

2020 Financial Highlights



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Plan Highlights

- In April 2020, Penn State University paid a one-time lump sum contribution of \$1.06 billion toward its unfunded liability.
 - In return, the university will receive an annual credit against its contributions over the next 30 years.
 - Penn State used \$50.3 million of these credits in 2020.
- The volatility in financial markets was impacted by COVID-19, however, changes made to SERS' investment strategy and asset allocation adopted in December 2019 helped yield positive investment results for 2020.
 - Time-weighted rate of return on investments of 11.1% for 2020 compared to 18.8% for 2019.
 - The return for the ten-year period ended December 31, 2020 was 8.0%, which exceeded the 7.0% investment return assumption.
 - Full economic impact of the pandemic remains uncertain.





Summary of Fiduciary Net Position

As of December 31, 2020 and 2019 (\$ millions)

	2020	<pre>Increase/ (Decrease)</pre>	2019
	2020	(Decrease)	2019
Total assets	\$ 36,816	\$5,060	\$ 31,756
Total deferred outflows - OPEB	 6	3	 3
Total assets and deferred outflows	36,822	5,063	31,759
Total liabilities	1,778	1,137	641
Total deferred inflows - OPEB	 16	(6)	22
Total liabilities and deferred inflows	1,794	1,131	 663
Net position restricted for pensions	\$ 35,028	\$3,932	\$ 31,096

See complete audited financial statements for more detail





Summary of Changes in Fiduciary Net Position

For Years Ended December 31, 2020 and 2019 (\$ millions)

Increase/(Decrease)

	2020	2019	\$	%
Net position restricted for pensions - beginning of year	\$ 31,096	\$ 26,937		
Additions:				
Contributions	3,596	2,520	1,076	43%
Net investment income	3,920	5,175	(1,255)	(24%)
Total additions	7,516	7,695		
Deductions:				
Benefit payments and refunds	3,557	3,513	44	1%
Administrative expenses	27	23	4	17%
Total deductions	3,584	3,536		
Net increase	3,932	4,159	(227)	(5%)
Net position restricted for pensions - end of year	\$ 35,028	\$ 31,096	\$ 3,932	13%

See complete audited financial statements for more detail



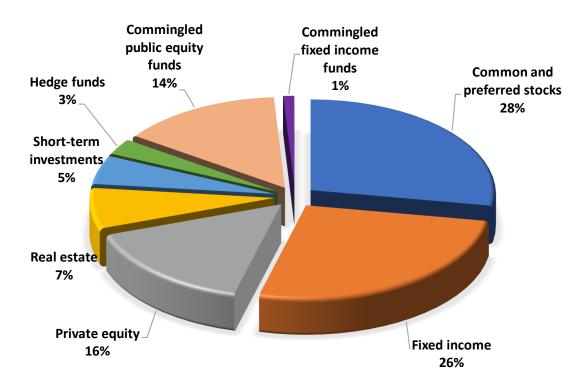


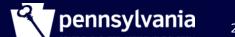
Investment Balances

As of December 31, 2020 and 2019 (\$ millions)

				Allocat	ion %
	2020		2019	2020	2019
Common and preferred stocks	\$ 10,037	\$	10,004	28%	32%
Fixed income	9,544		4,387	26%	14%
Private equity	5,626		4,193	16%	14%
Real estate	2,586		2,114	7%	7%
Short-term investments	1,839		1,662	5%	5%
Hedge funds	1,019		1,005	3%	3%
Commingled public equity funds	5,206		7,269	14%	23%
Commingled fixed income funds	350		560	1%	2%
Other investments	4		3	0%	0%
Total	\$ 36,211	<u>\$</u>	31,197	 100%	100%

Allocation as of December 31, 2020







Contribution Highlights

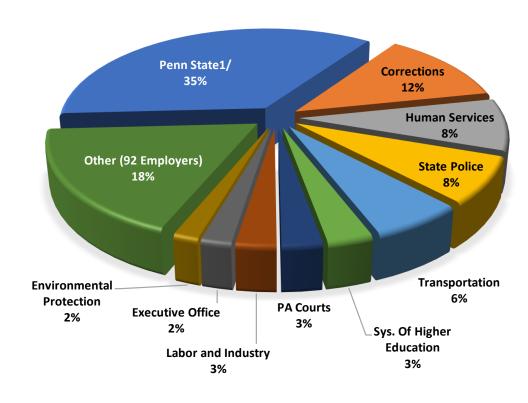
For the Year Ended December 31, 2020

Employer	Employer Contributions (\$ millions)
Penn State ^{1/}	\$ 1,129
Corrections	386
Human Services	273
State Police	243
Transportation	197
Sys. Of Higher Education	97
PA Courts	86
Labor and Industry	85
Executive Office	65
Environmental Protection	54
Other (92 Employers)	571

Total Employer		3,186
		ember ibutions
	(\$ m	nillions)
All 102 Employers	\$	410
Total Contributions	\$	3,596

^{1/}Includes \$1.06 billion prepayment of unfunded liability

Top 10 Contributing Employers



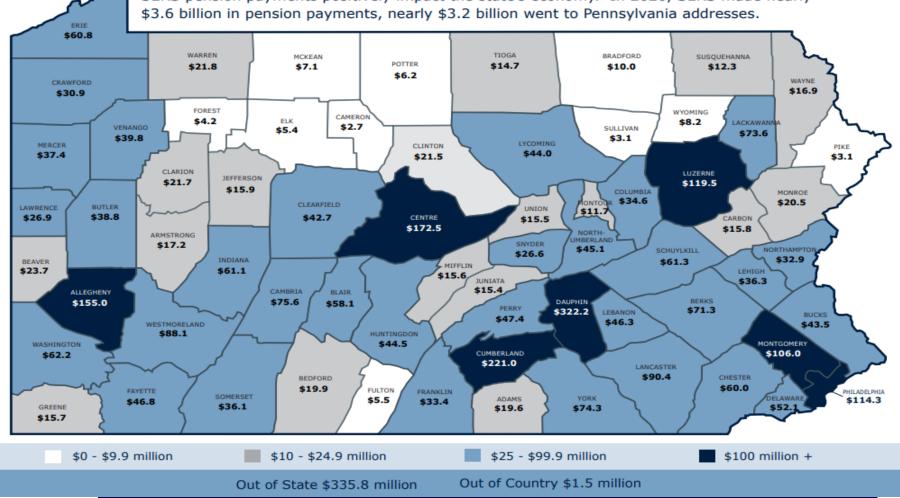
Finance and Member Services Committee





2020 Pension Payments By County (\$ millions)

SERS pension payments positively impact the state's economy. In 2020, SERS made nearly



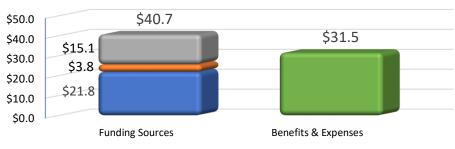




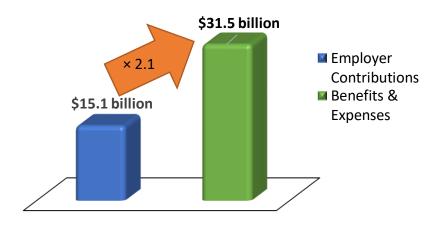
10 Year Funding and Payment Activity

Funding by Source vs. Benefits and Expenses Paid

(\$ billions)







Statement of Change Activity By Year (\$ millions)

Calendar		Contribution	s	Investment	Benefits and	Net
Year	Employer	Member	Total	Earnings	Expenses	Position
2020	\$ 3,186	\$ 410	\$ 3,596	\$ 3,919	\$ (3,584)	10.2% \$ 35,028
2019	2,115	405	2,520	5,176	(3,536)	31,096
2018	2,049	394	2,443	(1,442)	(3,421)	26,937 1/
2017	1,897	383	2,280	4,066	(3.330)	29.405
2016	1,622	375	1,997	1,587	31.2% (3,251)	
2015	1,360	372	1,732	88	increase (3,103)	26,055 increase
2014	1,084	366	1,450	1,462	(2,968)	27,338
2013	795	352	1,147	3,724	(2,866)	27,394
2012	566	348	914	2,795	(2,696)	25,389
2011	392	351	743	480	(2,732)	24,377
10 Yr. Total	\$ 15,066	\$ 3,756	\$ 18,822	\$ 21,855	\$ (31,487)	_

^{1/}Includes \$48 million adjustment for cumulative effect of change in accounting principle related to GASB 75 - Other Post-Employment Benefit Obligations

Finance and Member Services Committee



■ Investment Earnings



Actuarial Valuations

- Annually, the SERS Defined Benefit Plan obtains two actuarial valuations, one for financial reporting purposes (GASB 67) and one that is statutorily required for funding purposes.
- The funding valuation is used to set the employer contribution rate for the plan.
- Key differences include the actuarial cost method and asset valuation method used.
- The December 31, 2020 valuations include assumptions from the most recent actuarial experience study.

Valuation Comparison

As of December 31, 2020 (\$ millions)

		(Ψ	,	
GASB 67 - Accounting Valuation	on		Funding Valuation	
Total Pension Liability (TPL)	\$	52,254	Actuarial Accrued Liability (AAL)	\$ 55,098
Fiduciary Net Position	\$	35,028	Actuarial Value of Assets	\$ 32,703
Net Pension Liability (NPL)	\$	17,226	Unfunded AAL	\$ 22,395
Fiduciary Net Position/TPL		67.0%	Funded Ratio	59.4%
Fiduciary Net Position/TPL (Prior Year)		63.1%	Funded Ratio (Prior Year)	56.5%

 Under GASB 68, employers are allocated a share of the NPL, pension expense, and deferred inflows/ outflows related to pensions, which are to be recorded on their financial statements.





Plan Highlights

- Act 2020-23 (Enacted May 29, 2020) authorized the SERS Board to assess all employers a per-participant charge for the administrative fees, costs, and expenses of the plan.
 - SERS Board approved a \$668.77 per-participant charge which served as the funding mechanism for the plan during commonwealth FY 2020-21
 - Previously, the General Assembly provided direct funding through commonwealth budget appropriations
- Act 2020-94 (Enacted October 29, 2020) retroactively allowed the plan to use unvested employer contributions
 occurring after June 30, 2020 to offset administrative costs to the plan.
 - Prior to this act, monies were set aside for employers to use to offset future contributions to the plan.
- There were approximately 13,200 total defined contribution accounts in 2020, an increase of 5,200 accounts compared to 2019.
- Employer contributions were approximately \$7.7 million for 2020 compared to \$2.8 million in 2019.
- Employee contributions (including rollovers into the plan) were approximately \$14.8 million for 2020 compared to \$6.1 million in 2019.





Summary of Fiduciary Net Position

As of December 31, 2020 and 2019 (\$ millions)

	2	.020	Incre (Decr	ase/ ease)	2	019
Total assets	\$	41	\$	28	\$	13
Total deferred outflows - OPEB		2		1		1
Total assets and deferred outflows		43		29		14
Total liabilities		2		1		1
Total deferred inflows - OPEB		1				1
Total liabilities and deferred inflows		3		1		2
Net position held in trust for defined contribution plan participants	\$	40	\$	28	\$	12

See complete audited financial statements for more detail





Summary of Changes in Fiduciary Net Position

For Years Ended December 31, 2020 and 2019 (\$ millions)

Increase/(Decrease)

	202	20	20:	19	 \$	%
Net position held in trust for defined contribution plan participants - beginning of year	\$	12	\$	4		
Additions:						
Contributions		22		9	13	144%
Annual employer charge		5		-	5	N/A
Commonwealth funding		-		4	(4)	(100%)
Net investment income		5		_	5	N/A
Total additions		32		13		
Deductions:						
Benefit payments and refunds		-		-		
Administrative expenses		4		5	(1)	(20%)
Total deductions		4		5		
Net increase		28		8	20	250%
Net position held in trust for defined contribution plan participants - end of year	\$	40	\$	12	\$ 28	233%

See complete audited financial statements for more detail





Fund Balances & Breakouts

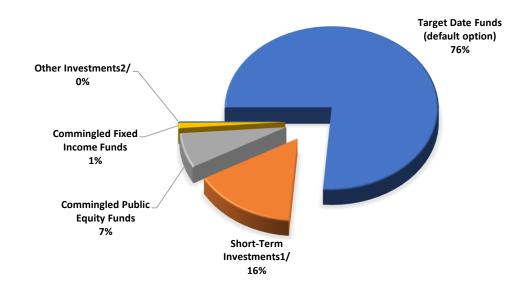
Fund Balances

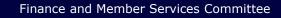
As of December 31, 2020 and 2019 (\$ thousands)

			Alloca	tion %
Fund	2020	2019	2020	2019
Target Date Funds (default option	\$31,445	\$ 7,898	76%	59%
Short-Term Investments ^{1/}	6,432	4,434	16%	33%
Commingled Public Equity Funds	2,844	808	7%	6%
Commingled Fixed Income Funds	450	150	1%	2%
Other Investments ^{2/}	41		0%	0%
Total	\$41,212	\$13,290	100%	100%

 $^{^{1/}}$ Includes both investments in participant directed accounts and plan level cash

Allocation as of December 31, 2020







^{2/}Includes investments in Schwab



Contributions by Fund For the Years Ended December 31, 2020 and 2019

(\$ thousands)

Annual Contribtuions

			Increase/ %		\$25,000.0	\$22,532.2	
Fund	2020	2019	(Decrease)	Change	\$25,000.0	thousands	
Global non-U.S. stock index fund	\$ 257.8	\$ 102.2	\$ 155.6	152%	_		
U.S. all company stock index fund	197.4	91.4	106.0	116%	\$20,000.0		
U.S. large company stock index fund	617.1	201.1	416.0	207%		_	
U.S. small/mid company stock index fund	108.1	39.8	68.3	172%	_	_	
U.S. TIPS fund	28.8	16.0	12.8	80%	\$15,000.0		
U.S. bond index fund	110.4	49.2	61.2	124%	_	_	\$8,960.2
Short-term bond index fund	29.7	23.0	6.7	29%	_	_	·
Short-term investment fund	1,044.2	339.5	704.7	208%	\$10,000.0		thousands
Target date fund suite (default option)	20,138.7	8,098.0	\$ 12,040.7	149%	_	_	
					_	_	_
Total Contributions	\$ 22,532.2	\$ 8,960.2	\$ 13,572.0	151%	\$5,000.0	_	
					_		_
					_		
					\$0.0		
						2020	2019



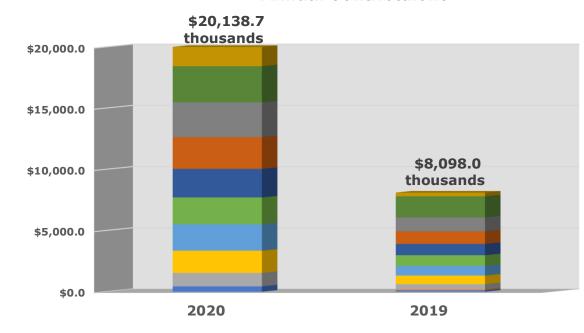


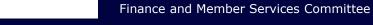
Contributions by Target Date Fund For the Years Ended December 31, 2020 and 2019

(\$ thousands)

Target Date Fund	2020	2019	Increase/ (Decrease)	% Change
Post Retirement Date	\$ 434.6	\$ 114.1	\$ 320.5	281%
2020 Retirement Date Fund	-	74.8	(74.8)	(100%)
2025 Retirement Date Fund	1,097.6	416.8	680.8	163%
2030 Retirement Date Fund	1,817.6	711.2	1,106.4	156%
2035 Retirement Date Fund	2,153.0	784.4	1,368.6	174%
2040 Retirement Date Fund	2,200.2	880.8	1,319.4	150%
2045 Retirement Date Fund	2,330.0	917.9	1,412.1	154%
2050 Retirement Date Fund	2,590.7	1,031.2	1,559.5	151%
2055 Retirement Date Fund	2,845.4	1,138.5	1,706.9	150%
2060 Retirement Date Fund	2,948.8	1,721.3	1,227.5	71%
2065 Retirement Date Fund	1,720.8	307.0	1,413.8	461%
Total Contributions	\$20,138.7	\$ 8,098.0	\$ 12,040.7	149%

Annual Contribtuions









Plan Highlights

- Target Date Funds were added in January 2020 and became the default investment option.
 - Offers participants the ability to easily invest their savings in a diversified portfolio that is risk-adjusted to an age-based glidepath.
 - Four investment options from 2019 were eliminated: the 60/40 Balanced Stock and Bond Fund, as well as the Aggressive, Moderate, and Conservative risk profile funds.
- On April 3, 2020, the SERS Board moved to allow COVID-19 related distributions consistent with the federal Coronavirus Aid, Relief, and Economic Security (CARES) Act.
 - Deferred compensation participants could take an early distribution withdrawal on a tax-penalty-free basis from their accounts to help meet their immediate needs with the option to repay the money within three years. These withdrawals totaled nearly \$31 million in 2020.





Summary of Net Position Available for Benefits

As of December 31, 2020 and 2019 (\$ millions)

	2020		Increase/ (Decrease)		2019	
Assets						
Total receivables	\$	2	\$	(6)	\$	8
Total investments		4,379		490		3,889
Total Assets		4,381		484		3,897
Liabilities:						
Total liabilities		4		2		2
Net position available for benefits	\$	4,377	\$	482	\$	3,895

See complete audited financial statements for more detail





For Years Ended December 31, 2020 and 2019 (\$ millions)

Increase/(Decrease)

	2020		2019		 \$	%
Net position available for benefits - beginning of year	\$	3,895	\$	3,327		
Additions:						
Net investment income		519		616	(97)	(16%)
Contributions		158		155	3	2%
Plan transfers in		60		62	(2)	(3%)
Total additions		737		833		
Deductions:						
Benefit payments		126		112	14	13%
Plan transfers out		124		148	(24)	(16%)
Third party and administrative expenses		5		5	-	0%
Total deductions		255		265		
Increase/(decrease) in net position		482		568	(86)	(15%)
Net position available for benefits - end of year	\$	4,377	\$	3,895	\$ 482	12%



See complete audited financial statements for more detail





Fund Balances & Breakouts

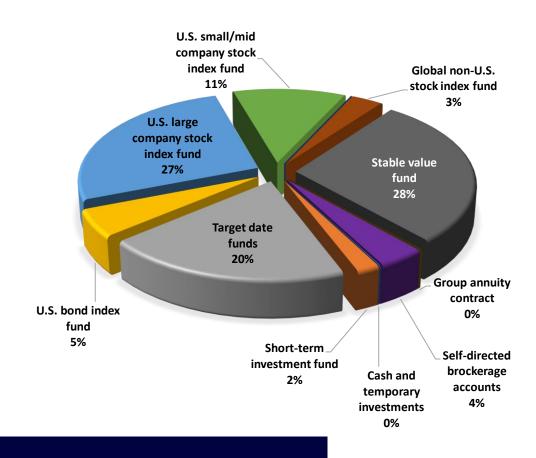
Fund Balances

As of December 31, 2020 and 2019 (\$ millions)

			Allocation %		
Fund	2020	2019 ^{1/}	2020	2019	
Cash and temporary investments	\$ 3	\$ 3	0%	0%	
Short-term investment fund	81	81	2%	2%	
Target date funds	867	-	20%	0%	
U.S. bond index fund	225	445	5%	12%	
U.S. large company stock index fund	1,158	1,398	27%	36%	
U.S. small/mid company stock index fund	501	466	11%	12%	
International company stock index fund		244	0%	6%	
Global non-U.S. stock index fund	140		3%	0%	
Stable value fund	1,237	1,118	28%	29%	
Group annuity contract	1	1	0%	0%	
Self-directed brockerage accounts	166	133	4%	3%	
Total	\$ 4,379	\$ 3,889	100%	100%	

 $^{^{1/}}$ Includes total fund holdings. Participants could elect investment options that hold more than one of these funds, such as the 60/40 Balanced Stock & Bond Fund as well as the aggressive, moderate, and conservative risk profile funds. Changes to simplify and streamline options were made in January 2020.

Allocation as of December 31, 2020





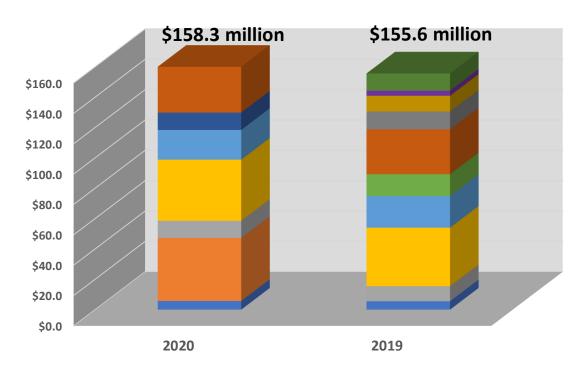


Contributions by Fund For the Years Ended December 31, 2020 and 2019

For the Years Ended December 31, 2020 and 2019 (\$ millions)

Annual Contributions

			Increase/	%
Fund	2020	2019	(Decrease)	Change
Short-term investment fund	\$ 5.7	\$ 5.5	\$ 0.2	4%
Target date funds	41.5	-	41.5	N/A
U.S. bond index fund	11.3	9.9	1.4	14%
U.S. large company stock index fund	40.3	38.6	1.7	4%
U.S. small/mid company stock index fund	19.6	20.8	(1.2)	(6%)
International company stock index fund	-	14.4	(14.4)	(100%)
Global non-U.S. stock index fund	11.4		11.4	N/A
Stable value fund	28.5	29.6	(1.1)	(4%)
Aggressive Portfolio		11.7	(11.7)	(100%)
Moderate Portfolio		10.4	(10.4)	(100%)
Conservative Portfolio		3.3	(3.3)	(100%)
60/40 Balanced Stock & Bond	-	11.4	(11.4)	(100%)
		_	_	
Total	\$ 158.3	\$ 155.6	\$ 2.7	2%







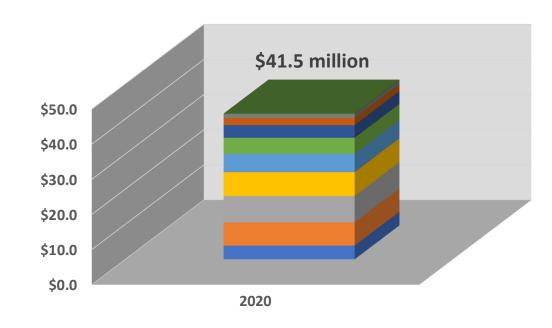


Contributions by Target Date Fund

For the Years Ended December 31, 2020 (\$ millions)

Target Date Fund 2020 Post Retirement Date 2025 Retirement Date Fund 6.6 7.5 2030 Retirement Date Fund 2035 Retirement Date Fund 6.8 2040 Retirement Date Fund 2045 Retirement Date Fund 4.6 2050 Retirement Date Fund 3.6 2055 Retirement Date Fund 2060 Retirement Date Fund 0.2 2065 Retirement Date Fund **Total Contributions** \$ 41.5

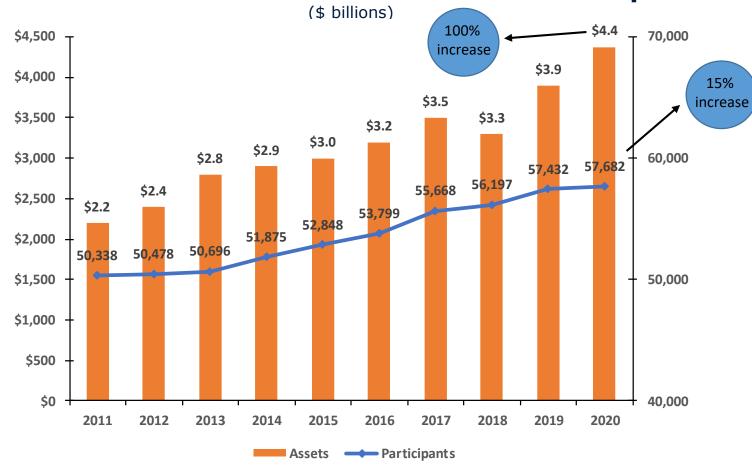
Annual Contributions







10 Year Growth Plan Assets & Participants





Thank you.

If you have questions, please contact me.

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