

**H.P. 1335 - L.D. 1850**

**Resolve, To Establish the Commission To Strengthen the Adequacy and Equity of Certain Cost Components of the School Funding Formula**

**Sec. 5. Duties. Resolved:** That the commission shall examine the reports and related work products presented to the Joint Standing Committee on Education and Cultural Affairs during the 126th Legislature as part of the independent review of the Essential Programs and Services Funding Act conducted pursuant to Resolve 2011, chapter 166 and shall develop a plan to strengthen the adequacy and equity of the following cost components included in the Essential Programs and Services Funding Act and other related education statutes.

**2. Support for economically disadvantaged students; Title I funds.** As part of the review and analysis of the cost components related to strengthening support for economically disadvantaged students, including the provision of funding under Title I of the federal Elementary and Secondary Education Act of 1965, 20 United States Code, Section 6301 et seq., referred to in this resolve as "Title I," and resources to provide extra help for struggling students, such as extended school days and summer school programs, the commission shall:

**A. Collect school administrative unit spending data on the number of Title I teachers and education technicians in order to update the staffing ratios in the essential programs and services funding formula;**

**B. Conduct an analysis of the updated data collected on student-teacher and student-education technician staffing ratios in the essential programs and services funding formula in order to separate the groups of teachers into the following categories: classroom teachers, Title I teachers and teacher leaders or instructional coaches;**

C. Develop a plan for adjusting the costs of the essential programs and services funding formula to account for the separate costs of classroom teachers, Title I teachers, education technicians and teacher leaders or instructional coaches;

D. Conduct research and analysis of the structures, programs, costs and achievement impacts of evidence-based practices in other states related to extended school day and summer school programs and also analyze examples of extended school day and summer school programs provided by school administrative units in the State;

E. Develop 2 or more models for funding and evaluating extended school day and summer school programs for inclusion in the essential programs and services funding formula; and

F. Project the financial impact of the adjustments under this subsection to the essential programs and services funding formula.

## Analysis of Student-Teacher Ratios

### Current EPS Student-Teacher Ratios

Regular Classroom Teacher and Subject Specialists

<u>Grade Level</u>	<u>FTE Student-Teacher Ratio</u>
Grades K-5	17:1
Grades 6-8	16:1
Grades 9-12	15:1

Geographically Isolated Small Schools

<u>School Type and Size</u>	<u>Small School Adjustment</u>
K-8 school, fewer than 15 students per grade	12.2% weighted per-pupil amount
Elementary school other than K-8, fewer than 15 students per grade	13.4% weighted per-pupil amount
Elementary school other than K-8, Between 15 and 29 students per grade	8.8% weighted per-pupil amount
Secondary school, fewer than 100 students	11:1 Student-teacher ratio
Secondary school, between 100 and 200 students	13:1 student-teacher ratio

(Note: Small island schools receive an additional adjustment.)

## Teacher Ratios by School Type

Schools were divided into types according to their grade span. Most schools fit within or almost within the EPS prototypical school types of K-5, 6-8, and 9-12, or were K-8 or K-12 schools. Schools with narrower grade ranges, such as K-2 or 7-8, were placed within the closest EPS school type. Schools in the group labeled “other” include schools that cross two different EPS types, such as a 6-12 grade span.

**Table 1. Teacher Ratios by Grade Span 2013-14**

	K-5	Middle School	High School	K-8	K-12	Other	All Schools
Number of Schools	270	82	89	88	10	26	565
Total Enrollment	71,900	31,122	45,978	16,174	1,993	7,649	174,816
FTE Title I Teachers	178	13	2	45	6	1	244
FTE Teachers With Title I	4,693	2,076	3,067	1,257	186	541	11,819
FTE Teachers Without Title I	4,515	2,063	3,065	1,213	180	540	11,575
<b>Teacher-Student Ratio With Title I</b>	<b>15.3</b>	<b>15.0</b>	<b>15.0</b>	<b>12.9</b>	<b>10.7</b>	<b>14.1</b>	<b>14.8</b>
<b>Teacher-Student Ratio W/O Title I</b>	<b>15.9</b>	<b>15.1</b>	<b>15.0</b>	<b>13.3</b>	<b>11.1</b>	<b>14.2</b>	<b>15.1</b>

## Ratios Based on Performance

Higher and lower performing schools were identified by their student assessment scores in the years 2007 through 2010. Higher performing schools were better than average in three measures—mean scale score, the percentage of students meeting state standards, and the percentage of students at least partially meeting state standards—and had mean scale scores better than would be expected based on student characteristics and performance in earlier grades. High schools also needed a better than average graduation rate. Lower performing schools were worse than average in each measure.

**Table 2. K-5 School Teacher-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	61	64
Total Enrollment	14,829	16,313
FTE Teachers With Title I	971	1,122
FTE Teachers Without Title I	946	1,067
FTE Title I Teachers	25	55
Teacher-Student Ratio With Title I	15.3	14.5
Teacher-Student Ratio Without Title I	15.7	15.3

**Table 3. Middle School Teacher-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	18	33
Total Enrollment	7,507	11,446
FTE Teachers With Title I	513	767
FTE Teachers Without Title I	513	760
FTE Title I Teachers	0	7
Teacher-Student Ratio With Title I	14.6	14.9
Teacher-Student Ratio Without Title I	14.6	15.1

**Table 4. High School Teacher-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	13	14
Total Enrollment	7,280	6,053
FTE Teachers With Title I	542	427
FTE Teachers Without Title I	542	426
FTE Title I Teachers	0	1
Teacher-Student Ratio With Title I	14.4	14.2
Teacher-Student Ratio Without Title I	14.4	14.2

## Ratios Based on Efficiency

More efficient schools were identified as higher performing schools that also had a return on spending better than the state average and better than would be expected based on student characteristics and performance in earlier grades. A school's return on spending was defined as the percentage of students meeting state proficiency standards divided by operating expenditure. Less efficient schools were lower performing schools with low return on spending.

**Table 5. K-5 School Teacher-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	48	40
Total Enrollment	13,037	9,103
FTE Teachers With Title I	827	641
FTE Teachers Without Title I	806	612
FTE Title I Teachers	21	29
Teacher-Student Ratio With Title I	15.8	14.2
Teacher-Student Ratio Without Title I	16.2	14.9

**Table 6. Middle School Teacher-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	13	21
Total Enrollment	6,082	6,691
FTE Teachers With Title I	411	463
FTE Teachers Without Title I	411	459
FTE Title I Teachers	0	5
Teacher-Student Ratio With Title I	14.8	14.4
Teacher-Student Ratio Without Title I	14.8	14.6

**Table 7. High School Teacher-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	10	8
Total Enrollment	6,274	2,370
FTE Teachers With Title I	432	180
FTE Teachers Without Title I	432	179
FTE Title I Teachers	0	1
Teacher-Student Ratio With Title I	14.5	13.2
Teacher-Student Ratio Without Title I	14.5	13.3

## Ratios by Poverty Level

Schools identified as average poverty schools had a percentage of students eligible for free or reduced price lunches within a half a standard deviation of the state average. Higher and lower poverty schools were above or below this range.

**Table 8. K-5 Teacher-Student Ratios by Poverty Level**

	School Poverty Level			Total
	Lower	Average	Higher	
Number of Schools	81	93	96	270
Total Enrollment	24,206	22,067	25,627	71,900
Average School Size	299	237	267	266
FTE Teachers With Title I	1,544	1,465	1,684	4,693
FTE Teachers Without Title I	1,515	1,410	1,591	4,515
FTE Title 1 Teachers	29	56	93	178
Teacher Student Ratios With Title I	15.7	15.1	15.2	15.3
Teacher Student Ratios Without Title I	16.0	15.7	16.1	15.9

**Table 9. Middle School Teacher-Student Ratios by Poverty Level**

	School Poverty Level			Total
	Lower	Average	Higher	
Number of Schools	30	30	22	82
Total Enrollment	13,348	10,698	7,076	31,122
Average School Size	445	357	322	380
FTE Teachers With Title I	901	711	464	2,076
FTE Teachers Without Title I	901	703	459	2,063
FTE Title I Teachers	0	8	5	13
Teacher-Student Ratios With Title I	14.8	15.0	15.3	15.0
Teacher-Student Ratios Without Title I	14.8	15.2	15.4	15.1

**Table 10. High School Teacher-Student Ratios by Poverty Level**

	School Poverty Level			Total
	Lower	Average	Higher	
Number of Schools	40	35	14	89
Total Enrollment	23,697	16,358	5,923	45,978
Average School Size	592	467	423	517
FTE Teachers With Title I	1,579	1,093	395	3,067
FTE Teachers Without Title I	1,579	1,092	394	3,065
FTE Title I Teachers	0	0	1	1
Teacher-Student Ratios With Title I	15.0	15.0	15.0	15.0
Teacher-Student Ratios Without Title I	15.0	15.0	15.0	15.0

## Ratios by School Size

Schools were divided into categories based on the school sizes cited in the EPS isolated small schools adjustment. For K-5, middle, and K-8 Schools, those with less than 15 students per grade and between 15 and 29 students per grade are listed.

**Table 11. K-5 Schools Teacher-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-28	28+	
Number of Schools	25	36	209	270
Total Enrollment	1,543	4,061	66,296	71,900
Average School Size	62	113	317	266
FTE Teachers With Title I	138	306	4,249	4,693
FTE Teachers Without Title 1	131	295	4,089	4,515
FTE Title I Teachers	6	11	161	178
Teacher-Student Ratio With Title I	11.2	13.3	15.6	15.3
Teacher-Student Ratio Without Title I	11.8	13.8	16.2	15.9

**Table 12. Middle Schools Teacher-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-28	28+	
Number of Schools	1	2	79	82
Total Enrollment	50	204	30,868	31,122
Average School Size	50	102	391	380
FTE Teachers With Title I	6	17	2,053	2,076
FTE Teachers Without Title 1	5	16	2,042	2,063
FTE Title I Teachers	1	1	11	13
Teacher-Student Ratio With Title I	9.1	12.1	15.0	15.0
Teacher-Student Ratio Without Title I	10.0	12.9	15.1	15.1

**Table 13. K-8 Schools Teacher-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-28	28+	
Number of Schools	44	27	17	88
Total Enrollment	3,472	5,031	7,671	16,174
Average School Size	79	186	451	184
FTE Teachers With Title I	333	406	518	1,257
FTE Teachers Without Title 1	319	390	503	1,213
FTE Title I Teachers	14	15	15	45
Teacher-Student Ratio With Title I	10.4	12.4	14.8	12.9
Teacher-Student Ratio Without Title I	10.9	12.9	15.3	13.3

## Ratios by School Size: High Schools

For high schools, schools with less than 100 student and between 100 and 200 students are listed, which are the high school sizes cited in the EPS isolated small schools adjustment.

**Table 14. High Schools Teacher-Student Ratios by Size**

	School Size			Total
	1-99	100-199	200+	
Number of Schools	3	9	77	89
Total Enroll	223	1,205	44,550	45,978
Average School Size	74	134	579	517
FTE Teachers With Title I	25	113	2,928	3,067
FTE Teachers Without Title I	25	113	2,927	3,065
FTE Title I Teachers	0	0	2	2
Teacher-Student Ratio With Title I	8.8	10.7	15.2	15.0
Teacher-Student Ratio Without Title I	8.8	10.7	15.2	15.0

## Ratios by Beating the Odds

Schools were considered to be beating the odds and designated “above the line” if their average scale score on the 2013 NECAP was better than would be expected based on the percentage of students in the school eligible for free or reduced-price lunch. Other schools were considered below the line.

**Table 15. K-5 Schools Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	97	98
Total Enrollment	27,297	28,034
Average School Size	281	286
FTE Teachers With Title I	1,794	1,855
FTE Teachers Without Title I	1,715	1,797
FTE Title 1 Teachers	79	58
Teacher-Student Ratio With Title I	15.2	15.1
Teacher-Student Ratio Without Title I	15.9	15.6

**Table 16. Middle School Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	46	35
Total Enrollment	17,484	13,118
Average School Size	380	375
FTE Teachers With Title I	1,175	867
FTE Teachers Without Title I	1,167	863
FTE Title 1 Teachers	8	5
Teacher-Student Ratio With Title I	14.9	15.1
Teacher-Student Ratio Without Title I	15.0	15.2

**Table 17. High School Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	45	42
Total Enrollment	23,379	21,168
Average School Size	520	504
FTE Teachers With Title I	1,534	1,434
FTE Teachers Without Title I	1,532	1,434
FTE Title I Teachers	2	0
Teacher-Student Ratio With Title I	15.2	14.8
Teacher-Student Ratio Without Title I	15.3	14.8

## Analysis of Student-Education Technician Ratios

### Current EPS Student-Education Technicians Ratios

#### Regular Education Technicians

<u>Grade Level</u>	<u>Student-Education Technicians Ratio</u>
Grades K-5	100:1
Grades 6-8	100:1
Grades 9-12	250:1

## Education Technicians by School Type

Schools were divided into types according to their grade span. Most schools fit within or almost within the EPS prototypical school types of K-5, 6-8, and 9-12, or were K-8 or K-12 schools. Schools with narrower grade ranges, such as K-2 or 7-8, were placed within the closest EPS school type. Schools in the group labeled “other” include schools that cross two different EPS types, such as a 6-12 grade span.

**Table 1. Ed Tech Ratios by Grade Span 2013-14**

	K-5	Middle School	High School	K-8	K-12	Other	All Schools
Number of Schools	270	82	89	88	10	26	565
Total Enrollment	71,900	31,122	45,978	16,174	1,993	7,649	174,816
Ed Tech With Title I	845	118	149	174	27	41	1,354
Ed Tech Without Title I	629	100	146	139	25	38	1,076
FTE Title I Ed Techs	216	18	3	35	3	3	278
Title I % of FTE Ed Tech	25.6%	15.3%	2.0%	20.1%	9.5%	6.8%	20.5%
<b>Ed Tech-Student Ratio With Title I</b>	<b>85.1</b>	<b>264.2</b>	<b>309.6</b>	<b>92.74</b>	<b>72.7</b>	<b>187.0</b>	<b>129.1</b>
<b>Ed Tech-Student Ratio W/O Title I</b>	<b>114.3</b>	<b>311.8</b>	<b>316.0</b>	<b>116.1</b>	<b>80.4</b>	<b>200.8</b>	<b>162.4</b>

## Ratios Based on Performance

Higher and lower performing schools were identified by their student assessment scores in the years 2007 through 2010. Higher performing schools were better than average in three measures—mean scale score, the percentage of students meeting state standards, and the percentage of students at least partially meeting state standards—and had mean scale scores better than would be expected based on student characteristics and performance in earlier grades. High schools also needed a better than average graduation rate. Lower performing schools were worse than average in each measure.

**Table 2. K-5 School Ed Tech-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	61	64
Total Enrollment	14,829	16,313
Average School Size	243	255
Ed Tech With Title I	171	183
Ed Tech Without Title I	146	137
Ed Tech-Student Ratio With Title I	86.9	89.3
Ed Tech-Student Ratio Without Title I	101.6	118.9

**Table 3. Middle School Ed Tech-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	18	33
Total Enrollment	7,507	11,446
Average School Size	417	347
Ed Tech With Title I	26	51
Ed Tech Without Title I	22	41
Ed Tech-Student Ratio With Title I	289.8	224.0
Ed Tech-Student Ratio Without Title I	342.8	279.9

**Table 4. High School Ed Tech-Student Ratios by Performance**

	Higher Performing	Lower Performing
Number of Schools	13	14
Total Enrollment	7,820	6,053
Average School Size	602	432
Ed Tech With Title I	21	28
Ed Tech Without Title I	21	27
Ed Tech-Student Ratio With Title I	376.0	217.0
Ed Tech-Student Ratio Without Title I	376.0	225.0

## Ratios Based on Efficiency

More efficient schools were identified as higher performing schools that also had a return on spending better than the state average and better than would be expected based on student characteristics and performance in earlier grades. A school's return on spending was defined as the percentage of students meeting state proficiency standards divided by operating expenditure. Less efficient schools were lower performing schools with low return on spending.

**Table 5. K-5 School Ed Tech-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	48	40
Total Enrollment	13,037	9,103
Average School Size	272	228
Ed Tech With Title I	149	115
Ed Tech Without Title I	124	94
Ed Tech-Student Ratio With Title I	87.8	79.4
Ed Tech-Student Ratio Without Title I	105.1	97.2

**Table 6. Middle School Ed Tech-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	13	21
Total Enrollment	6,082	6,691
Average School Size	468	319
Ed Tech With Title I	20	30
Ed Tech Without Title I	16	25
Ed Tech-Student Ratio With Title I	305.6	224.5
Ed Tech-Student Ratio Without Title I	382.5	273.1

**Table 7. High School Ed Tech-Student Ratios by Efficiency**

	More Efficient	Less Efficient
Number of Schools	10	8
Total Enrollment	6,274	2,370
Average School Size	627	296
Ed Tech With Title I	19	12
Ed Tech Without Title I	19	11
Ed Tech-Student Ratio With Title I	333.7	204.3
Ed Tech-Student Ratio Without Title I	333.7	223.6

## Ratios by Poverty Level

Schools identified as average poverty schools had a percentage of students eligible for free or reduced price lunches within a half a standard deviation of the state average. Higher and lower poverty schools were above or below this range.

**Table 8. K-5 School Ed Tech-Student Ratios by Poverty Level**

	School Poverty Level			
	Lower	Average	Higher	Total
Number of Schools	81	93	96	270
Total Enrollment	24,206	22,067	25,627	71,900
Average School Size	299	237	267	803
Ed Tech With Title I	270	279	296	845
Ed Tech Without Title I	230	206	193	629
Ed Tech-Student Ratio With Title I	90	79	87	85
Ed Tech-Student Ratio Without Title I	105	107	133	114

**Table 9. Middle School Ed Tech-Student Ratios by Poverty Level**

	School Poverty Level			
	Lower	Average	Higher	Total
Number of Schools	30	30	22	82
Total Enrollment	13,348	10,698	7,076	31,122
Average School Size	445	357	322	1123
Ed Tech With Title I	37	44	37	118
Ed Tech Without Title I	35	38	27	100
Ed Tech-Student Ratio With Title I	363.7	243.7	190.2	264.2
Ed Tech-Student Ratio Without Title I	383.6	281.5	262.1	311.8

**Table 10. High School Ed Tech-Student Ratios by Poverty Level**

	School Poverty Level			
	Lower	Average	Higher	Total
Number of Schools	40	35	14	89
Total Enrollment	23,697	16,358	5,923	45,978
Average School Size	592	467	423	1483
Ed Tech With Title I	67	62	20	149
Ed Tech Without Title I	67	60	19	146
Ed Tech-Student Ratio With Title I	356.3	263.8	296.2	309.6
Ed Tech-Student Ratio Without Title I	356.3	272.6	311.7	316.0

## Ratios by School Size

Schools were divided into categories based on the school sizes cited in the EPS isolated small schools adjustment. For K-5, middle, and K-8 Schools, those with less than 15 students per grade and between 15 and 29 students per grade are listed.

**Table 11. K-5 Schools Ed Tech-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-29	29+	
Number of Schools	25	36	209	270
Total Enrollment	1,543	4,061	66,296	71,900
Average School Size	62	113	317	492
Ed Tech With Title I	25	59	761	845
Ed Tech Without Title I	21	48	561	629
Ed Tech-Student Ratio With Title I	61.7	68.4	87.2	85.1
Ed Tech-Student Ratio Without Title I	74.2	85.5	118.3	114.3

**Table 12. Middle Schools Ed Tech-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-29	29+	
Number of Schools	1	2	79	82
Total Enrollment	50	204	30,868	31,122
Average School Size	50	102	391	543
Ed Tech With Title I	0	2	115	117
Ed Tech Without Title I	0	0	100	100
Ed Tech-Student Ratio With Title I	N.A.	88.7	269.6	266.5
Ed Tech-Student Ratio Without Title I	N.A.	N.A.	309.3	311.8

**Table 13. K-8 Schools Ed Tech-Student Ratios by Pupils Per Grade**

	Pupils Per Grade			Total
	<15	15-29	29+	
Number of Schools	44	27	17	88
Total Enrollment	3,472	5,031	7,671	16,174
Average School Size	79	186	451	716
Ed Tech With Title I	55	61	58	174
Ed Tech Without Title I	43	50	46	139
Ed Tech-Student Ratio With Title I	62.9	82.5	131.8	92.7
Ed Tech-Student Ratio Without Title I	81.5	100.0	165.3	116.1

## Ratios by School Size: High Schools

For high schools, schools with less than 100 student and between 100 and 200 students are listed, which are the high school sizes cited in the EPS isolated small schools adjustment.

**Table 14. High Schools Ed Tech-Student Ratios by Size**

	School Size			Total
	1-99	100-199	200+	
Number of Schools	3	9	77	89
Total Enrollment	223	1,205	44,550	45,978
Average School Size	74	134	579	517
Ed Tech With Title I	2	8	139	282
Ed Tech Without Title I	0	6	145	283
Ed Tech-Student Ratio With Title I	111.5	156.5	321.0	162.9
Ed Tech-Student Ratio Without Title I	N.A.	211.4	308.3	162.3

## Ratios by Beating the Odds

Schools were considered to be beating the odds and designated “above the line” if their average scale score on the 2013 NECAP was better than would be expected based on the percentage of students in the school eligible for free or reduced-price lunch. Other schools were considered below the line.

**Table 15. K-5 Schools Ed Tech-Student Ratios Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	97	98
Total Enrollment	27,297	28,034
Average School Size	281	286
Ed Tech With Title I	280	320
Ed Tech Without Title I	211	239
Ed Tech-Student Ratio With Title I	97.4	87.7
Ed Tech-Student Ratio Without Title I	129.3	117.5

**Table 16. Middle School Ed Tech-Student Ratios Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	46	35
Total Enrollment	17,484	13,118
Average School Size	380	375
Ed Tech With Title I	62	54
Ed Tech Without Title I	50	48
Ed Tech-Student Ratio With Title I	282.0	243.8
Ed Tech-Student Ratio Without Title I	350.4	273.9

**Table 17. High School Ed Tech-Student Ratios Beating the Odds**

	Performance	
	Below Line	Above Line
Number of Schools	45	42
Total Enrollment	23,379	21,168
Average School Size	520	504
Ed Techs With Title I	80	63
Ed Techs Without Title I	78	62
Ed Tech-Student Ratio With Title I	291.5	336.0
Ed Tech-Student Ratio Without Title I	299.0	341.4