

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:

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

- 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 2012

Adjusted for ACS

District	SSRC	PK-6%	Quadratic
			Mean
	*		
BARRINGTON	28.5%	4.6%	20.4%
BRISTOL WARREN	33.1%	33.0%	33.1%
BURRILLVILLE	66.0%	34.1%	52.5%
CENTRAL FALLS	94.1%	91.0%	92.6%
CHARLESTOWN	0.0%	21.8%	15.4%
COVENTRY	62.0%	25.8%	47.5%
CRANSTON	59.6%	37.1%	49.6%
CUMBERLAND	55.8%	20.6%	42.1%
EAST GREENWICH	16.7%	7.3%	12.9%
EAST PROVIDENCE	62.5%	47.7%	55.6%
EXETER-W. GREEN	39.3%	14.9%	29.7%
FOSTER	46.2%	15.7%	34.5%
FOSTER-GLOC	54.3%	17.0%	40.2%
GLOCESTER	57.9%	21.1%	43.6%
HOPKINTON	56.5%	27.4%	44.4%
JAMESTOWN	0.0%	5.2%	3.7%
JOHNSTON	48.3%	38.6%	43.7%
LINCOLN	45.0%	24.6%	36.3%
LITTLE COMPTON	0.0%	17.9%	12.7%
MIDDLETOWN	35.8%	31.9%	33.9%
NARRAGANSETT	0.0%	20.3%	14.4%
NEW SHOREHAM	0.0%	12.6%	8.9%
NEWPORT	0.0%	63.1%	44.6%
NORTH KINGSTOWN	36.4%	21.4%	29.9%
NORTH PROVIDENCE	62.4%	39.5%	52.2%
NORTH SMITHFIELD	54.0%	14.2%	39.5%
PAWTUCKET	82.8%	78.6%	80.7%
PORTSMOUTH	15.0%	12.6%	13.9%
PROVIDENCE	85.3%	88.3%	86.8%
RICHMOND	57.1%	19.2%	42.6%
SCITUATE	42.8%	16.0%	32.3%
SMITHFIELD	31.6%	13.8%	24.4%
SOUTH KINGSTOWN	14.6%	18.0%	16.4%
TIVERTON	40.9%	24.0%	33.5%
WARWICK	44.5%	31.6%	38.6%
WEST WARWICK	68.1%	52.4%	60.8%
WESTERLY	1.7%	36.2%	25.6%
WOONSOCKET	86.2%	76.0%	81.3%

* Updated for 2005-2009 ACS median family income data

STATE SHARE RATIO FOR THE COMMUNITY CALCULATION

Adjusted for ACS

District	EWAV 12/31/2007 <small>(adjusted for 05-09 ACS)</small>	6/30/2010 RADM (*)	State Share Ratio Community (SSRC)	Adjusted SSRC (**)
BARRINGTON	\$5,121,253,027	3,346	28.545%	28.545%
BRISTOL WARREN	\$4,968,415,974	3,465	33.058%	33.058%
BURRILLVILLE	\$1,833,251,350	2,516	65.983%	65.983%
CENTRAL FALLS	\$404,160,302	3,204	94.111%	94.111%
CHARLESTOWN	\$2,999,989,805	1,045	-34.026%	0.000%
COVENTRY	\$4,199,820,158	5,163	62.024%	62.024%
CRANSTON	\$8,948,376,217	10,344	59.613%	59.613%
CUMBERLAND	\$4,544,244,629	4,797	55.774%	55.774%
EAST GREENWICH	\$4,121,731,784	2,310	16.699%	16.699%
EAST PROVIDENCE	\$4,563,091,825	5,675	62.461%	62.461%
EXETER-W. GREEN	\$2,457,913,772	1,890	39.286%	39.286%
FOSTER	\$279,102,614	242	46.156%	46.156%
FOSTER-GLOC	\$1,328,430,917	1,358	54.331%	54.331%
GLOCESTER	\$493,695,931	548	57.941%	57.941%
HOPKINTON	\$1,167,141,628	1,252	56.478%	56.478%
JAMESTOWN	\$2,697,561,722	703	-79.143%	0.000%
JOHNSTON	\$3,434,810,707	3,102	48.305%	48.305%
LINCOLN	\$3,891,394,814	3,306	45.048%	45.048%
LITTLE COMPTON	\$2,890,556,948	429	-214.564%	0.000%
MIDDLETOWN	\$3,505,576,854	2,550	35.819%	35.819%
NARRAGANSETT	\$5,530,360,036	1,477	-74.807%	0.000%
NEW SHOREHAM	\$2,753,185,846	124	-936.570%	0.000%
NEWPORT	\$6,584,661,839	2,099	-46.456%	0.000%
NORTH KINGSTOWN	\$5,674,658,910	4,167	36.423%	36.423%
NORTH PROVIDENCE	\$2,651,305,163	3,296	62.446%	62.446%
NORTH SMITHFIELD	\$1,802,568,285	1,829	53.989%	53.989%
PAWTUCKET	\$3,540,411,328	9,597	82.777%	82.777%
PORTSMOUTH	\$4,829,053,076	2,652	14.989%	14.989%
PROVIDENCE	\$7,868,651,855	25,059	85.340%	85.340%
RICHMOND	\$1,072,133,252	1,168	57.146%	57.146%
SCITUATE	\$2,004,236,360	1,635	42.771%	42.771%
SMITHFIELD	\$3,578,130,192	2,441	31.566%	31.566%
SOUTH KINGSTOWN	\$6,620,262,436	3,621	14.644%	14.644%
TIVERTON	\$2,424,595,995	1,915	40.891%	40.891%
WARWICK	\$12,050,921,020	10,131	44.467%	44.467%
WEST WARWICK	\$2,409,620,157	3,526	68.096%	68.096%
WESTERLY	\$6,621,513,725	3,146	1.738%	1.738%
WOONSOCKET	\$1,799,772,940	6,076	86.171%	86.171%
	\$143,666,563,393	141,204		

* Includes charter and state school students (except DCYF training school students)

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

2008 EQUALIZED WEIGHTED ASSESSED VALUATIONS OF RHODE ISLAND MUNICIPALITIES

Community	Assessed Value (1) 12/31/07	Ratio Of Assessment	Full Value (2) 12/31/07	EWAV*Before		Median Family Income Adjustment Factor (3)	Adjusted EWAV* For Computation Purposes	Adjusted EWAV* Prescribed By Sec. 16-7-21
				Median Family Income	Adjustment Factor			
Barrington	\$3,372,315,367	94.39%	\$3,572,711,061	\$3,356,106,985	163.90%	\$5,500,659,348	\$5,121,253,027	
Bristol	3,316,944,482	94.66%	3,504,188,868	3,291,739,112	114.70%	3,775,624,761	3,515,202,181	
Burrillville	1,741,149,673	95.03%	1,832,300,092	1,721,212,556	114.40%	1,969,067,164	1,833,251,350	
Central Falls	808,100,703	93.20%	867,015,894	814,451,000	53.30%	434,102,383	404,160,302	
Charlestown	2,788,196,102	95.10%	2,931,801,290	2,754,053,888	117.00%	3,222,243,048	2,999,989,805	
Covenry	4,053,897,812	97.17%	4,172,112,250	3,919,168,056	115.10%	4,510,962,432	4,199,820,158	
Cranston	9,164,925,032	90.92%	10,080,424,173	9,469,274,564	101.50%	9,611,313,682	8,948,376,217	
Cumberland	4,184,686,697	95.28%	4,392,154,134	4,125,869,379	118.30%	4,880,903,475	4,544,244,629	
East Greenwich	2,902,078,803	97.48%	2,977,141,159	2,796,644,920	158.30%	4,427,088,908	4,121,731,784	
East Providence	5,259,076,402	94.75%	5,550,498,239	5,213,986,127	94.00%	4,901,146,959	4,563,091,825	
Exeter	931,937,638	92.42%	1,008,318,966	947,187,239	150.30%	1,423,622,420	1,325,428,492	
Foster	738,503,566	99.58%	741,627,529	696,664,602	117.00%	815,097,585	758,876,474	
Glocester	1,228,929,790	94.96%	1,294,144,167	1,215,683,609	118.60%	1,441,800,761	1,342,352,988	
Hopkinton	1,113,262,790	95.43%	1,166,536,009	1,095,811,998	114.40%	1,253,608,926	1,167,141,628	
Jamestown	2,172,270,945	82.75%	2,625,029,197	2,465,880,580	117.50%	2,897,409,681	2,697,561,722	
Johnston	3,564,174,377	95.02%	3,751,083,578	3,523,665,245	104.70%	3,689,277,511	3,434,810,707	
Lincoln	3,406,793,533	93.49%	3,644,099,665	3,423,167,485	122.10%	4,179,687,499	3,891,394,814	
Little Compton	2,015,231,874	93.78%	2,148,947,517	2,018,662,480	153.80%	3,104,702,894	2,890,556,948	
Middletown	3,256,347,213	93.26%	3,491,549,626	3,279,866,154	114.80%	3,765,286,345	3,505,576,854	
Middletown	5,368,924,516	98.07%	5,474,847,617	5,142,922,003	115.50%	5,940,074,914	5,530,360,036	
Narragansett	2,119,387,399	82.20%	2,578,223,002	2,421,912,121	122.10%	2,957,154,700	2,753,185,846	
New Shoreham	6,159,645,254	90.08%	6,838,278,306	6,423,691,475	110.10%	7,072,484,314	6,584,661,839	
Newport	4,614,641,810	93.88%	4,915,485,797	4,617,472,819	132.00%	6,095,064,122	5,674,658,910	
North Kingstown	3,244,748,276	94.94%	3,417,721,828	3,210,514,341	88.70%	2,847,726,221	2,651,305,163	
North Smithfield	1,638,277,378	94.03%	1,742,238,456	1,636,611,120	118.30%	1,936,110,955	1,802,568,285	
Pawtucket	5,483,683,482	93.60%	5,858,363,142	5,503,185,990	69.10%	3,802,701,519	3,540,411,328	
Portsmouth	3,846,059,390	94.80%	4,056,994,959	3,811,030,023	136.10%	5,186,811,862	4,829,053,076	
Providence	14,869,419,941	99.16%	14,995,111,336	14,085,997,168	60.00%	8,451,598,301	7,868,651,855	
Richmond	991,356,630	94.13%	1,053,164,957	989,314,335	116.40%	1,151,561,886	1,072,133,252	
Scituate	1,029,316,656	51.61%	1,994,479,250	1,873,559,218	114.90%	2,152,719,541	2,004,236,360	
Smithfield	2,979,747,374	93.37%	3,191,308,051	2,997,827,436	128.20%	3,843,214,773	3,578,130,192	
South Kingstown	5,362,276,378	95.21%	5,632,180,331	5,290,716,049	134.40%	7,110,722,369	6,620,262,436	
Tiverton	2,816,389,976	96.41%	2,921,284,037	2,744,174,268	94.90%	2,604,221,380	2,424,595,995	
Warren	1,524,863,285	94.52%	1,613,217,413	1,515,412,284	103.00%	1,560,874,652	1,453,213,793	
Warwick	12,462,172,432	95.51%	13,048,390,232	12,257,300,646	105.60%	12,943,709,482	12,050,921,020	
West Greenwich	1,016,506,425	95.07%	1,069,274,075	1,004,446,800	121.10%	1,216,385,074	1,132,485,280	
West Warwick	2,859,131,430	94.12%	3,037,679,252	2,853,512,747	90.70%	2,588,136,062	2,409,620,157	
Westerly	6,592,452,929	95.78%	6,882,800,997	6,465,514,872	110.00%	7,112,066,360	6,621,513,725	
Woonsocket	2,668,739,630	93.11%	2,866,116,821	2,692,351,695	71.80%	1,933,108,517	1,799,772,940	
Statewide Totals	\$143,666,563,390	93.94%	\$152,938,843,273	\$143,666,563,390		\$154,310,052,788	\$143,666,563,390	

Notes: Projected AEWAV for use in 2011-2012 state education aid distribution.

(1) Assessed valuation as certified and used in the 2008 municipal tax rolls.

(2) Full value based upon 2007 market value.

(3) Based on U.S. Census Bureau 5-year ACS 2005-2009

*Equalized Weighted Assessed Valuation

June 30, 2010 - TOTAL RESIDENT PK-6%
 Provided by the Office of Information Services

FINAL 10/18/2010

distname_res	PK-6 FRPL	PK-6 Total	
	ADM	ADM	
Barrington Total	75	1,650	5%
Bristol-Warren Total	594	1,799	33%
Burrillville Total	456	1,338	34%
Central Falls Total	1,276	1,757	73% *
Charlestown Total	114	522	22%
Coventry Total	668	2,589	26%
Cranston Total	1,939	5,233	37%
Cumberland Total	507	2,462	21%
East Greenwich Total	83	1,142	7%
East Providence Total	1,387	2,910	48%
Exeter-WG Total	133	891	15%
Foster Total	38	242	16%
Foster-Glocester Total	32	186	17%
Glocester Total	115	547	21%
Hopkinton Total	172	627	27%
Jamestown Total	19	362	5%
Johnston Total	607	1,572	39%
Lincoln Total	393	1,600	25%
Little Compton Total	43	241	18%
Middletown Total	450	1,412	32%
Narragansett Total	148	731	20%
New Shoreham Total	9	70	13%
Newport Total	721	1,144	63%
North Kingstown Total	434	2,034	21%
North Providence Total	643	1,626	40%
North Smithfield Total	134	945	14%
Pawtucket Total	4,063	5,172	79%
Portsmouth Total	161	1,274	13%
Providence Total	12,083	13,678	88%
Richmond Total	113	586	19%
Scituate Total	127	793	16%
Smithfield Total	164	1,189	14%
South Kingstown Total	344	1,915	18%
Tiverton Total	227	947	24%
Warwick Total	1,577	4,988	32%
West Warwick Total	1,005	1,915	52%
Westerly Total	590	1,627	36%
Woonsocket Total	2,523	3,321	76%
Grand Total	34,166	73,040	47%

* Central Falls data uses 10/1/10 PK-6 enrollment data, which reflected FRPL % of 91%