

Funding Formula State Share Ratio Calculation

Once the core components of a formula driven funding system are defined, how is the amount the state should support determined? The funding formula includes a state share ratio that considers a district's revenue generating capacity and concentration of at-risk students. Combining these factors in a single state share ratio creates a special kind of average called a quadratic mean. The practical effect of using this type of calculation is the larger factor is weighted more heavily in a quadratic mean than a normal mean.

The calculation is:

$$\text{State Share Ratio (SSR)} = \sqrt{\frac{\text{SSRC}^2 + \%PK6FRPL^2}{2}}$$

- SSRC = State Share Ratio for the Community as defined in R.I.G.L. 16-7-20. The calculation is:

$$SSRC = 1 - (0.475 * \left\{ \frac{\text{(District EWAV/District RADM)}}{\text{(State EWAV/State RADM)}} \right\})$$

- EWAV = Equalized Weighted Assessed Valuation as defined in R.I.G.L. 16-7-21 and calculated by the Department of Administration's Office of Municipal Finance. This measure considers the total assessed valuations of real and tangible property for each city and town as of December 31 of the third preceding calendar year, adjusted for true market value, and adjusts for the ratio of median family income for the city or town as compared to the statewide median family income as reported in the latest available federal census data.
- RADM = Resident Average Daily Membership as defined in R.I.G.L. 16-7-22 and calculated by the R.I. Department of Education. This student data is currently used in all aid programs. RADM counts the students based on the district where they reside and gives the district credit for any time the student is an enrolled member of the district (present and absent).
- % PK6 FRPL = The percentage of students in grades PK-6 enrolled in the free and reduced price lunch program as calculated by the R.I. Department of Education.

The benefits of using this type of calculation include:

- Directs funding to where the greatest student needs are, whether they are a result of a district's capacity to pay or poverty concentration.
- Considers the "concentration effects" of poverty students on local schooling and neighborhood services. The concentration of a substantial number of at-risk students in a community will impose a heavier burden on the local service delivery system.
- Considers past policy decisions that have included a version of this type of formula since the inception of Operations Aid in the 1960s.

STATE SHARE RATIO FOR THE FORMULA (QUADRATIC MEAN)

Updated for FY 2016

District	SSRC	PK-6%	FY 2016 Quadratic Mean	FY 2015 calc	% Change from FY 2015
BARRINGTON	27.0%	7.1%	19.7%	21.2%	-1.5%
BRISTOL WARREN	30.6%	40.0%	35.6%	36.7%	-1.1%
BURRILLVILLE	66.8%	37.6%	54.2%	53.6%	0.6%
CENTRAL FALLS	97.0%	89.8%	93.5%	95.4%	-1.9%
CHARLESTOWN	0.0%	27.3%	19.3%	18.7%	0.6%
COVENTRY	62.6%	30.7%	49.3%	48.3%	1.0%
CRANSTON	62.9%	44.8%	54.6%	54.3%	0.3%
CUMBERLAND	54.8%	24.6%	42.5%	42.2%	0.3%
EAST GREENWICH	20.6%	9.1%	15.9%	12.7%	3.2%
EAST PROVIDENCE	63.8%	55.5%	59.8%	56.9%	2.9%
EXETER-W. GREEN	32.5%	18.0%	26.3%	27.1%	-0.9%
FOSTER	56.5%	22.1%	42.9%	40.4%	2.5%
FOSTER-GLOC	54.5%	23.8%	42.1%	41.7%	0.4%
GLOCESTER	53.3%	19.8%	40.2%	42.5%	-2.3%
HOPKINTON	57.4%	27.2%	44.9%	49.1%	-4.2%
JAMESTOWN	0.0%	12.3%	8.7%	8.6%	0.1%
JOHNSTON	48.9%	46.5%	47.7%	51.8%	-4.1%
LINCOLN	44.6%	30.8%	38.3%	39.6%	-1.2%
LITTLE COMPTON	0.0%	15.3%	10.8%	13.7%	-2.9%
MIDDLETOWN	33.9%	32.5%	33.2%	32.9%	0.3%
NARRAGANSETT	0.0%	26.7%	18.9%	18.9%	0.0%
NEW SHOREHAM	0.0%	11.7%	8.3%	9.5%	-1.2%
NEWPORT	0.0%	65.0%	46.0%	46.7%	-0.8%
NORTH KINGSTOWN	28.4%	26.2%	27.3%	27.3%	0.0%
NORTH PROVIDENCE	66.6%	48.2%	58.1%	56.1%	2.0%
NORTH SMITHFIELD	46.6%	21.9%	36.4%	35.9%	0.5%
PAWTUCKET	86.5%	79.6%	83.1%	83.3%	-0.2%
PORTSMOUTH	15.3%	17.2%	16.3%	11.3%	4.9%
PROVIDENCE	85.9%	89.7%	87.8%	88.0%	-0.2%
RICHMOND	52.0%	20.9%	39.6%	39.1%	0.5%
SCITUATE	35.1%	19.1%	28.3%	32.5%	-4.2%
SMITHFIELD	30.1%	19.3%	25.3%	21.8%	3.5%
SOUTH KINGSTOWN	16.2%	21.4%	19.0%	18.5%	0.5%
TIVERTON	39.2%	30.6%	35.2%	32.6%	2.6%
WARWICK	43.3%	37.2%	40.4%	41.3%	-1.0%
WEST WARWICK	71.1%	56.4%	64.2%	62.7%	1.5%
WESTERLY	0.0%	43.0%	30.4%	28.7%	1.7%
WOONSOCKET	89.1%	80.8%	85.1%	84.2%	0.9%

STATE SHARE RATIO FOR THE COMMUNITY CALCULATION

District	EWAV 12/31/2011 <small>(ACS 2008-2012/Dec 2013)</small>	6/30/2014 RADM (*)	State Share Ratio Community (SSRC)	Adjusted SSRC (**)	Change from FY 15
BARRINGTON	\$4,294,620,703	3,245	27.005%	27.0%	-2.2%
BRISTOL WARREN	\$4,311,773,477	3,429	30.646%	30.6%	-4.9%
BURRILLVILLE	\$1,455,405,851	2,417	66.789%	66.8%	1.1%
CENTRAL FALLS	\$209,007,560	3,888	97.035%	97.0%	0.4%
CHARLESTOWN	\$2,517,075,414	1,008	-37.726%	0.0%	0.0%
COVENTRY	\$3,244,729,537	4,782	62.576%	62.6%	0.9%
CRANSTON	\$6,876,888,665	10,228	62.916%	62.9%	1.3%
CUMBERLAND	\$3,977,780,117	4,857	54.830%	54.8%	0.0%
EAST GREENWICH	\$3,416,411,240	2,374	20.627%	20.6%	4.7%
EAST PROVIDENCE	\$3,509,132,211	5,346	63.796%	63.8%	3.4%
EXETER-W. GREEN	\$2,021,826,006	1,653	32.539%	32.5%	-1.7%
FOSTER	\$224,594,860	285	56.535%	56.5%	4.8%
FOSTER-GLOC	\$953,001,826	1,154	54.452%	54.5%	0.7%
GLOCESTER	\$422,851,787	499	53.262%	53.3%	-1.6%
HOPKINTON	\$920,303,420	1,192	57.417%	57.4%	-4.6%
JAMESTOWN	\$3,208,545,248	653	-171.004%	0.0%	0.0%
JOHNSTON	\$2,872,305,347	3,099	48.880%	48.9%	-7.1%
LINCOLN	\$3,289,228,476	3,275	44.606%	44.6%	-2.5%
LITTLE COMPTON	\$2,466,907,667	393	-246.211%	0.0%	0.0%
MIDDLETOWN	\$2,749,617,693	2,293	33.862%	33.9%	0.2%
NARRAGANSETT	\$5,886,860,460	1,399	-132.085%	0.0%	0.0%
NEW SHOREHAM	\$2,548,133,822	117	-1101.205%	0.0%	0.0%
NEWPORT	\$5,534,084,319	2,032	-50.211%	0.0%	0.0%
NORTH KINGSTOWN	\$5,102,235,650	3,930	28.394%	28.4%	-0.7%
NORTH PROVIDENCE	\$2,168,942,173	3,579	66.575%	66.6%	2.1%
NORTH SMITHFIELD	\$1,712,200,950	1,768	46.586%	46.6%	-0.5%
PAWTUCKET	\$2,461,386,518	10,077	86.528%	86.5%	0.7%
PORTSMOUTH	\$3,853,245,896	2,509	15.295%	15.3%	14.2%
PROVIDENCE	\$6,717,133,206	26,192	85.855%	85.9%	0.3%
RICHMOND	\$1,023,555,447	1,175	51.954%	52.0%	1.3%
SCITUATE	\$1,693,333,481	1,440	35.142%	35.1%	-7.2%
SMITHFIELD	\$3,003,765,973	2,370	30.097%	30.1%	4.1%
SOUTH KINGSTOWN	\$5,253,197,490	3,456	16.164%	16.2%	-0.9%
TIVERTON	\$1,999,179,390	1,815	39.249%	39.2%	4.9%
WARWICK	\$9,404,110,189	9,151	43.320%	43.3%	-2.0%
WEST WARWICK	\$1,776,956,166	3,390	71.089%	71.1%	0.2%
WESTERLY	\$5,785,156,386	3,103	-2.829%	0.0%	0.0%
WOONSOCKET	\$1,142,596,841	5,774	89.086%	89.1%	0.5%
	\$120,008,081,462	139,347			

* Includes charter and state school students

** Adjusted EWAV to bring districts with negative EWAV to 0%

June 30, 2014 - TOTAL RESIDENT PK-6%

distname_res	PK-6 FRPL	PK-6 Total	
	ADM	ADM	
Barrington Total	117	1,651	7.1%
Bristol-Warren Total	758	1,895	40.0%
Burrillville Total	482	1,283	37.6%
Central Falls Total	2,035	2,265	89.8%
Charlestown Total	139	510	27.3%
Coventry Total	740	2,411	30.7%
Cranston Total	2,398	5,347	44.8%
Cumberland Total	663	2,695	24.6%
East Greenwich Total	111	1,223	9.1%
East Providence Total	1,639	2,951	55.5%
Exeter-WG Total	142	788	18.0%
Foster Total	63	285	22.1%
Foster-Glocester Total	34	143	23.8%
Glocester Total	99	499	19.8%
Hopkinton Total	165	607	27.2%
Jamestown Total	48	391	12.3%
Johnston Total	755	1,622	46.5%
Lincoln Total	535	1,735	30.8%
Little Compton Total	30	196	15.3%
Middletown Total	402	1,236	32.5%
Narragansett Total	192	718	26.7%
New Shoreham Total	7	60	11.7%
Newport Total	743	1,143	65.0%
North Kingstown Total	531	2,024	26.2%
North Providence Total	960	1,990	48.2%
North Smithfield Total	204	933	21.9%
Pawtucket Total	4,685	5,886	79.6%
Portsmouth Total	216	1,254	17.2%
Providence Total	13,322	14,859	89.7%
Richmond Total	129	618	20.9%
Scituate Total	131	685	19.1%
Smithfield Total	233	1,206	19.3%
South Kingstown Total	387	1,809	21.4%
Tiverton Total	286	936	30.6%
Warwick Total	1,739	4,678	37.2%
West Warwick Total	1,075	1,905	56.4%
Westerly Total	710	1,652	43.0%
Woonsocket Total	2,631	3,257	80.8%
Grand Total	39,536	75,346	52.5%

2012 ADJUSTED EQUALIZED WEIGHTED ASSESSED VALUATIONS OF RHODE ISLAND MUNICIPALITIES

Municipality	Assessed Value 12/31/11 (1)	Ratio of Assessment	Full Value 12/31/11 (2)	EWAV* Before Median Family Income Adjustment Factor	Median Family Income Adjustment Factor (3)	Adjusted EWAV* for Computation Purposes	Adjusted EWAV* Prescribed by Sec. 16-7-21, Sub-Sec. 3 12/31/11
Barrington	\$2,982,443,388	103.52%	\$2,881,155,216	\$2,777,286,702	170.14%	\$4,725,183,334	\$4,294,620,703
Bristol	2,903,542,453	91.92%	3,158,614,062	3,044,742,880	116.81%	3,556,531,435	3,232,457,336
Burrillville	1,607,203,611	105.97%	1,516,625,361	1,461,949,507	109.53%	1,601,319,405	1,465,405,851
Central Falls	517,527,074	104.85%	493,569,668	475,775,990	48.33%	229,961,877	209,007,560
Charlestown	2,400,382,443	93.49%	2,567,654,900	2,475,088,385	111.89%	2,769,427,993	2,517,075,414
Coventry	3,525,437,865	102.19%	3,449,849,113	3,325,478,618	107.35%	3,570,034,001	3,244,729,537
Cransford	7,087,108,566	91.51%	7,744,632,428	7,465,430,719	101.35%	7,566,339,837	6,876,888,665
Cumberland	3,826,379,936	102.40%	3,736,520,772	3,601,815,478	121.51%	4,376,577,494	3,977,780,117
East Greenwich	2,312,095,540	98.99%	2,335,769,319	2,251,562,510	166.95%	3,758,927,871	3,416,411,240
East Providence	4,646,547,442	106.05%	4,381,554,106	4,223,594,718	91.41%	3,860,944,700	3,509,132,211
Exeter	825,794,265	96.70%	853,938,588	823,153,252	146.52%	1,206,049,642	1,096,153,397
Foster	544,491,469	97.69%	557,392,623	537,298,064	113.69%	610,845,492	555,184,744
Glocester	1,033,220,038	101.97%	1,013,290,593	976,760,458	117.74%	1,150,057,966	1,045,263,729
Hopkinton	931,466,958	100.47%	927,096,648	893,673,891	113.30%	1,012,569,603	920,303,420
Jamestown	2,032,977,802	79.18%	2,567,418,632	2,474,860,634	142.64%	3,530,222,011	3,208,545,248
Johnston	2,945,080,370	94.22%	3,125,638,998	3,012,956,600	104.89%	3,160,271,953	2,872,305,347
Lincoln	2,784,171,808	96.93%	2,872,298,273	2,768,749,061	130.71%	3,618,994,237	3,289,228,476
Little Compton	1,854,806,408	100.90%	1,838,196,365	1,771,927,556	153.18%	2,714,230,616	2,466,907,667
Middletown	2,643,035,904	96.92%	2,726,945,807	2,628,636,696	115.09%	3,025,284,093	2,749,617,693
Narragansett	4,527,080,489	93.73%	4,830,069,217	4,655,940,413	139.11%	4,777,055,102	5,886,860,460
New Shoreham	1,753,910,209	86.70%	2,023,030,124	1,950,097,874	143.77%	2,803,600,201	2,548,133,822
Newport	5,272,317,661	94.37%	5,586,707,525	5,385,301,157	113.07%	6,088,910,943	5,534,084,319
North Kingstown	3,969,303,956	94.44%	4,203,006,236	4,051,483,677	138.56%	5,613,766,739	5,102,235,650
North Providence	2,781,231,163	103.61%	2,684,317,876	2,587,545,544	92.23%	2,386,392,214	2,168,942,173
North Smithfield	1,586,477,504	100.71%	1,577,339,506	1,520,474,846	123.90%	1,883,859,822	1,712,200,950
Pawtucket	3,781,568,939	92.47%	4,089,517,788	3,942,086,600	68.70%	2,708,155,936	2,461,386,518
Portsmouth	3,355,186,809	101.69%	3,299,355,446	3,180,410,397	133.30%	4,239,557,937	3,853,245,896
Providence	11,685,525,495	90.73%	12,879,971,927	12,415,636,116	59.53%	7,390,567,892	6,717,133,206
Richmond	883,799,519	100.50%	879,383,223	847,680,582	132.85%	1,126,173,293	1,023,555,447
Scituate	884,845,672	57.16%	1,548,058,955	1,492,249,888	124.85%	1,863,100,771	1,693,333,481
Smithfield	2,749,497,569	100.72%	2,729,953,862	2,631,536,307	125.59%	3,304,912,330	3,003,765,973
South Kingstown	4,541,390,959	98.92%	4,590,840,418	4,425,336,050	130.61%	5,779,863,449	5,253,197,490
Tiverton	1,956,313,434	96.28%	2,031,801,697	1,958,563,223	112.31%	2,199,609,649	1,999,179,390
Warren	1,294,351,403	104.97%	1,233,036,735	1,188,584,533	99.91%	1,079,524,345	1,079,316,141
Wanwick	10,261,732,408	100.97%	10,163,069,968	9,796,681,178	105.62%	10,346,931,151	9,404,110,189
West Greenwich	874,072,161	102.95%	849,000,740	818,393,418	124.45%	1,018,477,087	925,672,609
West Warwick	2,266,422,455	100.53%	2,254,403,373	2,173,129,887	89.97%	1,955,107,154	1,776,956,166
Westerly	6,309,044,068	99.80%	6,321,866,664	6,093,957,077	104.45%	6,365,154,557	5,785,156,386
Woonsocket	1,868,296,247	94.67%	1,973,404,157	1,902,260,972	66.09%	1,257,149,333	1,142,596,841
Statewide Totals	\$120,008,081,460	96.39%	\$124,496,296,909	\$120,008,081,460		\$132,039,643,464	\$120,008,081,460

Source: Division of Municipal Finance

(1) Assessed valuation submitted by municipalities.
 (2) Full value based upon 2012 market value.
 (3) Based on U.S. Census Bureau, (2012) 5-year ACS.

(*) Equalized Weighted Assessed Valuation