

Legislative Research Commission

# Compendium Of State Education Rankings 2015

Research Report No. 413

Prepared By

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# **Compendium Of State Education Rankings 2015**

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# Foreword

In December 2014, the Education Assessment and Accountability Review Subcommittee approved the 2015 research agenda for the Office of Education Accountability, which included this edition of the *Compendium Of State Education Rankings*.

This publication is intended to offer legislators and the public a convenient source of information about how Kentucky compares to other states on key public elementary and secondary education indicators. Compendiums are updated and issued biennially.

David A. Byerman Director

Legislative Research Commission Frankfort, Kentucky October 2015

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### **Summary**

This compendium of state education rankings is intended as a reference tool comparing Kentucky's public education indicators to those of the nation and selected peer states. While rankings are based on all 50 states and the District of Columbia, the data presented focus on Southern Regional Education Board member states and other states adjacent to Kentucky.

Rankings should be used with caution. A ranking on one measure is affected by state differences in other measures, such as student characteristics and costs of living. It is essential to examine the measures on which a set of rankings is based because rankings do not indicate how far apart states are from each other. When many states cluster closely together on a measure, small fluctuations can cause big changes in rankings.

#### **Demographics**

With more than one-fourth of students living below the poverty level in 2013, Kentucky's public school student poverty rate was the 12<sup>th</sup> highest in the nation. The median family income was one of the lowest in the nation. Although minorities made up a gradually increasing percentage of students, Kentucky continued to have a lower percentage of minorities than the nation; in 2013, 80 percent of students were white, compared to 51 percent for the nation. Although the number of Hispanic students increased, they still made up less than 5 percent of students in 2013; blacks consistently made up approximately 11 percent of the student population.

#### **Student Services**

Between 2002 and 2013, the percentage of students receiving English learner services grew from just less than 1 percent to almost 3 percent; the national rate in 2013 was almost 9 percent. Approximately half of Kentucky students came from families whose incomes made them eligible for lunch subsidies; this rate was higher than that of the nation, but the gap narrowed over time, as eligibility increased more rapidly for the US than for Kentucky. The percentage of students with disabilities who required individualized education programs was 14.2 percent, compared to a national rate of 12.9 percent.

#### **Student Achievement**

Kentucky's grade 4 and grade 8 National Assessment of Educational Progress reading scores were significantly above the national averages in 2013. Kentucky was ranked 17<sup>th</sup> for grade 4 reading and 15<sup>th</sup> for grade 8 reading. Math scores in 2013 were statistically on par with those of the nation for grade 4 but significantly below the nation for grade 8; Kentucky ranked 28<sup>th</sup> and 36<sup>th</sup>, respectively.

Kentucky students' rate of participation in Advanced Placement exams more than doubled between 2002 and 2013, from 12.6 percent of students to 31.6 percent. Similarly, the percentage of students succeeding in earning qualifying scores more than doubled, from 6.5 percent in 2002 to 16.3 percent in 2013. Kentucky ranked 20<sup>th</sup> in AP participation and 25<sup>th</sup> in passing scores.

In 2009, Kentucky began requiring all students to take the ACT exam whether they were interested in college or not. From that time forward, Kentucky's average ACT scores have been lower than in previous years and lower than the scores of states that do not test all students. However, Kentucky's scores are similar to those of other states that administer the ACT to all students.

Since 2002, the graduation rate has improved more rapidly in Kentucky than in the nation. In 2013, Kentucky's high school seniors had the 10<sup>th</sup> highest adjusted cohort graduation rate, with an estimated 86 percent of students graduating, compared to a national rate of 81 percent.

#### **School And District Characteristics**

In 2013, Kentucky ranked 9<sup>th</sup> with respect to the percentage of students enrolled in rural schools. Kentucky's student/teacher ratio was slightly lower in 2013 than in 2002, but it continued to mirror that of the nation, with 16 students per teacher. Kentucky continued to have more total staff than the national average; in 2013, the number of students per staff member was 6.9, compared to a US ratio of 8.2. These differences primarily reflect more instructional aides and administrators. Relatively high numbers of instructional aides are likely due to Kentucky's higher rates of disability and preschool enrollment, as well as instructional aide requirements for kindergarten. Relatively high numbers of school administrators likely reflect the state's small rural schools and the inclusion of directors of Family Resource and Youth Services Centers (FRYSC), which do not exist in other states. The number of FRYSC directors increased over time, but the greatest contributor to growth in Kentucky's school administrators was an increase in assistant/vice principals. Kentucky continued to have more district administrators than the nation, but this gap narrowed over time, as the number decreased faster in Kentucky than in the nation.

#### **Fiscal Matters**

Even after adjusting for geographic cost differences, Kentucky ranked 34<sup>th</sup> for revenue per pupil and 33<sup>rd</sup> for current spending per pupil in 2012; however, unlike most states, Kentucky does not include school activity funds and some on-behalf payments when reporting revenue and expenditures. Since 2002, the share of revenue from local sources increased and the share of revenue from state sources decreased; however, in 2012, state sources still made up 54 percent of revenue in Kentucky, compared to just 45 percent for the nation. The state's proportion of spending dedicated to instruction was 58 percent, compared to 61 percent for the nation; the difference reflects Kentucky's slightly above-average percentages spent on instructional staff support, student transportation, and food services. As a result of mandated pay increases, Kentucky's average teacher salary rose from a rank of 36<sup>th</sup> in 2002 to a rank of 26<sup>th</sup> in 2013 and was on par with the national average.

## Chapter 1

### Introduction

In December 2014, the Education Assessment and Accountability Review Subcommittee approved the 2015 study agenda of the Office of Education Accountability (OEA), which included the latest edition of the *Compendium Of State Education Rankings*. This publication is intended to provide a reference tool for legislators and the general public regarding how Kentucky's public education indicators compare to those of the nation and selected peer states. While rankings are based on all 50 states and the District of Columbia, only the peer states are shown.

#### **Peer States**

This compendium compares Kentucky to its fellow members of the Southern Regional Education Board and to states adjacent to Kentucky. In addition to Kentucky, the other Southern Regional Education Board member states are Alabama (AL), Arkansas (AR), Delaware (DE), Florida (FL), Georgia (GA), Louisiana (LA), Maryland (MD), Mississippi (MS), North Carolina (NC), Oklahoma (OK), South Carolina (SC), Tennessee (TN), Texas (TX), Virginia (VA), and West Virginia (WV). Border states that are not members are Illinois (IL), Indiana (IN), Missouri (MO), and Ohio (OH).

#### **Organization Of The Compendium**

Rankings are grouped into the five areas described below. While additional data are available and useful, the data chosen were deemed to be the most salient education indicators. OEA invites feedback for future editions. Comparisons among school districts within Kentucky are available in a separate annual report.<sup>1</sup>

- **Student Demographics.** Chapter 2 provides data on child poverty, family income, and students' racial composition.
- **Student Services.** Chapter 3 concerns information on English learner services, individualized education programs, and National School Lunch Program eligibility.
- **Student Achievement.** Chapter 4 presents the results of the National Assessment of Educational Progress reading and math exams, the ACT, Advanced Placement exams, and graduation rates.
- School And District Characteristics. Chapter 5 provides rural school enrollment, and student/teacher ratios, as well as ratios of students to other types of staff.
- **Fiscal Matters.** Chapter 6 covers revenue per pupil, revenue by source, current spending per pupil, instruction as a percentage of current spending, and teacher salaries. Figures in Appendix A display 10-year trends for these measures.

#### **Use Of The State Rankings**

Rankings should be used with caution. A ranking on one measure is affected by state differences in other measures, such as student characteristics. It is essential to examine the measures on which a set of rankings is based because rankings do not indicate how far apart states are from each other. When many states cluster closely together on a measure, small fluctuations can cause big changes in rankings.

Depending on the data being ranked, a high ranking can be good, bad, or neutral. For example, high rankings on family income and low rankings on poverty rates are preferable. On the other hand, high rankings on rural school enrollment are neither good nor bad, though they have policy implications.

Unless otherwise noted, rankings reported in this compendium are out of 51—the 50 states and the District of Columbia. When two or more states have the same value, they are assigned the same rank and are listed in alphabetical order. If data are not available for all states, the US entry summarizes all available data.

Year refers to the ending year of the school year; for example, 2014 refers to the 2013-2014 school year. In most states, school years correspond to fiscal years, which begin July 1 and end June 30.

An em dash (—) indicates that data were not available because they were not collected, not reported, or not reliable. In contrast, N/A indicates that a measure does not apply. For example, N/A appears in place of a state rank for the US. In tables that show the statistical significance of differences between other states and Kentucky, N/A appears in the significance column for Kentucky itself.

Data based on samples are subject to sampling error. Each difference between Kentucky and another state was tested for statistical significance with a 95 percent confidence level; > indicates states that were significantly higher than Kentucky, = indicates states not significantly different from Kentucky, and < indicates states that were significantly lower than Kentucky. Statistical tests used unrounded percentages and took into account each state's sample size and variance; therefore, states with the same percentages can have different levels of significance.

Because costs vary from state to state, staff adjusted fiscal measures using the Comparable Wage Index (CWI), a measure developed under the auspices of the US Department of Education's National Center for Education Statistics (NCES). This index is posted on the NCES website for 1997 through 2005.<sup>2</sup> Index values for subsequent years, produced by the same person who created the NCES CWI, were obtained from Texas A&M University.<sup>3</sup>

Data from different sources may not match exactly, even when they purport to measure the same thing in the same year. Differences may reflect slightly different definitions or revisions made after data were reported.

# Chapter 2

### **Student Demographics**

The impact of socioeconomic and other demographic factors on academic performance is well documented. Examining the demographics of Kentucky's student population is crucial for understanding the state's needs.

### **Child Poverty**

Official poverty rates are determined by income thresholds for specified numbers and ages of family members; for example, in 2013, the federal poverty line was \$23,624 for a family of two parents and two children while it was \$16,057 for a single parent with one child.<sup>4</sup>

Poverty rates are useful for monitoring trends but fail to take into account a number of important factors: the effects of government policies that alter the resources available to families, such as payroll taxes and noncash benefits; expenses that are necessary to hold a job and earn income; variations in medical costs; some nontraditional family situations, such as child support payments and cohabitation of unmarried couples; and geographic differences in the costs of living.

As Table 2.1 shows, after rising for more than a decade, child poverty rates declined slightly in 2013 for most of the nation. Kentucky's rate continues to be high, but Kentucky is no longer among the top 10 states. In 2013, Kentucky ranked 12<sup>th</sup>, with about one-fourth of children in poverty (24.9 percent), compared to a national rate of 21.9 percent.

	1999			200	0			201	1	2013				
Rank		%	Rank	State	%	Sig.	Rank		%	Sig.	Rank	State		Sig.
2	MS	19.9	1	MS	31.0	> 51g.	1	MS	31.8	> <u>Sig.</u>	1	MS	33.7	> <u>Sig.</u>
3	LA	19.9	3	AR	27.2	=	4	LA	28.8	=	3	AR	28.6	>
5	WV	19.0	-				4	AR	28.1	=	4	LA	28.0	>
-			4	KY	26.0	N/A								
6	AL	16.1	6	AL	24.7	=	6	SC	27.8	=	5	SC	27.3	>
7	AR	15.8	7	SC	24.4	=	7	AL	27.6	=	6	AL	27.0	>
7	KY	15.8	7	ΤX	24.4	=	8	KY	27.4	N/A	8	WV	26.6	=
9	ΤX	15.4	9	LA	24.2	=	10	ΤX	26.6	=	9	GA	26.2	=
10	OK	14.7	10	TN	23.9	<	11	GA	26.3	=	9	TN	26.2	=
14	SC	14.1	11	WV	23.6	<	11	TN	26.3	=	12	KY	24.9	N/A
16	TN	13.5	14	NC	22.5	<	13	WV	25.8	=	12	NC	24.9	=
18	GA	13.0	15	GA	22.3	<	14	NC	25.6	=	14	ΤX	24.8	=
19	FL	12.5	16	OK	22.2	<	15	FL	24.9	<	15	FL	24.2	=
N/A	US	12.4	17	OH	21.9	<	17	OH	24.2	<	16	OK	23.5	=
20	NC	12.3	19	FL	21.3	<	19	OK	23.4	<	20	OH	22.4	<
23	MO	11.7	20	MO	20.7	<	20	IN	23.0	<	N/A	US	21.9	<
28	IL	10.7	21	IN	20.0	<	N/A	US	22.5	<	22	IN	21.8	<
30	OH	10.6	N/A	US	20.0	<	23	MO	22.1	<	22	MO	21.8	<
36	VA	9.6	25	IL	18.9	<	26	IL	21.6	<	27	IL	20.4	<
37	IN	9.5	35	DE	16.5	<	37	DE	17.5	<	34	DE	17.6	<
43	DE	9.2	40	VA	13.9	<	43	VA	15.3	<	41	VA	15.4	<
46	MD	8.5	50	MD	11.6	<	50	MD	13.5	<	46	MD	13.3	<

Table 2.1Children Living Below Federal Poverty Line, 1999, 2009, 2011, And 2013

Notes: > indicates significantly higher than Kentucky, = indicates not significantly different from Kentucky, and < indicates significantly lower than Kentucky. The 1999 census data are not subject to sampling error.

Source: Staff analysis of data from United States. Department of Commerce. Census Bureau. "Decennial Census." Washington: US Bureau of the Census, 2000. Web. Oct. 28, 2009; United States. Department of Commerce. Census Bureau. *American Community Survey*. For years 2009, 2011, and 2013 Web. Jan. 6, 2015.

#### **Family Income**

Table 2.2 presents median family income. Dollar figures shown are not comparable across years because they are not adjusted for inflation; however, dollar figures can be compared within the same year and rankings can be compared across years. The Census Bureau defines a family as two or more people residing together who are related by birth, marriage, or adoption. Income includes money from all sources, including public assistance, child support, unemployment insurance, interest, dividends, and pensions.

From 1999 to 2013, Kentucky was among the 10 lowest states with respect to median family income. In 2013, Kentucky ranked 45<sup>th</sup>, with a median family income of \$54,690, compared to a US median of \$64,926.

1999

le 2.2	ars, 1	.999, 20 011	009,	2(	)11, A		013	
Rank	State	\$ \$	Sig.		Rank		\$	Sig.
1		83,823	>		1	MD	87,204	>
8	VA	74,500	>		8	VA	75,524	>

Table 2.2Median Family Income In Nominal Dollars, 1999, 2009, 2011, And 2013

2009

Rank	State	\$	Rank	State	\$	Sig.	Rank	State	\$	Sig.	Rank	State	\$	Sig.
3	MD	61,876	1	MD	84,254	>	1	MD	83,823	>	1	MD	87,204	>
10	IL	55,545	8	VA	71,270	>	8	VA	74,500	>	8	VA	75,524	>
11	DE	55,257	14	DE	67,582	>	11	DE	69,663	>	17	IL	69,557	>
12	VA	54,169	17	IL	66,806	>	19	IL	65,579	>	18	DE	69,394	>
21	IN	50,261	N/A	US	61,082	>	N/A	US	61,455	>	N/A	US	64,926	>
N/A	US	50,046	31	OH	57,360	>	28	OH	58,565	>	29	ΤХ	61,208	>
22	OH	50,037	33	ΤХ	56,607	>	32	ΤХ	58,016	>	30	OH	61,030	>
24	GA	49,280	35	IN	56,432	>	33	IN	57,148	>	35	IN	59,428	>
31	NC	46,335	36	MO	56,318	>	34	MO	56,616	>	36	MO	58,754	>
33	MO	46,044	37	GA	56,176	>	38	GA	55,001	>	37	GA	57,458	>
34	ΤX	45,861	39	NC	54,288	>	39	NC	54,082	>	39	OK	56,655	>
36	FL	45,625	40	FL	53,509	>	40	FL	53,958	>	41	NC	56,111	=
38	SC	44,227	41	LA	53,427	>	41	OK	53,742	>	42	LA	55,871	=
40	TN	43,517	42	SC	52,406	>	42	LA	53,601	=	43	FL	55,774	=
43	AL	41,657	43	OK	52,403	>	44	TN	52,273	=	44	TN	54,691	=
44	KY	40,939	46	TN	51,344	>	45	SC	52,240	=	45	KY	54,690	N/A
45	OK	40,709	47	AL	50,779	>	46	AL	51,991	=	46	SC	54,686	=
47	LA	39,774	48	KY	49,801	N/A	47	KY	51,917	N/A	48	AL	54,045	=
49	AR	38,663	49	WV	47,659	<	49	WV	49,693	<	49	WV	51,596	<
50	MS	37,406	50	AR	46,868	<	50	AR	48,713	<	50	AR	50,415	<
51	WV	36,484	51	MS	45,601	<	51	MS	46,304	<	51	MS	47,615	<

Notes: > indicates significantly higher than Kentucky, = indicates not significantly different from Kentucky, and < indicates significantly lower than Kentucky. The 1999 census data are not subject to sampling error. Source: Staff analysis of data from United States. Department of Commerce. Census Bureau. "Decennial Census." Washington: US Bureau of the Census, 2000. Web. Oct. 28, 2009; United States. Department of Commerce. Census Bureau. *American Community Survey*. For years 2009, 2011, and 2013 Web. Jan. 6, 2015.

Chapter 2

#### **Racial Diversity Of Students**

State education agencies, such as Kentucky's Department of Education, report student enrollments in categories defined by race and ethnicity. White indicates origins in Europe, North Africa, or the Middle East. Black indicates origins in a black racial group of Africa. Hispanic includes origins in Mexico, Puerto Rico, Cuba, Central or South America, or other culture with Spanish heritage. Other includes Asians, Pacific Islanders, American Indians, and Alaska Natives.

Table 2.3 shows that the rate of minority student population for the commonwealth as a whole is lower than that of the US. In 2013, about 80 percent of Kentucky public school students were identified as white, compared to just 51 percent of the nation's enrollment. Though high, the percentage of students who are white has been declining in Kentucky, mirroring national trends. Between 2000 and 2013, the percentage of students who were black remained steady at about 11 percent. Kentucky's percentage of Hispanic students increased, but as of 2013 it was still relatively small at 4.8 percent, far below the national rate of 24.2 percent.

				Per	centage	Of Whi	ite	, Non-H	ispanic				
	2000		-		2009		•		2011			2013	
Rank	State	%	-	Rank	State	%		Rank	State	%	Rank	State	%
4	WV	94.8	-	3	WV	93.0		3	WV	92.0	2	WV	91.4
8	KY	88.1		6	KY	84.7		6	KY	81.9	7	KY	80.3
14	IN	84.3		13	OH	78.4		13	MO	74.7	13	MO	73.7
18	OH	81.1		14	IN	78.3		15	OH	74.2	14	OH	73.3
20	MO	79.7		16	MO	76.0		17	IN	73.1	17	IN	71.7
26	TN	72.9		25	TN	68.3		22	TN	67.3	22	TN	66.3
27	AR	72.2		27	AR	66.6		25	AR	64.8	25	AR	63.9
30	OK	66.2		30	AL	58.8		28	AL	58.3	29	AL	57.6
31	VA	64.3		31	VA	58.2		30	OK	54.6	31	SC	52.9
N/A	US	62.1		32	OK	57.3		31	VA	54.1	31	VA	52.9
33	NC	61.8		N/A	US	55.2		32	SC	53.4	33	OK	52.6
34	DE	61.6		34	IL	54.3		33	NC	53.2	34	NC	51.9
35	AL	61.1		34	NC	54.3		N/A	US	52.4	N/A	US	51.0
37	IL	60.7		37	SC	53.8		36	IL	51.3	35	IL	50.5
39	GA	55.5		38	DE	52.1		37	DE	50.1	38	DE	48.6
41	SC	55.2		40	LA	48.8		39	LA	48.5	40	LA	47.0
42	FL	54.3		41	GA	47.2		40	MS	46.0	41	MS	45.7
42	MD	54.3		42	FL	47.0		41	GA	44.4	42	GA	43.5
45	LA	49.2		43	MS	46.3		42	FL	43.0	43	MD	41.8
46	MS	47.5		44	MD	46.2		43	MD	42.9	44	FL	41.6
47	ΤX	43.1	_	47	TX	34.0		45	ΤX	31.2	47	ΤX	30.0

Table 2.3Racial Composition Of Students, 2000, 2009, 2011, And 2013

Continued on next page.

				Per	centage	Of Bla	ck,	Non-His	panic					
	2000	<u> </u>			2009				2011		-		2013	
Rank	State	%	R	Rank	State	%		Rank	State	%		Rank	State	%
2	MS	51.0		2	MS	50.5		2	MS	49.9		2	MS	49.5
3	LA	47.6		3	LA	46.1		3	LA	45.4		3	LA	45.0
4	SC	42.2		4	GA	39.0		4	GA	37.0		4	GA	36.9
5	GA	38.2		5	SC	38.8		5	SC	36.2		5	SC	35.4
6	MD	36.8		6	MD	38.0		6	MD	35.8		6	MD	35.1
7	AL	36.4		7	AL	35.3		7	AL	34.6		7	AL	33.9
8	NC	31.3		8	DE	33.2		8	DE	32.3		8	DE	31.4
9	DE	30.6		9	NC	31.2		9	NC	26.5		9	NC	26.2
10	VA	27.2		10	VA	26.4		10	VA	24.1		10	VA	23.5
11	FL	25.4		11	TN	24.6		11	TN	23.9		11	FL	23.0
12	TN	24.4		12	FL	24.0		12	FL	23.0		11	TN	23.0
13	AR	23.5		13	AR	22.4		13	AR	21.5		13	AR	21.0
14	IL	21.3		15	IL	20.0		15	IL	18.4		16	IL	17.6
18	MO	17.3		17	MO	17.8		16	MO	17.1		17	MO	16.6
N/A	US	17.2	I	N/A	US	17.0		18	OH	16.3		19	OH	16.2
19	OH	16.1		19	OH	16.9		N/A	US	15.7		N/A	US	15.7
21	ΤX	14.4		21	ΤX	14.2		21	ΤX	12.9		22	ΤX	12.7
23	IN	11.5		23	IN	12.8		22	IN	12.1		23	IN	12.3
24	OK	10.7		25	KY	11.0		23	KY	10.8		24	KY	10.7
25	KY	10.5		26	OK	10.9		24	OK	10.2		27	OK	9.4
38	WV	4.2		38	WV	5.4		32	WV	5.2	_	36	WV	4.9

Table 2.3 (cont.) Percentage Of Black, Non-Hispanio

**Percentage Of Hispanic** 

							mspume						
	2000			2009		-		2011				2013	
Rank	State	%	Rank	State	%	-	Rank	State	%		Rank	State	%
3	ΤX	39.6	3	ΤX	47.9		3	ΤX	50.3		3	ΤX	51.3
8	FL	18.2	7	FL	26.1		7	FL	28.0		7	FL	29.3
N/A	US	15.6	N/A	US	22.0		N/A	US	23.4		N/A	US	24.2
10	IL	14.6	9	IL	21.3		8	IL	22.9		8	IL	24.1
22	DE	5.4	20	DE	10.9		20	NC	12.6		20	NC	14.2
22	OK	5.4	22	NC	10.6		21	DE	12.4		21	OK	14.1
25	MD	4.4	23	OK	10.5		22	OK	12.3		22	DE	13.9
26	VA	4.3	25	GA	10.4		23	GA	11.9		24	MD	12.9
29	GA	4.0	26	MD	9.5		24	MD	11.5		26	GA	12.7
30	NC	3.7	27	VA	9.2		25	VA	11.4		27	VA	12.5
34	IN	3.1	28	AR	8.6		26	AR	9.8		28	AR	10.6
35	AR	3.0	31	IN	7.1		29	IN	8.4		30	IN	9.6
38	MO	1.6	35	SC	5.5		32	SC	6.4		35	TN	7.3
38	OH	1.6	36	TN	5.2		33	TN	6.1		36	SC	7.0
41	SC	1.5	39	AL	3.9		36	AL	4.7		39	AL	5.1
41	TN	1.5	39	MO	3.9		38	MO	4.5		39	MO	5.1
43	LA	1.3	42	KY	3.0		39	KY	3.9		41	KY	4.8
46	AL	1.1	43	LA	2.9		42	OH	3.4		42	LA	4.3
47	KY	0.8	44	OH	2.8		43	LA	2.6		44	OH	4.2
48	MS	0.6	48	MS	2.1		44	MS	2.5		48	MS	2.7
51	WV	0.4	51	WV	0.9		47	WV	1.1	-	51	WV	1.3

Continued on next page.

				rercen	lage O	A	I Other I	Naces				
	2000			2009				2011			2013	
Rank	State	%	Rank	State	%	-	Rank	State	%	 Rank	State	%
3	OK	17.7	3	OK	21.4	-	3	OK	23.0	 3	OK	23.9
N/A	US	5.4	13	VA	8.8		11	VA	10.4	11	VA	11.2
17	MD	4.5	N/A	US	7.8		13	MD	9.7	16	MD	10.3
21	VA	4.1	18	IL	6.8		N/A	US	8.6	N/A	US	9.1
25	IL	3.4	19	FL	6.6		17	NC	7.8	20	IL	7.7
27	NC	3.3	19	GA	6.6		18	IL	7.4	20	NC	7.7
29	AL	2.9	21	MD	6.3		20	GA	6.6	26	GA	6.8
29	ΤX	2.9	23	IN	5.8		22	IN	6.4	28	IN	6.5
32	DE	2.4	24	OH	5.5		23	OH	6.1	29	OH	6.4
33	GA	2.3	31	NC	4.0		24	FL	6.0	30	DE	6.2
35	FL	2.1	32	ΤХ	3.9		25	ΤХ	5.6	33	FL	6.1
37	LA	1.9	36	DE	3.7		28	DE	5.3	35	ΤX	5.9
39	KY	1.6	37	KY	3.4		32	SC	4.0	40	SC	4.7
39	TN	1.6	42	AL	2.4		33	AR	3.9	41	MO	4.6
43	MO	1.4	42	SC	2.4		34	MO	3.7	43	AR	4.5
45	AR	1.3	45	AR	2.3		35	LA	3.5	44	KY	4.2
46	OH	1.2	45	MO	2.3		36	KY	3.4	46	LA	3.7
47	IN	1.1	47	LA	2.2		37	TN	2.6	47	AL	3.4
47	SC	1.1	48	TN	1.9		39	AL	2.4	47	TN	3.4
49	MS	0.8	50	MS	1.1		40	WV	1.7	50	WV	2.4
50	WV	0.6	51	WV	0.8	_	41	MS	1.6	51	MS	2.1

 Table 2.3 (cont.)

 Percentage Of All Other Races

Note: In AK, CA, MA, NJ, and VT, the all other races category includes those of mixed race. Source: Staff analysis of data from United States. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Feb. 11, 2015.

# Chapter 3

### **Student Services**

This chapter compares Kentucky to peer states and to the nation with respect to selected student services. Some services are based on financial need, while others are based on educational needs, such as language barriers or disabilities. Because of the high proportion of disadvantaged students in Kentucky, many receive services.

#### **English Learner Services**

An English learner (EL), also called a student with limited English proficiency, comes from an environment in which a language other than English has had a significant impact on the ability to understand English. Federal funds provided by Title III of the Elementary and Secondary Education Act—reauthorized as the No Child Left Behind Act of 2001—support screening, curricula, instruction, professional development, and community and parent outreach programs. In addition, since FY 2006, Kentucky's state budget has provided funds for limited English proficiency in the Support Education Excellence in Kentucky (SEEK) funding formula, the mechanism for distributing state funds to districts.

Table 3.1 ranks states by the percentage of students receiving EL services. However, year-toyear comparability is somewhat compromised by missing data for different sets of states in each year. English learner data were not reported by two states in 2002, five in 2009, one in 2011, and two in 2013. Missing data affect the rankings and the US average, especially when the states with missing data have large Hispanic populations; for example, the drop in the US percentage of students receiving EL services in 2011 is likely a result of missing data for California.

In 2002, less than 1 percent of Kentucky's students received EL services. By 2013, the percentage of Kentucky students receiving these services had more than doubled but was still much lower than the national percentage; with 2.7 percent receiving EL services, Kentucky ranked 38<sup>th</sup>.

	2002			2009		•		2011			2013	
Rank	State	%	Rank	State	%	•	Rank	State	%	Rank	State	%
5	TX	14.5	3	ΤХ	15.1		3	TX	15.0	4	ΤХ	15.2
11	FL	8.2	8	IL	9.7		8	FL	8.7	6	IL	9.3
N/A	US	8.1	N/A	US	9.3		9	IL	8.3	7	FL	9.0
16	IL	6.6	10	FL	8.6		15	VA	7.0	N/A	US	8.5
18	OK	6.0	14	NC	7.6		16	NC	6.9	13	VA	7.4
23	GA	4.3	17	VA	7.0		18	AR	6.5	15	AR	7.0
25	IN	4.0	21	AR	5.8		19	OK	6.3	17	OK	6.9
25	NC	4.0	22	DE	5.7		N/A	US	6.0	18	NC	6.5
27	MD	3.8	26	GA	5.0		23	DE	5.3	19	MD	6.4
29	VA	3.7	27	IN	4.4		23	MD	5.3	23	DE	5.8
33	AR	2.9	27	SC	4.4		24	SC	5.0	25	SC	5.6
37	DE	2.6	35	TN	2.8		25	GA	4.9	28	GA	5.1
39	LA	1.5	36	AL	2.6		26	IN	4.7	29	IN	5.0
42	AL	1.0	39	KY	2.2		31	TN	3.0	35	TN	3.3
42	SC	1.0	40	OH	2.0		35	AL	2.4	37	MO	2.8
44	KY	0.9	41	LA	1.8		35	KY	2.4	38	KY	2.7
44	MO	0.9	41	MO	1.8		35	MO	2.4	44	OH	2.3
46	MS	0.5	45	MS	1.3		37	OH	2.1	46	LA	1.9
47	WV	0.3	46	WV	0.6		39	LA	1.7	47	MS	1.7
48	OH	0.0		MD			41	MS	1.1	49	WV	0.7
48	TN	0.0		OK			42	WV	0.6		AL	

Table 3.1Students Receiving English Learner Services, 2002, 2009, 2011, And 2013

Notes: Data were not available for ND and PA in 2002; MD, ME, NM, OK, and RI in 2009; CA in 2011; and AL and CO in 2013.

Source: Staff analysis of data from United States. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015.

#### **Individualized Education Programs**

An individualized education program (IEP) is a written instructional plan that the Individuals with Disabilities Education Act requires for each student identified with a disability that requires specialized instruction. The intent is to tailor the IEP to each student's unique needs, in collaboration with the student's parents.<sup>5</sup> The severity and nature of disabilities vary widely, ranging from speech difficulties and attention deficit/hyperactivity disorder to severe cognitive disabilities. The IEP creates an opportunity for teachers, parents, school administrators, related services personnel, and students to work together to improve educational results for students with disabilities. States use different methods to identify students with disabilities. Differences in identification methods can affect changes over time as well as differences between states in percentages of students with an IEP.

As Table 3.2 shows, the percentage of students with IEPs in Kentucky was 14.2 in 2013, which was one percentage point lower than in 2011. However, Kentucky's rate remained above the national rate of 12.9. Kentucky ranked 17<sup>th</sup> in 2013, down from 11<sup>th</sup> in 2011.

It is likely that the slight decline in the percentage of students with IEPs reflects recent changes in methods used to identify students rather than a change in the prevalence of disabilities. A 2008

OEA study pointed out Kentucky's relatively high disability identification rate and recommended measures for ensuring accurate identification of students and appropriate provision of services.<sup>6</sup> A follow-up study in 2011 recommended continued audits and reviews of the identification process.<sup>7</sup>

Table 3.2Students With Individualized Education Programs, 2002, 2009, 2011, And 2013

	2002			2009			2011			2013	
Rank	State	%									
3	WV	17.7	4	IN	16.8	7	WV	15.9	7	IN	16.2
6	IN	16.1	7	WV	16.5	8	IN	15.8	9	WV	15.7
7	TN	15.9	9	KY	16.1	11	KY	15.2	13	DE	14.9
11	MO	15.4	13	DE	15.1	12	OH	14.8	13	OK	14.9
12	FL	15.1	15	IL	15.0	13	OK	14.7	15	OH	14.8
13	KY	15.0	16	FL	14.6	14	IL	14.5	17	KY	14.2
16	SC	14.6	16	OH	14.6	15	DE	14.4	20	IL	14.0
17	IL	14.4	18	MO	14.5	17	FL	13.9	26	MO	13.5
19	NC	14.2	22	SC	14.1	18	MO	13.8	26	SC	13.5
20	OK	14.1	31	AR	13.5	18	SC	13.8	28	AR	13.3
20	VA	14.1	31	VA	13.5	20	AR	13.5	31	FL	13.1
22	DE	13.9	N/A	US	12.7	21	MS	13.0	31	MS	13.1
25	LA	13.4	33	LA	12.6	N/A	US	13.0	N/A	US	12.9
N/A	US	13.3	33	NC	12.6	21	VA	13.0	34	TN	12.8
29	AL	13.2	36	MD	12.2	22	NC	12.4	34	VA	12.8
33	MD	13.0	36	TN	12.2	25	MD	12.1	38	NC	12.5
39	MS	12.6	44	GA	10.9	25	TN	12.1	40	MD	11.9
40	AR	12.5	48	ΤX	9.5	27	LA	11.9	43	LA	11.4
42	OH	12.4	49	AL	0.9	30	AL	11.0	45	GA	10.9
44	ΤX	11.9	50	MS	0.0	32	GA	10.6	48	AL	10.6
46	GA	11.6	50	OK	0.0	35	ΤX	9.0	51	ΤX	8.7

Source: Staff analysis of data from United States. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015.

#### **National School Lunch Program**

Children from families with incomes at or below 130 percent of the poverty level are eligible for free lunches through the National School Lunch Program. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price lunches.

As Table 3.3 shows, between 2002 and 2013, approximately half of Kentucky students were eligible for lunch subsidies. Reflecting higher poverty rates, Kentucky's eligibility rate remained above that of the nation. However, the gap narrowed over time, as eligibility increased more rapidly nationally than in Kentucky; Kentucky dropped from having the 6<sup>th</sup> highest subsidized lunch rate in 2002 to the 15<sup>th</sup> highest in 2013.

	2002			2009			2011			2013	
Rank	State	%									
1	MS	65.3	1	MS	68.3	2	MS	70.6	1	MS	71.3
2	LA	59.1	3	LA	64.9	4	LA	66.2	3	LA	64.7
5	WV	50.4	5	AR	57.1	5	AR	60.5	4	AR	61.4
6	KY	49.1	6	OK	56.1	5	OK	60.5	6	OK	60.9
7	AL	48.7	7	GA	53.0	7	GA	57.4	7	ΤX	60.3
7	OK	48.7	8	SC	52.5	8	KY	56.6	8	GA	59.7
7	SC	48.7	9	AL	52.4	9	FL	56.0	10	FL	58.6
11	AR	47.2	11	KY	51.6	10	TN	55.0	11	SC	58.1
12	ΤХ	45.4	12	TN	50.0	11	AL	54.9	12	TN	57.9
13	FL	44.6	12	WV	50.0	12	SC	54.5	13	AL	57.7
14	GA	44.2	14	FL	49.6	14	WV	51.5	15	KY	54.6
N/A	US	38.6	15	ΤX	48.8	16	NC	50.3	16	NC	53.3
17	NC	38.4	N/A	US	43.8	18	ΤX	50.1	17	WV	52.5
20	IL	35.2	21	IN	41.8	N/A	US	47.9	18	DE	51.5
21	MO	35.1	25	DE	39.5	20	DE	47.7	21	IL	49.6
22	DE	34.6	26	IL	39.3	23	IN	46.6	N/A	US	49.6
29	IN	31.1	28	MO	38.7	27	IL	44.3	22	IN	48.9
31	MD	29.7	33	OH	36.4	27	MO	44.3	30	MO	44.5
34	VA	29.3	36	MD	34.7	31	OH	42.6	33	MD	42.7
40	OH	27.4	39	NC	33.9	34	MD	40.1	41	OH	39.0
	ΤN		42	VA	33.1	45	VA	36.7	42	VA	38.5

Table 3.3
Percentage Of Students Eligible For Free Or Reduced-Price Lunch In The
National School Lunch Program, 2002, 2009, 2011, And 2013

Note: Data were not available for AZ, CT, TN, and WY in 2002 and for AZ in 2013. Source: Staff analysis of data from United States. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015.

# Chapter 4

### **Student Achievement**

This chapter presents National Assessment of Educational Progress (NAEP) scores, participation rates and test scores for the ACT and Advanced Placement, and graduation rates.

Note that differences in student characteristics influence state rankings. Average test scores tend to be lower in states that have relatively large numbers of impoverished students, students with disabilities, English learners, and students who are neither white nor Asian. Compared to the national average, Kentucky has more impoverished students and students with disabilities, but fewer English learners and non-white students.

#### **National Assessment Of Educational Progress**

Beginning in 2003, all states were required to participate in NAEP for reading and mathematics every other year; tests are administered to random samples of students in grades 4 and 8.<sup>8</sup> Some students with disabilities and English learners use accommodations, such as readers or extra time, or are exempt from taking the tests. Despite the issuance of federal guidelines on these practices, there is considerable variation among states and from year to year in the percentages of students excluded or given accommodations. Kentucky tends to have relatively higher exclusion rates and lower accommodation rates. In 2013, Kentucky met the federal government's goal of 85 percent participation by students with disabilities and English learners in the math assessment but fell short of this goal in the reading assessment.<sup>9</sup> Exclusion and accommodation percentages are relatively small, and studies commissioned by the US Department of Education have not found exclusions and accommodations to have a substantial effect on test results.<sup>10</sup> Nevertheless, the department and other policy makers are concerned, urging states to include as many students as possible.

As Table 4.1 shows, Kentucky's average grade 4 math score was on par with that of the nation for 2009, 2011, and 2013, after having been significantly below the national average in 2003. Kentucky ranked 39<sup>th</sup> in 2003 but rose to 28<sup>th</sup> in 2013. However, Kentucky's average grade 8 math score was significantly below the national average in 2013.

Kentucky's average grade 4 and grade 8 reading scores, shown in Table 4.2, were significantly above the national averages in 2009, 2011, and 2013. In 2013, Kentucky ranked 17<sup>th</sup> for grade 4 reading and 15<sup>th</sup> for grade 8 reading.

							Gra	de 4							
	200	03			20	09			20	11			20	13	
Rank	State	Score	Sig												
2	NC	242	>	9	MD	244	>	5	MD	247	>	4	IN	249	>
9	VA	239	>	9	NC	244	>	9	NC	245	>	12	OH	246	>
11	IN	238	>	9	OH	244	>	9	VA	245	>	12	VA	246	>
11	OH	238	>	16	IN	243	>	13	IN	244	>	16	MD	245	>
17	ΤX	237	>	16	VA	243	>	13	OH	244	=	16	NC	245	>
20	DE	236	>	20	FL	242	>	24	KY	241	N/A	24	DE	243	=
20	SC	236	>	24	MO	241	=	24	ΤX	241	=	26	FL	242	=
27	MO	235	>	27	ΤX	240	=	27	DE	240	=	26	ΤX	242	=
N/A	US	235	>	N/A	US	240	=	27	FL	240	=	28	KY	241	N/A
32	FL	234	>	29	DE	239	=	27	MO	240	=	N/A	US	241	=
33	IL	233	>	29	KY	239	N/A	N/A	US	240	=	35	AR	240	=
33	MD	233	>	33	AR	238	=	32	IL	239	=	35	GA	240	=
36	WV	231	=	33	IL	238	=	34	AR	238	=	35	MO	240	=
37	GA	230	=	36	OK	237	=	34	GA	238	=	35	TN	240	=
39	AR	229	=	38	GA	236	=	37	OK	237	<	39	IL	239	<
39	KY	229	N/A	38	SC	236	<	37	SC	237	<	39	OK	239	<
39	OK	229	=	43	WV	233	<	43	WV	235	<	41	SC	237	<
43	TN	228	=	44	TN	232	<	46	TN	233	<	41	WV	237	<
47	LA	226	=	48	LA	229	<	48	AL	231	<	47	AL	233	<
48	AL	223	<	49	AL	228	<	48	LA	231	<	49	LA	231	<
48	MS	223	<	50	MS	227	<	50	MS	230	<	49	MS	231	<

Table 4.1National Assessment Of Educational Progress, Mathematics, 2003, 2009, 2011, And 2013

Grade 8

							Gra	d <u>e 8</u>							
	20	03			20	09			20	11			20	)13	
Rank	State	Score	Sig	Rank	State	Score	Sig	Rank	State	Score	Sig	Rank	State	Score	Sig
14	OH	282	>	12	MD	288	>	10	ΤХ	290	>	10	OH	290	>
14	VA	282	>	15	IN	287	>	12	OH	289	>	15	IN	288	>
18	IN	281	>	15	ΤX	287	>	12	VA	289	>	15	ΤX	288	>
18	NC	281	>	19	MO	286	>	17	MD	288	>	15	VA	288	>
26	MO	279	>	19	OH	286	>	21	NC	286	>	20	MD	287	>
29	MD	278	>	19	VA	286	>	23	IN	285	=	22	NC	286	>
30	DE	277	=	25	DE	284	>	27	DE	283	=	26	IL	285	>
30	IL	277	=	25	NC	284	>	27	IL	283	=	N/A	US	284	>
30	SC	277	=	32	IL	282	=	N/A	US	283	=	30	MO	283	=
30	ΤX	277	=	N/A	US	282	>	32	KY	282	N/A	31	DE	282	=
N/A	US	276	=	33	SC	280	=	32	MO	282	=	35	FL	281	=
35	KY	274	N/A	34	FL	279	=	34	SC	281	=	36	KY	281	N/A
36	OK	272	=	34	KY	279	N/A	37	AR	279	=	38	SC	280	=
38	FL	271	=	36	GA	278	=	37	OK	279	=	40	GA	279	=
38	WV	271	=	40	AR	276	=	40	FL	278	=	42	AR	278	=
41	GA	270	<	40	OK	276	<	40	GA	278	<	42	ΤN	278	=
42	TN	268	<	41	TN	275	<	45	TN	274	<	45	OK	276	<
45	AR	266	<	44	LA	272	<	46	LA	273	<	46	WV	274	<
45	LA	266	<	44	WV	270	<	46	WV	273	<	48	LA	273	<
49	AL	262	<	48	AL	269	<	49	AL	269	<	49	MS	271	<
50	MS	261	<	49	MS	265	<	49	MS	269	<	50	AL	269	<

Note: > indicates states significantly higher than Kentucky, = indicates states not significantly different, and < indicates states significantly lower than Kentucky.

Source: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. NAEP State Comparisons, Web. June 10, 2015.

Table 4.2
National Assessment Of Educational Progress, Reading, 2003, 2009, 2011, and 2013

							Gra	de 4							
	20	03			20	09			20	11			20	13	
Rank	State	Score	Sig												
6	DE	224	>	6	VA	227	=	2	MD	231	>	2	MD	232	>
9	VA	223	=	7	DE	226	=	8	VA	226	=	6	VA	229	>
13	MO	222	=	7	FL	226	=	10	DE	225	=	8	FL	227	=
13	OH	222	=	7	KY	226	N/A	10	FL	225	=	13	DE	226	=
19	NC	221	=	7	MD	226	=	10	KY	225	N/A	14	IN	225	=
23	IN	220	=	14	OH	225	=	14	OH	224	=	17	KY	224	N/A
25	KY	219	N/A	17	MO	224	=	23	GA	221	<	17	OH	224	=
25	MD	219	=	22	IN	223	=	23	IN	221	<	27	GA	222	=
25	WV	219	=	N/A	US	220	<	23	NC	221	<	27	MO	222	=
31	FL	218	=	30	IL	219	<	30	AL	220	<	27	NC	222	=
34	IL	216	=	30	NC	219	<	30	MO	220	<	N/A	US	221	<
N/A	US	216	=	30	ΤX	219	<	N/A	US	220	<	31	TN	220	<
36	SC	215	=	34	GA	218	<	34	IL	219	<	34	AL	219	<
36	ΤX	215	=	37	OK	217	<	36	ΤX	218	<	34	AR	219	<
38	AR	214	=	37	ΤN	217	<	37	AR	217	<	34	IL	219	<
38	GA	214	<	39	AL	216	<	39	OK	215	<	39	OK	217	<
38	OK	214	<	39	AR	216	<	39	SC	215	<	39	ΤХ	217	<
41	TN	212	<	39	SC	216	<	39	TN	215	<	42	WV	215	<
45	AL	207	<	42	WV	215	<	43	WV	214	<	44	SC	214	<
48	LA	205	<	43	MS	211	<	47	LA	210	<	47	LA	210	<
48	MS	205	<	50	LA	207	<	48	MS	209	<	49	MS	209	<

Grade 8

	2003					09			20	11		2013			
Rank	State	Score	Sig												
7	VA	268	=	11	OH	269	=	7	MD	271	=	6	MD	274	>
13	MO	267	=	14	KY	267	N/A	12	KY	269	N/A	15	KY	270	N/A
13	OH	267	=	14	MD	267	=	15	OH	268	=	18	OH	269	=
17	IL	266	=	14	MO	267	=	20	MO	267	=	23	VA	268	=
17	KY	266	N/A	20	IN	266	=	20	VA	267	=	25	IL	267	=
22	DE	265	=	20	VA	266	=	25	DE	266	<	25	IN	267	=
22	IN	265	=	25	DE	265	=	25	IL	266	<	25	MO	267	=
31	MD	262	=	25	IL	265	=	28	IN	265	<	31	DE	266	<
31	NC	262	=	30	FL	264	=	N/A	US	264	<	31	FL	266	<
31	OK	262	=	N/A	US	262	<	33	NC	263	<	N/A	US	266	<
N/A	US	261	=	33	TN	261	<	34	FL	262	<	34	GA	265	<
35	WV	260	=	34	GA	260	<	34	GA	262	<	34	TN	265	<
36	ΤX	259	<	34	NC	260	<	36	ΤX	261	<	36	NC	265	<
37	AR	258	<	34	ΤX	260	<	38	OK	260	<	37	ΤX	264	<
37	GA	258	<	39	OK	259	<	38	SC	260	<	38	AR	262	<
37	SC	258	<	41	AR	258	<	41	AR	259	<	38	OK	262	<
37	TN	258	<	42	SC	257	<	41	TN	259	<	42	SC	261	<
41	FL	257	<	43	AL	255	<	43	AL	258	<	46	AL	257	<
43	MS	255	<	43	WV	255	<	46	WV	256	<	46	LA	257	<
45	AL	253	<	49	LA	253	<	48	LA	255	<	46	WV	257	<
45	LA	253	<	50	MS	251	<	50	MS	254	<	50	MS	253	<

Note: > indicates states significantly higher than Kentucky, = indicates states not significantly different, and < indicates states significantly lower than Kentucky.

Source: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. NAEP State Comparisons, Web. June 10, 2015.

#### ACT

Kentucky uses the ACT exam to measure readiness to pursue college-level course work. The ACT consists of four multiple-choice tests—English, math, reading, and science—each of which has a maximum score of 36. Each student's scores on the four tests are averaged to create a composite. College readiness benchmarks based on student data have been set by both the organization that creates the ACT exam and by Kentucky's Council on Postsecondary Education (CPE). ACT's benchmarks are 18 in English, 22 in math and reading, and 23 in science.<sup>11</sup> CPE's benchmarks are 18 in English, 19 in math, and 20 in reading; CPE has no benchmark for science (13 KAR 2:020, Section 1(10)).

Table 4.3 ranks states by the percentages of high school graduates who took the ACT at any time during high school. The 2009 school year was the first year that 100 percent of high school graduates in Kentucky took the ACT test.

	2009			2012			2013					
Rank	State	%	Rank	State	%	Rank	State	%		Rank	State	%
1	KY	100	1	IL	100	 1	IL	100		1	IL	100
5	IL	97	1	KY	100	1	KY	100		1	KY	100
6	MS	93	1	LA	100	1	LA	100		1	LA	100
7	TN	92	1	MS	100	1	NC	100		1	MS	100
8	LA	89	1	TN	100	1	TN	100		1	NC	100
10	AL	76	11	AR	88	11	MS	95		1	TN	100
13	AR	73	12	AL	86	12	AR	90		13	AR	93
15	OK	71	15	OK	80	14	AL	78		16	FL	81
18	MO	67	17	MO	75	16	OK	75		17	AL	80
21	OH	64	20	OH	71	18	FL	74		19	MO	76
22	FL	62	22	FL	70	18	MO	74		21	OK	75
22	WV	62	23	WV	68	21	OH	72		24	OH	72
27	SC	50	27	SC	57	26	WV	63		27	WV	65
N/A	US	45	28	GA	52	N/A	US	54		28	SC	58
28	GA	40	N/A	US	52	27	GA	51		N/A	US	57
30	ΤX	30	29	ΤX	39	27	SC	51		30	GA	53
35	IN	24	34	IN	32	32	IN	38		32	IN	40
39	VA	20	40	VA	25	34	ΤX	37		32	ΤX	40
43	MD	17	43	MD	21	39	VA	26		41	VA	28
45	NC	15	45	NC	20	45	MD	21		45	MD	22
49	DE	11	49	DE	14	49	DE	15		49	DE	18

Table 4.3 ACT Participation Rates, 2009, 2012, 2013, And 2014

Source: Staff analysis of data from ACT. Average Scores by State. For years 2009, 2012, 2013, and 2014. Iowa City: ACT Inc. Web. June 11, 2015.

Table 4.4 compares Kentucky's ACT scores to those of the eight other states that had 100 percent participation in 2012 and 2014, including three that are not among the peer states shown throughout this compendium. Differences among states with respect to average ACT scores tend to be small; in both years, most of Kentucky's average scores were approximately 1 point below those of the highest state.

				20	12				
Com	posite	Eng	glish	Mathe	ematics	Rea	ding	Scie	ence
State	Score	State	Score	State	Score	State	Score	State	Score
IL	20.9	IL	20.5	IL	21.0	СО	20.7	ND	20.9
ND	20.7	LA	20.4	ND	21.0	IL	20.7	CO	20.8
CO	20.6	CO	19.9	CO	20.5	ND	20.7	IL	20.8
LA	20.3	ND	19.6	WY	20.2	WY	20.5	WY	20.6
WY	20.3	TN	19.6	MI	20.1	LA	20.4	MI	20.4
MI	20.1	KY	19.5	LA	19.9	KY	20.2	LA	20.1
KY	19.8	MI	19.3	KY	19.4	MI	20.0	KY	19.8
TN	19.7	WY	19.2	TN	19.1	TN	19.9	TN	19.6
MS	18.7	MS	18.6	MS	18.3	MS	18.9	MS	18.7
				20	14				
Com	posite	Eng	glish	Mathe	ematics	Rea	ding	Scie	ence
State	Score	State	Score	State	Score	State	Score	State	Score
UT	20.8	IL	20.3	IL	20.7	UT	21.3	UT	20.9
IL	20.7	CO	20.1	ND	20.7	MT	21.1	CO	20.6
CO	20.6	UT	20.0	MT	20.5	CO	20.9	ND	20.6
ND	20.6	ND	19.6	CO	20.4	IL	20.8	IL	20.5
MT	20.5	TN	19.6	UT	20.3	ND	20.8	MI	20.4
MI	20.1	KY	19.4	MI	19.9	WY	20.6	MT	20.4
WY	20.1	MI	19.3	WY	19.9	KY	20.3	WY	20.2
KY	19.9	MT	19.3	NC	19.6	MI	20.2	KY	20.0
TN	19.8	WY	19.3	KY	19.4	TN	20.1	TN	19.6

Table 4.4
Average ACT Scores For States With 100 Percent Participation, 2012 And 2014

Source: Staff analysis of data from ACT. Average Scores by State. For years 2012 and 2014. Iowa City: ACT Inc. Web. June 11, 2015.

Note that, although all Kentucky high school juniors take the ACT, only those who graduated from high school are included in state rankings. Students may retake the ACT as many times as they wish, provided they pay the test fee; students may choose which score to report to colleges, but the score used for state-level reporting in this compendium is that earned on the student's most recent attempt.

#### **Advanced Placement Exams**

Advanced Placement (AP) courses and exams provide high school students early access to college-level learning. Most colleges and universities use AP exam results in the admissions process to gauge a student's ability and to award college credit or placement into higher-level college courses. Scores range from 1 to 5; scores of 3 or above are considered passing and eligible for college credit.

The nonprofit organization College Board, which manages AP exams, annually publishes the number of high school graduates who attempted at least one exam during high school, as well as the number who attained scores of 3 or higher on at least one exam. These are shown in Table 4.5 as percentages of all high school graduates.

As Table 4.5 shows, Kentucky high school graduates' participation in Advanced Placement exams more than doubled between 2002 and 2013, increasing from 12.6 percent of graduates to 31.6 percent. Kentucky's ranking rose from 33<sup>rd</sup> to 20<sup>th</sup>. The percentage of students earning passing scores on the exams also improved dramatically, from 6.5 percent and a rank of 40<sup>th</sup> to 16.3 percent and a rank of 25<sup>th</sup>.

One contributor to Kentucky's improvements is AdvanceKentucky, an initiative of the Kentucky Science and Technology Corporation that provides considerable support and incentives to boost the number of Advanced Placement exams taken by students. In 2013, the 89 participating high schools (one-third of all high schools in Kentucky) experienced dramatic improvements in AP participation and pass rates.<sup>12</sup>

Table 4.5
Advanced Placement Exams For Graduating Classes Of 2002, 2011, 2012, And 2013

	Percentag	e Of High School Graduat	tes Attempting At Least One Exam	
002		2011	2012	20

	2002			2011				2012			2013	
Rank	State	%	Rank	State	%		Rank	State	%	Rank	State	%
2	VA	26.9	1	FL	47.4		1	FL	51.0	2	FL	53.1
4	FL	24.9	2	MD	46.4		3	MD	45.9	3	MD	47.4
6	MD	23.5	4	VA	40.1		4	AR	43.5	4	AR	46.1
7	NC	23.1	5	AR	40.0		5	VA	41.8	5	VA	44.1
11	SC	20.9	6	GA	38.2		6	GA	39.7	7	GA	39.6
14	GA	19.8	11	ΤX	32.8		13	ΤX	34.4	13	ΤX	35.9
15	ΤX	19.3	14	IN	31.9		15	IN	33.6	15	IN	35.0
N/A	US	18.1	15	NC	30.3		N/A	US	31.2	N/A	US	33.2
19	IL	16.2	N/A	US	30.2		18	NC	30.1	17	IL	32.4
24	DE	15.3	19	DE	28.9		19	IL	30.0	20	KY	31.6
29	OK	13.6	20	SC	28.6		20	KY	29.8	23	NC	31.2
30	IN	13.5	21	IL	28.5		24	DE	28.8	25	DE	30.7
31	OH	13.3	24	KY	27.6		26	SC	26.7	26	SC	29.3
33	KY	12.6	33	AL	21.9		34	AL	22.2	31	AL	25.2
35	TN	11.9	34	OK	21.5		36	WV	21.9	36	OH	22.7
41	WV	10.7	36	WV	20.5		37	OK	21.5	38	OK	22.1
43	AR	9.8	37	OH	20.3		38	OH	21.1	39	WV	22.0
44	AL	8.8	38	TN	19.8		43	TN	17.8	43	TN	19.0
48	MO	7.2	47	MS	14.3		47	MO	15.0	48	MO	15.8
49	MS	7.1	48	MO	14.1		49	MS	14.0	49	LA	15.2
51	LA	3.7	50	LA	13.3	-	51	LA	11.1	51	MS	12.7

Graduates With Passing Score(s) As A Percentage Of All High School Graduates

									-						
	2002			2011				2012				2013			
Rank	State	%	Rank	State	%		Rank	State	%	-	Rank	State	%		
3	VA	16.9	1	MD	27.9		1	MD	28.1		1	MD	29.6		
5	MD	16.4	3	VA	25.6		2	VA	26.8		3	VA	28.3		
8	FL	15.2	6	FL	23.9		3	FL	26.3		5	FL	27.3		
11	NC	13.7	13	GA	19.8		12	GA	20.9		13	IL	21.5		
12	SC	12.7	15	IL	18.5		16	IL	19.5		15	GA	21.3		
16	IL	11.7	16	NC	18.4		N/A	US	18.8		N/A	US	20.1		
N/A	US	11.7	N/A	US	18.1		18	NC	18.7		18	NC	19.3		
17	GA	11.2	18	TX	16.7		19	TX	17.6		19	TX	18.5		
18	TX	11.1	19	SC	16.5		22	SC	15.8		21	SC	17.7		
26	DE	9.3	22	DE	15.5		23	IN	15.2		23	DE	17.0		
28	OH	8.3	24	IN	14.0		24	AR	15.1		25	KY	16.3		
33	IN	7.3	26	KY	13.7		25	DE	15.0		26	IN	16.2		
34	TN	7.2	27	AR	13.5		26	KY	14.8		27	AR	16.0		
35	OK	7.1	28	OH	12.8		30	OH	13.6		30	OH	14.8		
40	KY	6.5	34	OK	10.7		40	OK	10.6		41	OK	11.0		
44	WV	5.2	35	TN	10.4		43	AL	9.6		42	AL	10.8		
46	AR	5.0	38	AL	9.9		43	TN	9.6		44	TN	10.1		
47	AL	4.8	42	WV	8.8		43	WV	9.6		47	MO	9.5		
48	MO	4.7	43	MO	8.2		47	MO	9.0		48	WV	9.4		
50	MS	3.0	46	LA	5.6		50	MS	4.4		50	LA	5.3		
51	LA	2.0	47	MS	4.5	-	51	LA	4.3	_	51	MS	4.4		

Source: Staff analysis of data from College Board. AP Report to the Nation. New York: College Board. For years 2002, 2011, 2012, and 2013. Web. Feb. 13, 2015.

#### **Graduation Rates**

The US Department of Education defines *graduation* as completing a standard diploma within 4 years. In addition, the department allows Kentucky and some other states to count students who required more than 4 years to earn a standard diploma if their IEPs specified more than 4 years. However, those without such IEPs are not counted as graduates if they took more than 4 years to earn the diploma. Also not counted are those earning nonstandard diplomas, such as certificates of completion, and nongraduates who passed the GED exam.

Historically, states' formulas for calculating graduation rates varied substantially, and all had data quality issues. The US Department of Education pressed states to implement systems to accurately track each cohort of 9<sup>th</sup>-graders through high school so that a more accurate "adjusted cohort graduation rate" (ACGR) could be calculated. The 4-year ACGR is

the number of students who graduate in 4 years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9<sup>th</sup> grade (or the earliest high school grade), students who are entering that grade for the first time form a cohort that is "adjusted" by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate to another country, or die.<sup>13</sup>

Kentucky began officially reporting a cohort graduation rate for the 2013 school year. As Table 4.6 shows, Kentucky ranked 10<sup>th</sup>, with a graduation rate of 86 percent, compared to a national rate of 81 percent.

Rank	State	Rate (%)
2	TX	88
7	IN	87
10	KY	86
10	MO	86
10	TN	86
17	AR	85
17	MD	85
17	OK	85
21	VA	84
23	IL	83
23	NC	83
27	OH	82
N/A	US	81
29	WV	81
30	AL	80
30	DE	80
35	SC	78
40	FL	76
40	MS	76
44	LA	74
45	GA	72

Table 4.6Adjusted Cohort Graduation Rate, 2013

Note: This graduation rate was not available for Idaho. The US Department of Education adjusted some statereported rates to make them comparable; therefore, these rates may differ from those reported by states. Source: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. Common Core of Data: Dropout / Completer Data Tables. Washington, DC: USDoE, Jan. 2015. Web. June 19, 2015. Although the ACGR is too new to provide trend data, the US Department of Education continues to report the averaged freshman graduation rate (AFGR), which divides the number of diploma recipients in a given year by the average membership of the graduating class during grades 8, 9, and 10. The AFGR formula improves comparability but has limitations; for example, it does not adjust for student transfers. <sup>a</sup> Because the AFGR lags one year, the most recent year for which AFGRs were available was school year 2012.

As Table 4.7 shows, Kentucky's AFGR was below the US average in 2002 and 2008 but rose to above the national average in 2010 and 2012. For the 2012 graduating class, Kentucky was ranked 22<sup>nd</sup>, with an AFGR of 82 percent, just above the national rate of 81 percent.

	2002		-		2008		 	2010		-	2012			
Rank	State	%	_	Rank	State	%	 Rank	State	%	-	Rank	State	%	
11	MD	79.7		11	MO	82.4	 12	MO	83.7	-	12	MO	86	
17	OH	77.5		15	IL	80.4	15	MD	82.2		16	MD	84	
18	IL	77.1		15	MD	80.4	16	IL	81.9		16	OH	84	
20	MO	76.8		20	OH	79.0	18	OH	81.4		16	VA	84	
21	VA	76.7		21	OK	78.0	19	VA	81.2		20	TN	83	
22	OK	76.0		22	WV	77.3	20	TN	80.4		22	IL	82	
25	AR	74.8		23	VA	77.0	22	KY	79.9		22	KY	82	
29	WV	74.2		25	AR	76.4	24	ΤX	78.9		22	ΤX	82	
30	ΤX	73.5		31	TN	74.9	26	OK	78.5		N/A	US	81	
31	IN	73.1		N/A	US	74.9	27	WV	78.3		27	IN	80	
N/A	US	72.6		32	KY	74.4	N/A	US	78.2		27	WV	80	
38	KY	69.8		34	IN	74.1	29	IN	77.2		30	NC	79	
39	DE	69.5		35	ΤX	73.1	30	NC	76.9		30	OK	79	
41	NC	68.2		36	NC	72.8	35	DE	75.5		34	AR	78	
44	LA	64.4		37	DE	72.1	38	AR	75.0		39	DE	77	
45	FL	63.4		43	AL	69.0	40	AL	71.8		43	AL	75	
46	AL	62.1		44	FL	66.9	41	FL	70.8		43	FL	75	
47	MS	61.2		46	GA	65.4	42	GA	69.9		46	LA	72	
48	GA	61.1		47	MS	63.9	43	LA	68.8		46	SC	72	
50	TN	59.6		48	LA	63.5	44	SC	68.2		49	GA	70	
51	SC	57.9			SC		46	MS	63.8	-	50	MS	68	

Table 4.7Averaged Freshman Graduation Rate, 2002, 2008, 2010, And 2012

Note: Averaged freshman graduation rate data were reported in whole percentages in 2012, unlike previous years when they were reported with one decimal place. Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *High School Dropout and Completion Rates in the US: 2007* and *Public School Graduates and Dropouts from the Common Core of Data* for years 2008, 2010, and 2012. Web. June 12, 2015.

<sup>&</sup>lt;sup>a</sup> The AFGR formula that Kentucky used for reporting within the state for accountability purposes differs slightly from the formula that the National Center for Education Statistics uses for these state comparisons. While the AFGR formula that Kentucky used for reporting within the state had only grades 9 and 10 in the denominator, the denominator of the formula used by NCES for state comparisons, as shown in Table 4.6, has grades 8 through 10 in the denominator. When Kentucky started in-state reporting of the 2013 cohort rate (the ACGR) for accountability purposes, it discontinued in-state reporting of the AFGR. However, Kentucky continued to report data for the AFGR to NCES.

# Chapter 5

### **School And District Characteristics**

#### **Rural School Enrollment**

The US Department of Education works with the US Census Bureau to classify school and district locations as rural, town, suburb, or city. The Census Bureau designates a locale as rural if it is outside of a town, suburb, city, or other urbanized area or cluster. The Census Bureau defines an urbanized area or cluster as a densely settled "core" of census-defined blocks with adjacent densely settled surrounding areas.<sup>14</sup> The approach to classification changes somewhat over time, so trends over time should be interpreted with caution. However, ranks can be compared over time because states are comparable within a given year.

As Table 5.1 shows, Kentucky continues to be among the 10 most rural states. In 2013, the percentage of students enrolled in rural schools in Kentucky was 36.6 percent, almost double the national percentage of 18.7 percent. Although a change in federal definitions caused percentages to be lower in 2013 than in previous years, Kentucky's rank relative to other states remained the same.

	2004			2009			2011		2013				
Rank	State	%											
3	MS	46.8	3	MS	49.6	3	MS	52.0	3	MS	46.1		
4	AL	45.6	4	AL	47.5	4	AL	47.6	4	WV	43.9		
5	NC	45.0	5	NC	46.3	5	WV	47.1	6	AL	38.8		
7	WV	44.4	7	WV	45.0	6	NC	46.6	8	NC	37.4		
9	KY	42.6	9	SC	43.6	8	SC	44.4	9	KY	36.6		
10	AR	40.6	10	KY	43.3	9	KY	43.6	12	AR	34.1		
12	SC	39.5	11	AR	42.6	11	AR	42.6	14	SC	33.1		
14	TN	35.8	12	TN	38.8	12	TN	39.9	16	OK	30.9		
15	OK	34.1	16	OK	35.3	16	GA	36.2	17	TN	30.3		
19	GA	31.9	17	GA	35.0	19	OK	35.5	18	LA	28.8		
23	IN	30.3	21	MO	32.5	22	MO	32.7	21	IN	28.0		
24	MO	30.0	23	LA	31.6	23	IN	32.0	22	GA	26.9		
25	LA	28.7	24	IN	31.3	24	LA	31.5	23	MO	26.6		
26	VA	27.9	26	VA	30.6	25	VA	30.8	24	VA	25.3		
30	OH	24.4	29	OH	26.4	30	OH	26.6	29	OH	22.0		
N/A	US	21.3	N/A	US	24.0	N/A	US	24.7	N/A	US	18.7		
34	ΤX	17.5	32	DE	23.4	32	ΤX	24.5	33	DE	16.9		
38	MD	17.0	34	ΤX	23.2	33	DE	24.4	34	TX	15.6		
40	DE	15.9	37	FL	18.8	38	FL	19.4	35	MD	14.3		
43	FL	13.5	39	MD	18.1	41	MD	17.8	41	FL	10.9		
46	IL	11.7	43	IL	14.3	43	IL	14.6	42	IL	10.7		

Table 5.1 Students Enrolled In Rural Schools, 2004, 2009, 2011, And 2013

Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Numbers and Types of Public Elementary and Secondary Schools from the Common Core of Data*. For school years 2004, 2009, and 2011; *Selected Statistics from the Public Elementary and Secondary Education Universe: School Year 2012–13*. Oct. 2014; and *Status of Education in Rural America*. Jan. 21, 2015.

#### **Student/Teacher Ratio**

Student/teacher ratios in Table 5.2 were derived by dividing student enrollment by the number of full-time equivalent teachers. Full-time equivalent is the amount of time required to perform an assignment stated as a proportion of a full-time position; it is computed by dividing the amount of time employed by the time normally required for a full-time position. A teacher is defined as a professional school staff member who instructs students in prekindergarten, kindergarten, grades 1-12, or ungraded classes and maintains daily student attendance records.<sup>15</sup>

States with fewer students per teacher may offer students more opportunities to receive personal attention. As Table 5.2 shows, Kentucky's student/teacher ratio continues to mirror that of the nation. Kentucky ranked 14<sup>th</sup> in 2013, with 16 students per teacher.<sup>b</sup>

	2002				2009				2011			2013	
Rank	State	Ratio	J	Rank	State	Ratio		Rank	State	Ratio	Rank	State	Ratio
6	FL	18.6		9	VA	17.3		7	IN	18.0	10	IN	17.4
12	IN	16.7		11	IN	16.7		9	VA	17.6	12	OH	16.3
14	KY	16.2		13	OH	16.1		13	OH	16.1	13	OK	16.1
N/A	US	16.2		N/A	US	15.7		13	SC	16.1	14	KY	16.0
15	IL	16.0		16	AL	15.6		15	KY	16.0	N/A	US	16.0
15	MD	16.0		16	IL	15.6		15	OK	16.0	17	GA	15.6
18	GA	15.9		18	KY	15.4		N/A	US	16.0	18	ΤX	15.5
19	AL	15.8		19	DE	15.1		19	IL	15.7	19	NC	15.4
19	MS	15.8		20	TN	15.0		20	AL	15.3	20	FL	15.3
19	TN	15.8		21	MS	14.7		21	MS	15.2	20	IL	15.3
22	NC	15.4		24	ΤX	14.5		21	NC	15.2	20	LA	15.3
24	DE	15.3		25	SC	14.4		23	FL	15.1	20	SC	15.3
25	OH	15.0		26	MD	14.3		26	GA	14.9	26	MS	15.1
26	OK	14.9		27	FL	14.1		27	TN	14.8	27	TN	15.0
27	ΤX	14.7		28	WV	14.0		28	TX	14.7	28	MD	14.9
29	LA	14.6		29	GA	13.9		29	MD	14.6	29	AL	14.4
31	SC	14.5		29	LA	13.9		30	DE	14.5	33	AR	14.2
36	WV	14.0		29	OK	13.9		31	LA	14.3	33	VA	14.2
37	MO	13.9		36	MO	13.6		33	AR	14.1	35	WV	14.1
43	AR	13.6		36	NC	13.6		35	WV	13.9	38	DE	13.9
48	VA	13.0		41	AR	12.9	-	37	MO	13.8	38	MO	13.9

Table 5.2 Student/Teacher Ratio, 2002, 2009, 2011, And 2013

Source: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. Common Core of Data. Web. May 1, 2015.

<sup>&</sup>lt;sup>b</sup> The student/teacher ratio is not equivalent to average classroom size because of variations in teacher assignments by grade level, subject, and other factors. For example, in Kentucky, special education teachers often coteach in the same classroom as a general education teacher.

#### **Student/Staff Ratios**

Table 5.3 presents information about staffing trends. To allow comparisons across states, this information is presented as ratios of enrollment to staff, analogous to the student/teacher ratios shown in Table 5.2. Thus, higher student/staff ratios indicate relatively fewer staff and lower ratios indicate more staff. After presenting ratios of students to total staff, the table focuses on specific categories that account for most of the differences between Kentucky and the nation.

When reporting staff data to NCES, states are asked to use the following definitions.<sup>16</sup>

- School administrators direct and manage the operation of a particular school. They include principals, assistant principals, department chairs, and others who supervise operations, assign duties to staff, maintain records, and coordinate instructional activities.
- District administrators are those with districtwide responsibilities, including superintendents, deputy and assistant superintendents, business managers, and administrative assistants.
- Instructional aides are paid to assist teachers with routine activities such as monitoring, conducting rote exercises, operating equipment, and clerking.

The All Staff column includes staff in the above categories and other staff not listed above, including teachers, librarians, guidance counselors, and support staff.

As Table 5.3 shows, between 2002 and 2013, Kentucky had more staff than average, as indicated by a student-staff ratio that was consistently lower than the national ratio. In 2013, the number of students per staff member was 6.9, compared to a US ratio of 8.2. These differences primarily reflect more instructional aides and administrators, as discussed below.

Kentucky continued to have a lower student/instructional aide ratio than the nation, although the difference narrowed between 2011 and 2013. This indicator of relatively more instructional aides reflects, in part, Kentucky's higher rates of disability and preschool enrollment, as well as instructional aide requirements for kindergarten.

Kentucky's student/school administrator ratio declined steadily, trending in the opposite direction of the nation; by 2013, Kentucky had 208.2 students per school administrator compared to a national ratio of 309.5. Higher counts of school administrators likely reflect Kentucky's many small rural schools as well as the inclusion of directors of Family Resource and Youth Services Centers (FRYSC), which do not exist in other states. The number of FRYSC coordinators grew over time; however, assistant/vice principals contributed the most to Kentucky's increase in school administrators between 2002 and 2013.

In contrast to school administrators, the number of district administrators declined. Although Kentucky continued to have relatively more district administrators than the nation, Kentucky's more rapid decrease narrowed the gap. By 2013, Kentucky had 767.8 students per district administrator, compared to 795.9 for the nation.

					Au		lall					
	2002			2009				2011			2013	
Rank	State	Ratio	Rank	State	Ratio	_	Rank	State	Ratio	Rank	State	Ratio
1	IL	13.4	2	IL	13.0		4	SC	11.1	1	IL	19.4
3	SC	12.3	4	SC	10.7		8	IL	9.7	4	AL	14.4
12	FL	8.8	11	DE	8.5		14	OK	8.0	9	SC	10.2
13	MD	8.7	N/A	US	7.9		N/A	US	8.0	N/A	US	8.2
16	AL	8.3	19	OK	7.8		15	AL	7.9	16	FL	8.0
17	DE	8.2	21	FL	7.7		15	DE	7.9	16	OK	8.0
N/A	US	8.2	21	TN	7.7		15	FL	7.9	18	NC	7.9
18	OK	8.1	25	AL	7.6		19	NC	7.7	18	ΤX	7.9
22	TN	8.0	26	IN	7.4		19	TN	7.7	20	TN	7.8
24	NC	7.9	26	NC	7.4		23	IN	7.5	22	GA	7.7
26	GA	7.7	26	OH	7.4		24	GA	7.4	23	MD	7.6
26	IN	7.7	29	ΤX	7.3		24	MD	7.4	26	LA	7.5
29	MS	7.6	29	WV	7.3		24	ΤX	7.4	29	DE	7.3
29	OH	7.6	31	MD	7.2		28	OH	7.3	29	WV	7.3
31	WV	7.5	33	GA	6.9		31	MO	7.2	32	MO	7.2
32	MO	7.3	33	MO	6.9		31	MS	7.2	32	MS	7.2
33	LA	7.2	37	LA	6.8		31	WV	7.2	32	VA	7.2
33	VA	7.2	37	MS	6.8		36	LA	6.9	36	OH	7.1
37	ΤX	7.1	39	AR	6.7		38	KY	6.8	37	IN	7.0
42	KY	6.9	39	KY	6.7		39	AR	6.7	40	KY	6.9
45	AR	6.8	44	VA	6.1	_	45	VA	6.2	41	AR	6.8

Table 5.3										
Student/Staff Ratios, 2002	, 2009, 2011, And 2013									

All Staff

					Instru	cti	onal Aid	es					
	2002	<u> </u>		2009				2011		-		2013	
Rank	State	Ratio	Rank	State	Ratio		Rank	State	Ratio		Rank	State	Ratio
2	AL	118.8	2	OH	95.4		1	AL	115.3		4	FL	90.0
3	OH	111.2	4	FL	91.9		6	OH	90.7		5	OH	89.8
6	OK	94.4	6	SC	84.3		7	FL	88.0		7	ΤX	84.1
8	MD	91.9	7	DE	80.9		8	SC	85.6		8	SC	79.5
9	WV	91.7	8	WV	80.5		10	DE	82.0		9	MD	78.0
11	DE	86.8	10	OK	80.3		11	OK	78.9		11	WV	76.5
13	MO	79.6	12	ΤX	75.7		12	ΤX	77.9		12	DE	75.8
14	FL	79.0	13	MD	75.0		12	WV	77.9		14	OK	74.8
15	VA	76.0	N/A	US	71.0		14	MD	75.0		17	GA	70.7
N/A	US	75.4	17	MO	70.6		20	IL	69.2		18	MO	68.3
18	AR	72.9	22	TN	61.6		21	MO	69.0		N/A	US	67.9
20	ΤX	71.4	23	AR	61.5		N/A	US	67.9		19	LA	66.7
21	TN	70.9	25	VA	61.2		23	GA	65.1		20	VA	65.0
27	LA	65.9	26	LA	60.2		25	VA	64.5		21	AR	64.7
30	GA	65.0	28	GA	59.2		26	LA	60.8		25	IN	62.5
37	MS	57.6	30	MS	54.8		26	TN	60.8		26	NC	62.0
40	IN	54.4	36	NC	51.3		28	MS	59.9		27	TN	61.7
45	NC	47.5	40	KY	47.6		29	AR	59.8		29	IL	60.2
46	KY	45.8	42	IN	45.3		33	NC	57.0		30	MS	60.1
N/A	IL		N/A	AL	—		42	KY	47.0		37	KY	50.3
N/A	SC		N/A	IL	_		45	IN	44.4			AL	

Continued on next page.

Office Of Education Accountability

					School 1	lui	mmstrat	013				
	2002			2009				2011			2013	
Rank	State	Ratio	Rank	State	Ratio		Rank	State	Ratio	Rank	State	Ratio
6	FL	384.5	9	OH	354.9		9	IN	360.7	11	VA	337.7
15	OH	341.3	13	FL	336.5		12	OH	347.2	12	OH	331.4
16	IN	338.1	15	IN	327.0		14	FL	332.2	13	IN	330.6
18	IL	328.0	16	DE	315.9		18	DE	313.3	14	FL	326.8
20	DE	321.9	18	MO	308.6		19	OK	307.4	N/A	US	309.5
23	GA	309.2	N/A	US	298.3		N/A	US	300.6	19	MO	294.8
24	OK	304.5	21	NC	297.0		23	TN	293.9	20	OK	294.7
26	MO	300.4	23	OK	292.1		25	MO	293.0	21	AR	294.5
28	VA	297.5	24	TN	291.4		26	NC	292.2	24	DE	285.2
N/A	US	295.4	27	SC	284.8		28	AL	289.9	25	TN	284.3
30	MS	289.3	28	IL	283.6		30	SC	284.2	26	NC	282.8
32	MD	284.7	30	AR	281.2		31	IL	284.1	28	SC	281.1
33	LA	283.0	31	AL	275.1		32	AR	272.8	29	GA	280.0
34	NC	281.2	32	VA	263.1		33	GA	272.4	34	LA	259.0
40	WV	266.2	34	WV	256.2		34	VA	271.7	35	MS	252.8
41	KY	265.8	36	GA	253.0		39	MS	256.6	36	WV	247.2
42	AR	259.4	39	MS	250.2		40	WV	256.0	38	MD	243.3
47	SC	220.9	41	LA	240.1		42	LA	241.8	41	ΤX	231.1
48	AL	219.9	43	MD	231.7		43	MD	234.5	43	KY	208.2
49	TN	186.3	44	ΤХ	227.0		44	ΤX	220.7		AL	
51	ΤX	144.7	46	KY	219.8		48	KY	213.9		IL	

**School Administrators** 

#### **District Administrators**

	2002			2009			2011			2013	
Rank	State	Ratio	Rank	State	Ratio	Rank	State	Ratio	Ran	<b>K</b> State	Ratio
2	SC	2,482.2	2	TN	5,858.6	2	TN	5,691.2	2	TN	5,762.7
6	LA	1,838.0	6	LA	1,959.0	5	LA	1,831.2	5	LA	2,136.3
9	FL	1,471.7	9	FL	1,285.9	9	FL	1,376.5	7	FL	1,398.2
14	IN	1,012.3	11	SC	1,118.0	11	OK	1,113.6	9	OK	1,238.5
16	MD	957.3	12	OK	1,059.5	12	SC	1,031.8	12	SC	1,001.9
19	OK	859.9	15	IN	914.5	15	IN	955.5	15	NC	944.9
20	GA	833.5	16	IL	896.9	16	NC	952.3	18	TX	840.3
20	WV	833.5	17	NC	889.9	17	AL	940.9	20	IN	821.5
23	NC	822.6	20	OH	861.7	20	OH	831.4	N/A	US	795.9
24	TN	803.7	22	AL	845.9	22	VA	814.2	21	AR	793.9
N/A	US	749.0	N/A	US	792.1	N/A	US	775.2	23	KY	767.8
29	MO	700.1	26	ΤX	782.3	24	ΤX	752.1	24	OH	724.2
31	AR	668.4	27	KY	719.5	25	IL	739.6	25	VA	722.8
32	AL	584.9	28	VA	712.4	26	KY	730.4	26	GA	721.8
33	KY	539.0	29	GA	704.0	27	GA	729.2	27	MO	707.4
34	IL	522.7	30	MO	693.7	28	AR	721.7	31	MS	496.1
35	TX	522.2	32	AR	671.8	32	MO	658.6	38	WV	374.0
36	MS	509.0	37	MS	488.4	34	MS	496.0	41	DE	316.8
41	DE	440.4	42	WV	380.2	42	WV	367.1	45	MD	251.0
44	VA	422.7	43	DE	372.4	43	DE	353.2		AL	—
50	OH	278.7	48	MD	248.3	48	MD	256.1		IL	

Note: For 2013, counts of instructional aides and administrators were not available for AL and IL, and counts of instructional aides were not available for NV.

Source: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. May 1, 2015.

## Chapter 6

### **Fiscal Matters**

The US Department of Education, in collaboration with the Census Bureau, collects financial data on education revenue and expenditures from state education agencies. Despite federal and state improvement efforts, the coding of some data is inconsistent among states, and sometimes even within states. For example, Kentucky does not follow federal guidelines stipulating the inclusion of school activity funds in revenue and expenditures reported to the federal government. Consequently, Kentucky's revenue and expenditures are understated to some extent.<sup>17</sup> An OEA study of district financial data found that activity funds amounted to more than \$184 million in unreported revenue in fiscal year 2010.<sup>18</sup> Additionally, Kentucky does not include School Facilities Construction Commission (SFCC) payments for all districts, which caused state revenue to be understated by approximately \$102 million in 2010. Combined, these unreported funds totaling \$286 million would have added approximately 4 percent to Kentucky's total revenue. The Kentucky Department of Education hopes to correct the omission of SFCC funds by the time data are reported for the 2013 fiscal year.<sup>19</sup>

Because costs vary from state to state, a dollar spent in one state does not buy the equivalent of a dollar spent in another state. States with higher costs of living usually offer higher salaries, and salaries make up a large proportion of education spending. To improve comparability, staff adjusted fiscal measures using the Comparable Wage Index, which was developed under the auspices of the National Center for Education Statistics. However, while this index is widely held to be the most appropriate method for adjusting education finance data, no method can achieve perfect comparability.

In 2014, OEA analyzed 10 years of Kentucky education finance data.<sup>20</sup> To complement that study, Appendix A of this report provides selected state comparisons of revenue and current expenditures for FY 2003 to FY 2012 and of teacher salaries for FY 2003 to FY 2013.

This chapter and Appendix A report nominal dollars. They are not adjusted for the inflation that caused a dollar in 2012 to have 80 percent of the buying power it had in 2003.<sup>21</sup>

### Revenue

Education revenue consists of funds received by a state's school system from external sources other than from issuance of debt, from liquidation of investments, or as agency and private trust transactions. Revenue excludes noncash transactions.

As Table 6.1 shows, Kentucky's revenue per pupil continued to be below the national average, even after adjusting for geographic cost differences; Kentucky ranked 34<sup>th</sup> in 2012, up from 41<sup>st</sup> in 2002. Kentucky revenue is somewhat understated because of the omission of activity funds and SFCC payments; in 2010, these amounted to approximately \$480 per pupil, which would have raised Kentucky's rank by two in that year, from 35<sup>th</sup> to 33<sup>rd</sup>.

			3	0 1						
	2002			2010				2012		
Rank	State	\$	Rank	State	\$	ŀ	Rank	State	\$	
13	DE	9,841	9	MD	15,738		9	MD	16,093	
15	MD	9,768	14	DE	14,070		13	DE	14,514	
17	OH	9,636	16	IL	13,434		14	IL	14,005	
19	IL	9,008	19	IN	13,034		18	OH	13,153	
20	IN	8,972	20	OH	12,883		22	WV	12,573	
21	GA	8,820	23	WV	12,142		N/A	US	12,152	
N/A	US	8,801	N/A	US	12,111		24	LA	11,959	
23	WV	8,736	24	LA	11,891		27	VA	11,654	
28	VA	8,356	25	VA	11,798		28	IN	11,473	
29	SC	8,315	32	MO	11,065		31	MO	11,152	
31	MO	8,263	33	SC	10,838		32	SC	11,058	
35	TX	7,754	34	AR	10,738		33	AR	10,939	
39	LA	7,254	35	GA	10,695		37	GA	10,457	
42	FL	7,178	39	TX	10,318		38	KY	10,391	
43	AR	7,112	41	KY	10,106		41	TX	9,906	
44	KY	7,106	43	FL	9,891		42	AL	9,534	
45	NC	7,081	44	AL	9,667		44	MS	9,052	
46	AL	6,956	46	MS	9,023		45	FL	8,99	
48	OK	6,643	47	NC	8,802		46	TN	8,983	
49	TN	6,394	48	TN	8,769		47	OK	8,80	
50	MS	6,142	49	OK	8,705		48	NC	8,690	

# Table 6.1Revenue Per Pupil In Nominal Dollars, 2002, 2010, And 2012Not Adjusted For Geographic Cost Differences

### **Adjusted For Geographic Cost Differences**

					81					
	2002		-		2010				2012	
Rank	State	\$	-	Rank	State	\$		Rank	State	\$
16	IN	10,049	-	15	IN	14,964		15	MD	14,704
18	OH	9,992		18	MD	14,300		17	DE	14,552
19	DE	9,888		19	WV	14,063		18	WV	14,531
29	MD	9,229		20	DE	13,991		21	OH	14,099
30	MO	9,188		22	OH	13,816		24	IL	13,674
31	WV	9,185		27	LA	13,058		26	IN	13,256
32	SC	9,157		28	IL	13,004		28	AR	13,046
33	VA	9,045		29	AR	12,828		29	LA	13,006
34	GA	8,866		31	MO	12,603		31	MO	12,762
35	IL	8,819		N/A	US	12,111		32	SC	12,259
N/A	US	8,801		33	SC	11,931		N/A	US	12,152
36	AR	8,564		35	KY	11,540		34	KY	11,854
37	LA	8,266		38	VA	10,868		38	VA	10,700
41	KY	7,922		39	GA	10,853		39	AL	10,649
42	FL	7,877		40	AL	10,791		40	MS	10,630
43	AL	7,862		41	FL	10,732		41	GA	10,624
44	OK	7,811		42	MS	10,648		42	OK	10,167
45	TX	7,717		43	OK	10,311		43	TN	9,870
47	NC	7,389		44	TX	10,171		44	FL	9,794
49	MS	7,308		48	TN	9,604		45	TX	9,729
50	TN	6,881	_	49	NC	9,318	_	49	NC	9,195
	1. 00 1 .	0 1 . 0	T.T.C.	<b>D</b> 01		10	· · ·	<u>a</u>	~	<i>a c</i>

Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015; and Lori Taylor. Extending the NCES CWI. College Station: Texas A&M University, 2014. Web. June 15, 2015.

Table 6.2 ranks states by the percentages of revenue from local, state, and federal sources. When reporting revenue, states are instructed to include tax revenue, investment earnings, and student fees for textbooks, transportation, and tuition.

State revenue sources should include funds for school construction, equalization, state payments made on behalf of districts, debt service, and transportation. Most state revenue in Kentucky is distributed through SEEK. Federal revenue sources include grants and other aid distributed directly by the federal government or indirectly by state governments. Examples include Head Start, the National School Lunch Program, and Title I funds.

Percentages for Kentucky are imprecise because, as mentioned earlier, Kentucky omits school activity funds from local revenue and SFCC funds from state revenue.

In 2012, less than one-third (32.1 percent) of funds came from local sources in Kentucky, compared to the national percentage of 44.6 percent. Kentucky ranked 39<sup>th</sup>, up from a rank of 42<sup>nd</sup> in 2002.

More than half of revenue (54.2 percent) came from state sources in 2012, compared to the national percentage of 45.2. Kentucky ranked 16<sup>th</sup>, down from a rank of 11<sup>th</sup> in 2002.

Much federal funding is tied to poverty indicators, which are high for Kentucky. In 2012, federal sources made up 13.7 percent of Kentucky's revenue, compared to a national percentage of 10.2. Kentucky ranked 9<sup>th</sup>, up slightly from a rank of 11<sup>th</sup> in 2002. Federal funds have played a more important role in recent years; as illustrated by Figure A.5 in Appendix A. Before 2010, the percentage of education revenue from federal sources hovered at approximately 11 percent for Kentucky and approximately 9 percent for the nation. Federal revenue increased in FY 2010, when the American Recovery and Reinvestment Act provided one-time State Fiscal Stabilization Funds to help stabilize state and local budgets. During the years of higher federal revenue, state revenue made up a smaller portion of total revenue.

			I	ocal Source	es			
	2002			2010			2012	
Rank	State	%	Rank	State	%	Rank	State	%
3	IL	58.4	2	IL	59.2	2	IL	59.6
5	MD	56.4	5	MO	55.8	4	MO	57.8
6	MO	56.2	11	FL	52.3	13	VA	52.8
9	VA	52.8	11	VA	52.3	16	FL	50.7
14	TX	49.8	14	MD	50.7	17	MD	50.2
16	OH	48.5	18	GA	47.2	21	GA	46.3
19	TN	46.9	21	OH	45.1	22	OH	46.2
22	FL	44.6	22	TX	45.0	22	TX	46.2
23	GA	43.7	N/A	US	43.8	N/A	US	44.6
25	IN	43.1	25	SC	42.3	25	SC	43.5
N/A	US	42.9	26	IN	41.7	27	TN	40.7
29	SC	39.9	27	TN	41.4	29	LA	39.8
31	LA	38.3	30	LA	37.9	32	OK	37.3
33	AR	33.7	34	OK	35.0	35	IN	35.8
37	OK	31.5	37	AR	32.1	36	AR	35.2
39	AL	30.9	39	AL	31.4	37	AL	32.8
39	MS	30.9	40	KY	31.3	38	MS	32.7
42	KY	29.8	41	MS	31.2	39	KY	32.1
44	WV	28.5	43	DE	29.1	43	WV	29.6
46	DE	27.1	44	WV	29.0	44	DE	28.8
46	NC	27.1	46	NC	26.5	46	NC	25.6

Table 6.2Percentages Of Revenue By Source, 2002, 2010, And 2012

**State Sources** 

	2002			2010			2012	
Rank	State	%	Rank	State	%	Rank	State	%
5	NC	64.5	7	DE	58.6	7	NC	60.1
6	DE	64.3	8	NC	58.2	9	DE	58.6
10	WV	60.9	10	WV	55.4	10	WV	58.2
11	KY	59.6	14	AL	52.5	13	AL	55.4
14	AL	58.7	15	AR	52.1	15	IN	54.5
16	OK	56.7	15	KY	52.1	16	KY	54.2
19	AR	55.5	19	OK	47.8	18	AR	51.5
20	MS	54.1	20	MS	47.5	21	MS	49.4
23	SC	51.0	22	IN	47.2	22	OK	49.2
24	IN	50.8	24	TN	45.1	25	SC	45.6
25	GA	49.2	26	OH	44.1	26	TN	45.2
25	LA	49.2	28	SC	43.8	N/A	US	45.2
N/A	US	49.2	N/A	US	43.5	29	OH	44.3
32	OH	45.6	30	LA	43.0	31	MD	43.5
33	FL	45.3	32	MD	41.5	33	GA	42.8
35	TN	43.7	36	TX	39.4	33	LA	42.8
41	VA	40.9	38	GA	37.9	35	TX	41.1
42	TX	40.8	39	VA	37.3	42	VA	38.0
45	MD	37.2	47	FL	31.5	44	FL	36.3
47	MO	36.3	49	MO	29.3	48	IL	32.2
49	IL	33.9	50	IL	28.4	49	MO	32.0

Continued on next page.

			Fe	deral Sou	rces			
	2002			2010			2012	
Rank	State	%	Rank	State	%	Rank	State	%
2	MS	15.0	2	MS	21.3	1	MS	17.9
8	LA	12.5	6	LA	19.1	2	LA	17.3
9	OK	11.9	8	OK	17.2	6	NC	14.3
10	AR	10.7	9	KY	16.6	8	TN	14.1
11	KY	10.5	10	AL	16.1	9	KY	13.7
11	WV	10.5	10	FL	16.1	10	OK	13.5
13	AL	10.4	13	AR	15.9	13	AR	13.2
14	FL	10.0	15	TX	15.6	15	FL	13.0
16	TN	9.5	15	WV	15.6	16	TX	12.7
17	TX	9.3	17	NC	15.3	17	DE	12.6
19	SC	9.1	18	MO	14.9	20	WV	12.2
22	DE	8.6	20	GA	14.8	21	AL	11.8
24	NC	8.5	21	SC	13.9	22	GA	10.9
N/A	US	7.9	23	TN	13.6	23	SC	10.8
31	IL	7.7	N/A	US	12.7	N/A	US	10.2
32	MO	7.6	31	IL	12.4	25	MO	10.1
34	GA	7.2	32	DE	12.2	30	IN	9.6
37	MD	6.4	37	IN	11.1	30	OH	9.6
39	VA	6.3	39	OH	10.8	34	VA	9.3
42	IN	6.1	42	VA	10.4	41	IL	8.3
45	OH	5.9	49	MD	7.8	49	MD	6.3

### Table 6.2 (cont.)

Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015.

### **Current Expenditures**

*Current expenditures* refers to those for day-to-day operation of public schools. It includes direct expenditures for salaries, employee benefits, purchased professional and technical services, purchased property and other services, and supplies; it also includes payments made by the state government on behalf of school systems. It excludes interest on debt, capital outlays, and programs outside the scope of preschool to grade 12, such as adult education, community colleges, private school programs, and community services. Also excluded are expenditures for items lasting more than 1 year, such as school buses and computers.<sup>22</sup>

Table 6.3 ranks states by per-pupil current expenditures, both unadjusted and adjusted for geographic cost differences. Adjusted per-pupil expenditures in 2012 totaled \$10,640, close to the national average of \$10,667; Kentucky was ranked 33<sup>rd</sup>, up from 40<sup>th</sup> in 2002.

Table 6.4 ranks states by expenditures on instruction as a percentage of all current expenditures. Instruction expenditures include salaries, benefits, supplies, materials, and contractual services for general, special, and vocational programs offered in both the regular school year and summer school. In 2012, Kentucky ranked 38<sup>th</sup>, with 58 percent spent on instruction, compared to 61 percent for the US. An examination of detailed data revealed that Kentucky's below-average percentage spent on instruction reflects slightly above-average percentages spent for instructional staff support, student transportation, and food services.<sup>23</sup>

Not Adjusted For Geographic Cost Differences											
	2002			2010			2012				
Rank	State	\$	Rank	State	\$	Rank	State	\$			
9	DE	9,284	10	MD	14,007	12	MD	13,871			
11	MD	8,692	14	DE	12,222	14	DE	13,580			
16	OH	8,069	15	IL	11,739	17	IL	12,011			
17	IL	7,956	16	WV	11,730	20	WV	11,579			
19	WV	7,844	20	OH	11,224	21	OH	11,323			
22	IN	7,734	21	LA	10,701	24	LA	10,726			
N/A	US	7,728	N/A	US	10,652	N/A	US	10,667			
24	VA	7,496	23	VA	10,594	25	VA	10,656			
26	GA	7,380	29	MO	9,721	30	IN	9,588			
30	MO	7,136	32	IN	9,479	31	AR	9,536			
33	SC	7,017	33	GA	9,432	32	MO	9,514			
36	TX	6,771	35	AR	9,281	35	KY	9,327			
38	LA	6,567	37	SC	9,080	36	GA	9,272			
39	KY	6,523	39	KY	8,957	37	SC	9,077			
40	NC	6,495	41	AL	8,907	41	AL	8,577			
42	AR	6,276	42	FL	8,863	42	FL	8,520			
43	OK	6,229	43	TX	8,788	43	TN	8,354			
44	FL	6,213	45	NC	8,225	44	TX	8,213			
46	AL	6,029	46	TN	8,117	45	NC	8,160			
48	TN	5,948	47	MS	8,104	47	MS	8,097			
50	MS	5,354	49	OK	7,929	48	OK	7,763			

Table 6.3Current Expenditures Per Pupil, Nominal Dollars, 2002, 2010, And 2012

### **Adjusted For Geographic Cost Differences**

	2002			2010		-	2012	
Rank	State	\$	Rank	State	\$	Rank	State	\$
12	DE	9,328	14	WV	13,586	15	DE	13,616
17	IN	8,663	16	MD	12,728	17	WV	13,382
22	OH	8,367	20	DE	12,154	20	MD	12,674
26	WV	8,247	21	OH	12,037	22	OH	12,137
27	MD	8,212	23	LA	11,751	24	IL	11,726
28	VA	8,114	26	IL	11,363	26	LA	11,665
30	MO	7,935	29	AR	11,088	29	AR	11,373
32	IL	7,789	30	MO	11,072	30	IN	11,078
33	SC	7,728	31	IN	10,883	32	MO	10,888
N/A	US	7,728	N/A	US	10,652	N/A	US	10,667
35	AR	7,558	33	KY	10,228	33	KY	10,640
36	LA	7,483	35	SC	9,995	35	SC	10,063
37	GA	7,419	36	AL	9,943	37	VA	9,784
38	OK	7,324	37	VA	9,759	38	AL	9,579
40	KY	7,272	38	FL	9,616	39	MS	9,509
42	FL	6,818	39	GA	9,572	40	GA	9,420
43	AL	6,814	40	MS	9,563	41	FL	9,281
44	NC	6,778	42	OK	9,392	42	TN	9,179
45	TX	6,739	44	TN	8,890	44	OK	8,967
48	TN	6,401	45	NC	8,707	45	NC	8,627
49	MS	6,371	46	TX	8,663	48	TX	8,066

Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015; and Lori Taylor. Extending the NCES CWI. College Station: Texas A&M University, 2014. Web. June 15, 2015.

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	2002			2010			2012	
Rank	State	%	Rank	State	%	Rank	State	%
4	TN	65.2	8	TN	63.0	5	DE	63.8
9	GA	63.9	9	NC	62.6	10	NC	62.3
12	NC	63.4	10	GA	62.5	11	TN	62.2
16	MD	62.2	13	MD	62.2	12	MD	62.1
20	WV	61.7	15	DE	61.5	14	GA	61.8
21	AR	61.6	N/A	US	61.3	17	FL	61.0
21	DE	61.6	19	VA	61.0	N/A	US	60.9
21	VA	61.6	21	WV	60.6	19	VA	60.6
N/A	US	61.5	24	FL	60.4	21	IL	60.2
24	KY	61.4	24	TX	60.4	26	MO	59.6
26	AL	61.2	26	MO	60.3	29	TX	59.1
27	LA	61.1	30	IL	59.9	30	IN	58.8
29	IN	60.9	34	KY	59.3	32	WV	58.6
29	MO	60.9	36	IN	58.8	38	AL	57.9
33	TX	60.4	36	MS	58.8	38	KY	57.9
34	MS	60.2	38	AL	58.5	43	MS	57.1
34	SC	60.2	38	LA	58.5	44	LA	56.9
39	IL	59.5	42	AR	57.7	44	OH	56.9
42	FL	59.0	43	OK	57.6	47	SC	56.7
46	OH	58.0	43	SC	57.6	48	AR	56.6
47	OK	57.8	48	OH	57.2	49	OK	55.6

# Table 6.4Instruction Expenditures As A Percentage Of Current Expenditures, 2002, 2010, And 2012

Sources: Staff analysis of data from US. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. Jan. 6, 2015.

### **Classroom Teacher Salaries**

Table 6.5 ranks states by average annual classroom teacher salary. A salary is the total amount regularly paid before deductions; it excludes extra-duty pay. Teacher salary information is not collected by the federal government, but it is collected by the National Education Association.

Kentucky's average classroom teacher salary was well below the national average until 2008, when legislation increased the minimum number of instructional days by two and mandated a teacher salary increase of at least \$3,000. Adjusted for geographic cost differences, Kentucky's rank rose from 36<sup>th</sup> in 2002 to 26<sup>th</sup> in 2013. The average teacher salary for Kentucky in 2013, adjusted for geographic cost differences, was \$56,916, just above the national average of \$56,065. Comparing average salaries of adjacent states is one measure of a state's ability to compete for teachers; Kentucky's adjusted average teacher salary was lower than the averages in Ohio, Indiana, and Illinois but higher than those in Tennessee, Missouri, Virginia, and West Virginia.

				0	8	1					
	2002			2009			201	l		2013	
Rank	State	\$									
9	IL	49,435	6	MD	62,849	7	IL	64,509	8	MD	64,248
11	DE	48,363	8	IL	61,344	8	MD	63,960	12	DE	59,679
12	MD	48,251	13	DE	56,667	13	DE	57,934	13	IL	59,113
N/A	US	44,683	15	OH	54,656	14	OH	56,715	16	OH	56,307
15	IN	44,195	N/A	US	54,274	N/A	US	55,489	N/A	US	56,065
16	GA	44,073	18	GA	52,879	22	GA	52,815	23	GA	52,880
17	OH	44,029	24	IN	49,569	24	IN	50,801	25	LA	51,381
19	NC	42,680	26	LA	48,627	28	LA	49,006	27	KY	50,203
23	VA	41,731	28	NC	48,454	29	KY	48,908	28	IN	50,077
27	SC	39,923	29	VA	48,385	30	ΤX	48,638	30	VA	48,988
30	FL	39,275	31	KY	47,875	31	AL	47,803	33	ΤX	48,819
32	ΤX	39,232	32	SC	47,421	32	VA	47,564	35	SC	48,375
33	TN	38,515	33	ΤX	47,157	38	SC	47,050	36	AL	47,949
35	MO	37,996	34	FL	46,921	41	NC	46,700	37	TN	47,563
36	KY	37,951	35	AL	46,879	43	AR	45,998	38	MO	47,517
40	AL	37,194	40	AR	45,738	44	TN	45,891	41	AR	46,631
42	AR	36,962	41	TN	45,549	45	FL	45,732	42	FL	46,598
43	WV	36,751	45	WV	44,701	46	MO	45,321	43	NC	45,737
45	LA	36,328	46	MS	44,498	48	OK	44,343	45	WV	45,453
47	OK	34,744	48	MO	44,249	49	WV	44,260	49	OK	44,373
49	MS	33,295	49	OK	43,846	50	MS	41,975	50	MS	41,814

Table 6.5									
Average Classroom Teacher Salary, 2002, 2009, 2011, and 2013									
Average Classroom Teacher Salary, 2002, 2009, 2011, and 2013 Not Adjusted For Geographic Cost Differences									

Adjusted For Geographic Cost Differences

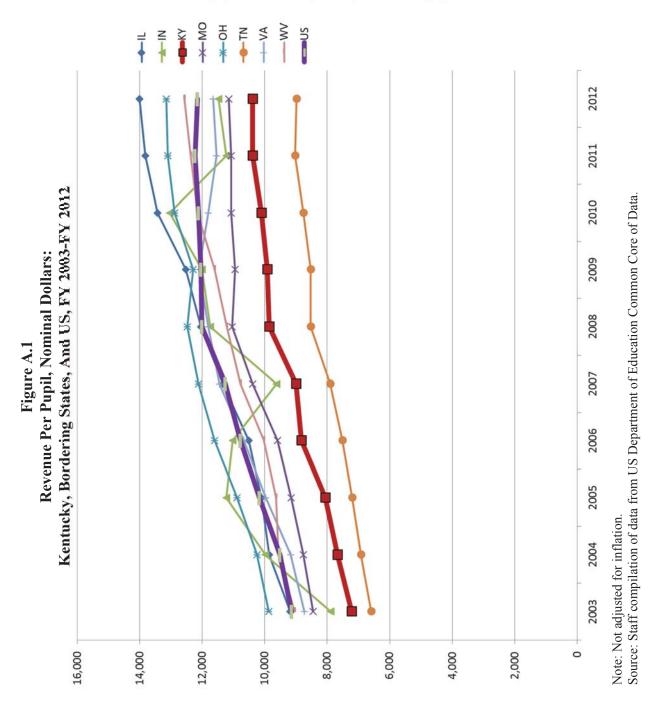
	2002			2009			2011			2013	
Rank	State	\$									
6	IN	49,502	10	IL	58,995	7	IL	62,935	14	OH	60,436
9	DE	48,594	12	OH	58,005	11	OH	60,934	18	DE	59,428
10	IL	48,396	16	MD	57,292	18	IN	58,724	19	MD	58,903
19	OH	45,654	17	IN	56,681	19	MD	58,275	22	IN	58,068
20	MD	45,586	20	DE	55,612	21	DE	58,070	24	IL	57,761
N/A	US	44,683	24	AR	54,987	27	KY	55,936	26	KY	56,916
22	NC	44,539	26	KY	54,720	N/A	US	55,489	N/A	US	56,065
24	AR	44,509	27	LA	54,303	29	AR	54,795	28	LA	56,007
26	GA	44,303	N/A	US	54,274	30	GA	53,831	29	AR	55,910
28	SC	43,967	30	GA	53,704	32	LA	53,339	33	MO	54,106
32	WV	43,241	32	AL	52,868	33	AL	53,306	34	SC	53,985
34	FL	43,101	33	SC	52,623	37	SC	51,911	35	GA	53,981
36	KY	42,311	34	MS	52,511	38	MO	51,878	36	AL	53,358
37	MO	42,252	35	OK	52,425	39	OK	51,709	39	WV	52,489
39	AL	42,040	36	WV	51,910	42	WV	51,141	40	TN	51,907
41	TN	41,448	37	NC	51,720	46	TN	50,312	41	FL	51,010
42	LA	41,397	42	FL	50,634	47	FL	49,863	42	OK	50,705
43	OK	40,854	45	TN	50,004	48	MS	49,487	47	MS	48,818
49	VA	40,112	46	MO	49,749	49	NC	49,369	49	NC	48,336
50	MS	39,618	49	ΤX	46,941	50	ΤX	47,827	50	ΤX	47,502
51	ΤХ	39,046	51	VA	44,629	51	VA	43,729	51	VA	44,893

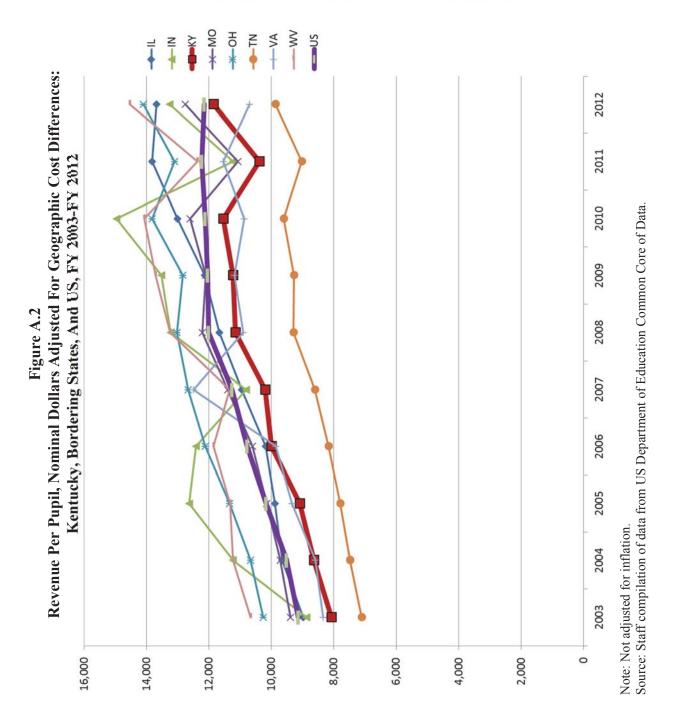
Note: Salary data used with permission of the National Education Association © 2015. All rights reserved. Sources: Staff analysis of data from National Education Association. Rankings of the States and Estimates of School Statistics. Washington. For fiscal years 2002, 2009, 2011, and 2013. Web. June 15, 2015; and Lori Taylor. Extending the NCES CWI. College Station: Texas A&M University, 2014. Web. June 15, 2015.

# Appendix A

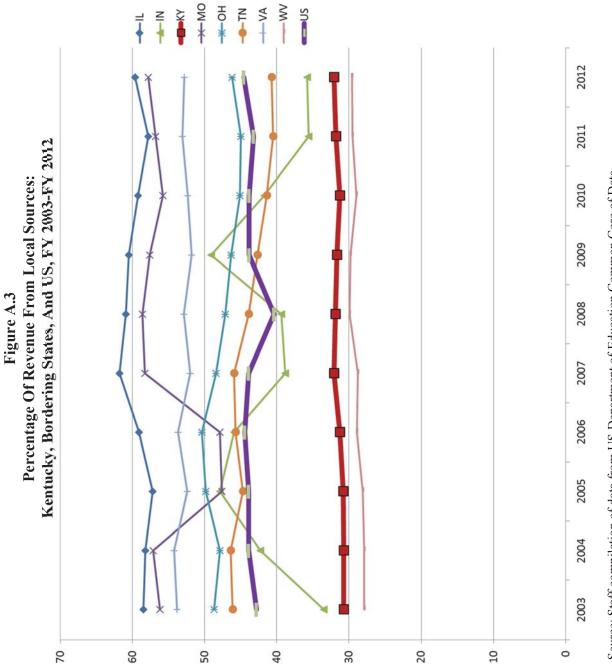
### Ten-Year Financial Trends For Kentucky, Bordering States, And US

Revenue Per Pupil, Nominal Dollars, Not Adjusted For Geographic Cost Differences

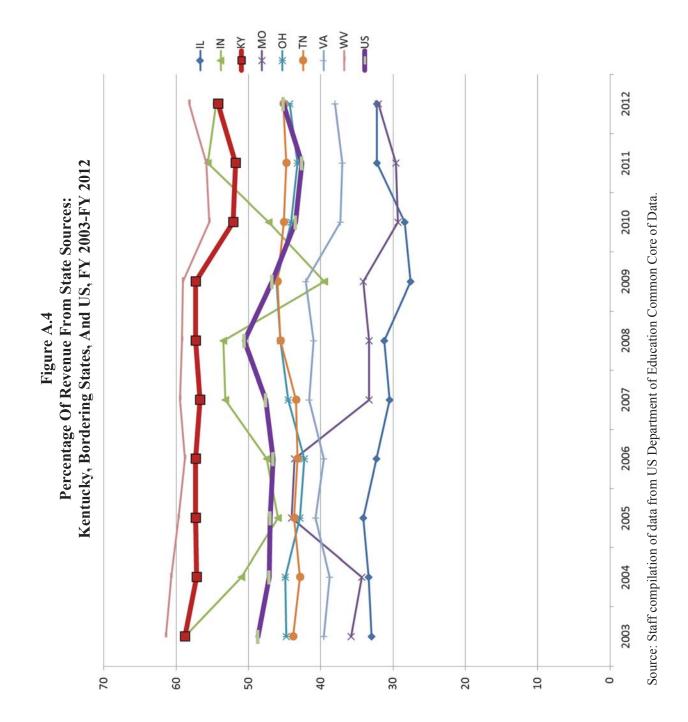




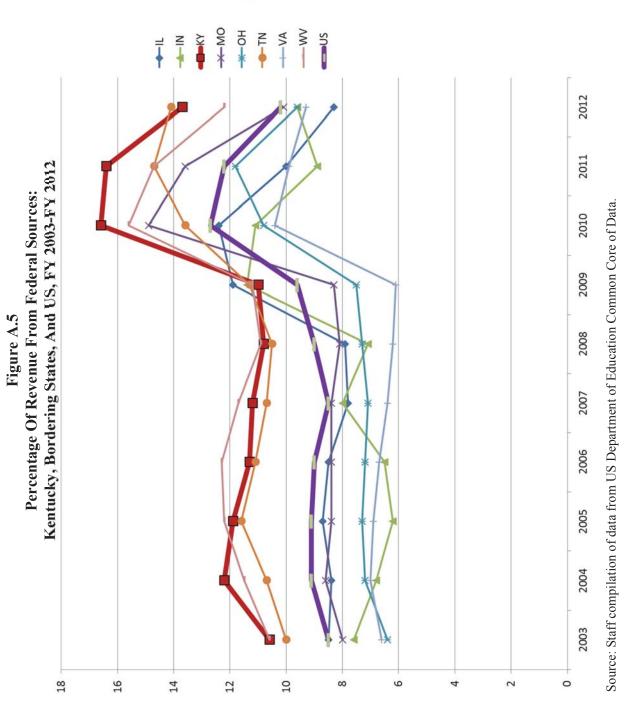
### Revenue Per Pupil, Nominal Dollars, Adjusted For Geographic Cost Differences



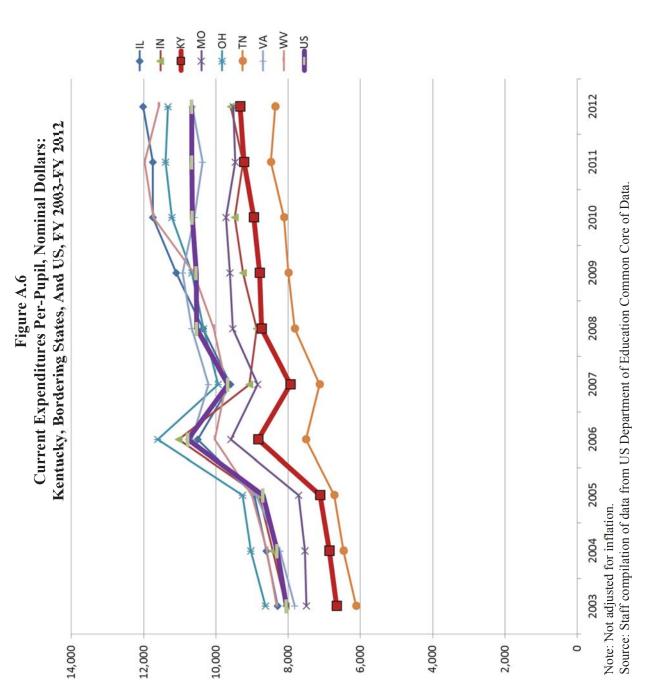
### Percentage Of Revenue From Local Sources



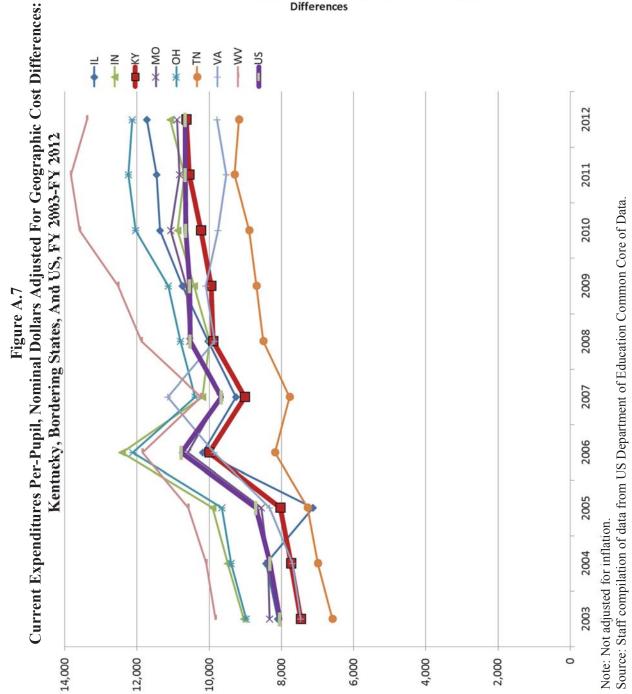
#### Percentage Of Revenue From State Sources



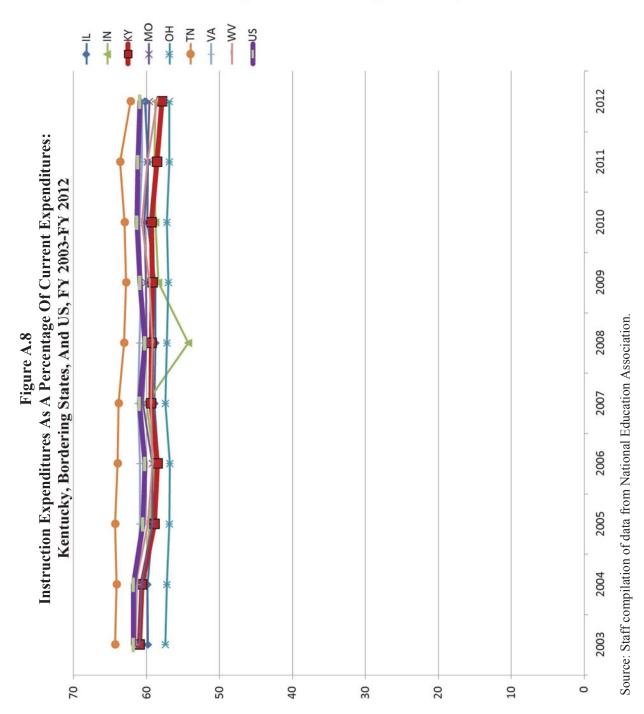
Percentage Of Revenue From Federal Sources



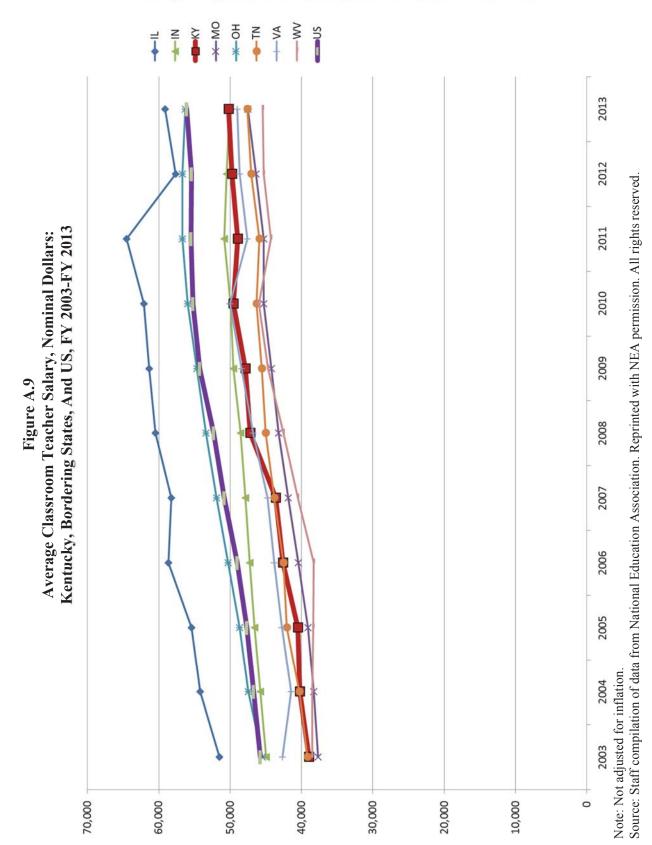
Current Expenditures Per Pupil, Nominal Dollars, Not Adjusted For Geographic Cost Differences



### Current Expenditures Per Pupil, Nominal Dollars, Adjusted For Geographic Cost Differences



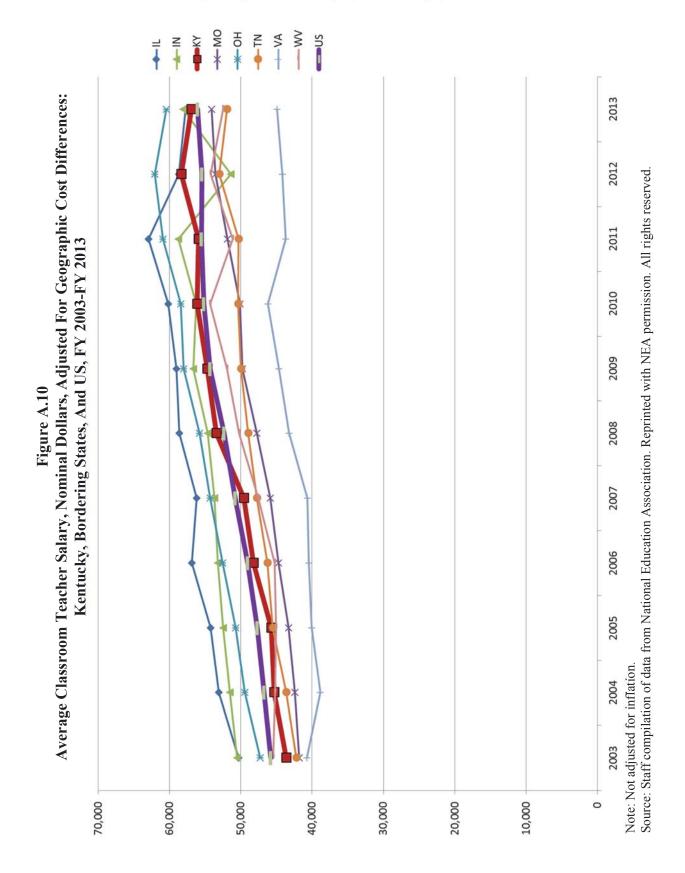
#### Instruction Expenditures As A Percentage Of Current Expenditures



### Average Salary, Nominal Dollars, Not Adjusted For Geographic Cost Differences

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Appendix A



### Average Salary, Nominal Dollars, Adjusted For Geographic Cost Differences

### Endnotes

<sup>1</sup> Kentucky. Legislative Research Commission. Office of Education Accountability. *Kentucky District Data Profiles*. Frankfort: Legislative Research Commission. Web.

<sup>2</sup> United States. Dept. of Educ. National Center for Educ. Statistics. Cost Adjustments: Comparable Wage Index Data Files and Documentation. Web. June 15, 2015.

<sup>3</sup> Lori Taylor. Extending the NCES CWI. College Station: Texas A&M University, 2014. Web. June 15, 2015.

<sup>4</sup> United States. Department of Commerce. Census Bureau. Poverty thresholds. By Size of Family and Number of Children, 2013. Web. June 9, 2015.

<sup>5</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *CCD School and District Glossary*. Washington, DC: NCES. Web. April 2, 2011.

<sup>6</sup> Kentucky. Legislative Research Commission. Office of Education Accountability *Review of Special Education in Kentucky*. Research Report No. 358. Frankfort: LRC, 2008.

<sup>7</sup> Kentucky. Legislative Research Commission. Office of Education Accountability. *Appropriate Identification and Service of Students With Disabilities in Kentucky: Special Education Eligibility, Funding, and Personnel Training.* Frankfort: LRC, 2011.

<sup>8</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *NAEP Overview*. Washington: NCES. Web. Oct. 28, 2009.

<sup>9</sup> United States. Dept. of Educ. National Center for Educ. Statistics. Technical Appendices to 2013 Reading Assessment Report Card and 2013 Mathematics Assessment Report Card. Washington, DC: US Dept. of Educ., Nov. 7, 2013. Web. June 11, 2015.

<sup>10</sup> United States. Dept. of Educ. National Center for Educ. Statistics. "A Closer Look at Exclusion and Accommodations as Related to Assessment Results." Washington: NCES, 2009. Web. April 2, 2011; Kitmitto, Sami, and Victor Bandeira de Mello. *Measuring the Status and Change of NAEP State Inclusion Rates for Students with Disabilities*. Washington: US NCES, Nov. 2008.

<sup>11</sup> ACT. ACT College Readiness Benchmarks. Web. Aug. 19, 2015.

<sup>12</sup> AdvanceKentucky. *Five-Year Review: 2008-2013*. Lexington: Kentucky Science and Technology Corporation, Oct. 2013.

<sup>13</sup> United States. Dept. of Educ. National Center for Educ. Statistics. Common Core of Data: Dropout / Completer Data Tables. Washington, DC: USDoE, Jan. 2015. Web. June 19, 2015.

<sup>14</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *Numbers and Types of Public Elementary and Secondary Schools from the Common Core of Data*, 2011. May 13, 2011; and *Selected Statistics From the Public Elementary and Secondary Education Universe: School Year 2012–13*. Oct. 2014; and *Status of Education in Rural America*. Jan. 21, 2015.

<sup>15</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *Documentation to the NCES Common Core of Data State Nonfiscal Survey of Public Elementary/Secondary Education: School Year 2012-13*. Provisional Version 1a. Appendix C—Glossary for the Common Core of Data: School Year 2012–13. Washington, DC: NCES, Dec. 2014.

<sup>16</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *Documentation to the NCES Common Core of Data State Nonfiscal Survey of Public Elementary/Secondary Education: School Year 2012-13. Provisional Version 1a.* Appendix C—Glossary for the Common Core of Data: School Year 2012–13. Washington, DC: NCES, Dec. 2014.

<sup>17</sup> Kentucky. Legislative Research Commission. Office of Education Accountability. *Fees, Dues, and Supplies in Kentucky Schools*. Research Report No. 361. Frankfort: LRC, 2009.

<sup>18</sup> Kentucky. Legislative Research Commission. Office of Education Accountability. *Reporting Total Revenue: Onbehalf Payments and Local Activity Funds*. Research Report No. 388. Frankfort: LRC, 2012, P. 27.

<sup>19</sup> Conway, Karen. "RE: SFCC funds included in state revenue reported to US Dept. of Ed?" Email to Brenda Landy. June 7, 2013.

<sup>20</sup> Kentucky. Legislative Research Commission. Office of Education Accountability. *Education Revenue*,

Expenditures, And Staffing Over 10 Years. Research Report No. 409. Frankfort: LRC, 2014.

<sup>21</sup> United States. Bureau of Labor Statistics. CPI Inflation Calculator. Web. Aug. 14, 2015.

<sup>22</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *Common Core of Data*. Web. June 18, 2015.

<sup>23</sup> United States. Dept. of Educ. National Center for Educ. Statistics. *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2011–12 (Fiscal Year 2012)*. Washington, DC: NCES, Jan. 2015.