



March 7, 2019

TO: Members of the Capital Construction Subcommittee
FROM: Kevin Olineck, Director
SUBJECT: Employer Rate Projection Tool

EMPLOYER RATE PROJECTION TOOL

At the February 22, 2019 meeting of Capital Construction, there was some discussion of the PERS Employer Rate Projection Tool available on the PERS website. The tool, an interactive Excel spreadsheet, may be used for planning by employers to estimate their own potential contribution rates and amounts over the next several biennia. Employers may also use the tool to determine the potential impact of establishing new side accounts.

Follow along with an example of the City of Scappoose establishing a \$1.5M side account.

- Access the **tool, data, and instructions** here:

<https://www.oregon.gov/pers/EMP/Pages/Employer-Rate-Projection-Tool.aspx>

Public Employees Retirement System / EMPLOYERS / Employer Rate Projection Tool

Employer Rate Projection Tool

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By using PERS' Employer Rate Projection Tool, employers can estimate their own potential employer contribution rates and amounts for planning purposes over the next several biennia. Employers may also use the tool to determine the potential impact of establishing new side accounts.

The tool, an interactive Excel spreadsheet, is for planning purposes only and data will change each year based on actual experience.

You must download the .zip file to access the tool. We recommend using Microsoft Excel 2010 or later to use the tool. Some features might not work in older versions of Microsoft Excel. The tool will not work on Macintosh (Apple) versions of Excel.

Download an instructional document:

- [User Guide](#)

Download the Employer Rate Projection Tool and supporting resources:

- [Employer Rate Projection Tool](#) (Version 2.1 - uploaded 1/9/19) (download this .zip file to open the macro-enabled Excel tool)
- [Employer Rate Projection Tool - Data Inputs](#) (includes December 31, 2017 Employer Valuation Payroll, 2017-2019 Current Employer Contribution Rates, and 2019-2021 Employer Contribution Rates)

Have questions about employer rates and contributions? Contact Actuarial.Services@PERS.state.or.us

- Read the **User Guide**

How to Use the Employer Rate Projection Tool

The Employer Rate Projection Tool is an interactive Excel file that allows users to enter current contribution rates and payroll data to generate a projection of contribution rates and amounts up to 10 future biennia. The tool will also generate an estimated beginning rate offset for a new side account based on the side account deposit amount specified by the user.

IMPORTANT

This tool is provided for rough planning purposes only. Employers should not rely on these projections to make budget or staffing decisions. Employers that choose to use this tool do so at their own risk, and PERS accepts no responsibility for employers relying on the results.

- Open the “Employer Rate Projection Tool – Data Inputs”
- Identify data that will be used in the tool

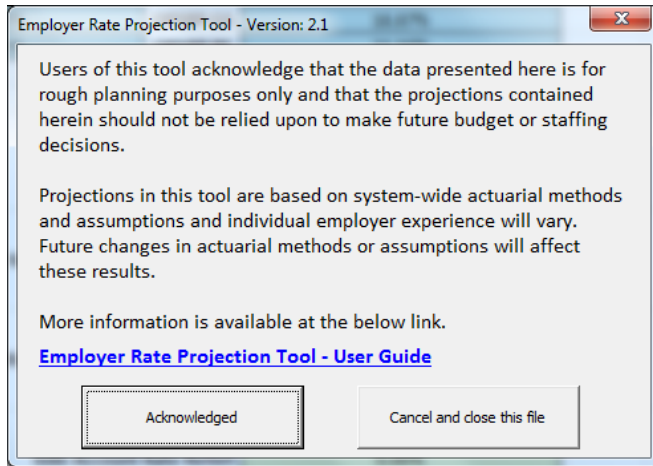
Employer Number	Employer Name	December 31, 2017 Valuation Payroll				Current Contribution Rates: 2017-19				New Contribution Rates: 2019-21				Additional Rate Components: 2019-21		
		Tier 1/2 GS	Tier 1/2 PF	OPSRP GS	OPSRP PF	Total Valuation Payroll	Tier 1/2 GS & PF	OPSRP G	OPSRP P	Tier 1/2 GS & PF	OPSRP G	OPSRP P	Pre-SLGRP(Surplus) Rate	Transition Liability/(Surplus) Rate	Side Account Rate Relief	
211	2251 City of Rogue River	254,532	65,014	227,508	150,933	697,987	26.09%	17.97%	22.74%	31.18%	22.36%	26.99%	-1.68%	3.83%	0.00%	
212	2100 City of Roseburg	1,967,327	2,367,453	2,716,490	3,743,226	10,794,496	23.99%	14.02%	18.79%	28.11%	18.53%	23.16%	-1.68%	0.00%	0.00%	
213	2101 City of Salem	21,351,917	18,761,040	28,791,318	13,296,724	82,201,000	21.07%	11.97%	16.74%	25.49%	16.41%	21.04%	0.00%	0.00%	-7.88%	
214	2172 City of Sandy	741,784	560,575	2,379,817	813,842	4,495,019	21.86%	13.28%	18.05%	26.40%	17.87%	22.50%	-1.68%	-0.66%	0.00%	
215	2176 City of Scappoose	716,412	207,172	779,731	493,144	2,196,459	22.43%	14.32%	19.09%	26.28%	18.87%	23.50%	0.00%	-1.34%	0.00%	
216	2254 City of Shady Cove	0	0	219,480	0	219,480	7.22%	0.48%	4.16%	10.00%	2.51%	7.14%	0.00%	-17.70%	0.00%	
217	2219 City of Sheridan	304,072	0	417,324	0	721,396	15.16%	7.31%	12.08%	17.90%	13.52%	18.15%	0.00%	0.00%	0.00%	
218	2142 City of Sherwood	1,618,988	995,725	3,540,032	980,010	7,134,755	21.76%	13.77%	18.54%	26.61%	18.28%	22.91%	-1.68%	-0.25%	0.00%	
219	2273 City of Silverton	1,020,958	424,685	896,589	671,968	3,014,200	20.41%	11.69%	16.46%	24.84%	16.02%	20.65%	-1.68%	-0.09%	-2.42%	
220	2221 City of Sisters	142,187	0	789,968	0	932,155	14.28%	9.97%	14.74%	18.80%	14.50%	19.13%	-1.68%	-4.03%	0.00%	
221	2278 City of Springfield	7,083,104	7,871,619	7,586,420	7,651,303	30,192,446	16.85%	8.31%	13.08%	21.65%	12.67%	17.30%	0.00%	-7.54%	0.00%	
222	2123 City of St Helens	1,240,360	489,692	2,128,769	814,557	4,673,378	25.72%	18.01%	22.78%	29.62%	22.22%	26.85%	0.00%	2.01%	0.00%	
223	2213 City of Stanfield	65,902	99,948	201,450	137,573	504,874	7.27%	0.45%	5.22%	10.01%	0.00%	0.00%	0.00%	0.00%	0.00%	
224	2757 City of Stavton	0	567,092	0	463,274	1,030,366	24.07%	13.07%	17.84%	29.33%	17.62%	22.25%	-1.68%	-0.91%	0.00%	

- Open the “Employer Rate Projection Tool”
- Select “Enable Content”

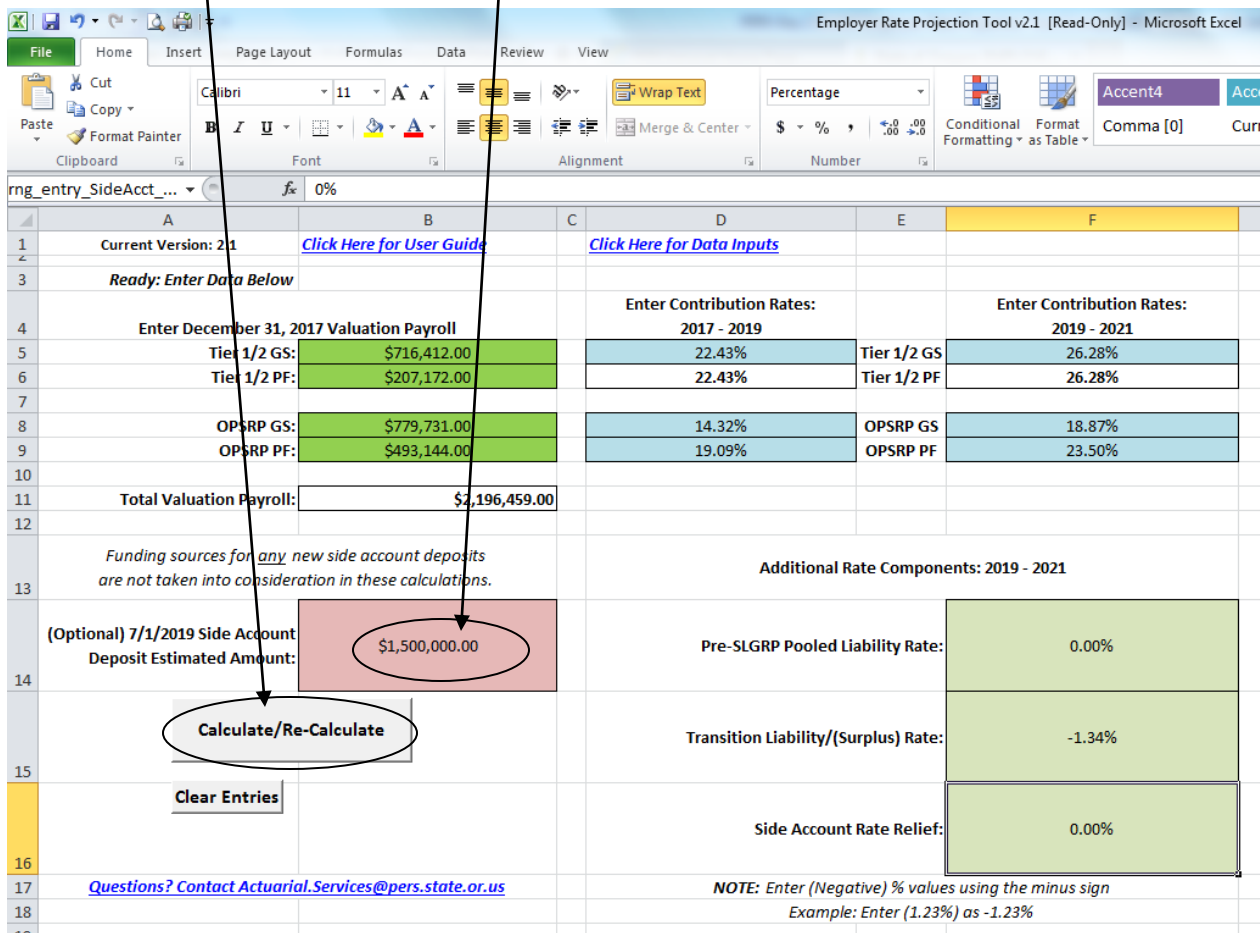
Security Warning: Macros have been disabled. **Enable Content**

Current Version: 2.1	Click Here for User Guide	Click Here for Data Inputs		
Ready: Enter Data Below				
Enter December 31, 2017 Valuation Payroll		Enter Contribution Rates: 2017 - 2019		Enter Contribution Rates: 2019 - 2021
Tier 1/2 GS:			Tier 1/2 GS	
Tier 1/2 PF:			Tier 1/2 PF	
OPSRP GS:			OPSRP GS	
OPSRP PF:			OPSRP PF	
Total Valuation Payroll:	\$0.00			
<i>Funding sources for any new side account deposits are not taken into consideration in these calculations.</i>		Additional Rate Components: 2019 - 2021		
(Optional) 7/1/2019 Side Account Deposit Estimated Amount:			Pre-SLGRP Pooled Liability Rate:	
Calculate/Re-Calculate			Transition Liability/(Surplus) Rate:	
Clear Entries			Side Account Rate Relief:	
Questions? Contact Actuarial.Services@pers.state.or.us		NOTE: Enter (Negative) % values using the minus sign Example: Enter (1.23%) as -1.23%		

- Click **“Acknowledged”** to access full functionality of the tool



- Enter data from **“Data Inputs”** spreadsheet (green columns in green boxes, blue columns in blue boxes, light green columns in light green boxes)
- Enter value of **potential side account**.
- Click **“Calculate/Re-Calculate”**



Actuarial Methods and Assumptions Discussion

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A		B		D		E									
Current Version: 2.1		Show Detail	Enter New Data	Projected ER Rate Growth (at 7.20% Assumed Earnings Rate)											
				Biennium		3.38%	4.38%	5.41%	0.89%	-0.31%	-0.62%	-0.48%	-0.76%	-1.00%	-6.86%
				2017-2019	2019-2021	2021-2023	2023-2025	2025-2027	2027-2029	2029-2031	2031-2033	2033-2035	2035-2037		
6	December 31, 2017 Combined Valuation Payroll	\$2,196,459.00	Projected Payroll, Combined	\$4,394,217.84	\$4,707,196.00	\$5,042,466.04	\$5,401,615.68	\$5,786,345.76	\$6,198,478.23	\$6,639,964.85	\$7,112,896.34	\$7,619,512.39	\$8,162,212.15		
9	(Optional) 7/1/2015 Side Account Deposit Estimated Amount	\$1,500,000.00	Assumed Net Annual Wage Growth + 3.50%												
10	Side Account Rate Relief	0.00%	ER: 7/1/19, Rate Ends: 2029												
11	Pre-SGRP Pooled Liability Rate	0.00%	ER: 7/1/19, Rate Ends: 2029												
12	Transition Liability (Surplus) Rate	-1.34%	ER: 7/1/19, Rate Ends: 2029												
13	Valuation Payroll	\$716,412.00	Projected Payroll	\$1,414,710.80	\$1,273,239.72	\$1,145,915.75	\$974,028.39	\$827,924.13	\$703,735.51	\$562,988.41	\$422,241.31	\$295,568.91	\$192,119.79		
18	Tier One / Tier Two General Service		Projected Contribution Rates	22.43%	26.28%	31.69%	32.58%	32.27%	31.65%	32.51%	31.75%	30.75%	23.89%		
19			Projected Contributions (w/o New Side Account)	\$ 317,319.63	\$ 334,607.40	\$ 363,140.70	\$ 317,336.45	\$ 267,174.12	\$ 222,732.29	\$ 183,027.53	\$ 134,061.61	\$ 90,887.44	\$ 45,897.47		
20			Projected Additional Side Account Rate Offset	n/a	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%			
21			Projected Contributions (After New Side Account)	\$317,319.63	\$276,301.49	\$310,665.38	\$272,734.43	\$229,257.70	\$180,505.89	\$157,246.41	\$114,725.77	\$77,352.35	\$37,099.61		
29	Tier One / Tier Two Police/Fire		Projected Payroll	\$411,786.31	\$391,197.00	\$352,077.30	\$316,869.57	\$269,339.13	\$202,004.35	\$141,403.05	\$91,911.98	\$55,147.19	\$30,330.95		
30		\$207,172.00	Projected Contribution Rates	22.43%	26.28%	31.69%	32.58%	32.27%	31.65%	32.51%	31.75%	30.75%	23.89%		
31			Projected Contributions (w/o New Side Account)	\$ 91,363.47	\$ 100,208.97	\$ 113,973.30	\$ 109,238.11	\$ 86,915.74	\$ 63,934.38	\$ 45,870.13	\$ 29,182.05	\$ 18,957.76	\$ 7,246.06		
32			Projected Additional Side Account Rate Offset	n/a	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%			
33			Projected Contributions (After New Side Account)	\$92,363.67	\$94,892.35	\$95,450.50	\$88,725.59	\$74,581.80	\$54,683.92	\$39,494.81	\$24,973.10	\$14,432.39	\$5,857.11		
45	OPSRP General Service		Projected Payroll	\$1,578,400.60	\$1,933,110.31	\$2,288,817.27	\$2,705,342.50	\$3,113,511.02	\$3,518,428.26	\$3,959,899.08	\$4,422,788.84	\$4,894,548.51	\$5,267,662.74		
46		\$775,793.00	Projected Contribution Rates	14.33%	18.07%	24.28%	25.17%	24.66%	24.24%	25.10%	24.34%	23.34%	16.49%		
47			Projected Contributions (w/o New Side Account)	\$ 226,035.56	\$ 364,779.80	\$ 555,724.83	\$ 680,934.96	\$ 774,018.84	\$ 852,867.03	\$ 933,934.67	\$ 1,076,506.80	\$ 1,142,387.62	\$ 884,590.93		
48			Projected Additional Side Account Rate Offset	n/a	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%			
49			Projected Contributions (After New Side Account)	\$226,035.56	\$276,255.75	\$450,912.23	\$557,048.23	\$683,440.75	\$689,146.43	\$812,597.64	\$873,972.50	\$918,249.87	\$638,787.70		
61	OPSRP Police/Fire		Projected Payroll	\$989,260.12	\$1,109,638.97	\$1,255,655.71	\$1,405,374.23	\$1,575,571.48	\$1,774,310.02	\$1,975,674.32	\$2,175,954.22	\$2,374,247.78	\$2,572,097.47		
62		\$493,144.00	Projected Contribution Rates	19.09%	23.50%	28.91%	29.80%	29.49%	28.87%	29.73%	28.97%	27.97%	21.11%		
63			Projected Contributions (w/o New Side Account)	\$ 188,849.76	\$ 260,765.16	\$ 363,010.07	\$ 418,801.52	\$ 464,636.03	\$ 512,243.30	\$ 587,367.97	\$ 630,373.94	\$ 664,077.10	\$ 442,989.82		
64			Projected Additional Side Account Rate Offset	n/a	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%	-4.58%			
65			Projected Contributions (After New Side Account)	\$188,849.76	\$209,951.08	\$305,509.39	\$354,444.73	\$392,485.34	\$430,991.71	\$496,895.24	\$530,729.71	\$555,352.35	\$425,184.86		
77	Cumulative Contribution Reduction From New Side Account	\$2,535,140.40	Total Projected Contributions (Without New Side Acct)	\$4,394,217.84	\$4,707,196.00	\$5,042,466.04	\$5,401,615.68	\$5,786,345.76	\$6,198,478.23	\$6,639,964.85	\$7,112,896.34	\$7,619,512.39	\$8,162,212.15		
78			Total Projected Contributions (After New Side Acct)	\$824,568.62	\$1,062,958.93	\$1,399,448.90	\$1,520,311.03	\$1,592,741.72	\$1,651,777.00	\$1,810,300.30	\$1,870,124.41	\$1,914,309.93	\$1,480,704.29		
82			Total Projected Contributions (After New Side Acct)	\$824,568.62	\$847,400.68	\$1,162,537.51	\$1,272,952.98	\$1,327,765.59	\$1,367,927.94	\$1,506,234.10	\$1,544,401.08	\$1,565,386.96	\$1,106,929.28		

- See projected payroll, employer rate, and impact of possible side account in **table or chart**

