STATE TEACHERS RETIREMENT SYSTEM Amortization of Change in Proportionate Share of Net Pension Liability As of and for the Year Ended June 30, 2017

Employe		FY 2016	FY 2017	Difference in Allocation %	Difference in NPL(\$)	FY 2017 Immediately	FY 2017 Deferred	FY 2018 Amount	FY 2018 Deferred	FY 2019 Amount	FY 2019 Deferred	FY 2020 Amount	FY 2020 Deferred	FY 2021 Amount	FY 2021 Deferred	FY 2022 Amount	FY 2022 Deferred
Number	Employer			2016 to FY 2017	FY 2016 to FY 2017										Inflows/Outflows		
000100	Barbour County Board of Education	0.013203%	0.016206%	0.003003%	\$ 107,971	\$ 18,055 \$	89.916	\$ 18.055	\$ 71.861	\$ 18.055	\$ 53.806	\$ 18.055	\$ 35,751	\$ 18,055	\$ 17.696	\$ 17.696	\$ -
000200	Berkeley County Board of Education	0.475506%	0.444592%	-0.030914%	(1,111,491)	(185,868)	(925,623)	(185,868)	(739,755)	(185,868)	(553,887)	(185,868)	(368,019)	(185,868)	(182,151)	(182,151)	
000300	Boone County Board of Education	0.171985%	0.029939%	-0.142046%	(5,107,162)	(854,040)	(4,253,122)	(854,040)	(3,399,082)	(854,040)	(2,545,042)	(854,040)	(1,691,002)	(854,040)	(836,962)	(836,962)	-
000400 000500	Braxton County Board of Education Brooke County Board of Education	0.016981% 0.099112%	0.013173% 0.085686%	-0.003808% -0.013426%	(136,914) (482,722)	(22,895) (80,723)	(114,019) (401,999)	(22,895) (80,723)	(91,124) (321,276)	(22,895) (80,723)	(68,229) (240,553)	(22,895) (80,723)	(45,334) (159,830)	(22,895) (80,723)	(22,439) (79.107)	(22,439) (79,107)	-
000500	Cabell County Board of Education	0.099112%	0.085686%	-0.013426% 0.007029%	(482,722) 252,723	(80,723) 42,261	(401,999) 210,462	42,261	168,201	42,261	(240,553) 125,940	42,261	(159,830)	42,261	(79,107) 41,418	(79,107) 41,418	
000700	Calhoun County Board of Education	0.025139%	0.011780%	-0.013359%	(480,313)	(80,320)	(399,993)	(80,320)	(319,673)	(80,320)	(239,353)	(80,320)	(159,033)	(80,320)	(78,713)	(78,713)	
000800	Clay County Board of Education	0.027701%	0.031526%	0.003825%	137,525	22,997	114,528	22,997	91,531	22,997	68,534	22,997	45,537	22,997	22,540	22,540	-
000900	Doddridge County Board of Education	0.059552%	0.061973%	0.002421%	87,045	14,556	72,489	14,556	57,933	14,556	43,377	14,556	28,821	14,556	14,265	14,265	-
001000 001100	Fayette County Board of Education Gilmer County Board of Education	0.111376% 0.012770%	0.112945% 0.012283%	0.001569% -0.000487%	56,412	9,433	46,979	9,433 (2,928)	37,546	9,433	28,113	9,433 (2,928)	18,680	9,433 (2,928)	9,247	9,247 (2.870)	-
001100	Grant County Board of Education Grant County Board of Education	0.012770%	0.012283%	-0.000487% -0.018151%	(17,510) (652,606)	(2,928) (109,131)	(14,582) (543,475)	(109,131)	(11,654) (434,344)	(2,928) (109,131)	(8,726) (325,213)	(109,131)	(5,798) (216,082)	(109,131)	(2,870) (106,951)	(2,870)	
001300	Greenbrier County Board of Education	0.126746%	0.097493%	-0.029253%	(1,051,771)	(175,881)	(875,890)	(175,881)	(700,009)	(175,881)	(524,128)	(175,881)	(348,247)	(175,881)	(172,366)	(172,366)	
001400	Hampshire County Board of Education	0.051354%	0.040626%	-0.010728%	(385,718)	(64,501)	(321,217)	(64,501)	(256,716)	(64,501)	(192,215)	(64,501)	(127,714)	(64,501)	(63,213)	(63,213)	
001500	Hancock County Board of Education	0.099204%	0.082123%	-0.017081%	(614,135)	(102,698)	(511,437)	(102,698)	(408,739)	(102,698)	(306,041)	(102,698)	(203,343)	(102,698)	(100,645)	(100,645)	
001600	Hardy County Board of Education	0.012561%	0.018911%	0.006350%	228,310	38,179	190,131	38,179	151,952	38,179	113,773	38,179	75,594	38,179	37,415	37,415	-
001700 001800	Harrison County Board of Education Jackson County Board of Education	0.385828%	0.380651%	-0.005177% -0.056981%	(186,135) (2,048,711)	(31,126) (342,594)	(155,009) (1,706,117)	(31,126) (342,594)	(123,883) (1,363,523)	(31,126) (342,594)	(92,757) (1,020,929)	(31,126) (342,594)	(61,631) (678,335)	(31,126) (342,594)	(30,505) (335,741)	(30,505) (335,741)	
001900	Jefferson County Board of Education	0.271456%	0.213198%	-0.058258%	(2,094,624)	(350,272)	(1,744,352)	(350,272)	(1,394,080)	(350,272)	(1,043,808)	(350,272)	(693,536)	(350.272)	(343,264)	(343,264)	
002000	Kanawha County Board of Education	0.569236%	0.639529%	0.070293%	2,527,334	422,631	2,104,703	422,631	1,682,072	422,631	1,259,441	422,631	836,810	422,631	414,179	414,179	
002100	Lewis County Board of Education	0.051328%	0.059146%	0.007818%	281,091	47,005	234,086	47,005	187,081	47,005	140,076	47,005	93,071	47,005	46,066	46,066	-
002200	Lincoln County Board of Education	0.054296%	0.062361%	0.008065%	289,971	48,490	241,481	48,490	192,991	48,490	144,501	48,490	96,011	48,490	47,521	47,521	-
002300 002400	Logan County Board of Education Marion County Board of Education	0.128593% 0.164101%	0.099102%	-0.029491% -0.006631%	(1,060,328) (238,413)	(177,312) (39,868)	(883,016) (198,545)	(177,312)	(705,704) (158,677)	(177,312) (39,868)	(528,392) (118,809)	(177,312) (39,868)	(351,080) (78,941)	(177,312)	(173,768) (39,073)	(173,768) (39,073)	-
002500	Marshall County Board of Education	0.174551%	0.217333%	0.042782%	1,538,196	257,223	1,280,973	257,223	1,023,750	257,223	766,527	257,223	509,304	257,223	252,081	252,081	
002600	Mason County Board of Education	0.086675%	0.074556%	-0.012119%	(435,730)	(72,865)	(362,865)	(72,865)	(290,000)	(72,865)	(217,135)	(72,865)	(144,270)	(72,865)	(71,405)	(71,405)	-
002700	McDowell County Board of Education	0.117349%	0.102076%	-0.015273%	(549,130)	(91,828)	(457,302)	(91,828)	(365,474)	(91,828)	(273,646)	(91,828)	(181,818)	(91,828)	(89,990)	(89,990)	-
002800	Mercer County Board of Education	0.217177%	0.198047%	-0.019130%	(687,805)	(115,018)	(572,787)	(115,018)	(457,769)	(115,018)	(342,751)	(115,018)	(227,733)	(115,018)	(112,715)	(112,715)	
002900 003000	Mineral County Board of Education Mingo County Board of Education	0.106744% 0.070458%	0.098546% 0.051810%	-0.008198% -0.018648%	(294,753)	(49,290)	(245,463)	(49,290)	(196,173)	(49,290)	(146,883)	(49,290)	(97,593)	(49,290)	(48,303)	(48,303)	-
003000	Monongalia County Board of Education Monongalia County Board of Education	0.070458%	0.051810%	-0.018648%	(670,475) (602,126)	(112,120) (100,690)	(558,355) (501,436)	(112,120) (100,690)	(446,235) (400,746)	(112,120) (100,690)	(334,115) (300,056)	(112,120) (100,690)	(221,995) (199,366)	(112,120) (100,690)	(109,875) (98,676)	(109,875) (98,676)	
003200	Monroe County Board of Education	0.030419%	0.027166%	-0.003253%	(116,959)	(19,558)	(97.401)	(19,558)	(77,843)	(19,558)	(58,285)	(19,558)	(38,727)	(19,558)	(19.169)	(19.169)	
003300	Morgan County Board of Education	0.038309%	0.042214%	0.003905%	140,401	23,478	116,923	23,478	93,445	23,478	69,967	23,478	46,489	23,478	23,011	23,011	-
003400	Nicholas County Board of Education	0.060486%	0.069326%	0.008840%	317,836	53,150	264,686	53,150	211,536	53,150	158,386	53,150	105,236	53,150	52,086	52,086	-
003500	Ohio County Board of Education	0.169224%	0.170526%	0.001302%	46,812	7,828	38,984	7,828	31,156	7,828	23,328	7,828	15,500	7,828	7,672	7,672	-
003600 003700	Pendleton County Board of Education Pleasants County Board of Education	0.013995% 0.072102%	0.001191%	-0.012804% -0.011544%	(460,359) (415,056)	(76,983) (69,407)	(383,376) (345,649)	(76,983) (69,407)	(306,393) (276,242)	(76,983) (69,407)	(229,410) (206,835)	(76,983) (69,407)	(152,427) (137,428)	(76,983) (69,407)	(75,444) (68.021)	(75,444) (68.021)	
003700	Pocahontas County Board of Education	0.012748%	0.016669%	0.003921%	140,977	23,575	117,402	23,575	93,827	23,575	70,252	23,575	46,677	23,575	23,102	23,102	
003900	Preston County Board of Education	0.037244%	0.042395%	0.005151%	185,200	30,970	154,230	30,970	123,260	30,970	92,290	30,970	61,320	30,970	30,350	30,350	-
004000	Putnam County Board of Education	0.219401%	0.196490%	-0.022911%	(823,749)	(137,751)	(685,998)	(137,751)	(548,247)	(137,751)	(410,496)	(137,751)	(272,745)	(137,751)	(134,994)	(134,994)	-
004100	Raleigh County Board of Education	0.305962%	0.276969%	-0.028993%	(1,042,422)	(174,318)	(868,104)	(174,318)	(693,786)	(174,318)	(519,468)	(174,318)	(345,150)	(174,318)	(170,832)	(170,832)	-
004200 004300	Randolph County Board of Education Ritchie County Board of Education	0.068217% 0.041068%	0.051951% 0.034167%	-0.016266% -0.006901%	(584,832) (248,120)	(97,798) (41,492)	(487,034) (206,628)	(97,798) (41,492)	(389,236) (165,136)	(97,798) (41,492)	(291,438) (123,644)	(97,798) (41,492)	(193,640) (82,152)	(97,798) (41,492)	(95,842) (40,660)	(95,842) (40,660)	
004300	Roane County Board of Education	0.025767%	0.016370%	-0.009397%	(337,862)	(56,499)	(281,363)	(56,499)	(224,864)	(56,499)	(168,365)	(56,499)	(111,866)	(56,499)	(55,367)	(55,367)	
004500	Summers County Board of Education	0.017239%	0.011660%	-0.005579%	(200,589)	(33,543)	(167,046)	(33,543)	(133,503)	(33,543)	(99,960)	(33,543)	(66,417)	(33,543)	(32,874)	(32,874)	
004600	Taylor County Board of Education	0.029610%	0.020440%	-0.009170%	(329,701)	(55,134)	(274,567)	(55,134)	(219,433)	(55,134)	(164,299)	(55,134)	(109,165)	(55,134)	(54,031)	(54,031)	-
004700	Tucker County Board of Education	0.011224% 0.038357%	0.012973%	0.001749% 0.005154%	62,884	10,516	52,368	10,516	41,852	10,516	31,336	10,516	20,820	10,516	10,304	10,304	-
004800 004900	Tyler County Board of Education Upshur County Board of Education	0.038357%	0.043511%	-0.024524%	185,308 (881,743)	30,988 (147,449)	154,320 (734,294)	30,988 (147,449)	123,332 (586,845)	30,988 (147,449)	92,344 (439,396)	30,988 (147,449)	61,356 (291,947)	30,988 (147,449)	30,368 (144,498)	30,368 (144,498)	
005000	Wayne County Board of Education	0.139280%	0.127007%	-0.012273%	(441,267)	(73,790)	(367,477)	(73,790)	(293,687)	(73,790)	(219,897)	(73,790)	(146,107)	(73,790)	(72,317)	(72,317)	
005100	Webster County Board of Education	0.013438%	0.021241%	0.007803%	280,551	46,915	233,636	46,915	186,721	46,915	139,806	46,915	92,891	46,915	45,976	45,976	-
005200	Wetzel County Board of Education	0.121059%	0.110103%	-0.010956%	(393,915)	(65,872)	(328,043)	(65,872)	(262,171)	(65,872)	(196,299)	(65,872)	(130,427)	(65,872)	(64,555)	(64,555)	-
005300 005400	Wirt County Board of Education	0.013422%	0.007375%	-0.006047%	(217,416)	(36,357)	(181,059)	(36,357)	(144,702)	(36,357)	(108,345)	(36,357)	(71,988)	(36,357)	(35,631)	(35,631)	-
005500	Wood County Board of Education Wyoming County Board of Education	0.298110% 0.113955%	0.262330% 0.084471%	-0.035780% -0.029484%	(1,286,444) (1,060,076)	(215,124) (177,270)	(1,071,320) (882,806)	(215,124) (177,270)	(856,196) (705,536)	(215,124) (177,270)	(641,072) (528,266)	(215,124) (177,270)	(425,948) (350,996)	(215,124) (177,270)	(210,824) (173,726)	(210,824) (173,726)	
0482	Bluefield State College	0.019228%	0.014434%	-0.004794%	(172,365)	(28,824)	(143,541)	(28,824)	(114,717)	(28,824)	(85,893)	(28,824)	(57,069)	(28,824)	(28,245)	(28,245)	
005700	River Valley Child Development Services	0.005653%	0.005611%	-0.000042%	(1,510)	(253)	(1,257)	(253)	(1,004)	(253)	(751)	(253)	(498)	(253)	(245)	(245)	
0483	Concord University	0.035737%	0.026241%	-0.009496%	(341,422)	(57,094)	(284,328)	(57,094)	(227,234)	(57,094)	(170,140)	(57,094)	(113,046)	(57,094)	(55,952)	(55,952)	-
0484	Fairmont State University	0.024067%	0.021664%	-0.002403%	(86,398)	(14,448)	(71,950)	(14,448)	(57,502)	(14,448)	(43,054)	(14,448)	(28,606)	(14,448)	(14,158)	(14,158)	-
0485 006100	Glenville State College Marshall University Research Corp	0.039778% 0.005142%	0.045449% 0.005395%	0.005671% 0.000253%	203,897 9.096	34,096 1,521	169,801 7,575	34,096 1,521	135,705 6.054	34,096 1,521	101,609 4,533	34,096 1,521	67,513 3,012	34,096 1,521	33,417 1,491	33,417 1.491	
006200	Marshall University	0.005142%	0.005395%	-0.025269%	(908,529)	(151,928)	(756,601)	(151,928)	(604,673)	(151,928)	(452,745)	(151,928)	(300,817)	(151,928)	(148,889)	(148,889)	-
0486	Shepherd University	0.009516%	0.007727%	-0.001789%	(64,322)	(10,756)	(53,566)	(10,756)	(42,810)	(10,756)	(32,054)	(10,756)	(21,298)	(10,756)	(10,542)	(10,542)	-
0488	West Liberty University	0.019397%	0.018115%	-0.001282%	(46,093)	(7,708)	(38,385)	(7,708)	(30,677)	(7,708)	(22,969)	(7,708)	(15,261)	(7,708)	(7,553)	(7,553)	-
0403	West Virginia School for the Deaf and Blind	0.166615%	0.157698%	-0.008917%	(320,604)	(53,613)	(266,991)	(53,613)	(213,378)	(53,613)	(159,765)	(53,613)	(106,152)	(53,613)	(52,539)	(52,539)	-
0490 007500	West Virginia State University West Virginia University	0.031345% 0.308824%	0.027162% 0.265661%	-0.004183% -0.043163%	(150,397) (1,551,895)	(25,150) (259,514)	(125,247) (1,292,381)	(25,150) (259,514)	(100,097) (1,032,867)	(25,150) (259,514)	(74,947) (773,353)	(25,150) (259,514)	(49,797) (513,839)	(25,150) (259,514)	(24,647) (254,325)	(24,647) (254,325)	-
0487	Southern West Virginia Community & Technical College	0.308824%	0.205001%	-0.043163%	(1,551,895)	(6,271)	(31,229)	(6,271)	(24,958)	(6,271)	(18,687)	(6,271)	(12,416)	(6,271)	(6,145)	(6,145)	-
0489	West Virginia Northern Community College	0.008977%	0.007685%	-0.001292%	(46,453)	(7,768)	(38,685)	(7,768)	(30,917)	(7,768)	(23,149)	(7,768)	(15,381)	(7,768)	(7,613)	(7,613)	-
0495	West Virginia Network	0.003551%	0.003349%	-0.000202%	(7,263)	(1,215)	(6,048)	(1,215)	(4,833)	(1,215)	(3,618)	(1,215)	(2,403)	(1,215)	(1,188)	(1,188)	-
0447	Blue Ridge Community and Technical College	0.002620%	0.002401%	-0.000219%	(7,874)	(1,317)	(6,557)	(1,317)	(5,240)	(1,317)	(3,923)	(1,317)	(2,606)	(1,317)	(1,289)	(1,289)	-

STATE TEACHERS RETIREMENT SYSTEM Amortization of Change in Proportionate Share of Net Pension Liability As of and for the Year Ended June 30, 2017

				Difference in		FY 2017	FY 2017	FY 2018	FY 2018	FY 2019	FY 2019	FY 2020	FY 2020	FY 2021	FY 2021	FY 2022	FY 2022
Employer		FY 2016	FY 2017	Allocation %	Difference in NPL(\$)	Immediately	Deferred	Amount	Deferred	Amount	Deferred	Amount	Deferred	Amount	Deferred	Amount	Deferred
Number	Employer	Allocation %	Allocation %	FY 2016 to FY 2017	FY 2016 to FY 2017	Recognized I	nflows/Outflows	Recognized	Inflows/Outflows	Recognized 1	nflows/Outflows	Recognized 1	inflows/Outflows	Recognized	nflows/Outflows	Recognized I	nflows/Outflows
0446	Pierpont Community & Technical College	0.001903%	0.001812%	-0.000091%	(3,272)	(547)	(2,725)	(547)	(2,178)	(547)	(1,631)	(547)	(1,084)	(547)	(537)	(537)	
0444	Mountwest Community and Technical College	0.004432%	0.002065%	-0.002367%	(85,104)	(14,231)	(70,873)	(14,231)	(56,642)	(14,231)	(42,411)	(14,231)	(28,180)	(14,231)	(13,949)	(13,949)	-
0445	New River Community and Technical College	0.009557%	0.009317%	-0.000240%	(8,629)	(1,443)	(7,186)	(1,443)	(5,743)	(1,443)	(4,300)	(1,443)	(2,857)	(1,443)	(1,414)	(1,414)	-
009600	West Virginia University at Parkersburg	0.004724%	0.004122%	-0.000602%	(21,644)	(3,619)	(18,025)	(3,619)	(14,406)	(3,619)	(10,787)	(3,619)	(7,168)	(3,619)	(3,549)	(3,549)	-
0420	West Virginia Council for Community & Technical College Education	0.002745%	0.002589%	-0.000156%	(5,609)	(938)	(4,671)	(938)	(3,733)	(938)	(2,795)	(938)	(1,857)	(938)	(919)	(919)	-
0402	West Virginia Department of Education	0.613329%	0.541238%	-0.072091%	(2,591,980)	(433,441)	(2,158,539)	(433,441)	(1,725,098)	(433,441)	(1,291,657)	(433,441)	(858,216)	(433,441)	(424,775)	(424,775)	-
0493	Bridge Valley Community & Technical College	0.015699%	0.005536%	-0.010163%	(365,403)	(61,104)	(304,299)	(61,104)	(243,195)	(61,104)	(182,091)	(61,104)	(120,987)	(61,104)	(59,883)	(59,883)	-
0441	West Virginia Higher Education Policy Commission	0.011989%	0.010669%	-0.001320%	(47,460)	(7,936)	(39,524)	(7,936)	(31,588)	(7,936)	(23,652)	(7,936)	(15,716)	(7,936)	(7,780)	(7,780)	-
wvSAF	State of WV Special Funding - SAF	26.517190%	23.995523%	-2.521667%	(90,664,721)	(15,161,325)	(75,503,396)	(15,161,325)	(60,342,071)	(15,161,325)	(45,180,746)	(15,161,325)	(30,019,421)	(15,161,325)	(14,858,096)	(14,858,096)	-
wvARC	State of WV Special Funding - ARC Contributions	65.573438%	68.861113%	3.287675%	118,205,988	19,766,888	98,439,100	19,766,888	78,672,212	19,766,888	58,905,324	19,766,888	39,138,436	19,766,888	19,371,548	19,371,548	-
		100.000000%	100.000000%	0.000000%													

STATE TEACHERS RETIREMENT SYSTEM

Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions As of and for the Year Ended June 30, 2017

Determination of denominator in calculation of the Proportionate Share of Net Pension Liability:

Net Pension Liability (Asset), 07.01.2016 \$ 4,109,834,000

Plus: Deferred Inflows, 07.01.2016:

Diff in Experience, Proj vs Actual 24,003,000
Change in Assumptions Diff in Earnings, Proj vs Actual -

24,003,000

Less: Deferred Outflows, 07.01.2016:

Diff in Experience, Proj vs Actual (37,624,000)
Change in Assumptions (162,567,000)
Diff in Earnings, Proj vs Actual (338,218,000)

(538,409,000)

Δ in Proportionate Share, to be allocated \$ 3,595,428,000

Amortization periond = 71.76 months