

Funding Formula Proposal 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? This funding formula proposal 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 proposed 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:

$$SSRC = 1 - (0.5 * \left\{ \frac{(\text{District EWAV/District RADM})}{(\text{State EWAV/State RADM})} \right\})$$

- 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 COMMUNITY CALCULATION

District	EWAV 12/31/06 <small>(provided by Dept. of Admin.)</small>	6/30/2009 RADM (*)	State Share Ratio Community (SSRC)	Adjusted SSRC (**)
BARRINGTON	\$4,833,023,171	3,347	28.650%	28.7%
BRISTOL WARREN	\$4,750,692,258	3,444	31.841%	31.8%
BURRILLVILLE	\$1,753,668,444	2,546	65.966%	66.0%
CENTRAL FALLS	\$378,029,965	3,397	94.501%	100.0%
CHARIHO	\$5,199,822,862	3,534	27.297%	27.3%
COVENTRY	\$4,201,865,709	5,232	60.317%	60.3%
CRANSTON	\$9,095,708,893	10,272	56.247%	56.2%
CUMBERLAND	\$4,843,742,064	4,878	50.935%	50.9%
EAST GREENWICH	\$4,319,891,057	2,317	7.875%	7.9%
EAST PROVIDENCE	\$4,375,372,043	5,679	61.931%	61.9%
EXETER-W. GREEN	\$2,494,932,132	1,912	35.524%	35.5%
FOSTER	\$287,404,608	248	42.737%	42.7%
FOSTER-GLOC	\$1,427,040,293	1,428	50.621%	50.6%
GLOCESTER	\$552,030,859	592	53.924%	53.9%
JAMESTOWN	\$2,943,953,327	685	-112.359%	0.0%
JOHNSTON	\$3,283,047,276	3,140	48.337%	48.3%
LINCOLN	\$3,604,354,622	3,199	44.327%	44.3%
LITTLE COMPTON	\$2,208,131,146	421	-159.163%	0.0%
MIDDLETOWN	\$3,163,080,265	2,356	33.662%	33.7%
NARRAGANSETT	\$6,150,069,192	1,463	-107.714%	0.0%
NEW SHOREHAM	\$2,498,725,977	132	-835.351%	0.0%
NEWPORT	\$5,809,117,993	2,052	-39.882%	0.0%
NORTH KINGSTOWN	\$5,567,526,892	4,177	34.139%	34.1%
NORTH PROVIDENCE	\$3,107,099,610	3,131	50.965%	51.0%
NORTH SMITHFIELD	\$1,842,436,560	1,877	51.498%	51.5%
PAWTUCKET	\$3,723,161,835	8,895	79.318%	79.3%
PORTSMOUTH	\$4,549,808,726	2,657	15.388%	15.4%
PROVIDENCE	\$8,253,125,163	24,039	83.036%	83.0%
SCITUATE	\$2,189,295,724	1,665	35.029%	35.0%
SMITHFIELD	\$3,383,407,993	2,473	32.398%	32.4%
SOUTH KINGSTOWN	\$6,294,060,063	3,727	16.555%	16.6%
TIVERTON	\$2,784,568,050	1,897	27.470%	27.5%
WARWICK	\$11,842,367,850	10,400	43.735%	43.7%
WEST WARWICK	\$2,346,417,091	3,480	66.684%	66.7%
WESTERLY	\$5,774,805,216	3,226	11.549%	11.5%
WOONSOCKET	\$1,768,185,354	6,016	85.477%	85.5%
	\$141,599,970,283	139,934		

* Includes charter school students

** Adjusted EWAV to bring districts with negative EWAV to 0% and Central Falls, a 100% state operated school to 100%.

2007 EQUALIZED WEIGHTED ASSESSED VALUATIONS OF RHODE ISLAND MUNICIPALITIES

Municipality	Assessed Value 12/31/06 (1)	Ratio of Assessment	Full Value 12/31/06 (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. C 12/31/06
Barrington	\$3,350,905,673	95.71%	\$3,501,084,006	\$3,223,507,758	160.39%	\$5,170,184,094	\$4,833,023,171
Bristol	3,077,837,919	80.99%	3,800,291,519	3,498,993,219	103.55%	3,623,207,478	3,386,928,856
Burrillville	1,722,210,650	94.45%	1,823,474,783	1,678,904,334	111.74%	1,876,007,702	1,753,668,444
Central Falls	804,844,196	93.20%	863,596,377	795,127,914	50.86%	404,402,057	378,029,965
Charlestown	2,543,198,658	82.30%	3,090,106,248	2,845,113,527	107.74%	3,065,325,314	2,865,427,614
Coventry	3,701,782,310	86.64%	4,272,389,927	3,933,662,275	114.27%	4,494,995,882	4,201,865,709
Cranston	9,096,170,342	90.08%	10,097,567,465	9,297,002,588	104.66%	9,730,242,908	9,095,708,893
Cumberland	4,264,675,755	90.73%	4,700,444,913	4,327,779,801	119.73%	5,181,650,756	4,843,742,064
East Greenwich	2,827,551,939	96.29%	2,936,401,542	2,703,594,983	170.93%	4,621,254,904	4,319,891,057
East Providence	5,292,596,922	95.59%	5,536,542,533	5,097,589,141	91.82%	4,680,606,349	4,375,372,043
Exeter	918,866,812	93.71%	980,495,375	902,758,815	140.50%	1,268,376,135	1,185,662,085
Foster	732,445,888	97.98%	747,541,168	688,273,903	120.61%	830,127,155	775,992,441
Glocester	1,231,978,040	84.48%	1,458,325,410	1,342,705,078	118.75%	1,594,462,280	1,490,483,319
Hopkinton	1,095,432,285	92.83%	1,180,001,205	1,086,447,235	112.05%	1,217,364,127	1,137,976,700
Jamestown	2,148,214,547	92.80%	2,314,914,630	2,131,381,383	147.76%	3,149,329,131	2,943,953,327
Johnston	3,570,579,960	97.26%	3,671,322,455	3,380,249,202	103.90%	3,512,078,921	3,283,047,276
Lincoln	3,381,395,716	93.71%	3,608,327,006	3,322,248,218	116.06%	3,855,801,281	3,604,354,622
Little Compton	2,002,566,693	92.80%	2,157,945,529	1,986,857,254	118.89%	2,362,174,589	2,208,131,146
Middletown	3,220,645,421	95.17%	3,384,085,514	3,115,785,251	108.60%	3,383,742,783	3,163,080,265
Narragansett	5,345,518,381	95.77%	5,581,656,686	5,139,126,511	128.02%	6,579,109,759	6,150,069,192
New Shoreham	2,104,843,996	82.20%	2,560,608,134	2,357,595,582	113.38%	2,673,041,871	2,498,725,977
Newport	6,130,638,628	93.13%	6,582,944,324	6,061,029,117	102.53%	6,214,373,153	5,809,117,993
North Kingstown	4,566,807,142	93.04%	4,908,409,715	4,519,256,542	131.79%	5,955,928,196	5,567,526,892
North Providence	3,152,870,393	85.48%	3,688,642,193	3,396,195,780	97.87%	3,323,856,810	3,107,099,610
North Smithfield	1,575,523,730	93.89%	1,678,050,123	1,545,009,369	127.57%	1,970,968,452	1,842,436,560
Pawtucket	5,482,565,056	93.74%	5,848,923,662	5,385,203,774	73.96%	3,982,896,711	3,723,161,835
Portsmouth	3,477,107,746	85.46%	4,068,596,699	3,746,026,374	129.93%	4,867,212,068	4,549,808,726
Providence	14,790,817,784	93.69%	15,787,180,899	14,535,526,717	60.74%	8,828,878,928	8,253,125,163
Richmond	934,082,036	82.35%	1,134,214,843	1,044,290,951	122.56%	1,279,882,989	1,196,418,548
Scituate	1,021,822,747	51.44%	1,986,332,154	1,828,849,893	128.06%	2,342,025,173	2,189,295,724
Smithfield	2,935,042,182	93.81%	3,128,620,017	2,880,573,811	125.65%	3,619,440,993	3,383,407,993
South Kingstown	5,323,431,004	93.66%	5,683,482,454	5,232,879,232	128.67%	6,733,145,708	6,294,060,063
Tiverton	2,793,466,914	96.38%	2,898,263,401	2,668,480,546	111.63%	2,978,824,833	2,784,568,050
Warren	1,524,666,754	96.30%	1,583,261,592	1,457,735,952	100.08%	1,458,902,140	1,363,763,402
Warwick	12,465,393,014	96.51%	12,915,985,882	11,891,968,495	106.53%	12,668,514,037	11,842,367,850
West Greenwich	1,005,775,227	89.36%	1,125,574,185	1,036,335,350	135.15%	1,400,607,225	1,309,270,047
West Warwick	2,814,919,557	93.26%	3,018,437,765	2,779,127,132	90.32%	2,510,107,626	2,346,417,091
Westerly	6,519,049,216	97.86%	6,661,661,553	6,133,505,412	100.72%	6,177,666,651	5,774,805,216
Woonsocket	2,651,729,051	93.79%	2,827,439,604	2,603,271,868	72.66%	1,891,537,339	1,768,185,354
Statewide Totals	\$141,599,970,284	92.07%	\$153,793,143,490	\$141,599,970,284		\$151,478,254,510	\$141,599,970,284

- (1) Assessed valuation as certified and used in the 2007 municipal tax rolls
- (2) Full value based upon 2006 market value.
- (3) Based on U.S. Census Bureau 2000 Census.

Notes: Projected AEAV for use in 2010-2011 state education aid distribution.
Does not include Fire District or other local taxing authorities.

* Equalized Weighted Assessed Valuation
** Adjustment = 0.934787444

data element: adm/ada

June 30, 2009 Student Data - Includes Charter

To be used for State Share Calculation

breakout: district of residence

exclusion: state operated schools

distcode_res	distname_res	adm	ada	schoolDays	adm_a	ada_a
BA	Barrington	602,550	580,915	180	3,347	3,227
	Barrington Total	602,550	580,915		3,347	3,227
BR	Bristol	397,743	376,112	180	2,210	2,090
	Bristol Total	397,743	376,112		2,210	2,090
BU	Burrillville	458,320	435,112	180	2,546	2,417
	Burrillville Total	458,320	435,112		2,546	2,417
CF	Central Falls	611,405	558,383	180	3,397	3,102
	Central Falls Total	611,405	558,383		3,397	3,102
CH	Charlestown	183,478	173,239	180	1,019	962
CH	Charlestown	5,306	5,047	185	29	27
	Charlestown Total	188,784	178,286		1,048	990
CO	Coventry	2,411	2,233	180	13	12
CO	Coventry	875,669	838,907	182	4,811	4,609
CO	Coventry	74,550	71,400	183	407	390
	Coventry Total	952,630	912,539		5,232	5,012
CR	Cranston	1,835,853	1,727,636	180	10,199	9,598
CR	Cranston	223	222	230	1	1
CR	Cranston	18,293	16,676	253	72	66
	Cranston Total	1,854,368	1,744,534		10,272	9,665
CU	Cumberland	8,570	7,814	180	48	43
CU	Cumberland	883,870	838,322	183	4,830	4,581
CU	Cumberland	36	36	185	0	0
	Cumberland Total	892,476	846,172		4,878	4,625
EG	East Greenwich	412,856	394,638	180	2,294	2,192
EG	East Greenwich	4,228	4,228	182	23	23
	East Greenwich Total	417,084	398,866		2,317	2,216
EP	East Providence	1,022,308	942,774	180	5,679	5,238
	East Providence Total	1,022,308	942,774		5,679	5,238
EX	Exeter	155,674	148,669	180	865	826
EX	Exeter	2,003	1,903	182	11	10
EX	Exeter	1,881	1,802	185	10	10
EX	Exeter	877	813	230	4	4
	Exeter Total	160,435	153,187		890	850
FO	Foster	1,742	1,532	180	10	9
FO	Foster	43,115	41,170	181	238	227
	Foster Total	44,857	42,702		248	236
FG	Foster-Glocester	79,535	74,753	180	442	415
FG	Foster-Glocester	177,413	167,102	180	986	928
FG	Foster-Glocester	180	175	180	1	1
	Foster-Glocester Total	257,128	242,030		1,428	1,345
GL	Glocester	106,609	102,221	180	592	568

	Glocester Total	106,609	102,221		592	568
HK	Hopkinton	226,405	213,750	180	1,258	1,188
	Hopkinton Total	226,405	213,750		1,258	1,188
JA	Jamestown	121,577	115,791	180	675	643
JA	Jamestown	2,023	1,953	208	10	9
	Jamestown Total	123,600	117,744		685	653
JO	Johnston	521,170	486,412	180	2,895	2,702
JO	Johnston	39,379	37,953	181	218	210
JO	Johnston	4,635	4,112	208	22	20
JO	Johnston	458	458	212	2	2
JO	Johnston	446	409	225	2	2
JO	Johnston	182	156	230	1	1
	Johnston Total	566,269	529,500		3,140	2,936
LN	Lincoln	31,897	30,299	180	177	168
LN	Lincoln	206,828	198,716	181	1,143	1,098
LN	Lincoln	185,248	171,938	182	1,018	945
LN	Lincoln	157,531	150,481	183	861	822
	Lincoln Total	581,504	551,434		3,199	3,033
LC	Little Compton	75,836	71,940	180	421	400
	Little Compton Total	75,836	71,940		421	400
MI	Middletown	424,111	405,798	180	2,356	2,254
	Middletown Total	424,111	405,798		2,356	2,254
NA	Narragansett	257,840	232,230	180	1,432	1,290
NA	Narragansett	2,220	2,095	185	12	11
NA	Narragansett	190	190	190	1	1
NA	Narragansett	203	188	203	1	1
NA	Narragansett	215	199	215	1	1
NA	Narragansett	654	616	218	3	3
NA	Narragansett	223	222	223	1	1
NA	Narragansett	454	409	227	2	2
NA	Narragansett	2,300	1,664	230	10	7
	Narragansett Total	264,299	237,813		1,463	1,317
NH	New Shoreham	23,694	21,995	180	132	122
	New Shoreham Total	23,694	21,995		132	122
NE	Newport	369,386	339,030	180	2,052	1,883
	Newport Total	369,386	339,030		2,052	1,883
NK	North Kingstown	740,819	701,599	180	4,116	3,898
NK	North Kingstown	7,095	7,034	182	39	39
NK	North Kingstown	182	175	183	1	1
NK	North Kingstown	3,966	3,812	185	21	21
	North Kingstown Total	752,062	712,620		4,177	3,958
NP	North Providence	194,177	178,866	180	1,079	994
NP	North Providence	79,691	75,541	181	440	417
NP	North Providence	290,996	274,995	182	1,599	1,511
NP	North Providence	2,432	2,264	183	13	12
	North Providence Total	567,295	531,665		3,131	2,934
NS	North Smithfield	336,707	321,096	180	1,871	1,784
NS	North Smithfield	1,554	1,431	230	7	6

	North Smithfield Total	338,261	322,527		1,877	1,790
PA	Pawtucket	1,524,577	1,414,192	180	8,470	7,857
PA	Pawtucket	54,253	51,134	181	300	283
PA	Pawtucket	12,308	11,323	183	67	62
PA	Pawtucket	185	180	185	1	1
PA	Pawtucket	13,481	11,824	238	57	50
	Pawtucket Total	1,604,804	1,488,652		8,895	8,252
PO	Portsmouth	478,284	457,715	180	2,657	2,543
	Portsmouth Total	478,284	457,715		2,657	2,543
PV	Providence	4,288,285	3,847,185	180	23,824	21,373
PV	Providence	48,086	44,405	230	209	193
PV	Providence	237	237	237	1	1
PV	Providence	1,008	964	269	4	4
PV	Providence	365	365	365	1	1
	Providence Total	4,337,981	3,893,156		24,039	21,572
RM	Richmond	221,061	210,313	180	1,228	1,168
	Richmond Total	221,061	210,313		1,228	1,168
SC	Scituate	299,624	286,873	180	1,665	1,594
	Scituate Total	299,624	286,873		1,665	1,594
SF	Smithfield	445,076	428,063	180	2,473	2,378
	Smithfield Total	445,076	428,063		2,473	2,378
SK	South Kingstown	652,447	617,777	180	3,625	3,432
SK	South Kingstown	19,012	18,195	185	103	98
	South Kingstown Total	671,459	635,972		3,727	3,530
TV	Tiverton	341,528	324,540	180	1,897	1,803
	Tiverton Total	341,528	324,540		1,897	1,803
WR	Warren	222,087	207,772	180	1,234	1,154
	Warren Total	222,087	207,772		1,234	1,154
WK	Warwick	1,851,719	1,743,363	180	10,287	9,685
WK	Warwick	185	169	185	1	1
WK	Warwick	25,359	23,661	227	112	104
	Warwick Total	1,877,262	1,767,192		10,400	9,790
WG	West Greenwich	183,096	175,868	180	1,017	977
WG	West Greenwich	837	750	230	4	3
WG	West Greenwich	235	210	235	1	1
	West Greenwich Total	184,168	176,828		1,022	981
WW	West Warwick	623,777	580,148	180	3,465	3,223
WW	West Warwick	512	490	182	3	3
WW	West Warwick	2,689	2,443	230	12	11
	West Warwick Total	626,978	583,081		3,480	3,236
WE	Westerly	7,561	7,038	180	42	39
WE	Westerly	578,930	549,797	182	3,181	3,021
WE	Westerly	185	164	185	1	1
WE	Westerly	363	318	214	2	1
	Westerly Total	587,039	557,317		3,226	3,062
WO	Woonsocket	1,082,899	984,256	180	6,016	5,468
	Woonsocket Total	1,082,899	984,256		6,016	5,468
	Grand Total	25,259,659	23,571,365		139,934	130,581

**Free and Reduced Price Lunch Data
PK-6 FRPL**

6/30/2009

District	PK - 6 FRPL ADM	PK-6 Total ADM	% PK- 6 Eligible FRPL
Barrington	59	1,647	4%
Bristol-Warren	569	1,748	33%
Burrillville	381	1,325	29%
Central Falls	1,768	1,964	90%
Chariho	368	1,788	21%
Coventry	653	2,597	25%
Cranston	1,669	5,110	33%
Cumberland	478	2,458	19%
East Greenwich	83	1,144	7%
East Providence	1,223	2,847	43%
Exeter-WG	141	919	15%
Foster	26	239	11%
Foster-Glocester	28	169	17%
Glocester	108	583	19%
Jamestown	19	350	5%
Johnston	553	1,580	35%
Lincoln	326	1,594	20%
Little Compton	12	233	5%
Middletown	338	1,310	26%
Narragansett	131	726	18%
Newport	706	1,136	62%
New Shoreham	11	81	14%
North Kingstown	425	2,058	21%
North Providence	546	1,539	35%
North Smithfield	142	973	15%
Pawtucket	3,810	5,032	76%
Portsmouth	122	1,270	10%
Providence	11,533	13,143	88%
Scituate	99	825	12%
Smithfield	110	1,183	9%
South Kingstown	352	1,954	18%
Tiverton	188	923	20%
Warwick	1,480	5,150	29%
Westerly	521	1,625	32%
West Warwick	903	1,843	49%
Woonsocket	2,460	3,314	74%
	32,341	72,380	45%