
SUMMARY OF 2017 VALUATION RESULTS

South Carolina Retirement System (SCRS)

Executive Summary

(Dollar amounts expressed in thousands)

	Valuation Date:	
	July 1, 2017	July 1, 2016
Membership		
• Number of		
- Active Members	193,985	190,923
- TERI Members	6,630	8,332
- Retirees and Beneficiaries	133,658	129,523
- Inactive Members	176,045	169,806
- Total	510,318	498,584
• Projected payroll of active members	\$8,592,885	\$8,213,042
• Projected payroll for all members, including members in ORP, TERI, and working retirees	\$10,921,112	\$10,497,446
Required Contribution Rates^{1, 2}		
• Employer contribution rate	14.56%	11.99%
• Member	9.00%	9.09%
Assets		
• Market value	\$25,732,829	\$23,996,362
• Actuarial value	27,241,570	27,293,968
• Return on market value	11.9%	-0.7%
• Return on actuarial value	3.7%	3.3%
• Ratio of actuarial to market value of assets	105.9%	113.7%
• External cash flow %	-4.2%	-3.9%
Actuarial Information		
• Normal cost %	10.72%	10.27%
• Actuarial accrued liability (AAL)	\$48,374,725	\$45,859,906
• Unfunded actuarial accrued liability (UAAL)	21,133,155	18,565,938
• Funded ratio	56.3%	59.5%
• Funding period (years) ³	24	30
Reconciliation of UAAL		
• Beginning of Year UAAL	\$18,565,938	\$16,753,255
- Interest on UAAL	1,392,445	1,256,494
- Amortization payment	(1,112,307)	(1,017,186)
- Assumption/method changes	1,309,385	467,722
- Asset experience	1,005,145	1,131,589
- Salary experience	147,345	(17,241)
- Other liability experience	(174,796)	(8,695)
- Legislative Changes	0	0
• End of Year UAAL	\$21,133,155	\$18,565,938

¹ The required contribution rates shown for 2016 were established by Section 9-1-1085 of the South Carolina Code prior to enactment of the Retirement System Funding and Administration Act of 2017. The required contribution rates shown for 2017 reflect the changes due to the enactment of the Retirement System Funding and Administration Act of 2017. The actual employer contribution rates in effect for FY 2017, FY 2018, and FY 2019, are 11.56%, 13.56%, and 14.56%, respectively. Similarly, the actual member contribution rates in effect for FY 2017, FY 2018, and FY 2019, are 8.66%, 9.00%, and 9.00%, respectively.

² The employer contribution rates shown above include the cost of incidental death benefits.

³ The funding period for 2017 is determined on an actuarial value of asset basis and is based on the contribution rate scheduled to become effective for FY 2019 (i.e. beginning July 1, 2018 and ending June 30, 2019).

Police Officers Retirement System (PORS)

Executive Summary

(Dollar amounts expressed in thousands)

	Valuation Date:	
	July 1, 2017	July 1, 2016
Membership		
• Number of		
- Active members	27,056	26,651
- Retirees and beneficiaries	17,887	17,288
- Inactive members	16,004	15,001
- Total	60,947	58,940
• Projected payroll of active members	\$1,263,314	\$1,187,195
• Projected payroll for all active members, including working retirees	\$1,384,871	\$1,312,199
Required Contribution Rates^{1,2}		
• Employer contribution rate	17.24%	14.28%
• Member	9.75%	9.28%
Assets		
• Market value	\$4,274,123	\$3,876,036
• Actuarial value	4,480,894	4,354,853
• Return on market value	11.8%	-0.7%
• Return on actuarial value	4.3%	3.7%
• Ratio - actuarial value to market value	104.8%	112.4%
• External cash flow %	-1.4%	-1.8%
Actuarial Information		
• Normal cost %	14.73%	14.02%
• Actuarial accrued liability (AAL)	\$7,109,612	\$6,567,397
• Unfunded actuarial accrued liability (UAAL)	2,628,718	2,212,544
• Funded ratio	63.0%	66.3%
• Funding period (years) ³	23	30
Reconciliation of UAAL		
• Beginning of Year UAAL	\$2,212,544	\$1,895,301
- Interest on UAAL	165,941	142,148
- Amortization payment	(144,518)	(123,814)
- Assumption/method changes	213,979	120,909
- Asset experience	142,806	160,261
- Salary experience	70,073	17,265
- Other liability experience	(32,107)	474
- Legislative Changes	0	0
• End of Year UAAL	\$2,628,718	\$2,212,544

¹ The required contribution rates shown for 2016 were established by Section 9-11-225 of the South Carolina Code prior to enactment of the Retirement System Funding and Administration Act of 2017. The required contribution rates shown for 2017 reflect the changes due to the enactment of the Retirement System Funding and Administration Act of 2017. The actual employer contribution rates in effect for FY 2017, FY 2018, and FY 2019, are 14.24%, 16.24%, and 17.24%, respectively. Similarly, the actual member contribution rates in effect for FY 2017, FY 2018, and FY 2019, are 9.24%, 9.75%, and 9.75%, respectively.

² The employer contribution rates shown above include the cost of incidental death benefits.

³ The funding period for 2017 is determined on an actuarial value of asset basis and is based on the contribution rate scheduled to become effective for FY 2019 (i.e. beginning July 1, 2018 and ending June 30, 2019).

Retirement System for Judges and Solicitors (JSRS)

Executive Summary

(Dollar amounts expressed in thousands)

Valuation Date:	July 1, 2017	July 1, 2016
Membership		
<ul style="list-style-type: none"> • Number of <ul style="list-style-type: none"> - Active members¹ 160 - Retirees and beneficiaries 191 - DROP and Retired-in-Place members 22 - Inactive members <u>3</u> - Total 354 • Projected payroll of active members \$22,347 	<ul style="list-style-type: none"> - Active members¹ 157 - Retirees and beneficiaries 187 - DROP and Retired-in-Place members 23 - Inactive members <u>2</u> - Total 346 	<ul style="list-style-type: none"> - Active members¹ 157 - Retirees and beneficiaries 187 - DROP and Retired-in-Place members 23 - Inactive members <u>2</u> - Total 346
Contribution Rates		
<ul style="list-style-type: none"> • Employer contribution rate 52.49%² • Member 10.00% 	<ul style="list-style-type: none"> • Employer contribution rate 49.42%³ • Member 10.00% 	<ul style="list-style-type: none"> • Employer contribution rate 49.42%³ • Member 10.00%
Assets		
<ul style="list-style-type: none"> • Market value \$152,151 • Actuarial value 160,189 • Return on market value 11.8% • Return on actuarial value 4.0% • Ratio of actuarial to market value of assets 105.3% • External cash flow % -3.3% 	<ul style="list-style-type: none"> • Market value \$140,717 • Actuarial value 158,837 • Return on market value -0.7% • Return on actuarial value 3.6% • Ratio of actuarial to market value of assets 112.9% • External cash flow % -3.3% 	<ul style="list-style-type: none"> • Market value \$140,717 • Actuarial value 158,837 • Return on market value -0.7% • Return on actuarial value 3.6% • Ratio of actuarial to market value of assets 112.9% • External cash flow % -3.3%
Actuarial Information		
<ul style="list-style-type: none"> • Normal cost % 29.30% • Actuarial accrued liability (AAL) \$295,630 • Unfunded actuarial accrued liability (UAAL) 135,441 • Funded ratio 54.2% • Funding period (years) 30 	<ul style="list-style-type: none"> • Normal cost % 27.69% • Actuarial accrued liability (AAL) \$283,304 • Unfunded actuarial accrued liability (UAAL) 124,467 • Funded ratio 56.1% • Funding period (years) 30 	<ul style="list-style-type: none"> • Normal cost % 27.69% • Actuarial accrued liability (AAL) \$283,304 • Unfunded actuarial accrued liability (UAAL) 124,467 • Funded ratio 56.1% • Funding period (years) 30
Reconciliation of UAAL		
<ul style="list-style-type: none"> • Beginning of Year UAAL \$124,467 - Interest on UAAL 9,341 - Amortization payment (8,675) - Assumption/method changes 9,577 - Asset experience 5,410 - COLA (5,276) - Salary experience (409) - Other liability experience 1,006 - Legislative Changes <u>0</u> • End of Year UAAL \$135,441 	<ul style="list-style-type: none"> • Beginning of Year UAAL \$111,692 - Interest on UAAL 8,377 - Amortization payment (7,609) - Assumption/method changes 6,102 - Asset experience 6,129 - COLA 907 - Salary experience (2,346) - Other liability experience 1,215 - Legislative Changes <u>0</u> • End of Year UAAL \$124,467 	<ul style="list-style-type: none"> • Beginning of Year UAAL \$111,692 - Interest on UAAL 8,377 - Amortization payment (7,609) - Assumption/method changes 6,102 - Asset experience 6,129 - COLA 907 - Salary experience (2,346) - Other liability experience 1,215 - Legislative Changes <u>0</u> • End of Year UAAL \$124,467

¹ Active member counts include unfilled positions and members in DROP or Retired-in-Place.

² The contribution rate determined by the July 1, 2017 actuarial valuation is certified by the Board to be effective for the fiscal year beginning July 1, 2018. The contribution rate includes the cost of incidental death benefits

³ The Board elected to make the contribution rate determined by the July 1, 2016 valuation effective for the fiscal year beginning July 1, 2017.

Retirement System for Members of the General Assembly of the State of South Carolina (GARS)

Executive Summary

(Dollar amounts expressed in thousands)

Valuation Date:	July 1, 2017	July 1, 2016
Membership		
<ul style="list-style-type: none"> • Number of <ul style="list-style-type: none"> - Active positions - Special contributors - Retirees and beneficiaries - Inactive members - Total • Projected payroll 	87 19 354 35 <hr/> 495 \$1,961	102 17 358 32 <hr/> 509 \$2,316
Contribution Requirement		
<ul style="list-style-type: none"> • Member contribution rate • Employer contribution requirement 	11.00% \$5,804 ¹	11.00% \$5,428 ²
Assets		
<ul style="list-style-type: none"> • Market value • Actuarial value • Return on market value • Return on actuarial value • Ratio - actuarial value to market value • External cash flow % 	\$31,789 34,887 10.5% 1.8% 109.7% -5.5%	\$30,188 35,926 -0.8% 1.6% 119.0% -6.4%
Actuarial Information		
<ul style="list-style-type: none"> • Normal cost % • Actuarial accrued liability (AAL) • Unfunded actuarial accrued liability (UAAL) • Funded ratio • Funding period from the valuation date 	23.77% \$74,855 39,968 46.6% 10 Years	22.91% \$74,996 39,070 47.9% 11 Years
Reconciliation of UAAL		
<ul style="list-style-type: none"> • Beginning of Year UAAL - Interest on UAAL - Amortization payment - Assumption change - Asset experience - Liability experience - Legislative changes • End of Year UAAL 	\$39,070 2,930 (4,593) 1,510 1,851 (800) 0 <hr/> 39,968	\$37,197 2,790 (4,542) 808 2,099 718 0 <hr/> \$39,070

¹ The contribution requirement determined by the July 1, 2017 valuation is subject to adoption by the Board before becoming effective for the fiscal year beginning July 1, 2019. Note, the Board also has the authority to make the contribution requirement effective for the fiscal year beginning July 1, 2018.

² The contribution requirement determined by the July 1, 2016 valuation was adopted by the Board to be effective for the fiscal year beginning July 1, 2017.

South Carolina National Guard Supplemental Retirement Plan (SCNG)

Executive Summary

(Dollar amounts expressed in thousands)

Valuation Date:	July 1, 2017	July 1, 2016
Membership <ul style="list-style-type: none"> • Number of <ul style="list-style-type: none"> - Active Members - Retirees and Beneficiaries - Inactive Members - Total 	12,116 4,789 1,901 <hr/> 18,806	12,253 4,709 1,969 <hr/> 18,931
Annual Required Contribution <ul style="list-style-type: none"> • Member • Employer contribution¹ 	\$0 \$5,290	\$0 \$4,814
Assets <ul style="list-style-type: none"> • Market value • Actuarial value • Return on market value • Return on actuarial value • Ratio - actuarial value to market value • External cash flow % 	\$26,036 27,807 10.8% 3.4% 106.8% 0.7%	\$23,350 26,751 -0.6% 2.9% 114.6% 1.2%
Actuarial Information <ul style="list-style-type: none"> • Normal cost • Actuarial accrued liability (AAL) • Unfunded actuarial accrued liability (UAAL) • Funded ratio • Amortization period² 	\$819 66,506 38,699 41.8% 19	\$763 64,445 37,694 41.5% 17
Reconciliation of UAAL <ul style="list-style-type: none"> • Beginning of Year UAAL - Interest on UAAL - Amortization payment - Assumption/method changes - Asset experience - Other liability experience - Legislative changes • End of Year UAAL 	\$37,694 2,827 (4,115) 1,829 1,123 (659) 0 <hr/> \$38,699	\$36,414 2,731 (4,194) 2,276 1,197 (730) 0 <hr/> \$37,694

¹ The contribution amount determined by the actuarial valuation is effective for the following fiscal year.

² There are four years remaining in the amortization of the unfunded liability attributable to due to the 2006 legislation change and 19 years remaining in the amortization of the unfunded liability due to other plan experience. The 17 year amortization period disclosed for 2016 is a blended amortization period. The change in the disclosure method is to better communicate when the plan is expected to attain a 100% funded ratio.