

2007 School Finance Report



Research Report No. 349

Legislative Research Commission

Office of Education Accountability

Prepared by

Marcia Ford Seiler, Director; Pam Young; and Jo Ann Ewalt, Ph.D.

Kentucky Legislative Research Commission

David L. Williams
President, LRC Co-Chair

Gregory D. Stumbo
Speaker, LRC Co-Chair

SENATE

HOUSE

Katie Kratz Stine
President Pro Tem

Larry Clark
Speaker Pro Tem

Dan Kelly
Majority Floor Leader

Rocky Adkins
Majority Floor Leader

Ed Worley
Minority Floor Leader

Jeff Hoover
Minority Floor Leader

Dan Seum
Majority Caucus Chair

Robert R. Damron
Majority Caucus Chair

Johnny Ray Turner
Minority Caucus Chair

Bob DeWeese
Minority Caucus Chair

Carroll Gibson
Majority Whip

John Will Stacy
Majority Whip

Jerry P. Rhoads
Minority Whip

David Floyd
Minority Whip

Robert Sherman, Director

The Kentucky Legislative Research Commission is a 16-member committee comprised of the majority and minority leadership of the Kentucky Senate and House of Representatives. Under Chapter 7 of the Kentucky Revised Statutes, the Commission constitutes the administrative office for the Kentucky General Assembly. Its director serves as chief administrative officer of the legislature when it is not in session. The Commission and its staff, by law and by practice, perform numerous fact-finding and service functions for members of the General Assembly. The Commission provides professional, clerical, and other employees required by legislators when the General Assembly is in session and during the interim period between sessions. These employees, in turn, assist committees and individual members in preparing legislation. Other services include conducting studies and investigations, organizing and staffing committee meetings and public hearings, maintaining official legislative records and other reference materials, furnishing information about the legislature to the public, compiling and publishing administrative regulations, administering a legislative intern program, conducting a pre-session orientation conference for legislators, and publishing a daily index of legislative activity during sessions of the General Assembly.

The Commission also is responsible for statute revision; publication and distribution of the *Acts* and *Journals* following sessions of the General Assembly; and maintenance of furnishings, equipment, and supplies for the legislature.

The Commission functions as Kentucky's Commission on Interstate Cooperation in carrying out the program of the Council of State Governments as it relates to Kentucky.

2007 School Finance Report

Project Staff

Marcia Ford Seiler, Director
Pam Young
Jo Ann Ewalt, Ph.D.

Research Report No. 349

Legislative Research Commission

Frankfort, Kentucky
lrc.ky.gov

Accepted February 8, 2008, by
Education Assessment and Accountability Review Subcommittee

Foreword

The Office of Education Accountability (OEA) is statutorily mandated through KRS 7.410 to analyze the level of equity achieved by the Support Education Excellence in Kentucky funding system and whether adequate funds are available to all school districts. Since 1990, OEA has conducted reviews of school finance issues, primarily focusing on the level of equity achieved by the funding system. While the *2006 School Finance Report* analyzed local and state education revenue from fiscal year 1990 through FY 2005, the *2007 School Finance Report* reflects the addition of FY 2006 data.

Office of Education Accountability staff would like to thank the Kentucky Department of Education's Division of Data Management for providing the necessary data to complete the analysis presented in this report.

Robert Sherman
Director

Legislative Research Commission
Frankfort, Kentucky
February 8, 2008

Contents

Summary.....	v
Introduction.....	1
Methodologies Used To Examine Equity.....	1
Quintile Analysis	1
Other Equity Measures.....	2
Geographic Cost Adjustments	3
Inflation Adjustments for Revenue Data.....	4
Revenue Analysis.....	4
Local and State Revenue	4
Local Revenue	9
State Revenue	9
Federal Revenue	11
Total Revenue.....	12
Changes in Equity Over Time.....	14
Conclusion	17
Works Cited	19
Appendix A: FY 2006 Wealth Quintiles	21
Appendix B: FY 2005 Comparable Wage Index by School District.....	23
Appendix C: Average Per-pupil Revenues by Wealth Quintile	33
Appendix D: Average Per-pupil Revenues by Wealth Quintile in 1990 Constant Dollars	41
Appendix E: Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Using Comparable Wage Index	49

List of Tables

1	Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Per-pupil Revenue	6
2	Local and State Per-pupil Revenue by Property Wealth Quintile as Percent of Quintile 5 for Select Years.....	7
3	Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5: Comparison of Unadjusted and Comparable Wage Index	8
4	State Per-pupil Revenue by Property Wealth Quintile Adjusted for State On-Behalf-Of Payments.....	11
5	Total Revenue: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Per-pupil Revenue	13
6	Total Per-pupil Revenue by Property Wealth Quintile as Percent of Quintile 5 for Select Years.....	14

List of Figures

A	Equity Measures for Local and State Per-pupil Revenue	9
---	---	---

Summary

In December 2006, the Office of Education Accountability (OEA) presented the *2006 School Finance Report* to the Education Assessment and Accountability Review Subcommittee. That report analyzed local and state education revenue from fiscal year 1990 through FY 2005. This report reflects the addition of FY 2006 data.

The report begins with an explanation of the methodologies used to examine equity in school finance. Local and state (combined) revenue are then analyzed. The source of school district revenue is then disaggregated, and the next three sections of the study discuss local, state, and federal revenues, respectively. The final revenue analysis section of the report discusses total district revenue. The report concludes with a discussion of factors that are contributing to a widening of the equity gap in school finance in Kentucky.

Equity is examined using quintile analysis, coefficient of variation, Gini Coefficient, Comparable Wage Index, and inflation adjustments. OEA's finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings, or quintiles, based upon the district's per-pupil local property assessment. The coefficient of variation is a measure of how much variation exists in districts' per-pupil spending. The Gini Coefficient measures the difference between the actual distribution of per-pupil revenue and a perfectly equitable revenue distribution. The Comparable Wage Index is a cost adjustment technique that uses the salaries of college graduates who are not educators to measure regional variations in wages, which can be used by researchers to adjust district-level finance data to make resource comparisons across geographic areas. Inflation adjustments are used to analyze changes in dollars over time to take into consideration how the purchasing power of those dollars may have changed.

While the magnitude of the equity variance differs depending upon the method of analysis, there is remarkable consistency in the trends over time. For example, analyzing unadjusted (nominal) dollars, the disparity in revenue between property-rich school districts and property-poor districts is now greater than it was in pre-KERA 1990 terms. Conversely, when revenues are adjusted for inflation, the analyses of local and state (combined) revenue and total revenue show that the equity gap was greater in the year before KERA was enacted than it has been since. However, regardless of the method used to analyze equity, all show that in the past several years, the equity gap has been widening.

2007 School Finance Report

Introduction

In December 2006, the Office of Education Accountability (OEA) presented the *2006 School Finance Report* to the Education Assessment and Accountability Review Subcommittee. That report analyzed local and state education revenue from fiscal year 1990 through FY 2005. This report reflects the addition of FY 2006 data.

This report also includes an analysis of districts' local and state (combined) revenue using a cost-of-living index provided by the National Center for Education Statistics (NCES). Known as the Comparable Wage Index, the NCES cost adjustor allows district revenues to be compared while taking into account the fact that in some areas of Kentucky, teachers' wages reflect higher costs of living or other factors that drive up the costs of salaries.

The report begins with an explanation of the methodologies used to examine equity in school finance. Local and state (combined) revenues are then analyzed. The source of school district revenue is then disaggregated, and the next three sections of the study discuss local, state, and federal revenues, respectively. The final revenue analysis section of the report discusses total district revenue. The report concludes with a discussion of factors that are contributing to a widening of the equity gap in school finance in Kentucky.

Methodologies Used To Examine Equity

Quintile Analysis

OEA's school finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings or quintiles. Each quintile represents roughly one-fifth of the state's students.

OEA's school finance reports have historically examined the level of equity among school districts in available revenue through a method in which school districts are placed in five groupings, or quintiles, based upon the district's per-pupil local property assessment. Each quintile represents roughly one-fifth of the state's students. Quintile 1 contains the state's districts with the lowest per-pupil local property wealth, and Quintile 5 contains the districts with the highest property wealth. Appendix A contains a list of school districts by wealth quintile for FY 2006.¹ Equity is measured by the average local and state (combined) revenue for each quintile. If over time the difference in per-pupil revenue

¹ Wealth quintiles are available for prior years upon request.

increases between the wealthiest districts (Quintile 5) and all other districts, it illustrates a widening of the equity gap. If the difference decreases, equity is improving.

OEA has continued to use wealth quintiles based on local property assessments because the link between education funding and local wealth was one of the primary policy issues that led to education reform in Kentucky.

Of course, there are other ways to study equity. Some argue that differences in per-pupil funding between wealthy and poor school districts should be determined by grouping districts according to how much total funding they receive and not by local property assessments (Bassett). This OEA study used the methodology described above in part to preserve the consistency of OEA's school finance report study designs. In addition, the quintile calculations based on per-pupil local property assessments is supported by the fact that two other equity measures reported in OEA's study show findings consistent with the quintile methodology.

Other Equity Measures

Since there is no single best measure of equity in state school finance, OEA's *2005 School Finance Report* presented a detailed discussion of criteria for selecting and reporting equity measures. As noted in the report, because of the lack of consensus on equity measures, most education research recommends reporting the results of more than one analysis. The advantage of reporting multiple measures of equity is that study findings are more robust and clear when all measures show similar results (Commonwealth Legislative Office. 2005 5-7).

Two commonly used statistical measures of equity—the coefficient of variation (CV) and the Gini Coefficient—are included in this report. The CV and Gini present overall measures of equity among districts, while the wealth quintiles analyze equity between groups of districts.

Two commonly used statistical measures of equity—the coefficient of variation (CV) and the Gini Coefficient—are included in this report. The CV is a measure of how much variation exists in districts' per-pupil spending. The Gini measures the difference between the actual distribution of per-pupil revenue and a perfectly equitable revenue distribution. For example, if all students receive an equal amount of revenue, then 20 percent of students in Kentucky should receive 20 percent of the funding and 40 percent of students should receive 40 percent of the funding. The coefficient ranges between 0 and 1; the closer the value is to 0, the more equitably the revenue is distributed.

The CV and Gini present overall measures of equity among districts, while the wealth quintiles analyze equity between groups

of districts. Thus, the measures should show similar trends but should not be expected to be precisely the same.

Geographic Cost Adjustments

When researchers compare educational resources between states or among school districts within one state, geographic cost differences complicate the analysis and can undermine attempts to determine equity levels. To address this, NCES has been publishing cost adjustment research for more than 25 years. Much of the earlier work used statistical models of teacher salaries and school district characteristics. These cost analyses are complex and can be difficult for the public to understand. They also suffer from a number of methodological problems, including the fact that salary data are only updated by NCES every four years (Taylor and Fowler).

The Comparable Wage Index (CWI) uses the salaries of college graduates who are not educators to measure regional variations in wages. The index allows researchers to adjust district-level finance data to make resource comparisons across geographic areas.

NCES has recently published an alternative to its earlier approaches. Known as the Comparable Wage Index (CWI), this cost adjustment technique uses the salaries of college graduates who are not educators to measure regional variations in wages. The index allows researchers to adjust district-level finance data to make resource comparisons across geographic areas. (Taylor and Glander).

According to the researchers who developed the index, the basic premise of the CWI is that all workers—including teachers—demand higher wages in areas with a higher cost of living or with characteristics that make the area less desirable, such as a particularly high crime rate. The index measures the variation in educator pay that is not controllable by school districts by using variations in the earnings of college graduates who are not educators. For example,

if accountants in the Atlanta metro area are paid 5 percent more than the national average accounting wage, Atlanta engineers are paid 5 percent more than the national average engineering wage, Atlanta nurses are paid 5 percent more than the national average nursing wage, and so on, then the CWI predicts that Atlanta teachers should also be paid 5 percent more than the national average teacher wage (Taylor and Glander 3).

The CWI has been used in this report to examine the equity of local and state per-pupil revenue. Appendix B, Table B.1 contains

the 2005 wage index for each school district.² Appendix B, Table B.2 contains the average wage index for each quintile.

Inflation Adjustments for Revenue Data

When researchers analyze changes in dollars over time, an important consideration is how the purchasing power of those dollars also may have changed. The logic of adjusting financial data for the rate of inflation is that a dollar in 1990 was not worth a dollar in 2007.

When researchers analyze changes in dollars over time, an important consideration is how the purchasing power of those dollars also may have changed. The logic of adjusting financial data for the rate of inflation is that a dollar in 1990 was not worth a dollar in 2007 because prices increased in the intervening 17 years: goods that cost \$1 in 1990 cost \$1.61 in 2007 (Bureau. "CPI"). Economists do not agree on the best way to adjust for inflation, in part because not all goods or services become more expensive over time (Gordon). In addition, inflation adjustments do not generally reflect increases in efficiency or service improvements. For example, inflation adjustments for the price of computers account for changes in price but not changes in computing power relative to price (Nordhaus). Nevertheless, there is consensus that one should consider inflationary factors when analyzing revenues or expenditures over time because failure to do so results in comparing units of measurement (in this case, dollars) that are not equal in all years (Hartford 83).

In the sections that follow and in the related appendices, nominal revenues (the actual revenues received by school districts) and inflation-adjusted revenues are reported so policy makers can note the difference.

In the sections that follow and in the related appendices, nominal revenues (that is, the actual revenues received by school districts) and inflation-adjusted revenues are reported so policy makers can note the difference. Inflation adjustments are calculated using the Bureau of Labor Statistics' Consumer Price Index.³

Revenue Analysis

Local and State Revenue

The greatest rate of growth in local and state revenues occurred in the lowest wealth quintile, referred to as Quintile 1.

The gap in local and state per-pupil revenue between the highest wealth quintile and the other wealth quintiles from FY 1990 through FY 2006 is shown in Appendix C, Figure C.A, along with the percent change in revenues during the 16-year period. The greatest rate of growth in local and state revenues occurred in the lowest wealth quintile. From FY 1990 to FY 2006, local and state revenues increased 161 percent, from \$2,665 to \$6,968, in Quintile 1. During this period, local and state revenues grew by

² The Comparable Wage Index is calculated by county. It is applied to county districts as well as to independent districts within the county.

³ There are other inflation-adjustment indices that could be used; all will present slightly different results. However, the Consumer Price Index (CPI) is a commonly accepted inflation adjuster in education research. OEA has used the CPI in previous reports, and in the interests of consistency, the CPI is used here.

105 percent, from \$4,223 to \$8,669, in Quintile 5. When adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index, local and state revenues increased 67 percent in Quintile 1 and 31 percent in Quintile 5 over the 16-year period. Appendix D reports the results of per-pupil revenues in constant 1990 dollars.

While Appendix C, Figure C.A illustrates variations in the amount of local and state revenues and reports the amount of revenues received by each quintile over time, Table 1 converts these data to a measure of equity among the wealth quintiles. Local and state per-pupil revenue in FY 1990 was \$4,223 in Quintile 5, compared to \$2,665 in Quintile 1, for a difference of \$1,558. Table 1 reports the differences in funding between Quintile 5 and each of the other quintiles from FY 1990 to FY 2006. Adding Quintile 5's and Quintile 1's difference of \$1,558 to the corresponding differences between Quintile 5 and Quintiles 2 through 4 results in an aggregate difference of \$5,352. As equity improves, the sum of differences between Quintile 5 and Quintiles 1 through 4 will narrow. The FY 1990 figure is the pre-reform baseline against which the FY 1991 through FY 2006 data will be compared.

Local and state education funding inequity has reached a high of \$6,092 in FY 2006, 14 percent above the gap in FY 1990.

Table 1 reports both unadjusted and constant dollar amounts. Panel 1 of the table shows that for unadjusted (nominal) revenue, the equity gap has been narrower in all years since the Kentucky Education Reform Act (KERA) was enacted than it was in FY 1990 with the exception of FY 2006. Over the years, the gap has narrowed and then widened, reaching a high of \$6,092 in FY 2006, 14 percent above the gap in FY 1990.

Table 1
Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue
Compared to Quintile 5 Per-pupil Revenue for FY 1990-FY 2006

Panel 1: Unadjusted Dollars

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,558	\$1,432	\$1,340	\$1,022	\$5,352	
1991	\$1,142	\$1,087	\$1,034	\$883	\$4,147	-23%
1992	\$901	\$1,005	\$932	\$842	\$3,679	-31%
1993	\$921	\$1,019	\$1,027	\$895	\$3,862	-28%
1994	\$795	\$923	\$924	\$839	\$3,480	-35%
1995	\$847	\$962	\$992	\$928	\$3,729	-30%
1996	\$900	\$1,006	\$1,026	\$935	\$3,867	-28%
1997	\$726	\$851	\$907	\$926	\$3,410	-36%
1998	\$1,047	\$1,170	\$1,253	\$1,198	\$4,669	-13%
1999	\$1,188	\$1,253	\$1,287	\$1,276	\$5,004	-6%
2000	\$1,146	\$1,244	\$1,219	\$1,238	\$4,847	-9%
2001	\$1,171	\$1,250	\$1,275	\$1,219	\$4,915	-8%
2002	\$1,228	\$1,292	\$1,201	\$1,313	\$5,034	-6%
2003	\$1,204	\$1,186	\$1,136	\$1,199	\$4,726	-12%
2004	\$1,216	\$1,246	\$1,090	\$1,089	\$4,642	-13%
2005	\$1,376	\$1,367	\$1,227	\$1,187	\$5,157	-4%
2006	\$1,701	\$1,612	\$1,459	\$1,320	\$6,092	14%

Panel 2: FY 1990 Constant Dollars

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,558	\$1,432	\$1,340	\$1,022	\$5,352	
1991	\$1,082	\$1,031	\$981	\$838	\$3,932	-27%
1992	\$827	\$923	\$857	\$773	\$3,380	-37%
1993	\$821	\$908	\$915	\$798	\$3,441	-36%
1994	\$690	\$801	\$802	\$728	\$3,022	-44%
1995	\$715	\$812	\$837	\$783	\$3,148	-41%
1996	\$739	\$827	\$843	\$769	\$3,178	-41%
1997	\$580	\$680	\$725	\$740	\$2,725	-49%
1998	\$822	\$919	\$984	\$940	\$3,665	-32%
1999	\$917	\$967	\$994	\$985	\$3,862	-28%
2000	\$860	\$933	\$915	\$928	\$3,635	-32%
2001	\$849	\$907	\$925	\$884	\$3,564	-33%
2002	\$875	\$921	\$856	\$936	\$3,587	-33%
2003	\$840	\$827	\$792	\$836	\$3,295	-38%
2004	\$830	\$850	\$744	\$743	\$3,167	-41%
2005	\$912	\$905	\$812	\$786	\$3,416	-36%
2006	\$1,085	\$1,028	\$931	\$842	\$3,887	-27%

Source: Staff compilation of final Support Education Excellence in Kentucky (SEEK) Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

The inflation-adjusted equity gap reported in Panel 2 of Table 1 is narrower than that shown in Panel 1 for unadjusted dollars.

As shown in Panel 2, the inflation-adjusted gap was \$3,887 in FY 2006, a decrease of 27 percent from FY 1990. The inflation-adjusted equity gap reported in Panel 2 is narrower than that shown in Panel 1 for unadjusted dollars. In addition, the year-to-year variations in the gap are smaller in the constant dollar analysis than is evident in Panel 1.

After education reform, revenues for Quintiles 1 through 4 ranged between 80 percent and 85 percent of the revenue received by Quintile 5 for fiscal years 1995, 2000, and 2006.

Prior to education reform in 1990, the equity gap was apparent between the property-poor and property-rich districts. As Table 2 reflects, Quintiles 1 through 4 received between 63 percent and 76 percent of the local and state revenues received by the highest wealth quintile in FY 1990. After reform, revenues for Quintiles 1 through 4 ranged between 80 percent and 85 percent of the revenue received by Quintile 5 for fiscal years 1995, 2000, and 2006.

Table 2
Local and State Per-pupil Revenue by Property Wealth Quintile as Percent of Quintile 5 for Select Years

Quintile	FY 1990	% of Q5	FY 1995	% of Q5	FY 2000	% of Q5	FY 2006	% of Q5
Q1 - Lowest Wealth	\$2,665	63%	\$4,644	85%	\$5,800	83%	\$6,968	80%
Q2	\$2,792	66%	\$4,530	82%	\$5,703	82%	\$7,057	81%
Q3	\$2,884	68%	\$4,500	82%	\$5,727	82%	\$7,209	83%
Q4	\$3,201	76%	\$4,564	83%	\$5,708	82%	\$7,349	85%
Q5 - Highest Wealth	\$4,223	100%	\$5,492	100%	\$6,946	100%	\$8,669	100%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Table 3 uses the Comparable Wage Index from FY 1997 through FY 2005, the most current period for which data are available, to convert the equity gap analysis presented in Table 1 to cost-adjusted dollars. Fiscal year 1997 is the baseline against which FY 1998 through FY 2005 data are compared. Similar to the analysis shown in Table 1, Table 3 illustrates the aggregate differences of local and state (combined) revenue of Quintiles 1 through 4, compared to the revenue of districts in Quintile 5. To assist in interpreting the table, both unadjusted and CWI-adjusted data are shown.

Table 3 illustrates using the cost index results in much smaller differences between quintiles than is seen in the unadjusted equity analysis. However, the trend is essentially the same for both the unadjusted and CWI data, and shows that the equity gap has narrowed and widened over the years.

As Table 3 illustrates, using the cost index results in much smaller differences between quintiles than is seen in the unadjusted equity analysis. The percent change in revenue over time, compared to the FY 1997 base year, is much more volatile in the cost-adjusted revenue analysis than in unadjusted revenue. However, the trend in revenue equity among the quintiles is essentially the same for both

the unadjusted and CWI data and shows that the equity gap has narrowed and widened over the years.

Table 3
Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5: Comparison of Unadjusted and Comparable Wage Index

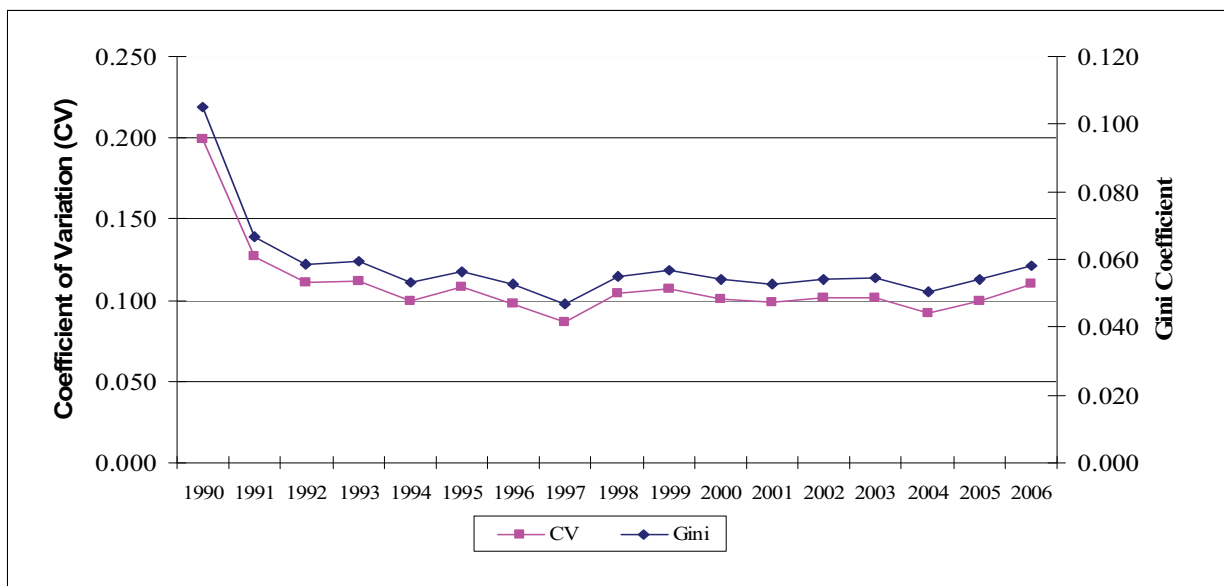
Fiscal Year	Unadjusted Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1997	CWI Adjusted Q1-4 Aggregate Difference: Equity Gap*	% Difference Compared to 1997
1997	3,410		701	
1998	4,669	37%	2,028	189%
1999	5,004	47%	2,291	227%
2000	4,847	42%	1,396	99%
2001	4,915	44%	1,646	135%
2002	5,034	48%	1,787	155%
2003	4,726	39%	1,261	80%
2004	4,642	36%	985	41%
2005	5,157	51%	1,466	109%

Note: *Appendix E contains the differences between Quintiles 1-4 and Quintile 5 for FY 1997-FY 2005. Sources: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education; National Center for Education Statistics.

Comparing Figure A with the last column of Table 1 shows that all three methods of examining equity—wealth quintiles, Gini Coefficient, and CV—reveal similar patterns. Equity improved significantly during the first decade of education reform; while equity measures have been volatile since the late 1990s, the equity gap has widened in the past several years.

Figure A reports changes in the equity of per-pupil local and state revenue as measured by the coefficient of variation and the Gini Coefficient. In interpreting the CV and Gini measures of equity, values closer to zero show greater equity. Differences between these two calculations should not be interpreted as one showing more equity because they are based on different units of measurement. However, as Figure A shows, the relationship between the two is similar, and a comparison of Figure A with the last column of Table 1 shows that all three methods of examining equity—wealth quintiles, Gini Coefficient, and CV—reveal similar patterns. Equity improved significantly during the first decade of education reform; while equity measures have been volatile since the late 1990s, the equity gap has widened in the past several years.

Figure A
Equity Measures for Local and State Per-pupil Revenue FY 1990-FY 2006



Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Local Revenue

In absolute terms, local revenue grew the most—\$3,404 per pupil—in the highest wealth quintile from FY 1990 to FY 2006. Local revenue grew the least—\$1,079—in the lowest wealth quintile for the same time period.

To analyze the revenue gap in further detail, local revenue is analyzed separately from state revenue. As shown in Appendix C, Figure C.B, local revenue grew the most in absolute terms in the highest wealth quintile—\$3,404 per pupil—increasing from \$2,103 per pupil in FY 1990 to \$5,507 in FY 2006. For the same time period, local revenue grew the least—\$1,079—in the lowest wealth quintile, increasing from \$355 per pupil to \$1,434. However, the lowest wealth quintile experienced the greatest rate of change, increasing 304 percent over the 16-year period. Appendix D, Figure D.B reports these changes in constant 1990 dollars. When adjusted for inflation, Quintile 1 grew by \$560, or 158 percent, and Quintile 5 grew by \$1,411, for a 67 percent increase over the 16-year period.

State Revenue

In absolute terms, state revenue grew the most—\$3,224 per pupil—in the lowest wealth quintile from FY 1990 to FY 2006. State revenue grew the least—\$1,041—in the highest wealth quintile for the same time period.

Per-pupil state revenue by wealth quintile from FY 1990 to FY 2006 is depicted in Appendix C, Figure C.C. State revenue grew the most in the lowest wealth quintile, increasing \$3,224 per pupil from \$2,310 in FY 1990 to \$5,534 in FY 2006. State revenue grew the least in the highest wealth quintile, increasing \$1,041 per pupil from \$2,120 to \$3,161 for the same time period. This

relationship is also evident when the data are adjusted for inflation, although the magnitude of dollar gains is less. As Appendix D, Figure D.C reports, in constant 1990 dollars, state revenue for Quintile 1 grew 53 percent from 1990 to 2006, while Quintile 5 state revenue fell by 5 percent, from \$2,120 to \$2,017 during this period.

As first noted in the *2005 School Finance Report*, the General Assembly appropriates funds to the Kentucky Department of Education for expenditures the department makes on behalf of school districts (Commonwealth. Legislative. Office. 2005 29). These items include vocational schools, teacher retirement, health insurance, and life insurance. These payments have not been reflected in OEA's funding analysis thus far because school districts were not required to account for these funds until FY 2004. Table 4 reflects changes to district revenue when on-behalf-of payments are included for fiscal years 2004, 2005, and 2006.

Quintiles 1 through 4 received 20 to 27 percent more revenue per pupil in FY 2004 when on-behalf-of payments are accounted for, while Quintile 5 received an additional 39 percent. In FY 2005, Quintiles 1 through 4 received 23 to 30 percent more from on-behalf-of payments, and Quintile 5 received 40 percent more revenue than seen in unadjusted revenues. In FY 2006, Quintiles 1 through 4 received 26 to 34 percent more from on-behalf-of payments, and Quintile 5 received 42 percent more revenue than seen in unadjusted revenues. In absolute terms, Quintile 5 received the most on-behalf-of payments in FY 2004; the second most, behind Quintile 1, in FY 2005; and the third most, behind Quintiles 1 and 3, in FY 2006.

Table 4
State Per-pupil Revenue by Property Wealth Quintile
Adjusted for State On-Behalf-Of Payments FY 2004-FY 2006

FY 2004				
Quintile	Unadjusted	With On-Behalf-Of Payments	Difference	% Change
Q1 - Lowest Wealth	\$5,146	\$6,196	\$1,050	20%
Q2	\$4,589	\$5,545	\$956	21%
Q3	\$4,233	\$5,208	\$975	23%
Q4	\$3,438	\$4,376	\$937	27%
Q5 - Highest Wealth	\$2,841	\$3,963	\$1,122	39%

FY 2005				
Quintile	Unadjusted	With On-Behalf-Of Payments	Difference	% Change
Q1 - Lowest Wealth	\$5,227	\$6,450	\$1,223	23%
Q2	\$4,654	\$5,792	\$1,139	24%
Q3	\$4,312	\$5,447	\$1,135	26%
Q4	\$3,533	\$4,604	\$1,071	30%
Q5 - Highest Wealth	\$2,911	\$4,069	\$1,158	40%

FY 2006				
Quintile	Unadjusted	With On-Behalf-Of Payments	Difference	% Change
Q1 - Lowest Wealth	\$5,534	\$6,969	\$1,434	26%
Q2	\$4,972	\$6,302	\$1,329	27%
Q3	\$4,519	\$5,883	\$1,364	30%
Q4	\$3,767	\$5,034	\$1,267	34%
Q5 - Highest Wealth	\$3,161	\$4,504	\$1,343	42%

Note: On-behalf-of payments are expenditures the Kentucky Department of Education makes with general fund appropriations. This spending covers expenses that might otherwise be paid for directly by school districts, such as vocational schools, teacher retirement, health insurance, and life insurance.

Source: Staff calculations based on data provided by the Kentucky Department of Education.

Federal Revenue

In absolute terms, federal revenue grew the most—\$995 per pupil—in the lowest wealth quintile from FY 1990 to FY 2006. Federal revenue grew the least—\$552—in Quintile 4 for the same time period.

Although this analysis focuses primarily on local and state education funding because those are the funding sources that can be impacted through state policymaking, analysis of education funding is incomplete without discussion of the federal funds received by school districts. Appendix C, Figure C.D depicts the federal funds received by quintiles from FY 1990 through FY 2006. Federal revenue grew the most in Quintile 1, increasing

\$995 per pupil from \$540 in FY 1990 to \$1,535 in FY 2006. Federal revenue grew the least in Quintile 4, increasing \$552 per pupil from \$292 to \$844 for the same time period.

When adjusted for inflation, the patterns of growth in federal revenue are similar to those reported for nominal dollars. As reported in Appendix D, Figure D.D, in constant 1990 dollars, Quintile 1 grew by \$440, or 81 percent; while Quintile 4 grew the least, increasing by \$247, or 85 percent, over the 16-year period.

Total Revenue

The gap is actually wider between Quintiles 5 and 4 when federal revenue is included.

Appendix C, Figure C.E reflects total revenue and illustrates how the addition of federal funds helps reduce the equity gap between Quintile 5 and Quintiles 1 through 3. The gap is wider between Quintiles 5 and 4 when federal revenue is included because of the relatively lower amount of federal funds received by districts in Quintile 4.

In an analysis similar to Table 1 containing local and state revenue, Table 5 converts the total per-pupil revenue data presented in Appendix C, Figure C.E to a measure of equity among the wealth quintiles and repeats both nominal and inflation-adjusted revenue amounts. Total per-pupil revenue for Quintile 5 was \$4,585 in 1990, compared to \$3,205 in Quintile 1, for a difference of \$1,380. Table 5 reports differences in total per-pupil funding between Quintile 5 and each of the other quintiles from FY 1990 through FY 2006. Adding Quintile 5's and Quintile 1's difference of \$1,380 to the corresponding differences in funding between Quintile 5 and Quintiles 2 through 4 results in an aggregate difference of \$5,241 in FY 1990. As equity improves, the sum of differences between Quintile 5 and Quintiles 1 through 4—the equity gap—will narrow. The FY 1990 figure is the pre-reform baseline against which the FY 1991 through FY 2006 equity gap data will be compared.

The equity gap in total revenue has been narrower in all years since education reform was enacted in FY 1990, with the exception of FY 2006.

As is the case when just local and state revenue is considered (see Table 1), the equity gap in total revenue has been narrower in all years since education reform was enacted in FY 1990, with the exception of FY 2006. The equity gap increased in FY 2006 because districts in Quintile 5 experienced greater increases in local and federal revenue than did districts in Quintiles 1 through 4. While districts with lower property wealth received more state revenue than districts in Quintile 5, the increases in state revenue were not sufficient to narrow the equity gap from previous years' levels.

Table 5
Total Revenue: Difference in Quintiles 1-4 Per-pupil Revenue
Compared to Quintile 5 Per-pupil Revenue for FY 1990-FY 2006

Panel 1: Unadjusted Dollars

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,380	\$1,391	\$1,378	\$1,092	\$5,241	
1991	\$1,043	\$1,139	\$1,144	\$1,050	\$4,376	-16%
1992	\$711	\$1,017	\$1,006	\$963	\$3,697	-29%
1993	\$726	\$985	\$1,063	\$1,041	\$3,816	-27%
1994	\$699	\$957	\$1,081	\$1,039	\$3,776	-28%
1995	\$650	\$902	\$1,037	\$1,042	\$3,631	-31%
1996	\$712	\$1,011	\$1,138	\$1,094	\$3,956	-25%
1997	\$416	\$771	\$948	\$1,078	\$3,212	-39%
1998	\$865	\$1,139	\$1,318	\$1,397	\$4,719	-10%
1999	\$885	\$1,136	\$1,253	\$1,388	\$4,661	-11%
2000	\$875	\$1,164	\$1,230	\$1,465	\$4,734	-10%
2001	\$833	\$1,113	\$1,261	\$1,403	\$4,610	-12%
2002	\$825	\$1,138	\$1,138	\$1,508	\$4,609	-12%
2003	\$711	\$949	\$1,008	\$1,368	\$4,036	-23%
2004	\$790	\$1,179	\$1,046	\$1,451	\$4,466	-15%
2005	\$976	\$1,322	\$1,247	\$1,583	\$5,128	-2%
2006	\$1,352	\$1,560	\$1,566	\$1,662	\$6,139	17%

Panel 2: FY 1990 Constant Dollars

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1990	\$1,380	\$1,391	\$1,378	\$1,092	\$5,241	
1991	\$989	\$1,080	\$1,085	\$996	\$4,149	-21%
1992	\$654	\$934	\$924	\$885	\$3,397	-35%
1993	\$647	\$878	\$947	\$928	\$3,399	-35%
1994	\$607	\$831	\$939	\$902	\$3,279	-37%
1995	\$549	\$762	\$875	\$880	\$3,065	-42%
1996	\$586	\$831	\$935	\$899	\$3,251	-38%
1997	\$333	\$616	\$757	\$861	\$2,567	-51%
1998	\$679	\$894	\$1,035	\$1,096	\$3,705	-29%
1999	\$683	\$876	\$967	\$1,071	\$3,597	-31%
2000	\$656	\$873	\$922	\$1,099	\$3,551	-32%
2001	\$604	\$807	\$914	\$1,018	\$3,343	-36%
2002	\$588	\$811	\$811	\$1,075	\$3,284	-37%
2003	\$496	\$662	\$703	\$954	\$2,814	-46%
2004	\$539	\$805	\$714	\$990	\$3,047	-42%
2005	\$647	\$875	\$826	\$1,048	\$3,396	-35%
2006	\$863	\$995	\$999	\$1,060	\$3,917	-25%

Source: Staff compilation of SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

The constant dollar equity gap calculated in Panel 2 of Table 5 shows greater success in reaching equity and a more consistent narrowing of the gap over time than is evident in the unadjusted dollar analysis presented in Panel 1 of Table 5.

As reflected in Table 6, Quintiles 1 through 3 received approximately 70 percent of the total revenue received by Quintile 5 in FY 1990. Quintile 4 received approximately 76 percent of the total revenue received by Quintile 5. By FY 2006, Quintiles 1 through 4 received between 83 percent and 86 percent of the total revenue received by Quintile 5. Quintile 4 received slightly less revenue than the other quintiles because it received less federal revenue.

Table 6
Total Per-pupil Revenue by Property Wealth Quintile
as Percent of Quintile 5 for Select Years

Quintile	FY 1990	% of Q5	FY 1995	% of Q5	FY 2000	% of Q5	FY 2006	% of Q5
Q1 - Lowest Wealth	\$3,205	70%	\$5,370	89%	\$6,785	89%	\$8,502	86%
Q2	\$3,193	70%	\$5,117	85%	\$6,497	85%	\$8,295	84%
Q3	\$3,207	70%	\$4,983	83%	\$6,431	84%	\$8,289	84%
Q4	\$3,493	76%	\$4,978	83%	\$6,195	81%	\$8,193	83%
Q5 - Highest Wealth	\$4,585	100%	\$6,020	100%	\$7,661	100%	\$9,855	100%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky of Education.

Changes in Equity Over Time

Previous OEA reports have identified factors that affect the equity of education resources among school districts in Kentucky. These factors impact districts differently, allowing some to raise additional local revenue, while limiting the ability of other school districts to raise local revenue. Various legislative actions have permitted selective state funding, which impacts districts' ability to reach equity.

OEA's *2005 School Finance Report* identified the following factors affecting the equity of education resources among school districts in Kentucky (Commonwealth. Legislative. Office. *2005* vii-ix). They impact districts differently, allowing some to raise additional local revenue, while limiting the ability of other school districts to raise local revenue. OEA's working paper *Understanding How Tax Provisions Interact with the SEEK Formula* provides a detailed analysis of several of the factors below (Commonwealth. Legislative. Office. *Understanding*).⁴

- Intertwining Tax Laws - House Bill 940 was enacted in 1990. In the early years of KERA, HB 940 gave school districts an opportunity to raise property tax rates. HB 44, enacted in 1979, has allowed them to maintain the higher property revenues.

⁴ SEEK stands for Support Education Excellence in Kentucky, which is the funding formula adopted as part of the Kentucky Education Reform Act.

- Permissive Tax - School districts may levy these taxes under KRS 160.593. The taxes consist of utility taxes, occupational taxes, and excise taxes.
- Property Assessment Growth and Support Education Excellence in Kentucky (SEEK) funding formula - As property assessments increase, some school districts lose more in SEEK funds than they are able to collect in local taxes.
- Districts Unable To Levy 4 Percent Tax Rate - Prior to recent legislative actions, districts could not levy the 4 percent increase rate if it exceeded the subsection (1) rate. The General Assembly removed this limitation through budget language in 2003 and 2005 and permanently removed the limitation as part of the tax modernization plan under HB 272 in 2005.
- Tier II Revenues - School districts are allowed to increase revenue up to 30 percent of the revenue generated by the adjusted SEEK base plus Tier I. The additional revenue produced within Tier II is not equalized by the state and creates additional disparities among revenue available to school districts.
- In Lieu of Taxes - Voluntary payments are made to school districts by corporate or governmental entities for property that is not subject to taxation.
- Growth Nickel - School districts meeting the criteria in KRS 157.621 can levy an additional nickel for building fund needs.
- Second Growth Nickel - Through budget language in 2003 and 2005, the General Assembly provided those districts that continued to meet the growth criteria the option to levy a second growth nickel.
- Recallable Nickel - Through budget language in 2003, 2005, and 2006, the General Assembly allowed all districts the opportunity to levy a nickel—subject to recall—for building needs.

Various legislative actions have permitted selective state funding, which impacts the ability to reach equity:

- Hold Harmless - A provision of the SEEK statute guarantees that a school district will not receive less state SEEK funding per pupil than it did in FY 1992. This funding is made without regard to the local wealth of the school district.
- Growth Nickel Equalization - The General Assembly, through budget language during the 2003, 2005, and 2006 Sessions, appropriated funds to equalize the first growth nickel for those districts that also levied the second growth nickel.
- Special Legislative Projects - Funds for special legislative projects are appropriated to school districts outside the SEEK formula.
- State Funds Outside SEEK - Kentucky Education Reform Act requirements, state grants, and on-behalf-of payments are appropriated outside the SEEK formula. On-behalf-of payments are expenditures the Kentucky Department of Education makes with general fund appropriations. This spending covers expenses that might otherwise be paid for directly by school districts, such as vocational schools, teacher retirement, health insurance, and life insurance.
- Equalized Facility Funding - Since the *2005 School Finance Report* was completed, the General Assembly through budget language during the 2005 and 2006 Sessions, appropriated funds to provide equalization for districts that have levied at least a 10-cent equivalent tax rate for building purposes or have debt service of at least a 10-cent equivalent tax rate and received no nickel equalization other than from the Facilities Support Program of Kentucky.

Conclusion

This report analyzes disparities in equity among school districts by examining the amount of per-pupil funding received by districts. Since there is no consensus on the best way to measure equity, this analysis employs several equity measures and shows both nominal and inflation-adjusted revenues. While the magnitude of the equity variance differs depending upon the method of analysis, there is remarkable consistency in the trends over time. All show that in the past several years, the equity gap has been widening.

This report analyzes disparities in equity among school districts by examining the amount of per-pupil funding received by districts. The analysis focuses on local and state revenues because those are subject to state legislative and regulatory policy, but federal revenues are also reported to provide a more complete picture of education finance in the Commonwealth. Since the review of previous research on equity in education finance concluded that there is no consensus on the best way to measure equity, this analysis employs several equity measures and shows both nominal and inflation-adjusted revenues (Costrell 6-7). Local and state revenues have also been analyzed using the Comparable Wage Index.

While the magnitude of the equity variance differs depending upon the method of analysis, there is remarkable consistency in the trends over time. For example, analyzing unadjusted (nominal) dollars, the disparity in revenue between property-rich school districts and property-poor districts is now greater than it was in pre-KERA 1990 terms. Conversely, when revenues are adjusted for inflation, the analyses of local and state (combined) revenue and total revenue show that the equity gap was greater in the year before KERA was enacted than it has been since. However, regardless of the method used to analyze equity, all show that in the past several years, the equity gap has been widening.

Works Cited

- Bassett, Fred. E-mail to Kentucky school superintendents, June 28, 2005.
- Bureau of Labor Statistics. "CPI Inflation Calculator." <<http://data.bls.gov/cgi-bin/cpicalc.pl>> (accessed Dec. 27, 2007).
- . "Table Containing History of CPI-U U.S. All Items Indexes and Annual Percent Changes From 1913 to Present." <<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt>> (accessed Oct. 26, 2007).
- Costrell, Robert M. "A Tale of Two Rankings: Equity v. Equity." *Education Next*. Stanford, CA: Hoover Institute. Summer 2005. <<http://www.educationnext.org/unabridged/20053/costrell.pdf>> (accessed Feb. 14, 2006).
- Commonwealth of Kentucky. Legislative Research Commission. Office of Education Accountability. *2005 School Finance Report*. Report No. 335. Frankfort: LRC, 2006.
- . ---. ---. *Understanding How Tax Provisions Interact with the SEEK Formula*. Unpublished working paper. Frankfort: LRC, 2007.
- Gordon, Robert. Apparel Prices 1914-93 and the Hulten/Bruegel Paradox. Oct. 15, 2004. Revision of paper presented at the Conference on Price Index Concepts and Measurement, Fairmont Waterfront Hotel. Vancouver, Canada. June 28-29, 2004. <<http://faculty-web.at.northwestern.edu/economics/gordon/Apparel1.pdf>> (accessed Dec. 28, 2007).
- Hartford, Tim. *The Undercover Economist*. New York, NY: Oxford University Press, Inc. 2006.
- National Center for Education Statistics. "Comparable Wage Index Data Files and Documentation." <<http://nces.ed.gov/edfin/adjustments.asp>> (assessed Nov. 26, 2007).
- Nordhaus, William. "Inflation Theory and Policy." *American Economic Review*. May 1976.
- Taylor, L.L., and W.J. Fowler, Jr. *A Comparable Wage Approach to Geographic Cost Adjustment* (NCES 2006-321). U.S. Department of Education. Washington, DC: National Center for Education Statistics. 2006. <<http://nces.ed.gov/pubs2006/2006321.pdf>> (accessed Dec. 28, 2007).
- Taylor, L.L., and M. Glander. *Documentation for the NCES Comparable Wage Index Data File* (EFSC 2006-865). U.S. Department of Education. Washington, DC: National Center for Education Statistics. 2006. <<http://nces.ed.gov/pubs2006/2006865.pdf>> (accessed Dec. 28, 2007).

Appendix A

FY 2006 Wealth Quintiles

Table A.1

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Adair Co.	Ashland Ind.	Anderson Co.	Bardstown Ind.	Anchorage Ind.
Allen Co.	Caldwell Co.	Ballard Co.	Beechwood Ind.	Boone Co.
Augusta Ind.	Carlisle Co.	Barren Co.	Burgin Ind.	Campbell Co.
Barbourville Ind.	Caverna Ind.	Bellevue Ind.	Calloway Co.	Fayette Co.
Bath Co.	Christian Co.	Bourbon Co.	Carroll Co.	Jefferson Co.
Bell Co.	Clinton Co.	Bowling Green Ind.	Clark Co.	Southgate Ind.
Berea Ind.	Crittenden Co.	Boyd Co.	Covington Ind.	
Bracken Co.	Cumberland Co.	Boyle Co.	Danville Ind.	
Breathitt Co.	Elizabethtown Ind.	Breckinridge Co.	Erlanger-Elsmere Ind.	
Butler Co.	Floyd Co.	Bullitt Co.	Fort Thomas Ind.	
Carter Co.	Frankfort Ind.	Campbellsville Ind.	Franklin Co.	
Casey Co.	Fulton Co.	Daviess Co.	Jessamine Co.	
Clay Co.	Fulton Ind.	Gallatin Co.	Kenton Co.	
Cloverport Ind.	Garrard Co.	Glasgow Ind.	Livingston Co.	
Corbin Ind.	Grant Co.	Hancock Co.	Lyon Co.	
Dawson Springs Ind.	Graves Co.	Hardin Co.	Marshall Co.	
Dayton Ind.	Grayson Co.	Henderson Co.	Mason Co.	
East Bernstadt Ind.	Greenup Co.	Knott Co.	McCracken Co.	
Edmonson Co.	Harrison Co.	Madison Co.	Oldham Co.	
Elliott Co.	Harrodsburg Ind.	Marion Co.	Scott Co.	
Eminence Ind.	Hazard Ind.	Mercer Co.	Shelby Co.	
Estill Co.	Henry Co.	Nelson Co.	Somerset Ind.	
Fairview Ind.	Hickman Co.	Newport Ind.	Warren Co.	
Fleming Co.	Hopkins Co.	Owensboro Ind.	Woodford Co.	
Green Co.	Laurel Co.	Paducah Ind.		
Harlan Co.	Logan Co.	Paintsville Ind.		
Harlan Ind.	Martin Co.	Pikeville Ind.		
Hart Co.	McLean Co.	Pulaski Co.		
Jackson Co.	Middlesboro Ind.	Rowan Co.		
Jackson Ind.	Montgomery Co.	Russell Ind.		
Jenkins Ind.	Muhlenberg Co.	Simpson Co.		
Johnson Co.	Murray Ind.	Spencer Co.		
Knox Co.	Owen Co.	Trigg Co.		
LaRue Co.	Paris Ind.	Union Co.		
Lawrence Co.	Pendleton Co.			
Lee Co.	Perry Co.			
Leslie Co.	Pike Co.			
Letcher Co.	Russell Co.			
Lewis Co.	Silver Grove Ind.			
Lincoln Co.	Taylor Co.			

Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Ludlow Ind.	Trimble Co.			
Magoffin Co.	Walton Verona Ind.			
Mayfield Ind.	Washington Co.			
McCreary Co.	Wayne Co.			
Meade Co.	Webster Co.			
Menifee Co.				
Metcalfe Co.				
Monroe Co.				
Monticello Ind.				
Morgan Co.				
Nicholas Co.				
Ohio Co.				
Owsley Co.				
Pineville Ind.				
Powell Co.				
Providence Ind.				
Raceland Ind.				
Robertson Co.				
Rockcastle Co.				
Russellville Ind.				
Science Hill Ind.				
Todd Co.				
West Point Ind.				
Whitley Co.				
Williamsburg Ind.				
Williamstown Ind.				
Wolfe Co.				

Source: Staff calculations based on data provided by the Kentucky Department of Education.

Appendix B

FY 2005 Comparable Wage Index by School District (Ranked Highest to Lowest)

Table B.1

District	2005 Comparable Wage Index
Augusta Ind.	1.2925
Beechwood Ind.	1.2925
Bellevue Ind.	1.2925
Boone Co.	1.2925
Bracken Co.	1.2925
Campbell Co.	1.2925
Covington Ind.	1.2925
Dayton Ind.	1.2925
Erlanger-Elsmere Ind.	1.2925
Fort Thomas Ind.	1.2925
Gallatin Co.	1.2925
Grant Co.	1.2925
Kenton Co.	1.2925
Ludlow Ind.	1.2925
Newport Ind.	1.2925
Pendleton Co.	1.2925
Silver Grove Ind.	1.2925
Southgate Ind.	1.2925
Walton Verona Ind.	1.2925
Williamstown Ind.	1.2925
Anchorage Ind.	1.1844
Bardstown Ind.	1.1844
Bullitt Co.	1.1844
Eminence Ind.	1.1844
Henry Co.	1.1844
Jefferson Co.	1.1844
Meade Co.	1.1844
Nelson Co.	1.1844
Oldham Co.	1.1844
Shelby Co.	1.1844
Spencer Co.	1.1844
Trimble Co.	1.1844
Carroll Co.	1.1748
Owen Co.	1.1748
Bourbon Co.	1.1589
Clark Co.	1.1589
Fayette Co.	1.1589

District	2005 Comparable Wage Index
Jessamine Co.	1.1589
Paris Ind.	1.1589
Scott Co.	1.1589
Woodford Co.	1.1589
Christian Co.	1.1485
Trigg Co.	1.1485
Henderson Co.	1.1345
Providence Ind.	1.1345
Webster Co.	1.1345
Ashland Ind.	1.1322
Boyd Co.	1.1322
Carter Co.	1.1322
Elliott Co.	1.1322
Fairview Ind.	1.1322
Greenup Co.	1.1322
Lawrence Co.	1.1322
Raceland Ind.	1.1322
Russell Ind.	1.1322
Elizabethtown Ind.	1.1107
Hardin Co.	1.1107
West Point Ind.	1.1107
Frankfort Ind.	1.1066
Franklin Co.	1.1066
Harrison Co.	1.1066
Nicholas Co.	1.1066
Breckinridge Co.	1.0657
Cloverport Ind.	1.0657
Grayson Co.	1.0657
LaRue Co.	1.0657
Marion Co.	1.0657
Washington Co.	1.0657
Anderson Co.	1.0438
Boyle Co.	1.0438
Burgin Ind.	1.0438
Danville Ind.	1.0438
Harrodsburg Ind.	1.0438
Mercer Co.	1.0438
Bowling Green Ind.	1.0427
Butler Co.	1.0427
Logan Co.	1.0427
Russellville Ind.	1.0427
Simpson Co.	1.0427
Warren Co.	1.0427
Caldwell Co.	1.037
Crittenden Co.	1.037

District	2005 Comparable Wage Index
Dawson Springs Ind.	1.037
Hopkins Co.	1.037
Livingston Co.	1.037
Muhlenberg Co.	1.037
Ballard Co.	1.0321
Calloway Co.	1.0321
Carlisle Co.	1.0321
Fulton Co.	1.0321
Fulton Ind.	1.0321
Graves Co.	1.0321
Hickman Co.	1.0321
Marshall Co.	1.0321
Mayfield Ind.	1.0321
McCracken Co.	1.0321
Murray Ind.	1.0321
Paducah Ind.	1.0321
Daviess Co.	1.0047
Hancock Co.	1.0047
McLean Co.	1.0047
Owensboro Ind.	1.0047
Clay Co.	0.9989
East Bernstadt Ind.	0.9989
Jackson Co.	0.9989
Laurel Co.	0.9989
Rockcastle Co.	0.9989
Ohio Co.	0.9956
Union Co.	0.9956
Bath Co.	0.9763
Fleming Co.	0.9763
Lewis Co.	0.9763
Mason Co.	0.9763
Menifee Co.	0.9763
Montgomery Co.	0.9763
Morgan Co.	0.9763
Robertson Co.	0.9763
Rowan Co.	0.9763
Lyon Co.	0.9738
Todd Co.	0.9738
Floyd Co.	0.9694
Johnson Co.	0.9694
Magoffin Co.	0.9694
Martin Co.	0.9694
Paintsville Ind.	0.9694
Pike Co.	0.9694
Pikeville Ind.	0.9694

District	2005 Comparable Wage Index
Berea Ind.	0.945
Estill Co.	0.945
Garrard Co.	0.945
Lincoln Co.	0.945
Madison Co.	0.945
Powell Co.	0.945
Barbourville Ind.	0.9336
Bell Co.	0.9336
Corbin Ind.	0.9336
Harlan Co.	0.9336
Harlan Ind.	0.9336
Knox Co.	0.9336
Middlesboro Ind.	0.9336
Pineville Ind.	0.9336
Whitley Co.	0.9336
Williamsburg Ind.	0.9336
Adair Co.	0.926
Campbellsville Ind.	0.926
Casey Co.	0.926
Clinton Co.	0.926
Cumberland Co.	0.926
Green Co.	0.926
McCreary Co.	0.926
Monticello Ind.	0.926
Pulaski Co.	0.926
Russell Co.	0.926
Science Hill Ind.	0.926
Somerset Ind.	0.926
Taylor Co.	0.926
Wayne Co.	0.926
Allen Co.	0.9175
Barren Co.	0.9175
Caverna Ind.	0.9175
Edmonson Co.	0.9175
Glasgow Ind.	0.9175
Hart Co.	0.9175
Metcalf Co.	0.9175
Monroe Co.	0.9175
Breathitt Co.	0.9132
Hazard Ind.	0.9132
Jackson Ind.	0.9132
Jenkins Ind.	0.9132
Knott Co.	0.9132
Lee Co.	0.9132
Leslie Co.	0.9132

District	2005 Comparable Wage Index
Letcher Co.	0.9132
Owsley Co.	0.9132
Perry Co.	0.9132
Wolfe Co.	0.9132

Note: The Comparable Wage Index is calculated by county. It is applied to county districts as well as to independent districts within the county.

The index for previous years is available at NCES's Web site
<<http://nces.ed.gov/edfin/adjustments.asp>>.

Source: National Center for Education Statistics.

FY 2005 Average Comparable Wage Index by Wealth Quintile

Table B.2

Quintile	Average 2005 Comparable Wage Index
Q1 - Lowest Wealth	0.9993
Q2	1.0611
Q3	1.0693
Q4	1.1299
Q5 - Highest Wealth	1.2342

Supporting Detail:

District	2005 Comparable Wage Index	2005 Wealth Quintiles
Breathitt Co.	0.9132	1
Jackson Ind.	0.9132	1
Jenkins Ind.	0.9132	1
Lee Co.	0.9132	1
Leslie Co.	0.9132	1
Letcher Co.	0.9132	1
Owsley Co.	0.9132	1
Wolfe Co.	0.9132	1
Allen Co.	0.9175	1
Edmonson Co.	0.9175	1
Hart Co.	0.9175	1
Metcalfe Co.	0.9175	1
Monroe Co.	0.9175	1
Adair Co.	0.926	1
Casey Co.	0.926	1
Green Co.	0.926	1
McCreary Co.	0.926	1
Monticello Ind.	0.926	1
Science Hill Ind.	0.926	1
Barbourville Ind.	0.9336	1

District	2005 Comparable Wage Index	2005 Wealth Quintiles
Bell Co.	0.9336	1
Corbin Ind.	0.9336	1
Harlan Co.	0.9336	1
Harlan Ind.	0.9336	1
Knox Co.	0.9336	1
Pineville Ind.	0.9336	1
Whitley Co.	0.9336	1
Williamsburg Ind.	0.9336	1
Berea Ind.	0.945	1
Estill Co.	0.945	1
Lincoln Co.	0.945	1
Powell Co.	0.945	1
Floyd Co.	0.9694	1
Johnson Co.	0.9694	1
Magoffin Co.	0.9694	1
Martin Co.	0.9694	1
Todd Co.	0.9738	1
Bath Co.	0.9763	1
Fleming Co.	0.9763	1
Lewis Co.	0.9763	1
Menifee Co.	0.9763	1
Morgan Co.	0.9763	1
Robertson Co.	0.9763	1
Clay Co.	0.9989	1
East Bernstadt Ind.	0.9989	1
Jackson Co.	0.9989	1
Rockcastle Co.	0.9989	1
Fulton Ind.	1.0321	1
Mayfield Ind.	1.0321	1
Dawson Springs Ind.	1.037	1
Butler Co.	1.0427	1
Russellville Ind.	1.0427	1
Cloverport Ind.	1.0657	1
Nicholas Co.	1.1066	1
West Point Ind.	1.1107	1
Carter Co.	1.1322	1
Elliott Co.	1.1322	1
Fairview Ind.	1.1322	1
Lawrence Co.	1.1322	1
Raceland Ind.	1.1322	1
Providence Ind.	1.1345	1
Meade Co.	1.1844	1
Augusta Ind.	1.2925	1
Dayton Ind.	1.2925	1

District	2005 Comparable Wage Index	2005 Wealth Quintiles
Ludlow Ind.	1.2925	1
Williamstown Ind.	1.2925	1
Hazard Ind.	0.9132	2
Knott Co.	0.9132	2
Perry Co.	0.9132	2
Clinton Co.	0.926	2
Cumberland Co.	0.926	2
Russell Co.	0.926	2
Taylor Co.	0.926	2
Wayne Co.	0.926	2
Middlesboro Ind.	0.9336	2
Garrard Co.	0.945	2
Paintsville Ind.	0.9694	2
Pike Co.	0.9694	2
Montgomery Co.	0.9763	2
Ohio Co.	0.9956	2
Laurel Co.	0.9989	2
McLean Co.	1.0047	2
Carlisle Co.	1.0321	2
Fulton Co.	1.0321	2
Graves Co.	1.0321	2
Hickman Co.	1.0321	2
Murray Ind.	1.0321	2
Caldwell Co.	1.037	2
Crittenden Co.	1.037	2
Hopkins Co.	1.037	2
Muhlenberg Co.	1.037	2
Bowling Green Ind.	1.0427	2
Logan Co.	1.0427	2
Harrodsburg Ind.	1.0438	2
Grayson Co.	1.0657	2
LaRue Co.	1.0657	2
Washington Co.	1.0657	2
Frankfort Ind.	1.1066	2
Harrison Co.	1.1066	2
Elizabethtown Ind.	1.1107	2
Ashland Ind.	1.1322	2
Greenup Co.	1.1322	2
Webster Co.	1.1345	2
Paris Ind.	1.1589	2
Owen Co.	1.1748	2
Eminence Ind.	1.1844	2
Henry Co.	1.1844	2
Trimble Co.	1.1844	2

District	2005 Comparable Wage Index	2005 Wealth Quintiles
Bracken Co.	1.2925	2
Grant Co.	1.2925	2
Pendleton Co.	1.2925	2
Silver Grove Ind.	1.2925	2
Walton Verona Ind.	1.2925	2
Barren Co.	0.9175	3
Caverna Ind.	0.9175	3
Glasgow Ind.	0.9175	3
Campbellsville Ind.	0.926	3
Pulaski Co.	0.926	3
Madison Co.	0.945	3
Pikeville Ind.	0.9694	3
Mason Co.	0.9763	3
Rowan Co.	0.9763	3
Union Co.	0.9956	3
Daviess Co.	1.0047	3
Hancock Co.	1.0047	3
Owensboro Ind.	1.0047	3
Ballard Co.	1.0321	3
Paducah Ind.	1.0321	3
Simpson Co.	1.0427	3
Anderson Co.	1.0438	3
Boyle Co.	1.0438	3
Mercer Co.	1.0438	3
Breckinridge Co.	1.0657	3
Marion Co.	1.0657	3
Hardin Co.	1.1107	3
Boyd Co.	1.1322	3
Russell Ind.	1.1322	3
Henderson Co.	1.1345	3
Christian Co.	1.1485	3
Trigg Co.	1.1485	3
Bourbon Co.	1.1589	3
Nelson Co.	1.1844	3
Spencer Co.	1.1844	3
Bellevue Ind.	1.2925	3
Covington Ind.	1.2925	3
Gallatin Co.	1.2925	3
Newport Ind.	1.2925	3
Somerset Ind.	0.926	4
Lyon Co.	0.9738	4
Calloway Co.	1.0321	4
Marshall Co.	1.0321	4
McCracken Co.	1.0321	4

District	2005 Comparable Wage Index	2005 Wealth Quintiles
Livingston Co.	1.037	4
Warren Co.	1.0427	4
Burgin Ind.	1.0438	4
Danville Ind.	1.0438	4
Franklin Co.	1.1066	4
Clark Co.	1.1589	4
Jessamine Co.	1.1589	4
Scott Co.	1.1589	4
Woodford Co.	1.1589	4
Carroll Co.	1.1748	4
Bardstown Ind.	1.1844	4
Bullitt Co.	1.1844	4
Oldham Co.	1.1844	4
Shelby Co.	1.1844	4
Beechwood Ind.	1.2925	4
Erlanger-Elsmere Ind.	1.2925	4
Fort Thomas Ind.	1.2925	4
Kenton Co.	1.2925	4
Fayette Co.	1.1589	5
Anchorage Ind.	1.1844	5
Jefferson Co.	1.1844	5
Boone Co.	1.2925	5
Campbell Co.	1.2925	5
Southgate Ind.	1.2925	5

Sources: Staff compilation of final Support Education Excellence in Kentucky Calculations and Annual Financial Reports provided by the Kentucky Department of Education; National Center for Education Statistics.

Appendix C

Average Per-pupil Revenues by Wealth Quintile

Table C.1
Supporting Data for Figures C.A-C.E

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1990							
1	115,074	\$71,665	\$355	\$2,310	\$540	\$2,665	\$3,205
2	114,190	105,467	549	2,243	401	2,792	3,193
3	118,119	138,954	687	2,197	323	2,884	3,207
4	106,632	179,714	1,038	2,163	292	3,201	3,493
5	121,119	280,727	2,103	2,120	361	4,223	4,585
Statewide	575,134	\$156,255	\$956	\$2,206	\$384	\$3,163	\$3,547
FY 1991							
1	112,587	\$78,561	\$481	\$3,006	\$577	\$3,487	\$4,063
2	115,851	114,895	695	2,846	426	3,541	3,967
3	112,858	148,272	919	2,675	368	3,594	3,962
4	113,154	194,504	1,280	2,465	311	3,745	4,056
5	118,398	308,585	2,280	2,349	478	4,628	5,106
Statewide	572,848	\$170,087	\$1,140	\$2,666	\$432	\$3,806	\$4,238
FY 1992							
1	115,196	\$82,965	\$585	\$3,344	\$681	\$3,930	\$4,611
2	115,319	120,827	810	3,016	480	3,826	4,306
3	117,366	156,687	1,073	2,825	419	3,898	4,317
4	105,660	204,520	1,379	2,610	371	3,989	4,359
5	122,849	310,508	2,367	2,463	492	4,830	5,323
Statewide	576,389	\$176,332	\$1,255	\$2,851	\$490	\$4,105	\$4,596
FY 1993							
1	115,975	\$87,359	\$591	\$3,478	\$693	\$4,069	\$4,761
2	116,562	126,068	835	3,136	531	3,971	4,502
3	112,531	161,312	1,035	2,929	461	3,963	4,424
4	116,281	215,672	1,409	2,686	351	4,095	4,446
5	120,705	324,663	2,518	2,472	497	4,990	5,487
Statewide	582,054	\$184,254	\$1,288	\$2,936	\$507	\$4,225	\$4,732
FY 1994							
1	117,389	\$95,407	\$690	\$3,613	\$697	\$4,303	\$5,000
2	115,073	133,898	903	3,272	567	4,175	4,742
3	115,901	170,188	1,142	3,032	444	4,174	4,618
4	112,221	227,847	1,521	2,738	401	4,259	4,660
5	121,719	332,361	2,587	2,511	601	5,098	5,699
Statewide	582,303	\$192,952	\$1,379	\$3,031	\$544	\$4,410	\$4,954

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1995							
1	115,477	\$104,767	\$779	\$3,865	\$725	\$4,644	\$5,370
2	114,974	146,018	1,012	3,518	588	4,530	5,117
3	117,044	185,496	1,260	3,240	483	4,500	4,983
4	112,117	249,159	1,759	2,805	414	4,564	4,978
5	121,110	360,085	2,896	2,596	528	5,492	6,020
Statewide	580,722	\$210,329	\$1,553	\$3,201	\$548	\$4,754	\$5,302
FY 1996							
1	114,936	\$113,902	\$859	\$3,963	\$753	\$4,822	\$5,575
2	114,767	158,720	1,137	3,579	561	4,716	5,276
3	116,275	203,231	1,375	3,321	454	4,696	5,150
4	109,635	273,034	1,898	2,888	407	4,787	5,194
5	120,298	383,316	3,102	2,620	566	5,722	6,288
Statewide	575,912	\$227,438	\$1,685	\$3,272	\$549	\$4,957	\$5,506
FY 1997							
1	114,764	\$119,513	\$1,025	\$4,228	\$861	\$5,253	\$6,114
2	115,076	169,753	1,316	3,812	632	5,128	5,760
3	115,470	214,715	1,533	3,539	511	5,072	5,583
4	109,368	293,622	2,063	2,991	400	5,053	5,453
5	120,576	412,182	3,352	2,627	551	5,979	6,530
Statewide	575,254	\$243,120	\$1,870	\$3,436	\$592	\$5,306	\$5,898
FY 1998							
1	114,752	\$125,180	\$1,011	\$4,271	\$822	\$5,282	\$6,104
2	115,626	181,230	1,377	3,782	671	5,159	5,830
3	113,668	225,941	1,563	3,513	575	5,075	5,650
4	108,988	313,937	2,168	2,963	441	5,131	5,572
5	121,188	430,946	3,597	2,732	640	6,329	6,969
Statewide	574,222	\$256,770	\$1,959	\$3,449	\$632	\$5,409	\$6,041
FY 1999							
1	114,990	\$130,435	\$1,064	\$4,598	\$887	\$5,662	\$6,549
2	113,775	188,977	1,514	4,084	701	5,598	6,299
3	113,861	239,224	1,709	3,854	619	5,563	6,182
4	108,784	327,102	2,324	3,250	473	5,574	6,047
5	121,348	452,967	3,951	2,899	584	6,850	7,435
Statewide	572,758	\$269,377	\$2,133	\$3,732	\$654	\$5,865	\$6,519
FY 2000							
1	114,448	\$143,590	\$1,114	\$4,686	\$985	\$5,800	\$6,785
2	113,317	208,156	1,520	4,183	794	5,703	6,497
3	112,430	260,192	1,864	3,863	704	5,727	6,431
4	108,383	352,757	2,458	3,250	487	5,708	6,195
5	122,455	486,063	4,034	2,913	714	6,946	7,661
Statewide	571,034	\$292,502	\$2,223	\$3,771	\$739	\$5,995	\$6,734

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2001							
1	114,195	\$153,977	\$1,170	\$4,932	\$1,063	\$6,101	\$7,165
2	111,715	221,926	1,654	4,368	862	6,022	6,884
3	112,480	280,527	1,965	4,032	739	5,997	6,737
4	108,976	377,408	2,645	3,408	540	6,054	6,594
5	121,700	535,780	4,380	2,893	725	7,272	7,997
Statewide	569,067	\$316,769	\$2,391	\$3,915	\$787	\$6,306	\$7,094
FY 2002							
1	114,041	\$161,895	\$1,180	\$4,876	\$1,177	\$6,057	\$7,234
2	116,524	237,360	1,658	4,335	928	5,993	6,921
3	114,370	302,893	2,110	3,974	837	6,084	6,921
4	101,433	399,610	2,666	3,306	579	5,972	6,551
5	122,891	566,707	4,464	2,821	774	7,285	8,059
Statewide	569,258	\$335,418	\$2,439	\$3,861	\$864	\$6,299	\$7,163
FY 2003							
1	115,726	\$171,127	\$1,219	\$5,061	\$1,299	\$6,280	\$7,579
2	113,809	245,680	1,703	4,595	1,042	6,298	7,340
3	117,672	314,484	2,223	4,126	933	6,349	7,282
4	95,793	408,650	2,820	3,465	636	6,285	6,921
5	129,458	573,484	4,558	2,927	805	7,484	8,290
Statewide	572,458	\$346,153	\$2,545	\$4,026	\$950	\$6,571	\$7,521
FY 2004							
1	115,301	\$177,559	\$1,279	\$5,146	\$1,458	\$6,425	\$7,883
2	113,950	254,559	1,805	4,589	1,099	6,395	7,494
3	115,073	326,282	2,318	4,233	1,076	6,551	7,627
4	99,127	433,074	3,114	3,438	670	6,552	7,222
5	130,179	603,593	4,800	2,841	1,032	7,641	8,673
Statewide	573,630	\$363,528	\$2,708	\$4,034	\$1,077	\$6,742	\$7,819
FY 2005							
1	117,487	\$187,290	\$1,361	\$5,227	\$1,523	\$6,588	\$8,111
2	111,624	268,348	1,944	4,654	1,168	6,598	7,766
3	116,500	336,898	2,425	4,312	1,103	6,738	7,841
4	99,773	445,536	3,244	3,533	727	6,777	7,505
5	131,921	622,859	5,053	2,911	1,123	7,964	9,087
Statewide	577,306	\$377,318	\$2,858	\$4,110	\$1,141	\$6,967	\$8,108
FY 2006							
1	116,559	\$199,856	\$1,434	\$5,534	\$1,535	\$6,968	\$8,502
2	115,122	287,430	2,085	4,972	1,238	7,057	8,295
3	119,507	358,991	2,691	4,519	1,080	7,209	8,289
4	97,738	471,913	3,581	3,767	844	7,349	8,193
5	133,346	654,044	5,507	3,161	1,186	8,669	9,855
Statewide	582,272	\$399,511	\$3,114	\$4,375	\$1,187	\$7,488	\$8,675

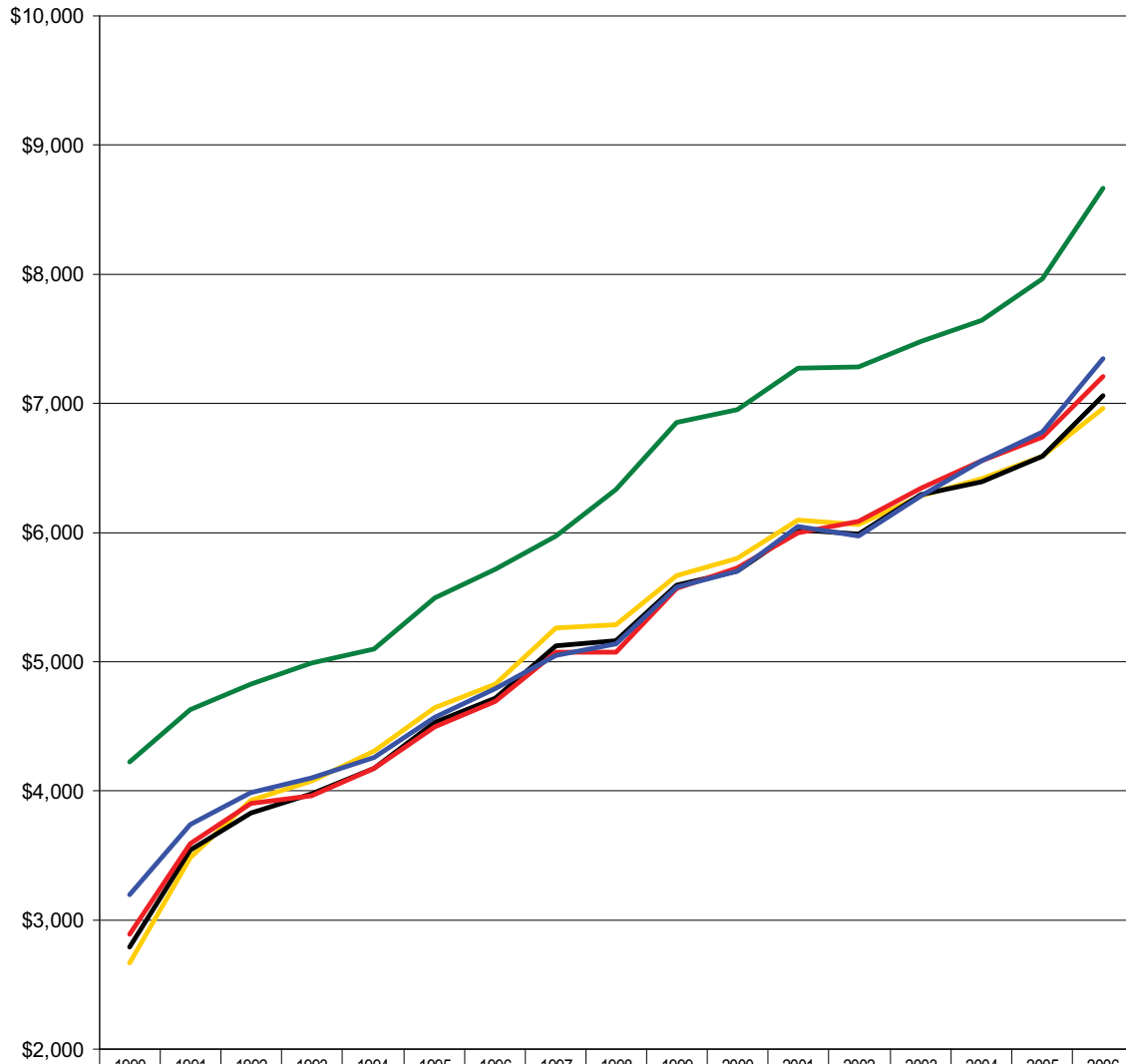
Note: ADA is Average Daily Attendance.

Source: Staff compilation of final Support Education Excellence in Kentucky (SEEK) Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.A

Local and State Per-pupil Revenue by Property Wealth Quintile

FY 1990-FY 2006



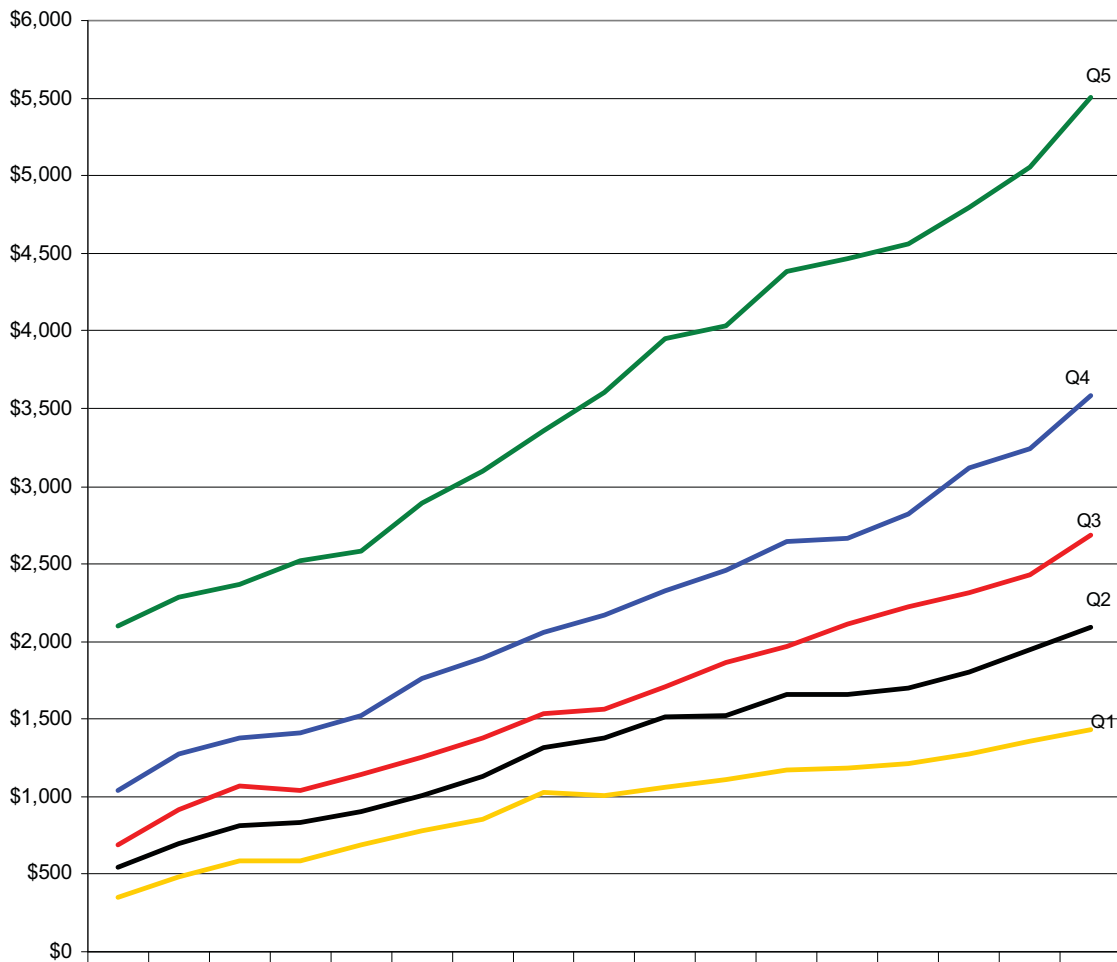
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Percent Change 1990 - 2006
Q1 - Lowest Wealth	2,665	3,487	3,930	4,069	4,303	4,644	4,822	5,253	5,282	5,662	5,800	6,101	6,057	6,280	6,425	6,588	6,968	161%
Q2	2,792	3,541	3,826	3,971	4,175	4,530	4,716	5,128	5,159	5,598	5,703	6,022	5,993	6,298	6,395	6,598	7,057	153%
Q3	2,884	3,594	3,898	3,963	4,174	4,500	4,696	5,072	5,075	5,563	5,727	5,997	6,084	6,349	6,551	6,738	7,209	150%
Q4	3,201	3,745	3,989	4,095	4,259	4,564	4,787	5,053	5,131	5,574	5,708	6,054	5,972	6,285	6,552	6,777	7,349	130%
Q5 - Highest Wealth	4,223	4,628	4,830	4,990	5,098	5,492	5,722	5,979	6,329	6,850	6,946	7,272	7,285	7,484	7,641	7,964	8,669	105%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.B

Local Per-pupil Revenue by Property Wealth Quintile

FY 1990-FY 2006



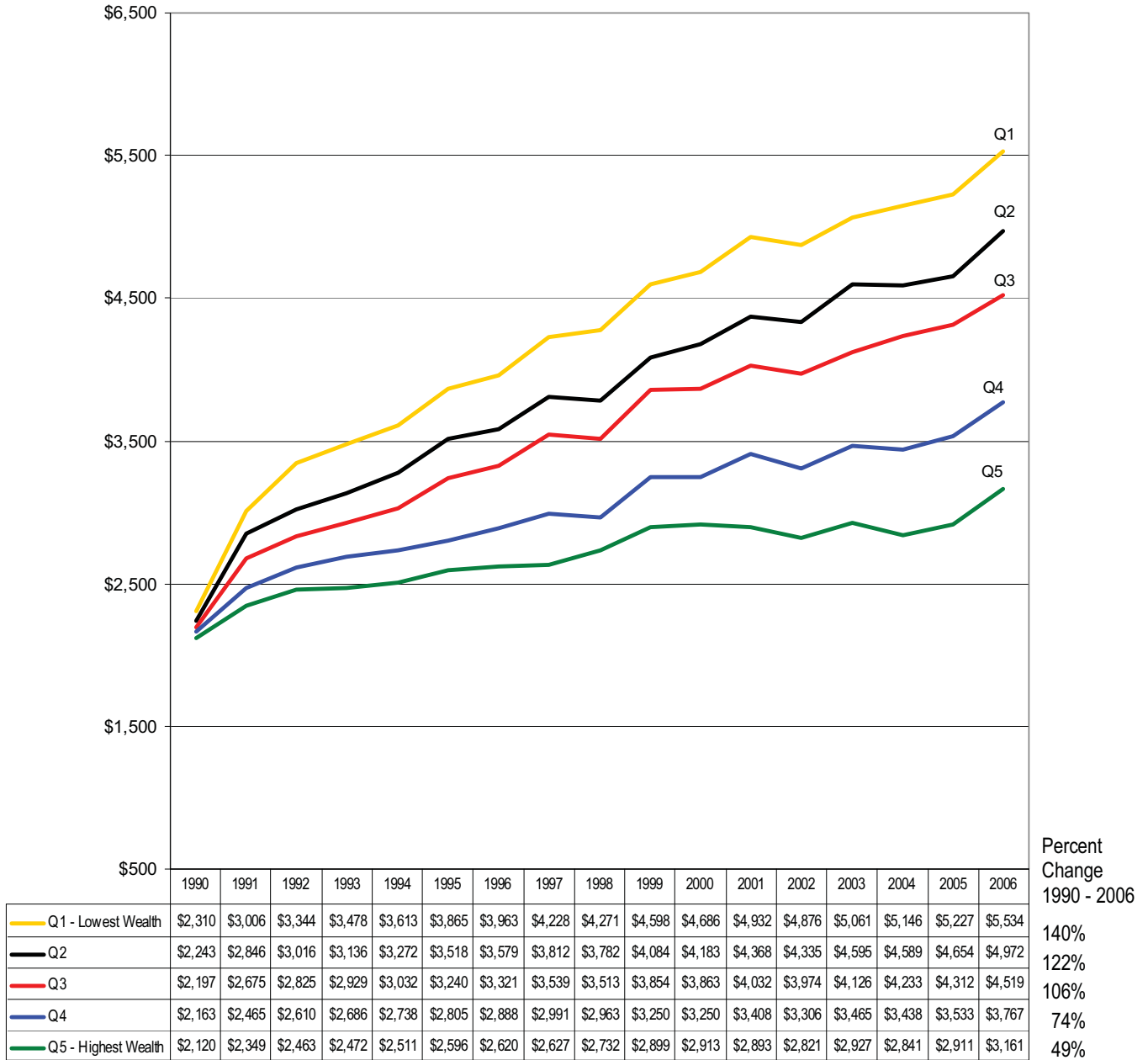
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Q1 - Lowest Wealth	\$355	\$481	\$585	\$591	\$690	\$779	\$859	\$1,025	\$1,011	\$1,064	\$1,114	\$1,170	\$1,180	\$1,219	\$1,279	\$1,361	\$1,434
Q2	\$549	\$695	\$810	\$835	\$903	\$1,012	\$1,137	\$1,316	\$1,377	\$1,514	\$1,520	\$1,654	\$1,658	\$1,703	\$1,805	\$1,944	\$2,085
Q3	\$687	\$919	\$1,073	\$1,035	\$1,142	\$1,260	\$1,375	\$1,533	\$1,563	\$1,709	\$1,864	\$1,965	\$2,110	\$2,223	\$2,318	\$2,425	\$2,691
Q4	\$1,038	\$1,280	\$1,379	\$1,409	\$1,521	\$1,759	\$1,898	\$2,063	\$2,168	\$2,324	\$2,458	\$2,645	\$2,666	\$2,820	\$3,114	\$3,244	\$3,581
Q5 - Highest Wealth	\$2,103	\$2,280	\$2,367	\$2,518	\$2,587	\$2,896	\$3,102	\$3,352	\$3,597	\$3,951	\$4,034	\$4,380	\$4,464	\$4,558	\$4,800	\$5,053	\$5,507

Percent
Change
1990 - 2006

304%
280%
292%
245%
162%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.C
State Per-pupil Revenue by Property Wealth Quintile
FY 1990-FY 2006

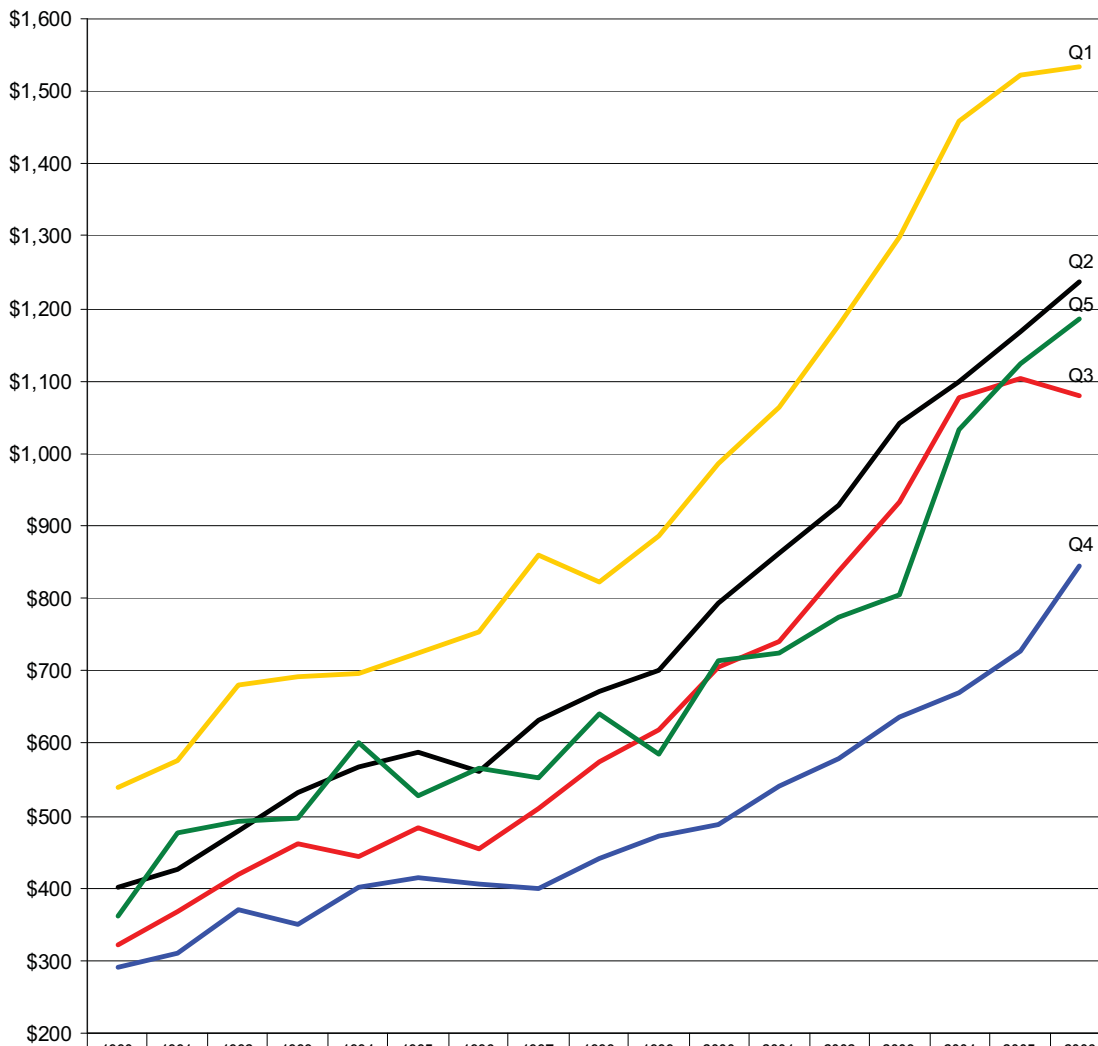


Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.D

Federal Per-pupil Revenue by Property Wealth Quintile

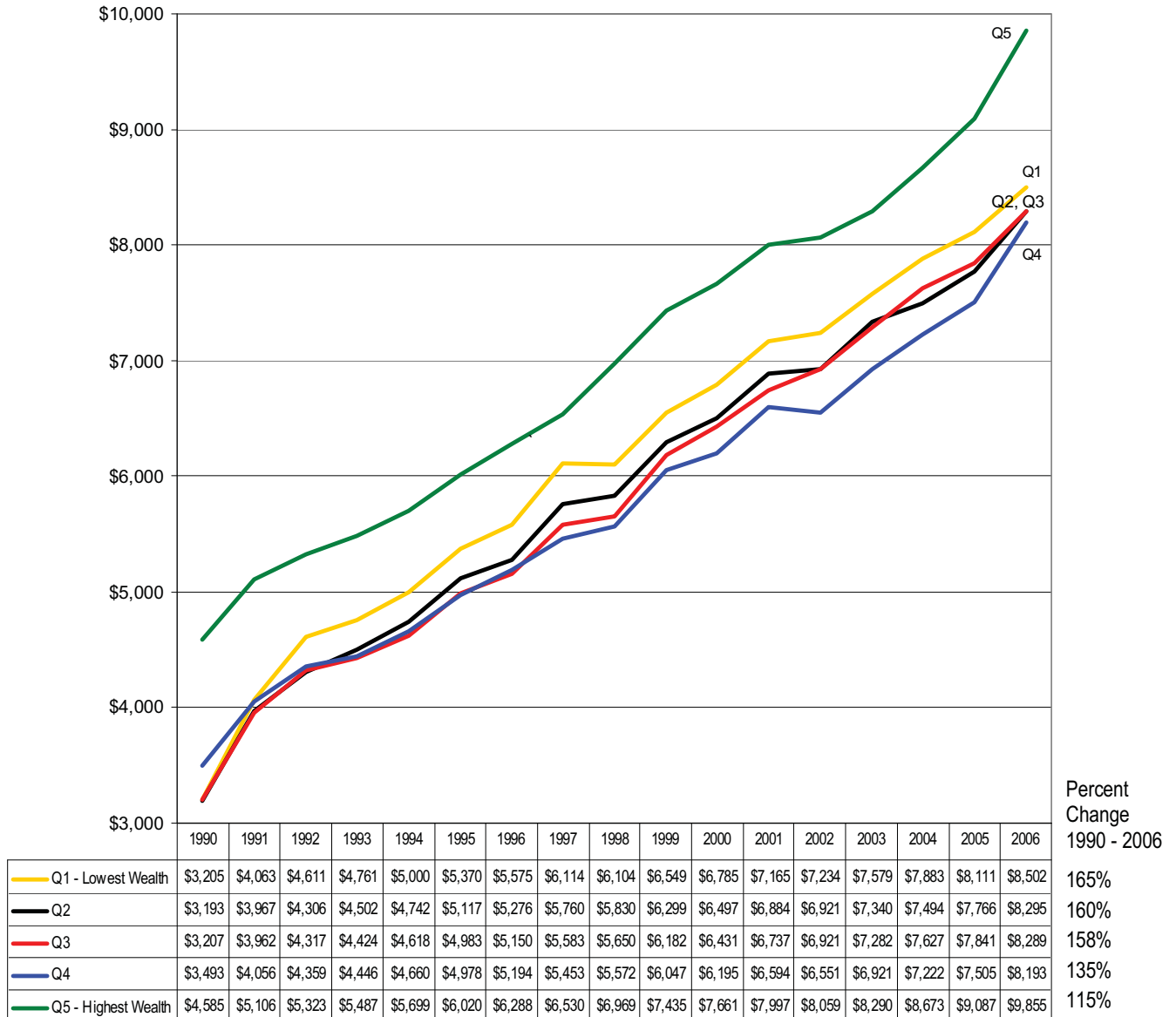
FY 1990-FY 2006



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Percent Change 1990 - 2006
Q1 - Lowest Wealth	\$540	\$577	\$681	\$693	\$697	\$725	\$753	\$861	\$822	\$887	\$985	\$1,063	\$1,177	\$1,299	\$1,458	\$1,523	\$1,535	184%
Q2	\$401	\$426	\$480	\$531	\$567	\$588	\$561	\$632	\$671	\$701	\$794	\$862	\$928	\$1,042	\$1,099	\$1,168	\$1,238	209%
Q3	\$323	\$368	\$419	\$461	\$444	\$483	\$454	\$511	\$575	\$619	\$704	\$739	\$837	\$933	\$1,076	\$1,103	\$1,080	234%
Q4	\$292	\$311	\$371	\$351	\$401	\$414	\$407	\$400	\$441	\$473	\$487	\$540	\$579	\$636	\$670	\$727	\$844	189%
Q5 - Highest Wealth	\$361	\$478	\$492	\$497	\$601	\$528	\$566	\$551	\$640	\$584	\$714	\$725	\$774	\$805	\$1,032	\$1,123	\$1,186	228%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Figure C.E
Total Per-pupil Revenue by Property Wealth Quintile
FY 1990-FY 2006



Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education.

Appendix D

Average Per-pupil Revenues by Wealth Quintile (FY 1990 Constant Dollars)

Table D.1
Supporting Data for Figures D.A-D.E

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1990							
1	115,074	\$71,665	\$355	\$2,310	\$540	\$2,665	\$3,205
2	114,190	105,467	549	2,243	401	2,792	3,193
3	118,119	138,954	687	2,197	323	2,884	3,207
4	106,632	179,714	1,038	2,163	292	3,201	3,493
5	121,119	280,727	2,103	2,120	361	4,223	4,585
Statewide	575,134	\$156,255	\$956	\$2,206	\$384	\$3,163	\$3,547
FY 1991							
1	112,587	\$74,488	\$456	\$2,850	\$547	\$3,306	\$3,853
2	115,851	108,939	659	2,698	404	3,357	3,761
3	112,858	140,586	872	2,537	349	3,408	3,757
4	113,154	184,422	1,213	2,338	295	3,551	3,846
5	118,398	292,590	2,162	2,227	453	4,389	4,842
Statewide	572,848	\$161,271	\$1,081	\$2,528	\$410	\$3,609	\$4,018
FY 1992							
1	115,196	\$76,222	\$538	\$3,073	\$626	\$3,610	\$4,236
2	115,319	111,006	744	2,771	441	3,515	3,956
3	117,366	143,952	986	2,596	385	3,581	3,966
4	105,660	187,897	1,267	2,398	340	3,665	4,005
5	122,849	285,271	2,175	2,263	452	4,438	4,890
Statewide	576,389	\$162,000	\$1,153	\$2,619	\$450	\$3,772	\$4,222
FY 1993							
1	115,975	\$77,828	\$526	\$3,099	\$617	\$3,625	\$4,242
2	116,562	112,313	744	2,794	473	3,537	4,011
3	112,531	143,712	922	2,609	410	3,531	3,941
4	116,281	192,141	1,255	2,393	313	3,648	3,961
5	120,705	289,241	2,243	2,202	443	4,446	4,889
Statewide	582,054	\$164,151	\$1,148	\$2,616	\$451	\$3,764	\$4,215
FY 1994							
1	117,389	\$82,852	\$599	\$3,138	\$605	\$3,737	\$4,342
2	115,073	116,278	784	2,842	492	3,626	4,118
3	115,901	147,792	992	2,633	386	3,625	4,010
4	112,221	197,863	1,321	2,378	348	3,699	4,047
5	121,719	288,623	2,247	2,180	522	4,427	4,949
Statewide	582,303	\$167,560	\$1,197	\$2,632	\$472	\$3,829	\$4,302

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 1995							
1	115,477	\$88,444	\$658	\$3,263	\$612	\$3,921	\$4,533
2	114,974	123,269	854	2,970	496	3,824	4,320
3	117,044	156,596	1,064	2,735	408	3,799	4,207
4	112,117	210,340	1,485	2,368	350	3,853	4,202
5	121,110	303,984	2,445	2,192	446	4,636	5,082
Statewide	580,722	\$177,560	\$1,311	\$2,702	\$463	\$4,013	\$4,476
FY 1996							
1	114,936	\$93,610	\$706	\$3,257	\$619	\$3,963	\$4,582
2	114,767	130,443	934	2,941	461	3,875	4,336
3	116,275	167,025	1,130	2,729	373	3,859	4,232
4	109,635	224,392	1,560	2,374	334	3,934	4,268
5	120,298	315,026	2,549	2,153	465	4,703	5,168
Statewide	575,912	\$186,919	\$1,385	\$2,689	\$451	\$4,074	\$4,525
FY 1997							
1	114,764	\$95,496	\$819	\$3,379	\$688	\$4,198	\$4,885
2	115,076	135,641	1,051	3,046	505	4,097	4,602
3	115,470	171,567	1,225	2,828	408	4,053	4,461
4	109,368	234,617	1,648	2,390	319	4,038	4,357
5	120,576	329,352	2,678	2,099	440	4,778	5,218
Statewide	575,254	\$194,264	\$1,494	\$2,745	\$473	\$4,240	\$4,713
FY 1998							
1	114,752	\$98,273	\$794	\$3,353	\$646	\$4,146	\$4,792
2	115,626	142,274	1,081	2,969	527	4,050	4,576
3	113,668	177,375	1,227	2,758	451	3,984	4,436
4	108,988	246,456	1,702	2,326	346	4,028	4,375
5	121,188	338,313	2,824	2,144	502	4,968	5,471
Statewide	574,222	\$201,576	\$1,538	\$2,708	\$496	\$4,246	\$4,742
FY 1999							
1	114,990	\$100,655	\$821	\$3,548	\$685	\$4,369	\$5,054
2	113,775	145,831	1,169	3,151	541	4,320	4,861
3	113,861	184,606	1,319	2,974	478	4,293	4,771
4	108,784	252,421	1,794	2,508	365	4,301	4,667
5	121,348	349,549	3,049	2,237	451	5,286	5,737
Statewide	572,758	\$207,875	\$1,646	\$2,880	\$505	\$4,526	\$5,030
FY 2000							
1	114,448	\$107,698	\$836	\$3,515	\$739	\$4,350	\$5,089
2	113,317	156,125	1,140	3,137	596	4,277	4,873
3	112,430	195,154	1,398	2,897	528	4,295	4,823
4	108,383	264,581	1,844	2,438	365	4,281	4,647
5	122,455	364,565	3,025	2,185	536	5,210	5,746
Statewide	571,034	\$219,387	\$1,668	\$2,829	\$555	\$4,496	\$5,051

Quintile	Funded ADA	Property Wealth Per Pupil	Average Local Revenue Per Pupil	Average State Revenue Per Pupil	Average Federal Revenue Per Pupil	Average Local/State Revenue Per Pupil	Average Total Revenue Per Pupil
FY 2001							
1	114,195	\$111,663	\$848	\$3,576	\$771	\$4,425	\$5,196
2	111,715	160,939	1,199	3,168	625	4,367	4,992
3	112,480	203,436	1,425	2,924	536	4,349	4,885
4	108,976	273,693	1,918	2,472	392	4,390	4,782
5	121,700	388,543	3,176	2,098	526	5,274	5,800
Statewide	569,067	\$229,718	\$1,734	\$2,839	\$571	\$4,573	\$5,144
FY 2002							
1	114,041	\$115,362	\$841	\$3,475	\$839	\$4,316	\$5,155
2	116,524	169,137	1,181	3,089	661	4,270	4,932
3	114,370	215,834	1,504	2,832	596	4,335	4,932
4	101,433	284,752	1,900	2,356	413	4,256	4,668
5	122,891	403,821	3,181	2,010	552	5,191	5,743
Statewide	569,258	\$239,011	\$1,738	\$2,751	\$616	\$4,489	\$5,104
FY 2003							
1	115,726	\$119,318	\$850	\$3,529	\$906	\$4,379	\$5,285
2	113,809	171,300	1,188	3,204	727	4,391	5,118
3	117,672	219,274	1,550	2,877	651	4,427	5,077
4	95,793	284,931	1,966	2,416	444	4,382	4,826
5	129,458	399,861	3,178	2,041	561	5,219	5,780
Statewide	572,458	\$241,355	\$1,774	\$2,807	\$663	\$4,582	\$5,244
FY 2004							
1	115,301	\$121,153	\$872	\$3,511	\$995	\$4,384	\$5,379
2	113,950	173,692	1,232	3,131	750	4,363	5,113
3	115,073	222,630	1,581	2,888	734	4,470	5,204
4	99,127	295,497	2,124	2,346	457	4,470	4,928
5	130,179	411,846	3,275	1,939	704	5,214	5,918
Statewide	573,630	\$248,044	\$1,848	\$2,753	\$735	\$4,600	\$5,335
FY 2005							
1	117,487	\$124,059	\$902	\$3,462	\$1,009	\$4,364	\$5,373
2	111,624	177,751	1,288	3,082	774	4,370	5,144
3	116,500	223,158	1,607	2,856	731	4,463	5,194
4	99,773	295,120	2,149	2,340	482	4,489	4,971
5	131,921	412,577	3,347	1,928	744	5,276	6,019
Statewide	577,306	\$249,932	\$1,893	\$2,722	\$756	\$4,615	\$5,371
FY 2006							
1	116,559	\$127,526	\$915	\$3,531	\$979	\$4,446	\$5,425
2	115,122	183,407	1,330	3,173	790	4,503	5,293
3	119,507	229,069	1,717	2,883	689	4,600	5,289
4	97,738	301,124	2,285	2,404	539	4,689	5,228
5	133,346	417,340	3,514	2,017	757	5,531	6,288
Statewide	582,272	\$254,925	\$1,987	\$2,791	\$757	\$4,778	\$5,536

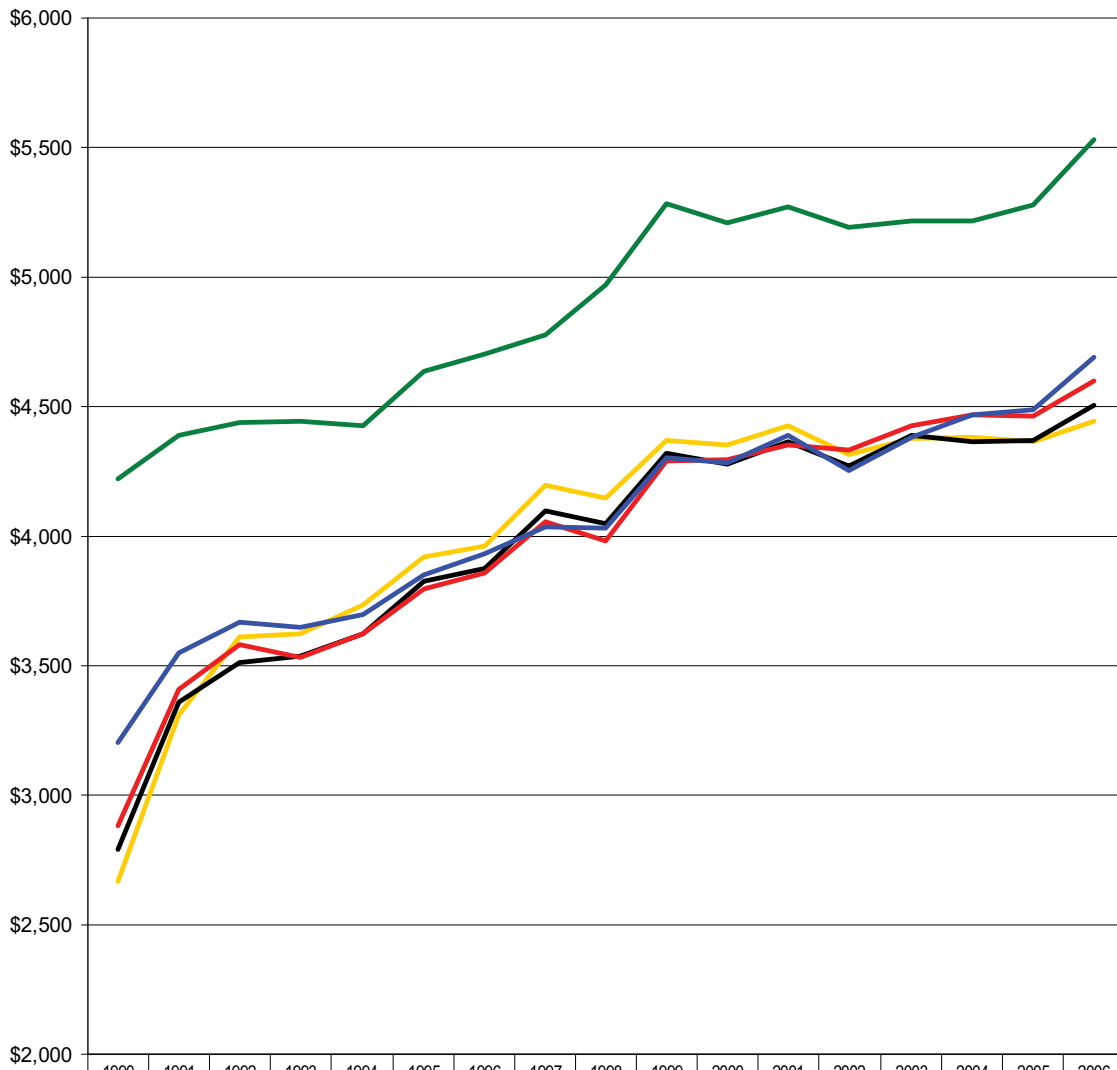
Note: ADA is Average Daily Attendance.

Source: Staff compilation of final Support Education Excellence in Kentucky (SEEK) Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Figure D.A

Local and State Per-pupil Revenue by Property Wealth Quintile

**FY 1990-FY 2006
(FY 1990 Constant Dollars)**



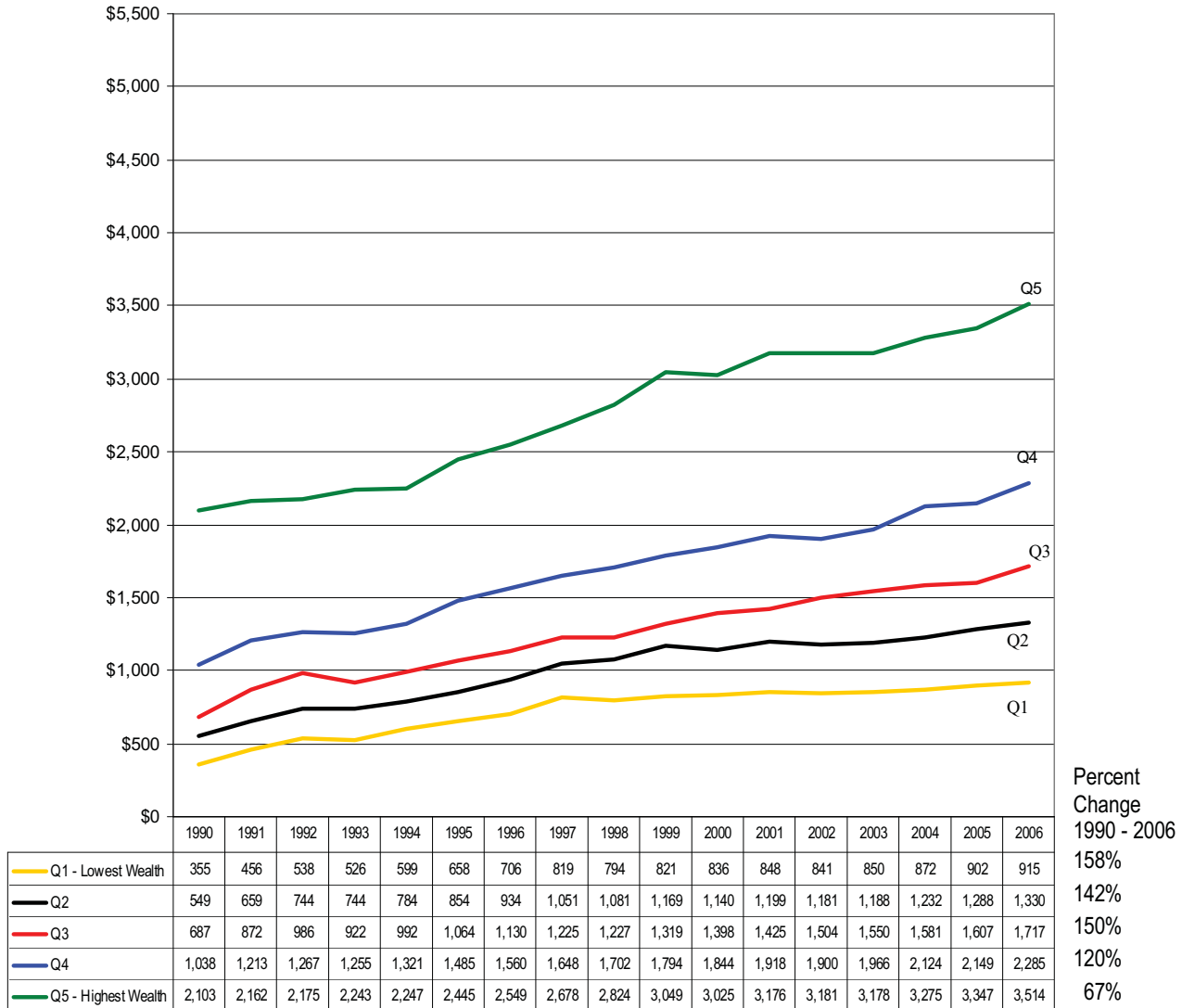
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Percent Change 1990 - 2006
Q1 - Lowest Wealth	2,665	3,306	3,610	3,625	3,737	3,921	3,963	4,198	4,146	4,369	4,350	4,425	4,316	4,379	4,384	4,364	4,446	67%
Q2	2,792	3,357	3,515	3,537	3,626	3,824	3,875	4,097	4,050	4,320	4,277	4,367	4,270	4,391	4,363	4,370	4,503	61%
Q3	2,884	3,408	3,581	3,531	3,625	3,799	3,859	4,053	3,984	4,293	4,295	4,349	4,335	4,427	4,470	4,463	4,600	60%
Q4	3,201	3,551	3,665	3,648	3,699	3,853	3,934	4,038	4,028	4,301	4,281	4,390	4,256	4,382	4,470	4,489	4,689	46%
Q5 - Highest Wealth	4,223	4,389	4,438	4,446	4,427	4,636	4,703	4,778	4,968	5,286	5,210	5,274	5,191	5,219	5,214	5,276	5,531	31%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Figure D.B

Local Per-pupil Revenue by Property Wealth Quintile

**FY 1990-FY 2006
(FY 1990 Constant Dollars)**

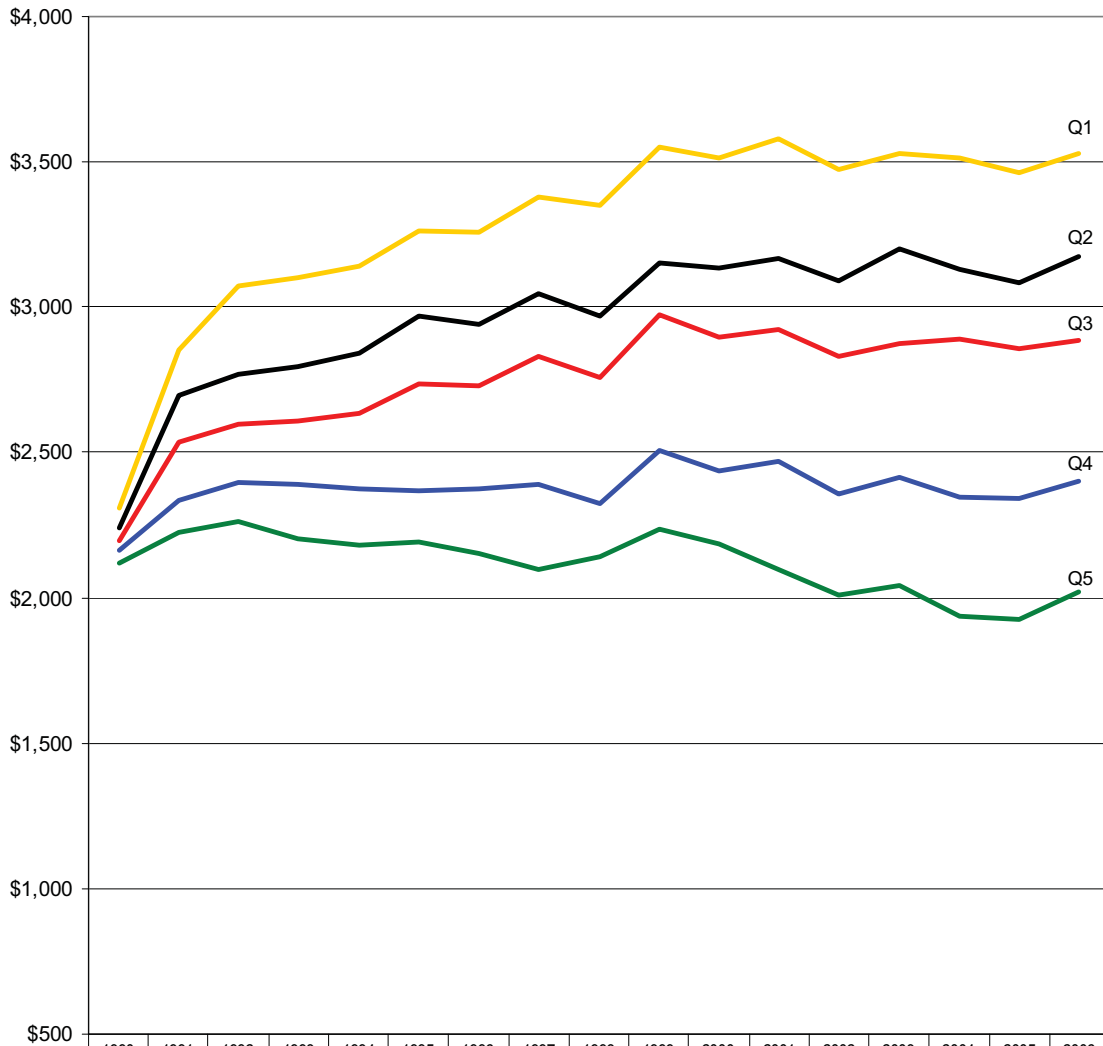


Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Figure D.C

State Per-pupil Revenue by Property Wealth Quintile

**FY 1990-FY 2006
(FY 1990 Constant Dollars)**



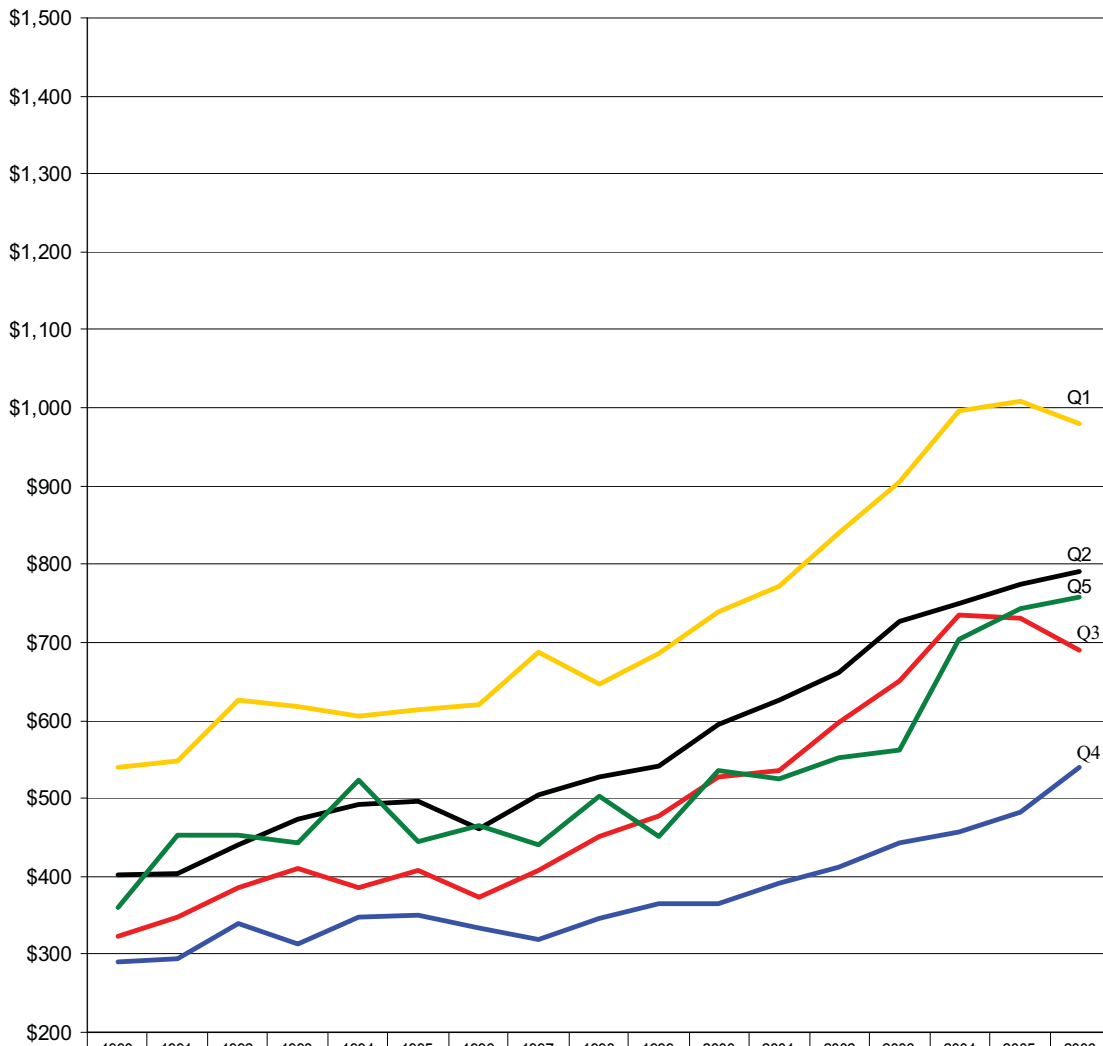
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Percent Change 1990 - 2006
Q1 - Lowest Wealth	2,310	2,850	3,073	3,099	3,138	3,263	3,257	3,379	3,353	3,548	3,515	3,576	3,475	3,529	3,511	3,462	3,531	53%
Q2	2,243	2,698	2,771	2,794	2,842	2,970	2,941	3,046	2,969	3,151	3,137	3,168	3,089	3,204	3,131	3,082	3,173	41%
Q3	2,197	2,537	2,596	2,609	2,633	2,735	2,729	2,828	2,758	2,974	2,897	2,924	2,832	2,877	2,888	2,856	2,883	31%
Q4	2,163	2,338	2,398	2,393	2,378	2,368	2,374	2,390	2,326	2,508	2,438	2,472	2,356	2,416	2,346	2,340	2,404	11%
Q5 - Highest Wealth	2,120	2,227	2,263	2,202	2,180	2,192	2,153	2,099	2,144	2,237	2,185	2,098	2,010	2,041	1,939	1,928	2,017	-5%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Figure D.D

Federal Per-pupil Revenue by Property Wealth Quintile

**FY 1990-FY 2006
(FY 1990 Constant Dollars)**



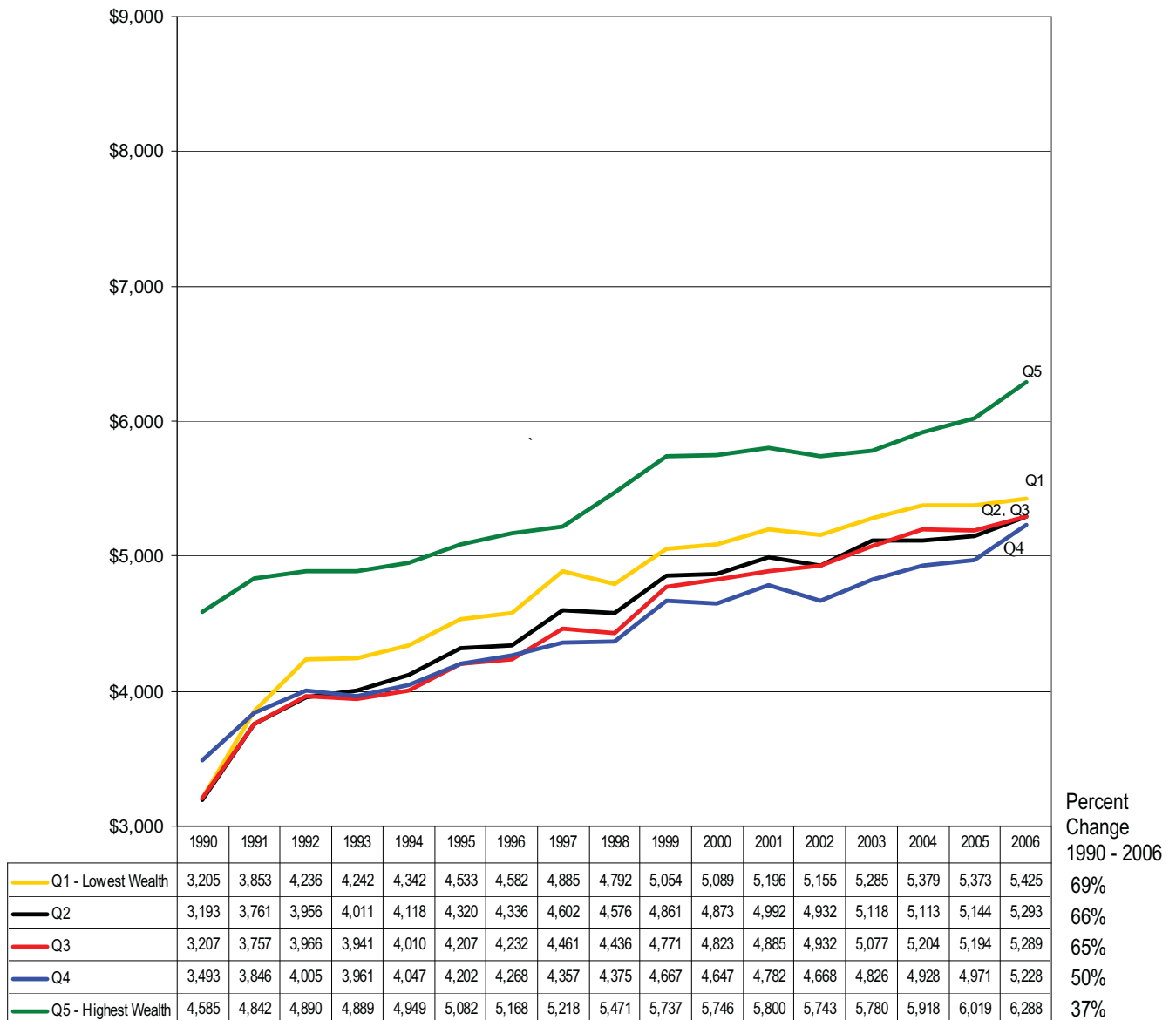
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Percent Change 1990 - 2006
Q1 - Lowest Wealth	540	547	626	617	605	612	619	688	646	685	739	771	839	906	995	1,009	979	81%
Q2	401	404	441	473	492	496	461	505	527	541	596	625	661	727	750	774	790	97%
Q3	323	349	385	410	386	408	373	408	451	478	528	536	596	651	734	731	689	113%
Q4	292	295	340	313	348	350	334	319	346	365	365	392	413	444	457	482	539	85%
Q5 - Highest Wealth	361	453	452	443	522	446	465	440	502	451	536	526	552	561	704	744	757	110%

Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Figure D.E

Total Per-pupil Revenue by Property Wealth Quintile

**FY 1990-FY 2006
(FY 1990 Constant Dollars)**



Source: Staff compilation of final SEEK Calculations and Annual Financial Reports provided by the Kentucky Department of Education and inflation indexes from the Bureau of Labor Statistics (Bureau. "Table").

Appendix E

Local and State Revenues: Difference in Quintiles 1-4 Per-pupil Revenue Compared to Quintile 5 Using Comparable Wage Index

Table E.1

Fiscal Year	Quintile 5 Per-pupil Revenue Minus Lower Quintiles' Revenue				Q1-4 Aggregate Difference: Equity Gap	% Difference Compared to 1990
	Quintile 1	Quintile 2	Quintile 3	Quintile 4		
1997	(\$312)	\$101	\$314	\$598	\$701	
1998	\$24	\$478	\$650	\$876	\$2,028	189%
1999	\$138	\$518	\$675	\$960	\$2,291	227%
2000	(\$63)	\$265	\$427	\$768	\$1,396	99%
2001	(\$62)	\$384	\$520	\$803	\$1,646	135%
2002	(\$57)	\$467	\$420	\$957	\$1,787	155%
2003	(\$79)	\$227	\$354	\$759	\$1,261	80%
2004	(\$186)	\$336	\$110	\$725	\$985	41%
2005	(\$60)	\$340	\$341	\$845	\$1,466	109%

Sources: Staff compilation of final Support Education Excellence in Kentucky Calculations and Annual Financial Reports provided by the Kentucky Department of Education; National Center for Education Statistics.

