

# Shrewsbury Public Schools

Average Per Pupil Expenditure Report

March 2017

# Topics

- How the data is derived
- Who publishes the data and when
- What goes into the calculation
- Comparative data sets
- Conclusions

# How the data is derived

- **Expenditures:** All Massachusetts school districts are required to annually report their revenues and expenditures to the Department of Elementary and Secondary Education using a standard format called the End of Year Report
- **Pupils:** All Massachusetts school districts are required to report their student enrollment data and demographics three times per year via the Student Information Management System

# Who publishes the data and when

- **Who:** The average per pupil expenditure data for each school district is calculated and published by the Department of Elementary and Secondary Education and available on their website.
- **When:** Typically the data is published in February or March of each for the preceding fiscal year. FY16 data was published on 3/21/2016.

# What goes into the calculation

- **Spending from all funds**
- The following funding sources are all included in the functional expenditure per pupil measure.
  - school committee appropriations
  - municipal appropriations outside the school committee budget that affect schools
  - federal grants
  - state grants
  - circuit breaker funds
  - private grants and gifts
  - school choice and other tuition revolving funds
  - athletic funds
  - school lunch funds
  - other local receipts such as rentals and insurance receipts

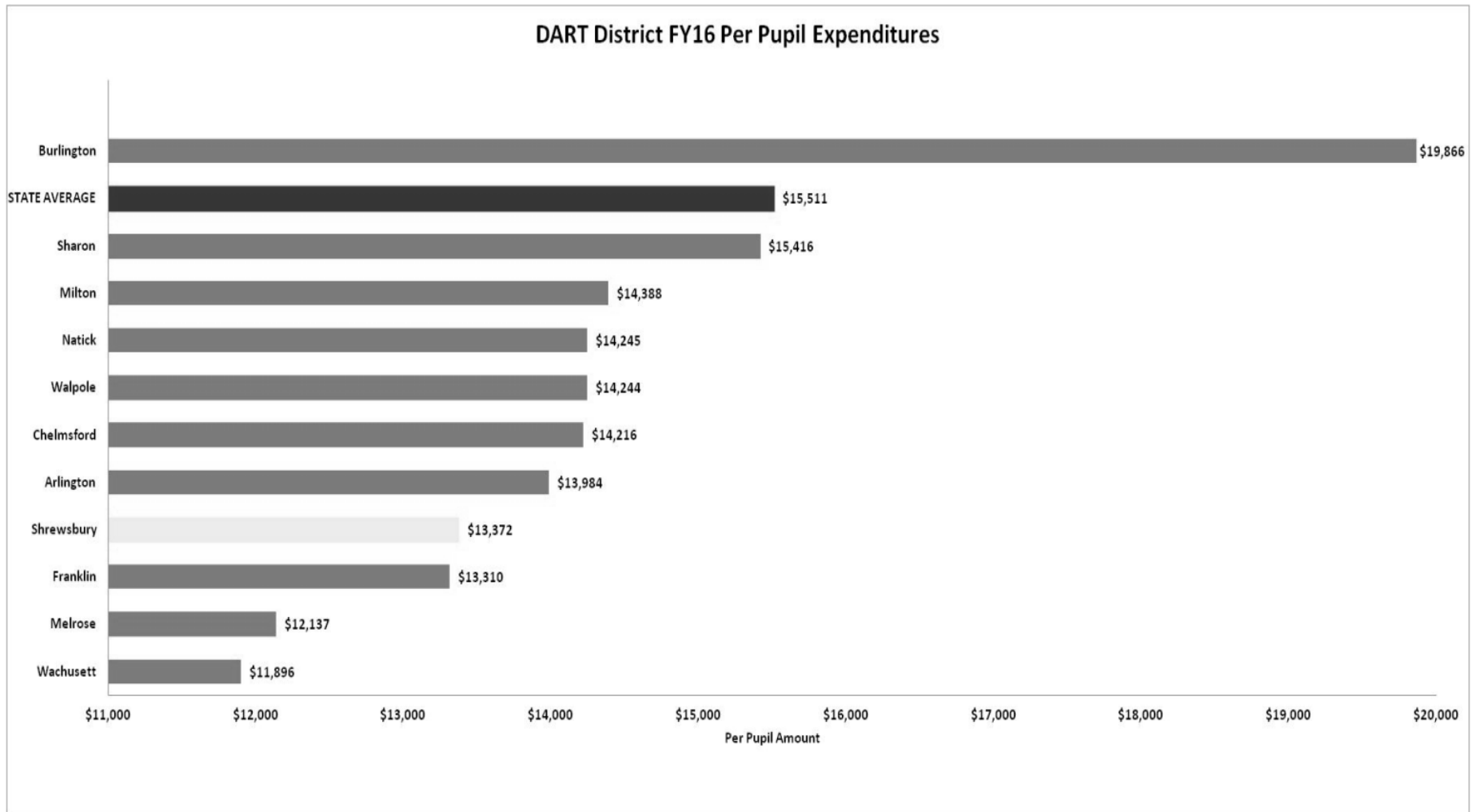
# Shrewsbury v. State Average



# Shrewsbury v. State Median

- FY16 State Median = \$15,021
  - FY16 Shrewsbury = \$13,372
- 
- \$ below median \$1,649
  - % below median 11%

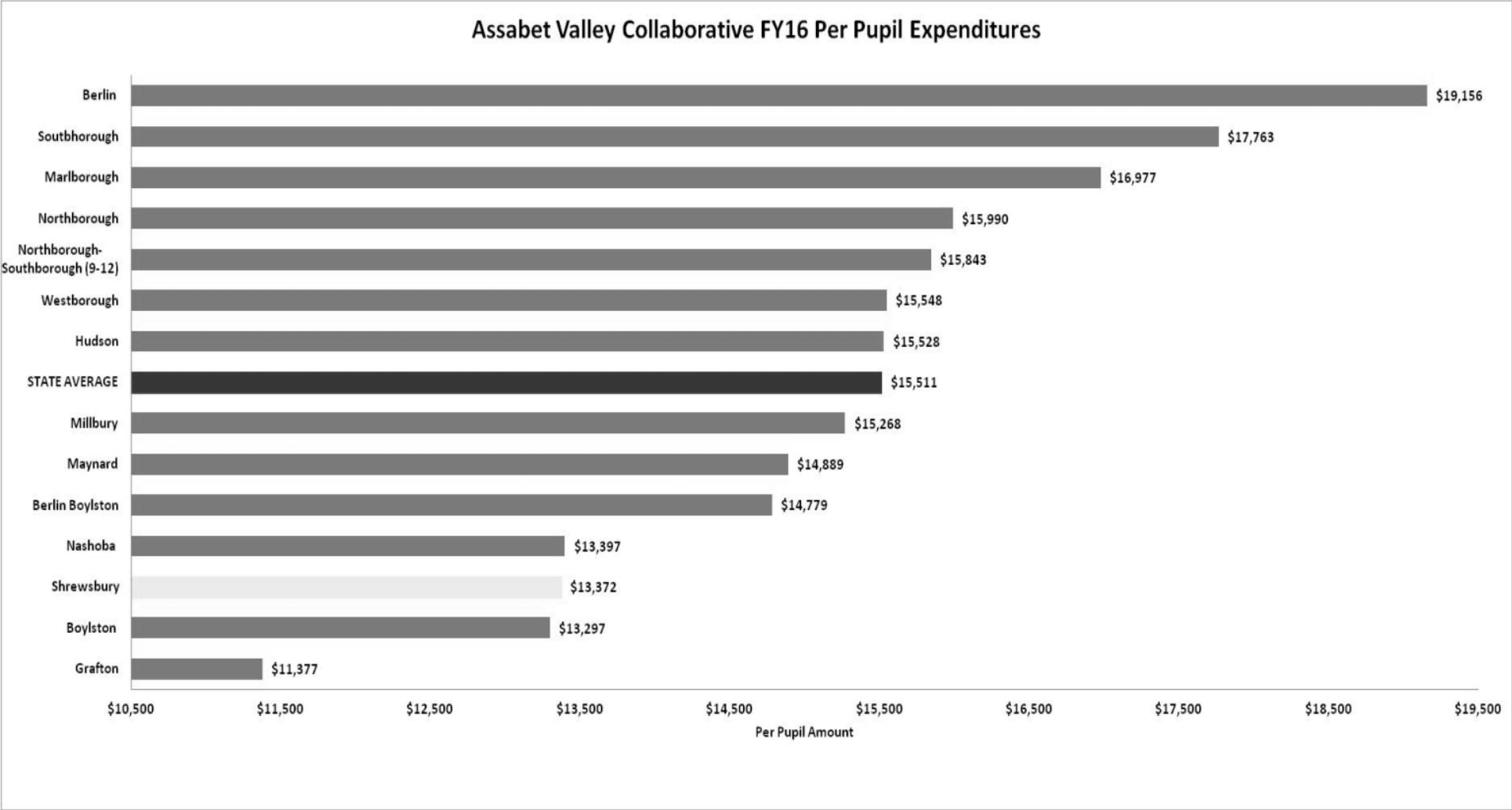
# Shrewsbury v. “Comparable Communities”



MA DESE determines comparable communities by district grades span, total enrollment, and special student populations.



# Shrewsbury v. Assabet Valley Collaborative Communities



Source: MA Department of Elementary and Secondary Education

# Shrewsbury v. Similar Size Districts

Size Rank	District	Pupils	Avg. Cost
1	WACHUSETT	7,542	\$11,896
2	REVERE	7,488	\$14,492
3	CHELSEA	7,248	\$14,329
4	METHUEN	7,196	\$13,234
5	CAMBRIDGE	7,177	\$28,399
6	LEXINGTON	7,026	\$18,069
7	WEYMOUTH	6,644	N/R
8	HOLYOKE	6,606	\$16,568
9	LEOMINSTER	6,533	\$13,301
10	PITTSFIELD	6,384	\$14,451
11	SHREWSBURY	6,271	\$13,372
12	ANDOVER	6,227	\$16,389
13	ATTLEBORO	6,188	\$13,378
14	PEABODY	6,109	\$14,299
15	FRANKLIN	5,948	\$13,310
16	BRAINTREE	5,850	\$14,112
17	FITCHBURG	5,812	\$13,937
18	ACTON-BOXBOROUGH	5,746	\$14,745
19	WESTFIELD	5,720	\$14,289
20	NEEDHAM	5,678	\$16,547
21	BARNSTABLE	5,607	\$15,556

Cost Rank	District	Pupils	FY16 Avg. Cost
1	WEYMOUTH	6,644	N/R
2	CAMBRIDGE	7,177	\$28,399
3	LEXINGTON	7,026	\$18,069
4	HOLYOKE	6,606	\$16,568
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18	FRANKLIN	5,948	\$13,310
19	LEOMINSTER	6,533	\$13,301
20	METHUEN	7,196	\$13,234
21	WACHUSETT	7,542	\$11,896

Adjusting for economies of scale, SPS ranks below the median in PPX for its peer group.

# Shrewsbury v. Districts with Similar Income/Capita

DOR Income, US Census and EQV used in FY2018 Cherry Sheets							
Rank	Municipality	School District	2014 Census	2014 DOR Income	DOR Income Per Capita	FY16 Average PPX [High to Low]	
1	Edgartown	Martha's Vineyard	4,297	213,674,000	49,726	24,711	
2	Dedham	Dedham	25,411	1,285,381,000	50,584	18,415	
3	Rockport	Rockport	7,162	346,523,000	48,384	17,297	
4	Essex	Manchester-Essex	3,633	195,659,000	53,856	16,327	
5	Chatham	Monomoy	6,138	325,472,000	53,026	16,135	
6	Foxborough	Foxborough	17,399	833,641,000	47,913	16,058	
7	Northborough	Northborough K-8	14,914	774,857,000	51,955	15,990	
8	Ipswich	Ipswich	13,673	720,344,000	52,684	15,575	
9	Newburyport	Newburyport	17,889	933,250,000	52,169	15,307	
10	Norfolk	Norfolk	11,790	595,626,000	50,520	15,193	
11	Upton	Mendon-Upton	7,701	388,616,000	50,463	15,033	Median PPX
12	Mendon	Mendon-Upton	5,962	307,084,000	51,507	15,033	
13	Littleton	Littleton	9,404	476,673,000	50,688	14,358	
14	Dunstable	Groton-Dunstable	3,390	178,003,000	52,508	14,247	
15	Walpole	Walpole	24,966	1,257,171,000	50,355	14,244	
16	Wrentham	Wrentham	11,434	571,633,000	49,994	14,209	
17	Hanover	Hanover	14,349	748,793,000	52,184	13,547	
18	Shrewsbury	Shrewsbury	36,574	1,883,130,000	51,488	13,372	Median Income per Capita
19	Holliston	Holliston	14,392	751,032,000	52,184	13,186	
20	Reading	Reading	25,482	1,326,944,000	52,074	13,163	
21	Princeton	Wachusett	3,461	174,316,000	50,366	11,896	
				Averages	\$ 51,173	\$ 15,395	

The 20 school districts closest to Shrewsbury in Income/Capita: 10 just above and 10 just below

# Shrewsbury v. Districts with Similar EQV/Capita

DOR Income, US Census and EQV used in FY2018 Cherry Sheets								
Rank	Municipality	School District	2014 Census	2016 EQV	EQV Per Capita	FY16 Average PPX [High to Low]		
1	Northfield	Pioneer Valley Reg.	3,008	459,130,600	152,637	N/R		
2	Cummington	Central Berkshire Reg.	873	132,105,600	151,324	15,484		
3	Hinsdale	Central Berkshire Reg.	1,977	303,864,800	153,700	15,484		
4	Washington	Central Berkshire Reg.	535	83,619,500	156,298	15,484		
5	Plainville	Plainville K-8	8,956	1,390,184,300	155,224	15,099		
6	Mendon	Mendon-Upton	5,962	901,857,400	151,268	15,033		
7	Seekonk	Seekonk	14,691	2,241,360,800	152,567	15,021		
8	Wareham	Wareham	22,464	3,397,641,400	151,248	14,854		
9	Saugus	Saugus	27,885	4,162,848,900	149,286	14,629		
10	Mansfield	Mansfield	23,604	3,521,948,200	149,210	14,457		
11	Groton	Groton-Dunstable	11,225	1,635,643,200	145,714	14,247	Median PPX	
12	Dunstable	Groton-Dunstable	3,390	512,397,400	151,150	14,247		
13	Chelmsford	Chelmsford	35,028	5,436,078,900	155,192	14,216		
14	Medford	Medford	57,295	8,962,552,200	156,428	13,895		
15	Rehoboth	Dighton-Rehoboth	11,932	1,758,293,500	147,359	13,695		
16	Beverly	Beverly	41,081	6,145,554,700	149,596	13,660		
17	Shrewsbury	Shrewsbury	36,574	5,538,400,100	151,430	13,372	Median EQV per Capita	
18	Franklin	Franklin	33,011	5,001,281,700	151,503	13,310		
19	Boylston	Boylston	4,476	686,459,600	153,365	13,297		
20	Raynham	Bridgewater-Raynham	13,695	2,011,714,400	146,894	13,175		
21	West Bridgewater	West Bridgewater	7,048	1,101,346,700	156,264	12,177		
				Averages	\$ 151,793	\$ 14,350		

The 20 school districts closest to Shrewsbury in EQV/Capita: 10 just above and 10 just below

# PPX Sub-Group Analysis

## Massachusetts Department of Elementary and Secondary Education

### Per Pupil Expenditure Summary, FY14-FY16

Fiscal year 2016 data last updated March 3, 2017

This report shows per pupil expenditures by major functional categories for the last three years, including total in-district expenditures, and total expenditures for all districts. Total expenditures per pupil average across all expenditures and pupils, both in-district and out-of-district. The out-of-district expenditure functions (9000 series) are not included on this report because we are not able to calculate per pupil expenditures consistently for all of these functional categories.

Districts with incomplete fiscal year 2016 data are not displayed.

#### Shrewsbury

	2014	2015	2016
<b>FTEIn</b> In-District FTE Pupils	5,925.8	5,868.2	5,967.9
<b>FTEOut</b> Out-of-District FTE Pupils	357.8	353.3	302.8
<b>FTEs</b> Total FTE Pupils	6,283.6	6,221.5	6,270.7

Function Description	2014			2015			2016		
	\$ Per In-District Pupil	State Average	% of State	\$ Per In-District Pupil	State Average	% of State	\$ Per In-District Pupil	State Average	% of State
	A	B	C = A/B	A	B	C = A/B	A	B	C = A/B
ADMN Administration	\$310.26	\$500.14	62.0%	\$294.78	\$531.08	55.5%	\$338.54	\$545.36	62.1%
LDRS Instructional Leadership	\$676.87	\$935.16	72.4%	\$754.67	\$976.22	77.3%	\$795.88	\$1,016.07	78.3%
TCHR Teachers	\$4,315.20	\$5,442.89	79.3%	\$5,042.60	\$5,619.30	89.7%	\$5,087.39	\$5,831.96	87.2%
TSER Other Teaching Services	\$1,326.94	\$1,138.33	116.6%	\$1,391.59	\$1,177.10	118.2%	\$1,444.07	\$1,240.11	116.4%
PDEV Professional Development	\$163.13	\$217.05	75.2%	\$154.56	\$197.46	78.3%	\$216.32	\$207.18	104.4%
MATL Instructional Materials, Equipment and Technology	\$307.49	\$431.09	71.3%	\$417.69	\$430.87	96.9%	\$331.93	\$466.69	71.1%
GUID Guidance, Counseling and Testing	\$322.09	\$420.88	76.5%	\$376.31	\$443.26	84.9%	\$361.74	\$461.50	78.4%
SERV Pupil Services	\$1,087.92	\$1,375.78	79.1%	\$1,143.38	\$1,430.21	79.9%	\$1,288.38	\$1,502.53	85.7%
OPMN Operations and Maintenance	\$708.41	\$1,102.49	64.3%	\$818.03	\$1,140.40	71.7%	\$794.49	\$1,124.35	70.7%
BENE Insurance, Retirement Programs and Other	\$1,544.90	\$2,434.56	63.5%	\$1,584.28	\$2,490.70	63.6%	\$1,693.30	\$2,598.82	65.2%
<b>IIII In-District Per Pupil Expenditure</b>	<b>\$10,763.21</b>	<b>\$13,998.38</b>	<b>76.9%</b>	<b>\$11,977.91</b>	<b>\$14,436.60</b>	<b>83.0%</b>	<b>\$12,352.04</b>	<b>\$14,994.57</b>	<b>82.4%</b>
<b>TTPP Total Per Pupil Expenditures</b>	<b>\$11,869.99</b>	<b>\$14,520.87</b>	<b>81.7%</b>	<b>\$13,147.35</b>	<b>\$14,942.48</b>	<b>88.0%</b>	<b>\$13,372.35</b>	<b>\$15,511.26</b>	<b>86.2%</b>

# PPX Sub-Group Analysis: FY16

<b>Function Description</b>		<b>\$ Per In-District Pupil A</b>	<b>State Average B</b>	<b>% of State C = A/B</b>	<b>SPS v State average per pupil</b>	<b>Ranking SPS out of 314 districts, 1=highest</b>	<b>Percentile 100%= Top, 1%=Bottom</b>
ADMN	Administration	\$338.54	\$545.36	62.1%	\$ (206.81)	293	7%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
LDRS	Instructional Leader	\$795.88	\$1,016.07	78.3%	\$ (220.19)	235	25%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
TCHR	Teachers	\$5,087.39	\$5,831.96	87.2%	\$ (744.57)	243	23%



# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
TSER	Other Teaching Services	\$1,444.07	\$1,240.11	116.4%	\$ 203.96	91	71%

# PPX Sub-Group Analysis: FY16

<b>Function Description</b>		<b>\$ Per In-District Pupil A</b>	<b>State Average B</b>	<b>% of State C = A/B</b>	<b>SPS v State average per pupil</b>	<b>Ranking SPS out of 314 districts, 1=highest</b>	<b>Percentile 100%= Top, 1%=Bottom</b>
PDEV	Professional Development	\$216.32	\$207.18	104.4%	\$ 9.14	103	67%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
MATL	Instructional Materials, Equipment and Technology	\$331.93	\$466.69	71.1%	\$ (134.76)	199	37%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
GUID	Guidance, Counseling and Testing	\$361.74	\$461.50	78.4%	\$ (99.76)	243	23%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
SERV	Pupil Services	\$1,288.38	\$1,502.53	85.7%	\$ (214.15)	191	39%

# PPX Sub-Group Analysis: FY16

<b>Function Description</b>	<b>\$ Per In-District Pupil A</b>	<b>State Average B</b>	<b>% of State C = A/B</b>	<b>SPS v State average per pupil</b>	<b>Ranking SPS out of 314 districts, 1=highest</b>	<b>Percentile 100%= Top, 1%=Bottom</b>
OPMN Operations and Maintenance	\$794.49	\$1,124.35	70.7%	\$ (329.86)	298	5%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
BENE	Insurance, Retirement Programs and Other	\$1,693.30	\$2,598.82	65.2%	\$ (905.52)	286	9%

# PPX Sub-Group Analysis: FY16

Function Description		\$ Per In-District Pupil A	State Average B	% of State C = A/B	SPS v State average per pupil	Ranking SPS out of 314 districts, 1=highest	Percentile 100%= Top, 1%=Bottom
III	In-District Per Pupil Expenditure	\$12,352.04	\$14,994.57	82.4%	\$ (2,642.54)	301	4%



# Other Facts

- Shrewsbury ranks #257 of 314 school districts reported thus far. [Data for 15 districts is not yet published.]
  - This is bottom 18<sup>th</sup> percentile
- \*Shrewsbury ranks #72 of 351 Commonwealth communities in income per capita at \$51,488
  - This is the top 21<sup>st</sup> percentile
- \*State average income per capita is \$41,937 and median is \$33,453
  - \**Department of Revenue data from 2014-latest available*

# Conclusions

- The different data sets all affirm Shrewsbury Public Schools is a comparatively “cost-efficient” organization
- If S.P.S. were spending at the state average per pupil, our budget would have to increase by \$13.4M [*6270.7 pupil FTE x \$2,139*]