

FY 2022 Other Post-Employment Benefits (OPEB) Overview

Vermont State Employees' Retirement System (VSERS)
Vermont State Teachers' Retirement System (VSTRS)

Senate Committees on Appropriations and Government Operations

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Key Findings

- **Total OPEB liabilities decreased by 42% (\$1.22 billion) across both systems when considering all factors.**
- **Act 114 (2022) established prefunding for State Employee and Teacher OPEB (health care benefits for retirees).**
 - Prior to that, OPEB was funded mainly on a “paygo” basis (funding the actual cost of benefits in the coming year).
 - Liabilities scheduled to be fully funded by FY2048.
- **Prefunding reduces liabilities significantly by allowing a 7% discount rate to be used – this factor alone reduced liabilities by \$1.5 billion.**
- **Beginning in FY 2023, OPEB costs are prefunded like pensions:**
 - State employees – Total cost paid through a blended assessment rate on the active payrolls (across all funds) of participating employers.
 - Teachers – Normal Cost paid by Ed Fund, Unfunded Liability amortization cost paid by General Fund. A small share is paid by LEAs.
 - Unlike pensions, Employees/Members do not contribute directly to the OPEB funds. They pay a share of the health care premium costs once they receive coverage.
- **Prefunding is more expensive in the short term than “paygo” – but prefunding saves taxpayer dollars long term because investment gains help to pay future benefit costs.**
 - A pool of assets must be built up over time to pay future benefits. These assets are invested diversely, with funding levels determined by actuarial and economic assumptions.
 - The shortfall between the cost of benefits owed and assets on hand must be closed over time through amortization.
 - Like with pensions, experience does not neatly mirror assumptions – and assumptions change over time. This translates to financial risk and fluctuation in plan funding status and budgetary funding requirements from year to year. All financial data reflects a snapshot in time and/or an estimate based on current assumptions.
- **FY 2022 GASB 74 reports are first actuarial reports to reflect financial benefits of prefunding OPEB systems.**
 - VSERS: https://ljfo.vermont.gov/assets/Subjects/Other-Post-Employment-Benefits-OPEB-Reports/5d6098f3bd/VRSERS-7_1_22-GASB-74-FINAL.pdf
 - VSTRS: https://ljfo.vermont.gov/assets/Subjects/Other-Post-Employment-Benefits-OPEB-Reports/6eb1d604e1/VSTRS-7_1_22-GASB-74-FINAL.pdf

Data in these slides was compiled by JFO from GASB 74 reports and actuarial presentations unless otherwise stipulated. Historical financial figures are not adjusted for inflation.



Change in Assets and Liabilities

- **First year of prefunding:**
 - 7% discount rate can be used instead of a 2-ish% rate tied to the AA municipal bond rate required under paygo.
 - **Use of higher discount rate reduced total liabilities by \$1.5 billion** across both systems. Some of these savings were offset by other factors that led to increased liabilities.
 - Overall, when also considering the other experience, assumption changes, and investment factors, **OPEB liabilities declined by \$1.22 billion (-42.2%)** across both systems.
- **Investments fell short of expectations, but the impact is relatively small now since there are relatively few assets.**
- **Some other assumptions changed about participation rates and health care cost trends. VSERS reflects expected changes from Group C mandatory retirement age in Act 114.**
- **Teacher system received \$13.3M one-time contribution to begin prefunding (Act 114) in FY2022.**
- **Funded ratios improved a bit, but we are at the very beginning of the prefunding journey (it's scheduled to end in FY2048).**
 - ADEC payments to increase at 3.5% (VSERS) or 3.0% (VSTRS) annually, at pace with assumed payroll growth.
 - Most of the progress toward paying down the unfunded net liability balance will not occur until future years (holding all else equal).

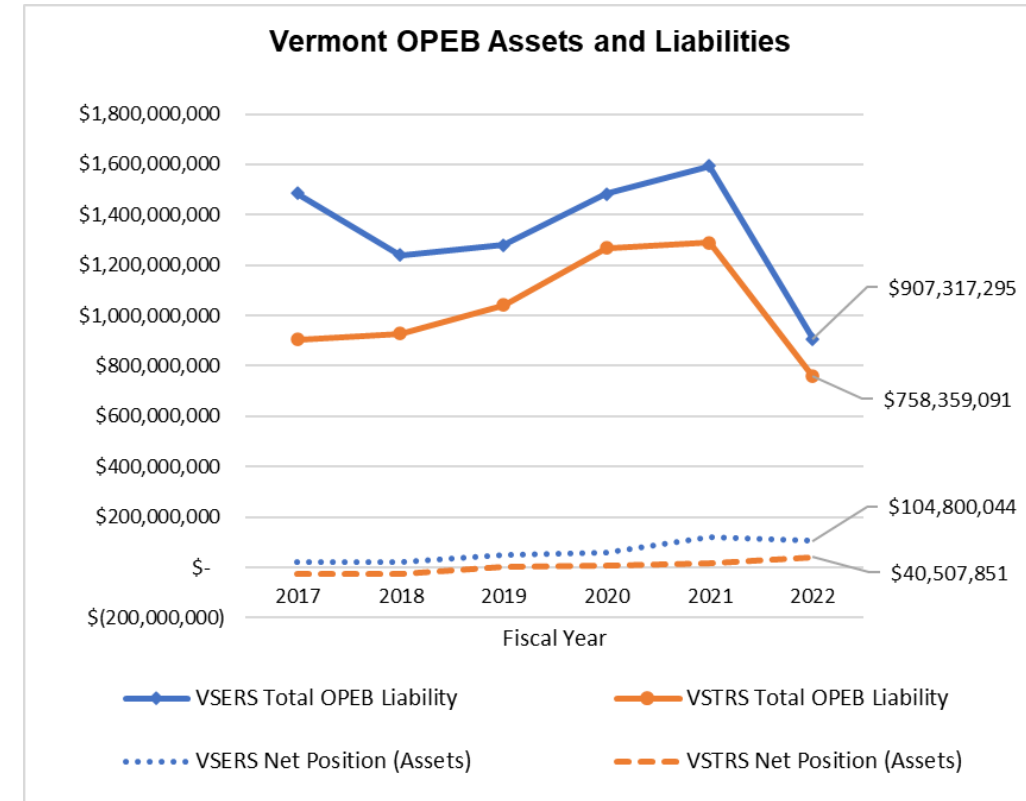


Table 1: FY 2022 Summary of Key OPEB Valuation Metrics

Line	\$ millions	State Employees (VSERS)			Teachers (VSTRS)		
		FY 2021	FY 2022	Change	FY 2021	FY 2022	Change
1	Total OPEB Liability	\$ 1,593,341,095	\$ 907,317,265	(686,023,830)	1,290,220,534	758,359,091	(531,861,443)
2	OPEB Assets (Plan Fiduciary Net Position)	\$ 120,267,813	\$ 104,800,044	(15,467,769)	14,633,492	40,507,851	25,874,359
3	Unfunded Liability (Net OPEB Liability) (1-2)	\$ 1,473,073,282	\$ 802,517,221	(670,556,061)	1,275,587,042	717,851,240	(557,735,802)
4	Funded Ratio (2÷1)	7.55%	11.55%		1.13%	5.34%	

Source: JFO from FY2022 VSERS and VSTRS GASB 74 reports.



VSERS Changes in Liabilities

- **At the end of FY2022, the VSERS OPEB system was 11.55% funded.**
 - Liabilities totaled \$907.3 million. With assets of \$104.8 million, the *unfunded* net OPEB liability was \$802.5 million.
- **Changes to Assumptions decreased liabilities by \$746.9 million.**
 - Act 114 prefunding allows the systems to use a 7% discount rate, rather than a 2.41% rate tied to the AA municipal bond rate (-\$770 million)
 - Updated per capita claims (-\$34 million)
 - Updated retiree contribution rates (-\$20 million) updated.
 - Updated health care cost trends (+\$75 million)
 - Updated participation and coverage election assumptions (+\$2 million)
- **Act 114 changes to benefit terms for VSERS Group C mandatory retirement decreased liabilities by -\$11.4 million.**
- **Experience losses from investments: -\$15.6 million.**
- **Net Impact of All Factors:**
 - **Total Liabilities decreased by \$686 million**
 - **Net (unfunded) Liabilities decreased by \$670.6 million**

Changes in OPEB Liabilities for State Employees		
	2021	2022
Beginning Total OPEB Liability	\$ 1,482,970,357	\$ 1,593,341,095
Service Cost	\$ 63,317,681	\$ 67,475,631
Interest	\$ 34,087,907	\$ 39,605,777
Change of Benefit Terms		\$ (11,431,218)
Experience vs Assumptions	\$ 4,953,124	\$ 240,955
Changes to Assumptions	\$ 43,572,802	\$ (746,859,265)
Benefit Payments and Refunds	\$ (35,560,776)	\$ (35,055,680)
Ending Total OPEB Liability	\$ 1,593,341,095	\$ 907,317,295
<i>Net Change</i>	<i>\$ 110,370,738</i>	<i>\$ (686,023,800)</i>
Beginning Plan Fiduciary Net Position	\$ 57,592,708	\$ 120,267,813
Contributions	\$ 90,462,714	\$ 35,170,057
Net Investment Income	\$ 7,775,040	\$ (15,580,304)
Benefit Payments and Refunds	\$ (35,560,776)	\$ (35,055,680)
Admin Expense	\$ (1,873)	\$ (1,842)
Other	\$ -	\$ -
Ending Net Position	\$ 120,267,813	\$ 104,800,044
<i>Net Change</i>	<i>\$ 62,675,105</i>	<i>\$ (15,467,769)</i>
Ending FY Net (Unfunded) Liability	\$ 1,473,073,282	\$ 802,517,251
%Funded	7.55%	11.55%
Covered Payroll	\$ 578,701,831	\$ 579,628,736
Net (Unfunded) Liability As % of Pay	254.55%	138.45%

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net OPEB Liability (Asset)	\$913,625,259	\$802,517,251	\$709,898,310
	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rates	1% Increase in Health Care Cost Trend Rates
Net OPEB Liability (Asset)	\$702,767,425	\$802,517,251	\$925,079,547

NOTE: OPEB liabilities are sensitive to changes in assumptions – a 1% change in either the discount rate or health care cost trend rates would lead to ~\$100M of liability changes.

Source: Segal, VSERS GASB 74 2022, page 16.



VSTRS Changes in Liabilities

- **At the end of FY2022, the VSTRS OPEB system was 5.34% funded.**
 - Liabilities totaled \$758.4 million. With assets of \$40.5 million, the *unfunded* net OPEB liability was \$717.9 million.
- **Changes to Assumptions decreased liabilities by \$605.2 million.**
 - Act 114 prefunding allows the systems to use a 7% discount rate, rather than a 2.2% rate tied to the AA municipal bond rate (-\$735 million).
 - Updated per capita claims (+\$9 million)
 - Updated retiree contribution rates (+\$2 million)
 - Updated health care cost trends (+\$60 million)
 - Updated participation and coverage election assumptions (+\$59 million)
- **Experience losses from investments: -\$0.2 million.**
- **Net Impact of All Factors:**
 - **Total Liabilities decreased by \$531.9 million**
 - **Net (unfunded) Liabilities decreased by \$557.7 million**

Changes in OPEB Liabilities for Teachers		
	2021	2022
Beginning Total OPEB Liability	\$ 1,268,119,008	\$ 1,290,220,534
Service Cost	\$ 50,729,395	\$ 53,506,618
Interest	\$ 28,808,340	\$ 29,254,133
Change of Benefit Terms	\$ (75,247,620)	\$ -
Experience vs Assumptions	\$ 33,179,296	\$ 18,750,319
Changes to Assumptions	\$ 15,407,499	\$ (605,231,768)
Benefit Payments and Refunds	\$ (30,775,384)	\$ (28,140,745)
Ending Total OPEB Liability	\$ 1,290,220,534	\$ 758,359,091
<i>Net Change</i>	\$ 22,101,526	\$ (531,861,443)
Beginning Plan Fiduciary Net Position	\$ 8,718,699	\$ 14,633,492
Contributions (Employer)	\$ 36,638,994	\$ 54,202,861
Net Investment Income	\$ 53,350	\$ (185,597)
Benefit Payments and Refunds	\$ (30,775,384)	\$ (28,140,745)
Admin Expense	\$ (2,167)	\$ (2,160)
Other	\$ -	\$ -
Ending Net Position	\$ 14,633,492	\$ 40,507,851
<i>Net Change</i>	\$ 5,914,793	\$ 25,874,359
Ending FY Net (Unfunded) Liability	\$ 1,275,587,042	\$ 717,851,240
%Funded	1.13%	5.34%
Covered Payroll	\$ 645,902,984	\$ 657,934,953
Net (Unfunded) Liability As % of Pay	197.49%	109.11%

	1% Decrease in Discount Rate (6.00%)	Current Discount Rate (7.00%)	1% Increase in Discount Rate (8.00%)
Net OPEB Liability (Asset)	\$818,278,276	\$717,851,240	\$634,325,822
	1% Decrease in Health Care Cost Trend Rates	Current Health Care Cost Trend Rates	1% Increase in Health Care Cost Trend Rates
Net OPEB Liability (Asset)	\$624,265,750	\$717,851,240	\$833,974,068

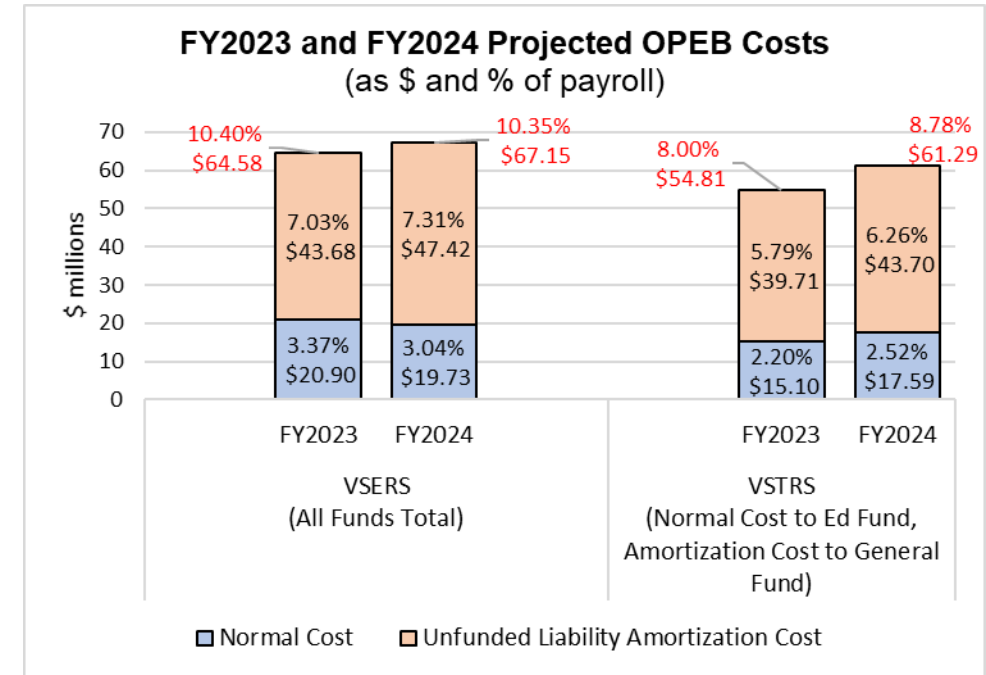
NOTE: OPEB liabilities are sensitive to changes in assumptions – a 1% change in either the discount rate or health care cost trend rates would lead to ~\$100M of liability changes.

Source: Segal, VSTRS GASB 74 2022, page 14.

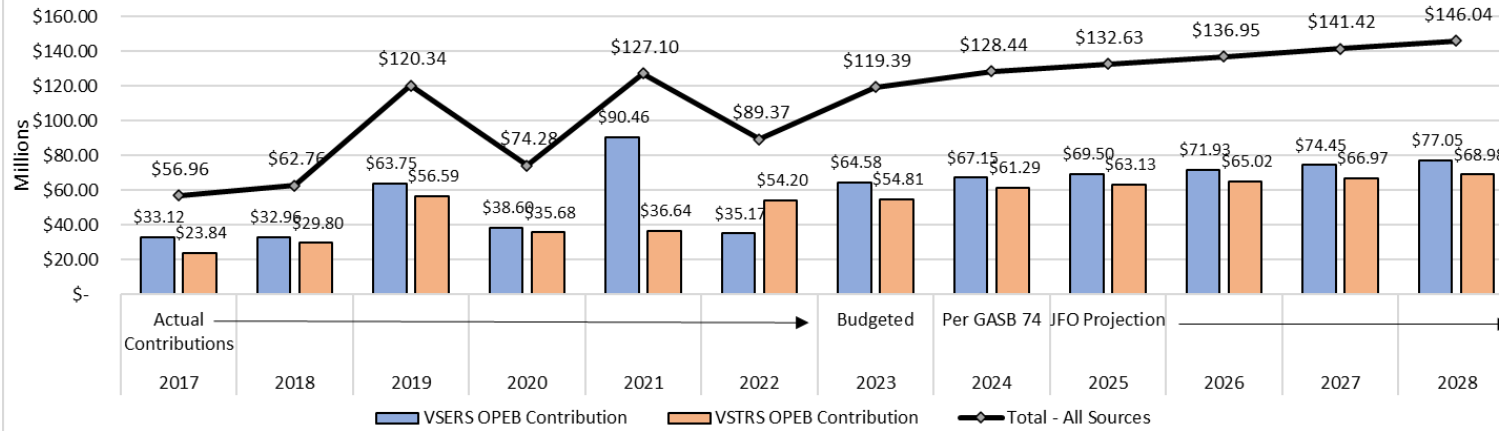


ADEC

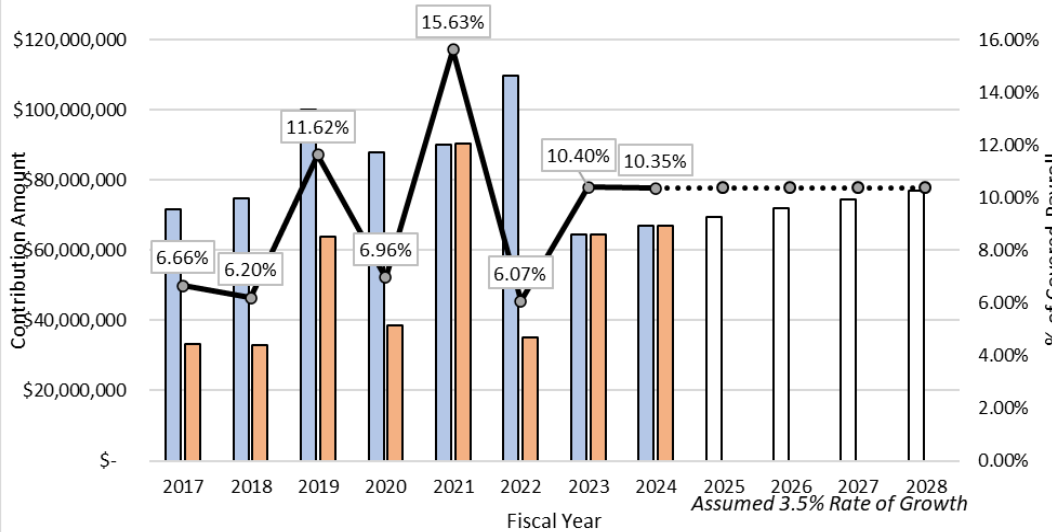
- **FY2023 is the first year of prefunding OPEB on an ADEC schedule:**
 - ADEC: Actuarially Determined Employer Contribution. The recommended contribution needed to fully fund the normal cost and the unfunded liability payment based on current assumptions.
 - Normal cost = cost to fund the future benefits earned during the current year of service, structured as a level percent of pay.
 - Unfunded liability cost = cost to amortize the net OPEB liability balance, assuming payments grow at 3% or 3.5% a year and the systems reach fully funded by FY2048.
- **From FY2023 to FY2024, costs are expected to be relatively stable as a percentage of pay:**
 - VSERS cost decline from 10.40% to 10.35%.
 - VSTRS costs increase from 8.00% to 8.78%.
- **Remember – due to actuarial methods, costs are expected to increase in dollar terms (3.5%/year for VSERS, 3%/year for VSTRS) at pace with assumed payroll growth.** To control for this, it is helpful to also track costs as a percentage of payroll.



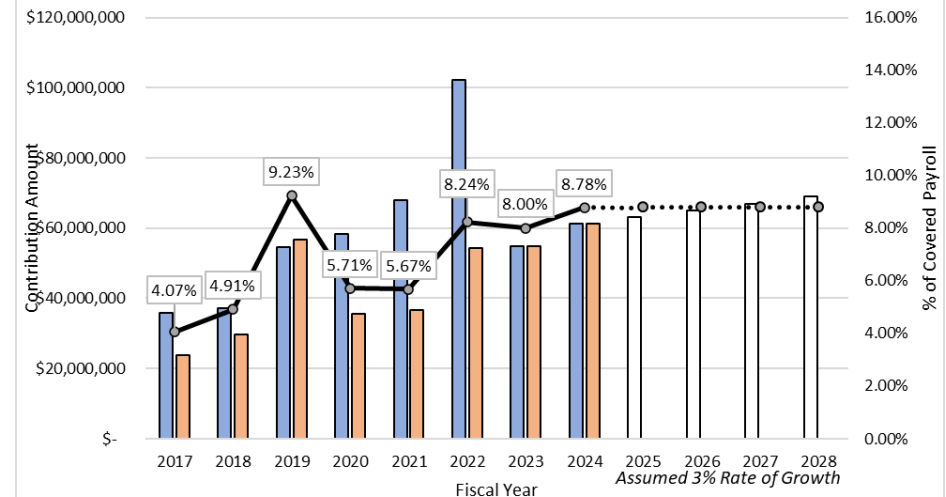
Historic and Expected OPEB Costs (Prefunding Begins FY2023)



VSERS Historic and Projected OPEB Costs



VSTRS Historic and Projected OPEB Costs



Legend: Actuarially Determined Contributions (light blue bar), Actual Contributions (orange bar), Actual Contribution As % of Covered Payroll (black line with circles).

Data from GASB 74 reports. Note that prior to FY2023, the "paygo" amount was funded to cover the expected annual cost of benefits rather than the actuarially determined amount to prefund benefits. Assumes that the FY2023 and FY2024 "actual" contributions will equal the actuarially determined contributions, and that costs remain a level percentage of payroll in the future with payroll growing according to 3.5% assumptions.

Legend: Actuarially Determined Contributions (light blue bar), Actual Contributions (orange bar), Actual Contribution As % of Covered Payroll (black line with circles).

Data from GASB 74 reports. Note that prior to FY2023, the "paygo" amount was funded to cover the expected annual cost of benefits rather than the actuarially determined amount to prefund benefits. Assumes that the FY2023 and FY2024 "actual" contributions will equal the actuarially determined contributions, and that costs remain a level percentage of payroll in the future with payroll growing according to 3.0% assumptions.



What if no Act 114? - VSERS

Act 114 had a positive impact of \$781 million on the VSERS OPEB system.

- Prefunding – discount rate change reduced OPEB liabilities by **\$770 million**.
- Change to benefit terms reflecting revised VSERS Group C retirement expectations reduced OPEB liabilities by **\$11 million**.

Without Act 114 (assuming all else constant):

- VSERS OPEB liabilities would have increased by \$95 million (to \$1.689 billion) instead of decreasing by \$686 million (to \$907 million).
- The unfunded OPEB liabilities would have been \$1.584 billion instead of \$803 million.

Note that some of the positive gains from Act 114 were offset by higher costs from other changes to assumptions and weaker than expected investment performance. This analysis assumes those factors would still have occurred in the absence of Act 114.

Estimated Change in OPEB Liabilities for <u>State Employees</u> Without Act 114		
\$ millions	2022 Actual	2022 Estimate If No Act 114
Beginning Total OPEB Liability	\$ 1,593	\$ 1,593
Service Cost	\$ 67	\$ 67
Interest	\$ 40	\$ 40
Change of Benefit Terms	\$ (11)	\$ -
Experience vs Assumptions	\$ 0	\$ 0
Changes to Assumptions	\$ (747)	\$ 23
Discount Rate	\$ (770)	\$ -
Per Capita Claims	\$ (34)	\$ (34)
Contribution Rates	\$ (20)	\$ (20)
Cost Trends	\$ 75	\$ 75
Participation and Coverage Election Rates	\$ 2	\$ 2
Benefit Payments and Refunds	\$ (35)	\$ (35)
Ending Total OPEB Liability	\$ 907	\$ 1,689
<i>Net Change</i>	\$ (686)	\$ 95
Beginning Plan Fiduciary Net Position (Assets)	\$ 120	\$ 120
Contributions	\$ 35	\$ 35
Net Investment Income	\$ (16)	\$ (16)
Benefit Payments and Refunds	\$ (35)	\$ (35)
Admin Expense	\$ (0)	\$ (0)
Other	\$ -	\$ -
Ending Net Position (Assets)	\$ 105	\$ 105
<i>Net Change</i>	\$ (15)	\$ (15)
Ending FY Net (Unfunded) Liability	\$ 803	\$ 1,584
% Funded	11.55%	6.21%
Covered Payroll	\$ 580	\$ 580
Net (Unfunded) Liability As % of Pay	138.45%	273.25%

Estimate holds all factors constant but excludes changes to benefit terms related to Act 114 and the change to the discount rate associated with prefunding.



What if no Act 114? - VSTRS

Act 114 had a positive impact of \$748 million on the VSTRS OPEB system.

- Prefunding – discount rate change reduced OPEB liabilities by **\$735 million**.
- FY2022 one-time appropriation to begin funding increased assets by **\$13.3 million**.

Without Act 114 (assuming all else constant):

- VSTRS OPEB liabilities would have increased by \$203 million (to \$1.494 billion) instead of decreasing by \$532 million (to \$758 million).
- The unfunded OPEB liabilities would have been \$1.466 billion instead of \$718 million.

Note that some of the positive gains from Act 114 were offset by higher costs from other changes to assumptions and weaker than expected investment performance. This analysis assumes those factors would still have occurred in the absence of Act 114.

Estimated Change in OPEB Liabilities for <u>Teachers</u> Without Act 114		
\$ millions	2022 Actual	2022 Estimate If No Act 114
Beginning Total OPEB Liability	\$ 1,290	\$ 1,290
Service Cost	\$ 54	\$ 54
Interest	\$ 29	\$ 29
Change of Benefit Terms	\$ -	\$ -
Experience vs Assumptions	\$ 19	\$ 19
<u>Changes to Assumptions</u>	<u>\$ (605)</u>	<u>\$ 130</u>
Discount Rate	\$ (735)	\$ -
Per Capita Claims	\$ 9	\$ 9
Contribution Rates	\$ 2	\$ 2
Cost Trends	\$ 60	\$ 60
Participation and Coverage Election Rates	\$ 59	\$ 59
Benefit Payments and Refunds	\$ (28)	\$ (28)
Ending Total OPEB Liability	\$ 758	\$ 1,494
<i>Net Change</i>	<i>\$ (532)</i>	<i>\$ 203</i>
Beginning Plan Fiduciary Net Position (Assets)	\$ 15	\$ 15
Contributions	\$ 54	\$ 41
Net Investment Income	\$ (0)	\$ (0)
Benefit Payments and Refunds	\$ (28)	\$ (28)
Admin Expense	\$ (0)	\$ (0)
Other	\$ -	\$ -
Ending Net Position (Assets)	\$ 41	\$ 27
<i>Net Change</i>	<i>\$ 26</i>	<i>\$ 13</i>
Ending FY Net (Unfunded) Liability	\$ 718	\$ 1,466
% Funded	5.34%	1.82%
Covered Payroll	\$ 658	\$ 658
Net (Unfunded) Liability As % of Pay	109.11%	222.88%

Estimate holds all factors constant but excludes changes to benefit terms related to Act 114 and the change to the discount rate associated with prefunding.



Moving Forward...

- Normal Cost must be paid for the foreseeable future to prefund the benefits the active workforce continues to earn.
- Unfunded OPEB liabilities to be amortized by FY2048 (Act 114).
- Amortization payments and normal cost payments are structured as “level percent of pay” and grow at an annual rate equivalent to the annual rate of assumed payroll growth:
 - VSERS: 3.5% per year
 - VSTRS: 3.0% per year
- Amortization schedule is revised annually to reflect how much it will cost to pay off each year’s recalculated unfunded liability balance by FY2048.
- Expect the unfunded liability balances to increase a bit in the near term (negative amortization) before declining, with most of the progress occurring in the last 15 years of the amortization period. This is a side effect of “level percent of pay” amortization.
- Overall, the OPEB amortization is structured very similarly to the structures already in effect for funding pensions, but pensions are scheduled to be fully amortized a decade earlier (FY2038).

