEFIT – ACCOUNTING UNDER GASB STATEMENT 73



STIPEND BENEFIT – ACCOUNTING UNDER GASB 73 PROJECTION OF TOTAL PENSION LIABILITY

1. Total Pension Liability at June 30, 2016	\$	359,730
Changes for the year:		
2. Service cost	\$	8,149
3. Interest		9,858
4. Changes of benefit terms		0
5. Differences between expected and actual experier	ice	0
6. Changes of assumptions or other input		0
7. Benefit payments		(70,401)
8. Net changes (sum of 2. through 7.)		(52,394)
9. Total Pension Liability at June 30, 2017	\$	307,336
Changes for the year:		
10. Service cost		8,149
11. Interest		8,382
12. Changes of benefit terms		0
13. Differences between expected and actual experier	nce	0
14. Changes of assumptions or other input		0
15. Benefit payments	_	(64,021)
16. Net changes (sum of 2. through 7.)		(47,490)
17. Total Pension Liability at June 30, 2018	\$	259,846



STIPEND BENEFIT – ACCOUNTING UNDER GASB 73 SENSITIVITY OF TOTAL PENSION LIABILITY TO CHANGES IN DISCOUNT RATE

For June 30, 2017 Disclosure

		1%		Current		1%	
		Decrease 2.00%		Discount Rate 3.00%		Increase 4.00%	
Total Pension Liability	\$	315,917	\$	307,336	\$	298,836	

For June 30, 2018 Disclosure

	1%		Current	1%
	Decrease		Discount Rate	Increase
	2.00%	3.00%		4.00%
Total Pension Liability	\$ 267,313	\$	259,846	\$ 252,498



STIPEND BENEFIT – ACCOUNTING UNDER GASB 73 SCHEDULE OF CHANGES IN TOTAL PENSION LIABILITY AND RELATED RATIOS

	2018	2017
1. Total Pension Liability - beginning	\$ 307,336	\$ 359,730
2. Service Cost	8,149	8,149
3. Interest	8,382	9,858
4. Changes of benefit terms	0	0
5. Differences between expected and actual experience	0	0
6. Changes of assumptions or other input	0	0
7. Benefit payments	 (64,021)	(70,401)
8. Net change in total Pension liability	(47,490)	(52,394)
9. Total Pension Liability - end of year	\$ 259,846	\$ 307,336
10. Estimated covered payroll	\$ 2,026,059	\$ 1,967,048
11. Total Pension Liability as a percentage of estimated payroll	12.83%	15.62%



STIPEND BENEFIT – ACCOUNTING UNDER GASB 73 SCHEDULE OF COLLECTIVE DEFERRED INFLOWS AND OUTFLOWS

		Deferred		Deferred
		Outflows of		Inflows of
Gain/Loss	_	Resources		Resources
1. Differences between expected and actual experience	\$	0	\$	0
2. Changes of assumptions or other input		0	_	0
3. Total	\$	0	\$	0

Amounts reported as deferred outflows and deferred inflows of resources related to Pensions will be recognized in Pension expense as follows:

Year ended June 30:	
2018	\$ 0
2019	0
2020	0
2021	0
2022	0
Thereafter	0



STIPEND BENEFIT – ACCOUNTING UNDER GASB 73 CALCULATION OF COLLECTIVE PENSION EXPENSE

		ear Ending ne 30, 2018
1. Change in Net Pension Liability	\$	(47,490)
2. (Increase)/Decrease in Deferred Outflows		0
3. Increase/(Decrease) in Deferred Inflows		0
4. Contributions - Employer		64,021
5. Pension Expense	\$	16,531
Operating Expenses		
6. Service Cost	\$	8,149
7. Contributions - Employee	Ψ	0
8. Administrative expenses	\$	8,149
9. Total		·
Financing Expenses		
10. Interest		8,382
11. Expected return on assets		0
12. Total		8,382
Changes		
13. Benefit changes	\$	0
14. Recognition of assumption changes		0
15. Recognition of experience gains and losses		0
16. Recognition of investment gains and losses		0
17. Total	\$	0
18. Pension Expense (9. + 12. + 17.)	\$	16,531
19. Pension Expense as % of Estimated Payroll		0.82%



MEDICAL BENEFIT – ACCOUNTING UNDER GASB STATEMENT 75



MEDICAL BENEFIT - ACCOUNTING UNDER GASB 75 PROJECTION OF TOTAL OPEB LIABILITY

1. Total OPEB Liability at June 30, 2016	\$	5,502,255
Changes for the year:		
2. Service cost	\$	141,682
3. Interest		157,589
4. Changes of benefit terms		0
5. Differences between expected and actual experience	е	0
6. Changes of assumptions or other input		0
7. Benefit payments	_	(640,282)
8. Net changes (sum of 2. through 7.)		(341,011)
9. Total OPEB Liability at June 30, 2017	\$	5,161,244
9. Total OPEB Liability at June 30, 2017 Changes for the year:	\$	5,161,244
	\$	5,161,244 141,682
Changes for the year:	\$	
Changes for the year: 10. Service cost	\$	141,682
Changes for the year: 10. Service cost 11. Interest		141,682 146,728
Changes for the year: 10. Service cost 11. Interest 12. Changes of benefit terms		141,682 146,728 0
Changes for the year: 10. Service cost 11. Interest 12. Changes of benefit terms 13. Differences between expected and actual experience		141,682 146,728 0
Changes for the year: 10. Service cost 11. Interest 12. Changes of benefit terms 13. Differences between expected and actual experience 14. Changes of assumptions or other input		141,682 146,728 0 0



MEDICAL BENEFIT - ACCOUNTING UNDER GASB 75 SENSITIVITY OF TOTAL OPEB LIABILITY TO CHANGES IN DISCOUNT AND TREND RATES

For June 30, 2017 Disclosure

·	1% Decrease	Current Discount Rate					1% Increase
	 2.00%		3.00%		4.00%		
Total OPEB Liability	\$ 5,409,553	\$	5,161,244	\$	4,927,124		
	1% Decrease		Current Trend Rate		1% Increase		
	5.50% Graded Down to 4.00%		6.50% Graded Down to 5.00%		.50% Graded own to 6.00%		
Total OPEB Liability	\$ 4,830,134	\$	5,161,244	\$	5,535,736		

For June 30, 2018 Disclosure

	1%		Current		1% Current			1%
		Decrease	D	iscount Rate		Increase		
		2.00%		3.00%		4.00%		
Total OPEB Liability	\$	4,998,321	\$	4,767,361	\$	4,549,985		
		1%		Current		1%		
		Decrease		Trend Rate		Increase		
	5.	.50% Graded	6	.50% Graded	7	.50% Graded		
	Do	own to 4.00%	D	own to 5.00%	D	own to 6.00%		
Total OPEB Liability	\$	4,416,379	\$	4,767,361	\$	5,166,837		



MEDICAL BENEFIT - ACCOUNTING UNDER GASB 75 SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS

	2018	_	2017
1. Total OPEB Liability - beginning \$	5,161,244	\$	5,502,255
2. Service Cost	141,682		141,682
3. Interest	146,728		157,589
4. Changes of benefit terms	0		0
5. Differences between expected and actual experience	0		0
6. Changes of assumptions or other input	0		0
7. Benefit payments	(682,293)	_	(640,282)
8. Net change in total OPEB liability	(393,883)		(341,011)
9. Total OPEB Liability - end of year \$	4,767,361	\$	5,161,244
10. Estimated covered payroll \$	10,387,754	\$	10,085,198
11. Total OPEB liability as a percentage of covered payroll	45.89%		51.18%



MEDICAL BENEFIT - ACCOUNTING UNDER GASB 75 SCHEDULE OF COLLECTIVE DEFERRED INFLOWS AND OUTFLOWS

		Deferred		Deferred
		Outflows of		Inflows of
Gain/Loss	_	Resources		Resources
1. Differences between expected and actual experience	\$	0	\$	0
2. Changes of assumptions or other input		0	_	0
3. Total	\$	0	\$	0

Amounts reported as deferred outflows and deferred inflows of resources related to OPEBs will be recognized in OPEB expense as follows:

Year ended June 30:	
---------------------	--

2018	\$ 0
2019	0
2020	0
2021	0
2022	0
Thereafter	0



MEDICAL BENEFIT - ACCOUNTING UNDER GASB 75 CALCULATION OF COLLECTIVE OPEB EXPENSE

		ear Ending ne 30, 2018
1. Change in Net OPEB Liability	\$	(393,883)
2. (Increase)/Decrease in Deferred Outflows		0
3. Increase/(Decrease) in Deferred Inflows		0
4. Contributions - Employer		682,293
5. OPEB Expense	\$	288,410
Operating Expenses		
6. Service Cost	\$	141,682
7. Contributions - Employee	Ψ	0
8. Administrative expenses	\$	141,682
9. Total		
Financing Expenses		
10. Interest		146,728
11. Expected return on assets	_	0
12. Total		146,728
Changes		
13. Benefit changes	\$	0
14. Recognition of assumption changes		0
15. Recognition of experience gains and losses		0
16. Recognition of investment gains and losses	_	0
17. Total	\$	0
18. OPEB Expense (9. + 12. + 17.)	\$	288,410
19. OPEB Expense as % of Estimated Payroll		2.78%



ACTUARIAL METHODS AND ASSUMPTIONS

I. Relevant Dates

Actuarial Valuation Date July 1, 2016

Data was collected as of October 1, 2016, and benefits were valued as if the data was representative of data on

July 1, 2016.

Measurement Dates June 30, 2017 and June 30, 2018

Fiscal Year Ends June 30, 2017 and June 30, 2018

II. <u>Actuarial Cost Method</u> Entry Age Normal, level percent of salary.

III. <u>Assumptions</u>

Interest Rate for 3.0% per year, based on all years discounted at

Discounting Future Liabilities municipal bond rate

General Inflation 2.5% per year.

Salary Scale 3.0% per year.

Annual Premium Increase Rate

<u>Year</u>	<u>Rate</u>
2016-17	6.5%
2017-18	6.4%
2018-19	6.3%
2019-20	6.2%
2020-21	6.1%
2021-22	6.0%
2022-23	5.9%
2023-24	5.8%
2024-25	5.7%
2025-26	5.6%
2026-27	5.5%
2027-28	5.4%
2028-29	5.3%
2029-30	5.2%
2030-31	5.1%
2031+	5.0%



ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

Dental and vision premiums were assumed to increase

5.0% annually.

The annual cap was assumed to increase 5.0% annually.

Mortality Rates Male: RP 2000 male table, generational (Scale BB) combined active/healthy annuitant, set back 24 months.

Female: RP 2000 female table, generational (Scale BB) combined active/healthy annuitant, set back 24 months.

Mortality rates for active male participants are 60% of the above rates, and for active female participants are

55% of the above rates.

Turnover Rates As developed for the valuation of benefits under Oregon PERS. Examples of turnover rates are as follows:

Years of		
<u>Service</u>	<u>Male</u>	<u>Female</u>
0	20.00%	15.50%
5	8.24%	8.35%
10	4.23%	4.36%
15	2.78%	2.98%
20	1.82%	2.23%
25	1.20%	1.67%
30+	1.20%	1.50%

Disability Rates As developed for the valuation

As developed for the valuation of benefits under Oregon PERS. Sample rates are as follows:

<u>Schoo</u>	I District
Age	<u>Rate</u>
30	0.0326%
35	0.0499%
40	0.0804%
45	0.1318%
50	0.1832%



ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

Retirement Rates

School District employees are assumed to retire with rates as follows:

Tier 1 / Tier 2				OPSRP		
	Years o	f Service		Yea	rs of Serv	rice
Age	< 15	15 - 29	30+	< 15	15 - 29	30+
< 52	0.00%	0.00%	15.00%	0.00%	0.00%	0.00%
52	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%
53	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%
54	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%
55	1.50%	4.50%	25.00%	1.00%	2.50%	5.00%
56	1.50%	4.50%	25.00%	1.00%	2.50%	5.00%
57	1.50%	4.50%	25.00%	1.00%	2.50%	7.50%
58	2.50%	14.50%	32.00%	1.00%	3.00%	30.00%
59	4.50%	14.50%	28.50%	1.50%	3.00%	25.00%
60	6.50%	14.50%	28.50%	3.00%	3.75%	20.00%
61	8.00%	14.50%	28.50%	3.00%	5.00%	20.00%
62	15.00%	25.00%	34.00%	6.00%	12.00%	30.00%
63	13.00%	22.00%	26.50%	6.00%	10.00%	20.00%
64	13.00%	19.50%	31.50%	6.00%	10.00%	20.00%
65	25.50%	33.50%	38.00%	12.00%	35.00%	20.00%
66	21.50%	36.50%	38.00%	14.00%	33.00%	20.00%
67	19.50%	34.50%	38.00%	11.00%	22.00%	30.00%
68	19.50%	28.00%	28.50%	9.00%	17.00%	20.00%
69	19.50%	28.00%	28.50%	9.00%	17.00%	20.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Participation

The following percentages of current active employees are assumed to be enrolled in a medical plan at retirement:

100% of actives eligible for District-paid medical benefits and currently enrolled in a medical plan.

80% of actives not eligible for District-paid medical benefits and currently enrolled in a medical plan.



ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

Plan Enrollment Current and future retirees are assumed to remain

enrolled in the plans in which they are currently enrolled, if any. Future retirees eligible for District-paid medical benefits are assumed to elect the most prevalent plan if

not currently enrolled in coverage.

Marital Status 70% of future retirees electing coverage are assumed to

cover a spouse as well. Males are assumed to be three years older than their female spouses. Actual marital status and ages as of the valuation date are used for

current retirees.

Coverage of Eligible Children We have assumed no impact of dependent children on

the implicit subsidy.

Health Care Claims Costs 2016-17 claims costs for an age 64 retiree or spouse are

assumed to be:

MODA Health Plans

Alder	14,788
Birch	13,764
Cedar	12,780
Dogwood	11,020
Evergreen	9.657

MODA Synergy/Summit

Health Plans

Alder	13,280
Birch	13,262
Cedar	12,739
Dogwood	10,949
Evergreen	9,780



ACTUARIAL METHODS AND ASSUMPTIONS (Concluded)

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Aging factors are used to adjust the age 64 per capita claims cost. Percentages shown below age 64 reduce the claims cost.

Attained Age	<u>Factor</u>
Under 40	5.0% per year
40-44	4.5% per year
45-49	4.0% per year
50-54	3.3% per year
55-59	3.6% per year
60-64	4.2% per year

Dental and Vision Costs

We have assumed no implicit subsidy due to dental or vision costs.

Expected Substitute Time

Licensed Retirees receiving a monthly stipend equal to three days of the current year's substitute rate are assumed to receive the benefit without being asked to substitute.

IV. Changes Since Prior Valuation

The actuarial cost method was changed from Projected Unit Credit to Entry Age Normal, as required under GASB Statements 73 and 75.

The interest rate for discounting future liabilities was lowered to match municipal bond rates, as outlined in GASB Statements 73 and 75.

Premium increase rates were modified slightly to reflect anticipated experience.

The percentage of future retirees covering a spouse on the plan was decreased to reflect anticipated experience.

The participation assumption was lowered to better reflect observed and anticipated experience.

Demographic assumptions were revised to match (as closely as possible) those developed in the most recent experience study for Oregon PERS.