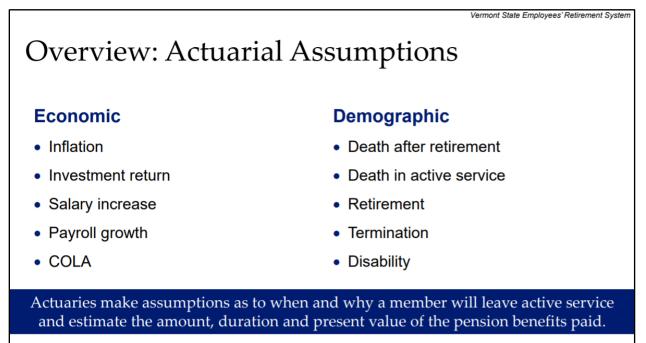
Excerpts from 2020 Experience Review for the Vermont State Employees Retirement System

Full report available at:

https://www.vermonttreasurer.gov/sites/treasurer/files/VSERS/VSERS-reports/otherreports/14794%20-%20VSERS%20-%202020%20Experience%20Review FINAL.pdf

Figure 1. Actuarial Assumptions of the System



🔆 Segal

Figure 2. Economic Assumptions

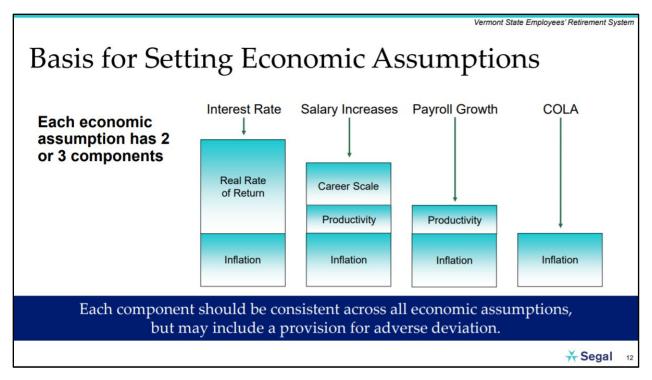


Figure 3. Real Rate of Return

Second trice Real Read Bate of Real Return Target Allocation Weighter Real Return VS Large Cap 6.05% 11.63% 0.70% US Large Cap 6.05% 11.63% 0.70% US Small Cap 7.23% 10.63% 0.77% International Developed 7.01% 14.59% 1.02% Emerging Markets 9.38% 6.15% 0.58% Private Equity 10.53% 10.00% 1.05% US Core 2.17% 20.00% 0.43% International Debt Emerging 4.47% 4.00% 0.18% TIPS 1.40% 3.00% 0.04% Hedge Funds 4.32% 10.00% 0.43%
Asset Class Arithmetic Real Return Allocation1 Real Return US Large Cap 6.05% 11.63% 0.70% US Small Cap 7.23% 10.63% 0.77% International Developed 7.01% 14.59% 1.02% Emerging Markets 9.38% 6.15% 0.58% Private Equity 10.53% 10.00% 1.05%
US Small Cap 7.23% 10.63% 0.77% International Developed 7.01% 14.59% 1.02% Emerging Markets 9.38% 6.15% 0.58% Private Equity 10.53% 10.00% 1.05%
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Energing Markets 9.56% 0.15% 0.36% Private Equity 10.53% 10.00% 1.05%
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US Core 2.17% 20.00% 0.43% International Debt Emerging 4.47% 4.00% 0.18% TIPS 1.40% 3.00% 0.04%
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E TIPS 1.40% 3.00% 0.04%
Real Estate 5.65% 8.00% 0.45%
B Hedge Funds 4.32% 10.00% 0.43%
iii Infrastructure 6.17% 2.00% 0.12%
Total 100% 5.79%
Adjustment to Geometric (0.54%)
Geometric Real Rate of Return ² 5.25%

Over the t	ime	he Fund is ex I real rate of re	spected to earr	n an annual re	al rate of ret	Vermont State Employees' Retirement System
	Component	Current	50/50: 7.25%	7.15%	7.00%	
	Inflation	2.50%	2.30%	2.30%	2.30%	* The Confidence Level indicates the likelihood that
	Real Rate of Return	5.05%	4.95%	4.95%	4.95%	expectations will be met
	Adjustment for Adverse Deviation	(0.05%)	(0.00%)	(0.10%)	(0.25%)	over a 20-year period. An increase in the confidence
	Total	7.50%	7.25%	7.15%	7.00%	level indicates that the plan is more likely to meet the
	Confidence Level*	51%	50.0%	51.3%	53.1%	expected rate of return.
¹ A range as the cur preferable	h how the current assure of reasonable investment return a rent assumption when last studied	mption was set. ssumptions was first id . However, we believe g this and related prese	A lower assumpti entified (7.00% to 7.25%) that choosing the lowest entations, it was also note	on such as 7.00 Within the reasonable end of the reasonable ad that the target asset a	% would increa range, 7.15% was pro range, and, therefore, allocation on which ou	tain a confidence level consistent se that confidence level to 53.1%. posed because it results in a similar confidence level increasing the associated confidence level, is r analysis was based had not yet been reached and Segal 22

Figure 5. Cost of Assumption Changes

			Vermont State Employees' Retirement S
Cost Impact (B Valuation)	ased on the Ju	ıne 30, 2019 Ac	tuarial
Description	Current Assumptions	All Proposed Demographic Assumptions	All Proposed Demographic and Economic Assumptions Including 7.00%
Actuarial Accrued Liability Change from prior column Cumulative change	\$2,780.0M	\$2,846.1M +66.1M +66.1M	\$2,996.8M +150.7M +216.8M
Actuarial Value of Assets	\$1,964.5M	\$1,964.5M	\$1,964.5M
Unfunded Actuarial Accrued Liability	\$815.5M	\$881.6M	\$1,032.3M
Funded Percentage Change from prior column Cumulative change	70.7%	69.0% -1.7% -1.7%	65.6% -3.4% -5.1%
Normal Cost Change from prior column Cumulative change	\$53.2M	\$59.3M +6.1M +6.1M	\$67.7M +8.4M +14.5M
Actuarially Determined Contribution for FY 2021	\$83.9M	\$95.8M	\$113.6M
Change from prior column Cumulative change		+11.9M +11.9M	+17.8M +29.7M