

Source: Washington State Investment Board.

Cash: Highly liquid, very safe investments that can be easily converted into cash, such as Treasury Bills and money-market funds.

Fixed Income: Securities representing debt obligations and usually having fixed payments and maturities. Different types of fixed income securities include government and corporate bonds, mortgage-backed securities, asset-backed securities, convertible issues, and may also include money-market instruments.

Innovation: Fund that provides the ability to invest in a broad range of assets that fall outside the traditional asset classes or management style of existing asset classes.

Public Equity: Shares of U.S. and non-U.S. corporations that trade on public exchanges or "over-the-counter." The ownership of a corporation is represented by shares that are claimed on the corporation's earnings and assets.

Private Equity: The infusion of equity capital into a private company (one that is not available on the public markets). Private equity investments include securities that are not listed on a public exchange and are not easily accessible to most individuals. These investments range from initial capital in start-up enterprises to leveraged buyouts of mature corporations.

Real Estate: An externally-managed selection of partnership investments with the majority of the partnerships invested in high-quality real estate leased to third parties.

Tangibles: The tangible asset portfolio invests in sectors such as infrastructure, timber, agriculture, natural resources, commodities, or other sectors consistent with the goals of the asset class.

In the asset tables that follow, we made adjustments to the MVA. LEOFF 2's MVA and AVA exclude assets held in the LEOFF 2 Benefit Improvement Account (BIA), and have been further reduced by \$300 million payable to the BIA effective July 1, 2019 (C 366 L19). Assets held in the BIA are not included in plan funding under <u>RCW 41.26.805</u>.

For PERS 2/3, TRS 2/3, and SERS 2/3, the respective MVAs and AVAs include the Total Allocation Portfolio (TAP) assets for Plan 3 retirees that have purchased an annuity from the State. In future years, gains and losses due to investment returns on the TAP assets will be smoothed as part of the AVA calculation.

2019 Actuarial Valuation

Change in Market Value of Assets								
(Dollars in Millions)		PERS		TRS				
	Plan 1	Plans 2/3*		Plan 1	Plans 2/3*			
	Fund 631	Fund 641	Total	Fund 632	Fund 642	Total		
2018 Market Value	\$7,677	\$38,685	\$46,363	\$5,802	\$13,973	\$19, <mark>77</mark> 4		
		Revenue						
Member Contributions	\$7	\$642	\$649	\$2	\$120	\$122		
Employer/State Contributions	726	820	1,547	501	524	1,025		
Total Contributions	734	1,462	2,196	503	644	1,147		
Investment Return	641	3,440	4,081	480	1,256	1,736		
Restorations**	3	27	30	1	5	5		
Transfers In	0	1	1	0	1	1		
Miscellaneous	0	0	0	0	0	0		
Total Revenue	\$1,377	\$4,929	\$6,306	\$984	\$1,905	\$2,889		
	l	Disbursemen	nts					
Monthly Benefits	\$1,199	\$1,196	\$2,395	\$905	\$355	\$1,260		
Refunds	4	48	52	1	4	5		
Total Benefits	1,203	1,244	2,447	906	359	1,265		
Transfers Out	0	4	4	0	3	3		
Expenses	0	1	1	0	0	0		
Payables	0	0	0	0	0	0		
Total Disbursements	\$1,203	\$1,249	\$2,452	\$906	\$362	\$1,268		
2019 Market Value	\$7,851	\$42,365	\$50,217	\$5,880	\$15,516	\$21,395		
Adjustments to Market Value***	\$0	\$166	\$166	\$0	\$427	\$427		
2019 Adjusted Market Value (MV)	\$7,851	\$42,532	\$50,383	\$5,880	\$15,943	\$21,822		
2019 Actuarial Value (AV)	\$7,461	\$40,766	\$48,228	\$5,558	\$15,311	\$20,869		
Ratio (AV / MV)	95%	96%	96%	95%	96%	96%		

Note: Totals may not agree due to rounding.

*Excludes defined contribution portion of Plan 3 assets.

**Includes additional annuity purchases and service credit purchases.

***Adjustment reflects TAP assets for Plan 3 retirees and LEOFF 2 BIA asset transfer.

2019 Actuarial Valuation

Change in Market Value of Assets (Continued)									
(Dollars in Millions)	SERS	PSERS		LEOFF		WSPRS	Total		
	Plans 2/3*	Plan 2	Plan 1	Plan 2		Plans 1/2			
	Fund 633	Fund 635	Fund 819	Fund 829	Total	Fund 615			
2018 Market Value**	\$5,421	\$601	\$5,903	\$12,985	\$18,888	\$1,289	\$92,336		
		Re	venue						
Contributions									
Member	80	33	0	188	188	9	\$1,081		
Employer/State	201	32	0	189	189	15	3,008		
Total Contributions	280	65	0	377	377	23	4,088		
Investment Return	486	57	495	1,154	1,649	111	8,119		
Restorations***	1	0	0	16	16	2	55		
Transfers In	0	0	0	0	0	1	3		
Miscellaneous	0	0	0	0	0	0	0		
Total Revenue	\$767	\$123	\$495	\$1,547	\$2,042	\$137	\$12,265		
		Disbu	rsements						
Monthly Benefits	\$176	\$3	\$369	\$305	\$674	\$64	\$4,572		
Refunds	5	4	0	9	9	0	75		
Total Benefits	181	7	369	314	683	64	4,647		
Transfers Out	2	0	0	0	0	0	9		
Expenses	0	0	0	2	2	0	4		
Payables	0	0	0	0	0	0	0		
Total Disbursements	\$183	\$7	\$369	\$316	\$685	\$65	\$4,659		
2019 Market Value	\$6,005	\$717	\$6,029	\$14,216	\$20,245	\$1,362	\$99,942		
Adjustments to Market Value*****	\$113	\$0	\$0	(\$300)	(\$300)	\$0	\$406		
2019 Adjusted Market Value (MV)	\$6,118	\$717	\$6,029	\$13,916	\$19,945	\$1,362	\$100,349		
2018 Actuarial Value (AV)	\$5,872	\$690	\$5,734	\$13,294	\$19,028	\$1,301	\$95,987		
Ratio (AV / MV)	96%	96%	95%	96%	95%	95%	96 %		

Note: Totals may not agree due to rounding.

*Excludes defined contribution portion of Plan 3 assets.

**Due to adjustments from the expected BIA asset transfer, the 2018 MVA for LEOFF2 in the table above does not match the 2018 MVA for LEOFF2 in the 2018 Actuarial Valuation Report.

***Includes additional annuity purchases and service credit purchases.

****Adjustment reflects TAP assets for Plan 3 retirees and LEOFF 2 BIA asset transfer.

2019 Actuarial Valuation

Calculation of Actuarial Value of Assets								
(Dollars in Millio	ons)		PERS 1	PERS 2/3	TRS 1	TRS 2/3	SERS 2/3	
a. Adjusted Market Value at 6/30/2019		\$7,851	\$42,532	\$5,880	\$15,943	\$6,118		
Plan Year Ending	Smoothing Period	Years Remaining						
6/30/2019	2	1	44	270	32	101	39	
6/30/2018	3	1	\$49	\$241	\$37	\$87	\$34	
6/30/2017	7	4	239	1,119	203	398	155	
6/30/2016	6	2	(134)	(517)	(107)	(181)	(71)	
6/30/2014	8	2	191	653	157	226	89	
b. Total Defer	ral		\$390	\$1,765	\$322	\$632	\$246	
c. Market Valu	e less Deferral	(a - b)	\$7,461	\$40,766	\$5, <mark>558</mark>	\$15,311	\$5,872	
d. 70% of Mark	ket Value of As	sets	\$5,496	\$29,772	\$4,116	\$11,160	\$4,283	
e. 130% of Ma	rket Value of A	ssets	\$10,207	\$55,291	\$7,644	\$20,725	\$7,954	
f. Actuarial V	alue of Assets	5*	\$7,461	\$40,766	\$5,558	\$15,311	\$5,872	

Note: Totals may not agree due to rounding. The gain/(loss) for 6/30/2015 has been fully realized for all plans. *Actuarial Value of Assets can never be less than 70% or greater than 130% of the Market Value of Assets.

Calculation of Actuarial Value of Assets (Continued)										
(Dollars in Mill	ions)		PSERS 2	LEOFF 1	LEOFF 2	WSPRS 1/2	Total			
a. Adjusted Market Value at 6/30/2019 \$7			\$717	\$6,029	\$13,916	\$1,362	\$100,349			
		Γ	Deferred Gains	s and (Losses)						
Plan Year Ending	Smoothing Period	Years Remaining								
6/30/2019	2	1	5	34	97	8	629			
6/30/2018	3	1	4	38	85	8	583			
6/30/2017	7	4	15	186	387	39	2,742			
6/30/2016*	6,5	2,1	(4)	(99)	(166)	(20)	(1,299)			
6/30/2014	8	2	7	137	219	26	1,706			
b. Total Defer	ral		\$27	\$295	\$623	\$62	\$4,361			
c. Market Valu	e less Deferra	al (a - b)	\$690	\$5,734	\$13,294	\$1,301	\$95,987			
d. 70% of Mar	ket Value of A	ssets	\$502	\$4,220	\$9,742	\$954	\$70,244			
e. 130% of Ma	rket Value of	Assets	\$932	\$7,837	\$18,091	\$1,771	\$130,453			
f. Actuarial Va	alue of Asset	s**	\$690	\$5,734	\$13,294	\$1,301	\$95,987			

Note: Totals may not agree due to rounding. The gain/(loss) for 6/30/2015 has been fully realized for all plans. *PSERS 2 = 5 year smoothing period, 1 year remaining; all other plans = 6 year smoothing period, 2 years remaining. **Actuarial Value of Assets can never be less than 70% or greater than 130% of the Market Value of Assets.

2019 Actuarial Valuation

	Investment Gains and (Losses) for Prior Year									
(Do	ollars in Millions)	PERS 1	PERS 2/3*	TRS 1	TRS 2/3*	SERS 2/3*				
a.	2018 Market Value**	\$7,633	\$38,640	\$5,775	\$13,958	\$5,408				
b.	Total Cash Flow	(475)	238	(415)	289	99				
c.	2019 Market Value**	7,800	42,325	5,841	15,506	5,9 <mark>9</mark> 4				
d.	Actual Return (c - b - a)	\$642	\$3,447	\$481	\$1,260	\$487				
e.	Weighted Asset Amount	\$7,393	\$38,764	\$5,561	\$14,099	\$5, <mark>45</mark> 6				
f.	Expected Return (7.5% x e)	554	2,907	417	1,057	409				
g.	Investment Gain/(Loss) for Prior Year (d	88	540	64	202	78				
h.	Dollar-Weighted Rate of Return**	8.68%	8.89%	8.65%	8.93%	8.93%				

Note: Totals may not agree due to rounding.

*Excludes defined contribution portion of Plan 3 assets.

**Source: Washington State Investment Board.

Investment Gains and (Losses) for Prior Year (Continued)									
(Do	llars in Millions)	PSERS 2	LEOFF 1	LEOFF 2	WSPRS	Total			
a.	2018 Market Value*	\$600	\$5,902	\$12,942	\$1,288	\$92,145			
b.	Total Cash Flow	59	(370)	64	(39)	(550)			
c.	2019 Market Value*	715	6,028	14,159	1,361	99,729			
d.	Actual Return (c - b - a)	\$57	\$496	\$1,154	\$111	\$8,135			
e.	Weighted Asset Amount	\$627	\$5,720	\$12,974	\$1,269	\$91,864			
f.	Expected Return (7.5% x e)**	47	429	960	95	6,877			
g.	Investment Gain/(Loss) for Prior Year (d	10	67	193	16	1,258			
h.	Dollar-Weighted Rate of Return*	9.12%	8.67%	8.89%	8.77%	8.86%			

Note: Totals may not agree due to rounding.

*Source: Washington State Investment Board.

**The expected return for LEOFF 2 is (7.4% x e).