David Douglas School District No. 40



Side Account and Pension Bond Analysis

November 4, 2024

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2007 Valuation 2019 Valuation 2021 Valuation 2022 Valuation 2023 Valuation

David Douglas	s School	District	No. 4	U
Background Data				

	2007 Va					2021 Valuation				2023 Valuation	
Rates Effective	7/1/09 -	6/30/11	7/1/21 -	6/30/23		7/1/23 - 6	/30/25	Adviso	ry Only	7/1/25 -	6/30/27
System (\$ in millions)											
Combined Valuation Payroll	\$	7,721.8	\$	11,533.7	\$		12,684.1	\$	13,856.6	\$	15,316.5
OPSRP UAL	\$	(72.1)	\$	1,891.8	\$		1,555.0	\$	3,484.1	\$	4,088.7
Funded Status		95%		77%			80%		73%		76%
School District Pool (\$ in millions)											
Combined Valuation Payroll	\$	2,693.3	\$	3,740.7	\$		4,141.8	\$	4,617.1	\$	4,985.0
Total T1/T2 UAL	\$	1,142.8	\$	7,880.4	\$		5,656.7	\$	7,853.8	\$	7,866.2
Funded Status		95%		74%			82%		76%		76%
David Douglas School District No. 40											
Combined Valuation Payroll	\$ 5	1,434,198	\$ 8	0,365,678	\$	84	1,597,919	\$ 9	1,674,179	\$ 10	0,957,646
Allocated UAL/(surplus)											
T1/T2	2	1,824,129	16	9,302,006		115	5,540,576	15	5,938,864	15	9,308,991
OPSRP		(479,976)	1	3,211,756	_	10),395,327	2	3,102,418	2	7,008,288
Total Allocated Pooled UAL	2	1,344,153	18	2,513,762	125,935,903		5,935,903	179,041,282		186,317,279	
Less Side Account	3	6,065,469	1	9,158,394	94 18,215,765		3,215,765	14,711,525		12,038,648	
Net UAL	\$ (1	4,721,316)	\$ 16	3,355,368	\$	107	7,720,138	\$ 16	4,329,757	\$ 17	4,278,631
	2007 Va	luation	2019 Va	2019 Valuation 202		2021 Valuation		2022 Valuation		2023 Valuation	
	T1/T2	OPSRP	T1/T2	OPSRP		T1/T2	OPSRP	T1/T2	OPSRP	T1/T2	OPSRP
Rates Effective	7/1/09 -	6/30/11	7/1/21 -	6/30/23	,	7/1/23 - 6	/30/25	Adviso	ry Only	7/1/25 - 6/30/27	
Pension											
Normal cost rate	5.19%	5.81%	13.45%	8.64%		14.48%	9.89%	15.76%	10.55%	15.40%	10.47%
Tier 1/Tier 2 UAL rate ⁽¹⁾	8.82%	8.82%	14.09%	14.09%		14.10%	14.10%	14.03%	14.03%	14.01%	14.01%
OPSRP UAL rate	(0.08%)	(0.08%)	1.69%	1.69%		1.69%	1.69%	2.62%	2.62%	2.69%	2.69%
Total Pension Rate	13.93%	14.55%	29.23%	24.42%		30.27%	25.68%	32.41%	27.20%	32.10%	27.17%
Total Side account rate relief ⁽²⁾	(5.09%)	(5.09%)	(3.47%)	(3.47%)		(4.01%)	(4.01%)	(3.31%)	(3.31%)	(2.73%)	(2.73%)
Member redirect offset ⁽³⁾	0.00%	0.00%	(2.45%)	(0.70%)		(2.40%)	(0.65%)	(2.40%)	(0.65%)	(2.40%)	(0.65%)
Net Pension Rate	8.84%	9.46%	23.31%	20.25%		23.86%	21.02%	26.70%	23.24%	26.97%	23.79%
Retiree Healthcare											
Normal cost rate	0.10%	0.00%	0.05%	0.00%		0.04%	0.00%	0.04%	0.00%	0.04%	0.00%
UAL rate	0.19%	0.19%	0.00%	0.00%		(0.04%)	0.00%	(0.04%)	0.00%	(0.04%)	0.00%
Total Retiree Healthcare Rate	0.29%	0.19%	0.05%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Net Employer Rate	9.13%	9.65%	23.36%	20.25%		23.86%	21.02%	26.70%	23.24%	26.97%	23.79%

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports.

⁽¹⁾ Includes Multnomah Fire District #10 rate and any impact of rate collar developed in the system-wide actuarial valuation report.

⁽²⁾ The side account rate relief shown may be reduced such that the net pension contribution rate does not go below 0.00%.

⁽³⁾ Redirected member contributions under Senate Bill 1049 (2.50% of payroll for T1/T2 and 0.75% of payroll for OPSRP) will offset employer contribution rates. Redirect does not apply to members with monthly pay below a threshold. The values shown in the table incorporate an estimate of the effect of this limitation.

Historical Payroll and Payroll Growth

		Combined Val	uation Payroll and P	ayroll Grow	/th	
	Systen	า	School Po	ol	Distri	ct
Calendar	PERS Covered	Annual	PERS Covered	Annual	PERS Covered	Annual
Year	Payroll	Payroll	Payroll	Payroll	Payroll	Payroll
2007	\$ 7,721,819,358	5.39%	\$ 2,693,307,473	5.07%	\$ 51,434,198	
2008	8,130,136,492	5.29%	2,815,403,743	4.53%	54,401,814	5.77%
2009	8,512,192,290	4.70%	2,873,703,874	2.07%	62,376,515	14.66%
2010	8,750,064,502	2.79%	2,950,661,440	2.68%	64,121,098	2.80%
2011	8,550,511,000	(2.28%)	2,786,000,000	(5.58%)	59,459,969	(7.27%)
2012	8,590,879,000	0.47%	2,731,500,000	(1.96%)	55,426,139	(6.78%)
2013	8,671,800,000	0.94%	2,723,500,000	(0.29%)	61,119,958	10.27%
2014	9,115,800,000	5.12%	2,872,700,000	5.48%	65,065,787	6.46%
2015	9,544,100,000	4.70%	3,060,700,000	6.54%	68,965,396	5.99%
2016	9,872,600,000	3.44%	3,240,700,000	5.88%	73,145,123	6.06%
2017	10,098,900,000	2.29%	3,314,200,000	2.27%	74,500,978	1.85%
2018	10,852,000,000	7.46%	3,543,500,000	6.92%	78,974,331	6.00%
2019	11,533,700,000	6.28%	3,740,700,000	5.57%	80,365,678	1.76%
2020	12,042,700,000	4.41%	3,821,900,000	2.17%	79,555,027	(1.01%)
2021	12,684,100,000	5.33%	4,141,800,000	8.37%	84,597,919	6.34%
2022	13,856,600,000	9.24%	4,617,100,000	11.48%	91,674,179	8.36%
2023	15,316,500,000	10.54%	4,985,000,000	7.97%	100,957,646	10.13%
	Average Annual owth Rate	7.13%		7.06%		5.03%
_	e Annual Growth e Since 2007	4.37%		3.92%		4.31%

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports.

Pension Bond Side Account Analysis - Historic Savings 2007 Side Account

Pension Bonds Issued	Dated Date	Am	ount Issued	TIC
Series 2007	10/31/07	\$	38,060,000	5.67%
Total Amount Issued		\$	38,060,000	

						Reported	Reported			Calculated
CALENDAR	PERS Covered	Balance on	Admin.	Reported	Pension Bond	Investment	Investment	Balance on	Calendar Year	Pension Bond
Year End	Payroll	January 1	Expense	Rate Credit	Deposits	Earnings (\$)	Earnings (%)	December 31	Debt Service	Savings
Dec-2007	\$ 51,434,198	\$ -	\$ -	\$ (560,352)	\$ 37,683,705	\$ (1,055,385)	9.5%	\$ 36,067,968	\$ -	\$ 560,352
Dec-2008	54,401,814	36,067,968	(2,500)	(3,124,292)	-	(9,197,812)	(27.2%)	23,743,364	3,645,570	(521,278)
Dec-2009	62,376,515	23,743,364	(1,000)	(3,577,142)	-	3,955,575	19.1%	24,120,797	3,387,495	189,648
Dec-2010	64,121,098	24,120,797	(1,000)	(2,869,845)	-	2,792,430	12.4%	24,042,382	2,344,186	525,659
Dec-2011	59,459,969	24,042,382	(1,000)	(2,828,211)	-	673,560	2.2%	21,886,731	2,427,447	400,764
Dec-2012	55,426,139	21,886,731	(1,000)	(1,536,207)	-	3,104,131	14.3%	23,453,655	2,514,794	(978,587)
Dec-2013	61,119,958	23,453,655	(1,000)	(1,802,020)	-	3,599,139	15.6%	25,249,774	2,605,693	(803,673)
Dec-2014	65,065,787	25,249,774	(1,000)	(2,037,432)	-	1,806,825	7.2%	25,018,167	2,699,367	(661,935)
Dec-2015	68,965,396	25,018,167	(1,000)	(2,297,656)	-	520,060	1.9%	23,239,571	2,799,892	(502,236)
Dec-2016	73,145,123	23,239,571	(1,000)	(3,053,421)	-	1,554,753	6.9%	21,739,903	2,901,612	151,809
Dec-2017	74,500,978	21,739,903	(500)	(2,763,977)	-	3,183,820	15.3%	22,159,246	3,002,436	(238,459)
Dec-2018	78,974,331	22,159,246	(500)	(2,789,715)	-	129,958	0.4%	19,498,989	3,111,551	(321,836)
Dec-2019	80,365,678	19,498,989	(500)	(2,854,505)	-	2,515,411	13.6%	19,159,395	3,224,573	(370,068)
Dec-2020	79,555,027	19,159,395	(500)	(2,811,039)	-	1,177,066	7.7%	17,524,922	3,340,659	(529,620)
Dec-2021	84,597,919	17,524,922	(500)	(2,725,516)	-	3,417,860	20.1%	18,216,766	3,458,965	(733,449)
Dec-2022	91,674,179	18,216,766	(500)	(3,195,204)	-	(308,536)	(1.6%)	14,712,526	3,583,511	(388,307)
Dec-2023	100,957,646	14,711,525	(500)	(3,421,080)	-	748,703	5.7%	12,038,648	3,713,171	(292,091)
									Subtotal (Actual)	\$ (4,513,308)

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports. Information for calendar years 2003 and prior was not readily available.

Pension Bond Side Account Analysis - Projected Savings 2007 Side Account, Base Case

Pension Bonds Issued	Dated Date	Amount Issued	TIC
Series 2007	10/31/07	38,060,000	5.67%
Total Amount Issued		\$ 38,060,000	

	Projected PERS	Balance.	Admin.	Projected	Projected Rate Credit	Pension Bond		rojected vestment	Projected Investment	Balance,	Semi-Annualized Debt Service	Projected Pension Bond
Period End (1)		beginning	Expense	Rate Credit	(%)	Deposits		rnings (\$)	Earnings (%)	ending	Intercept	Savings
Jun-2024	52,505,179	\$ 12,038,648	\$ (250)	(2,105,458)	4.01%	•	Ś	367.342	3.34%	\$ 10,300,283	•	
Dec-2024	53,904,180	10,300,283	(250)	(2,161,558)	4.01%	-	,	319,482	6.90%	8,457,957	2,040,862	120,695
Jun-2025	55,340,458	8,457,957	(250)	(2,219,152)	4.01%	-		256,178	6.90%	6,494,733	2,040,862	178,290
Dec-2025	56,815,006	6,494,733	(250)	(1,551,050)	2.73%	-		198,911	6.90%	5,142,343	2,117,059	(566,009)
Jun-2026	57,966,760	5,142,343	(250)	(1,582,493)	2.73%	-		152,546	6.90%	3,712,147	2,117,059	(534,566)
Dec-2026	58,881,218	3,712,147	(250)	(1,607,457)	2.73%	-		103,678	6.90%	2,208,117	2,196,206	(588,748)
Jun-2027	59,810,103	2,208,117	(250)	(1,632,816)	2.73%	-		52,299	6.90%	627,350	2,196,206	(563,390)
Dec-2027	60,753,641	627,350	(250)	(639,677)	1.05%	-		12,577	6.90%	-	1,130,102	(490,425)
Jun-2028	61,712,064	-	-	-	0.00%	-		-	6.90%	-	1,130,102	(1,130,102)
										9	Subtotal (Projected)	(3,437,117)
										Total	(Actual + Projected)	\$ (7,950,425)

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports. Information for calendar years 2003 and prior was not readily available.

(1) Historical PERS rate credits and savings are reported on calendar year basis. Projected changes in PERS rates are reported on a fiscal year basis, therefore projected rate credits and savings are shown to match that timing.

Key Economic Assumptions:

^{*} Payroll growth <u>projected at 5.40% through 12/31/25 and then 3.18% thereafter</u>, as assumed by PERS in its actuarial models. Actual payroll growth may differ from the assumption, and any changes in payroll growth rates from the assumption will affect the actual savings or costs realized.

^{**} Investment returns <u>projected at 6.90% annually</u>, as assumed by PERS in its actuarial models. Calendar Year 2024 returns through June 30 have been reported at 3.34% and have been incorporated. Investment earnings for the period of 7/1/24 through 12/31/24 are credited at 6.90%. Further, future rates of return may also differ from the assumption. Any changes in investment earnings will affect the actual savings or costs realized.

Pension Bond Side Account Analysis - Projected Savings 2007 Side Account, High Payroll Growth

Pension Bonds Issued	Dated Date	Amount Issued	TIC		
Series 2007	10/31/07	38,060,000	5.67%		
Total Amount Issued		\$ 38,060,000			

					Projected		Projected	Projected		Semi-Annualized	Projected
	Projected PERS	Balance,	Admin.	Projected Rate	Rate Credit	Pension Bond	Investment	Investment	Balance,	Debt Service	Pension Bond
Period End (1)	Covered Payroll	beginning	Expense	Credit	(%)	Deposits	Earnings (\$)	Earnings (%)	ending	Intercept	Savings
Jun-2024	53,476,479	\$ 12,038,648	\$ (250)	(2,144,407)	4.01%	\$ -	\$ 367,063	3.34%	\$ 10,261,054	\$ 1,968,320	\$ 176,087
Dec-2024	57,347,135	10,261,054	(250)	(2,299,620)	4.01%	-	316,497	6.90%	8,277,681	2,040,862	<i>258,758</i>
Jun-2025	59,943,930	8,277,681	(250)	(2,403,752)	4.01%	-	247,483	6.90%	6,121,163	2,040,862	362,889
Dec-2025	61,541,137	6,121,163	(250)	(1,680,073)	2.73%	-	184,435	6.90%	4,625,274	2,117,059	(436,985)
Jun-2026	62,788,699	4,625,274	(250)	(1,714,131)	2.73%	-	133,161	6.90%	3,044,054	2,117,059	(402,927)
Dec-2026	63,779,226	3,044,054	(250)	(1,741,173)	2.73%	-	79,141	6.90%	1,381,772	2,196,206	(455,033)
Jun-2027	64,785,380	1,381,772	(250)	(1,404,263)	2.17%	-	22,741	6.90%	-	2,196,206	(791,942)
Dec-2027	65,807,406	-	-	-	0.00%	-	-	6.90%	-	1,130,102	(1,130,102)
Jun-2028	66,845,555	-	-	-	0.00%	-	-	6.90%	-	1,130,102	(1,130,102)
									9	Subtotal (Projected)	(3,549,357)
									Total	(Actual + Projected)	\$ (8,062,665)

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports. Information for calendar years 2003 and prior was not readily available.

(1) Historical PERS rate credits and savings are reported on calendar year basis. Projected changes in PERS rates are reported on a fiscal year basis, therefore projected rate credits and savings are shown to match that timing.

Key Economic Assumptions:

^{*} Payroll growth <u>projected at 15.00% through 12/31/24, 5.40% through 12/31/25 and then 3.18% thereafter</u>. Actual payroll growth may differ from the assumption, and any changes in payroll growth rates from the assumption will affect the actual savings or costs realized.

^{**} Investment returns <u>projected at 6.90% annually</u>, as assumed by PERS in its actuarial models. Calendar Year 2024 returns through June 30 have been reported at 3.34% and have been incorporated. Investment earnings for the period of 7/1/24 through 12/31/24 are credited at 6.90%. Further, future rates of return may also differ from the assumption. Any changes in investment earnings will affect the actual savings or costs realized.

David Douglas School District No. 40

Pension Bond Side Account Analysis - Payroll Growth Sensitivity

	Acti	Base Case: Jarial Assumed Byroll Growth	15%	ligh Payroll: Payroll Growth ough 12/31/24	Difference		
2023 Payroll Projected 2024 Payroll Annual Growth 2024	\$	100,957,646 106,409,359 5.40%	\$	100,957,646 110,823,614 15.00%	\$	- 4,414,256 9.60%	
Projected final side account amortization		12/31/2027		5/31/2027		0.59 Years	
Historical savings Projected savings, remaining years	\$	(4,513,308) (3,437,117)	\$	(4,513,308) (3,549,357)	\$	- (112,241)	
Total projected savings	\$	(7,950,425)	\$	(8,062,665)	\$	(112,241)	

Source: Oregon Public Employees Retirement System – System Actuarial Valuation Reports and Employer Actuarial Valuation Reports.

Key Economic Assumptions:

^{*} Payroll growth projected at either 5.40% or 15.00% through 12/31/24 per scenario, 5.40% through 12/31/25 and then 3.18% thereafter. Actual payroll growth may differ from the assumption, and any changes in payroll growth rates from the assumption will affect the actual savings or costs realized.

^{**} Investment returns <u>projected at 6.90% annually</u>, as assumed by PERS in its actuarial models. Calendar Year 2024 returns through June 30 have been reported at 3.34% and have been incorporated. Investment earnings for the period of 7/1/24 through 12/31/24 are credited at 6.90%. Further, future rates of return may also differ from the assumption. Any changes in investment earnings will affect the actual savings or costs realized.

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