

Actual Base: from Kansas Fiscal Facts (LEG003707) & SB294

Inflation (CPI): from U.S. Department of Labor - All Urban Consumers - Kansas City, MO-KS - All Items, Base of 3600 adjusted for inflation each year (BLS000001-4)

Augenblick & Myers: from May 2002 Study (LEG001414), June 2005 Update (LEG003516), October 2011 Update (EXP-MYERS000073), all amounts direct from reports except 2012 adjusted for inflation

Post Audit Study: from January 2006 Cost Study (USD443 001586), January 17, 2006 Memo (LEG003410), all amounts direct from reports. 2007 through 2012 amounts are in 2007 dollars

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						Augenblick	A&M for	Port Audit	Post Audit for	
				\$3600		(direct from	Chart	Study	from study 8	
	Actual			Base		study & 06-	(EV12	Calculated	I PA 1-17-06	
	Base			adjusted		2005 8 09-	adjusted	Inflation	LFA 1-17-00	
	State Aid		Annual	for		2005 @ 05-	for	(not on	which are in	
	Per Pupil	Inflation:	CPI	inflation	fiscal year	updates):	inflation):	chart):	EV07 dollars)	
		(1991)	131.2	mation	FY1992	upuuco).	initiation).	churcj.	rior donars)	
FY1993	\$3,600	(1992)	134.3	3600	FY1993					
FY1994	\$3,600	(1993)	138.1	3702	FY1994					
FY1995	\$3,600	(1994)	141.3	3788	FY1995					
FY1996	\$3,626	(1995)	145.3	3895	FY1996					
FY1997	\$3,648	(1996)	151.6	4064	FY1997					
FY1998	\$3,670	(1997)	155.8	4176	FY1998					
FY1999	\$3,720	(1998)	157.8	4230	FY1999					
FY2000	\$3,770	(1999)	160.1	4292	FY2000					
FY2001	\$3,820	(2000)	166.6	4466	FY2001	4,650	4,650			
FY2002	\$3,870	(2001)	172.2	4616	FY2002					
FY2003	\$3,863	(2002)	174	4664	FY2003					
FY2004	\$3,863	(2003)	177	4745	FY2004					
FY2005	\$3,863	(2004)	180.7	4844	FY2005	4,806	4,806			
FY2006	\$4,257	(2005)	185.3	4967	FY2006			4,167	4,167	i
FY2007	\$4,316	(2006)	190.1	5096	FY2007			4,659	4,659	,
FY2008	\$4,374	(2007)	194.479	5213	FY2008			5,127	5,012	-
FY2009	\$4,400	(2008)	201.15	5392	FY2009			5,544	5,239	,
FY2010	\$4,012	(2009)	200.959	5387	FY2010			5,778	5,466	,
FY2011	\$3,937	(2010)	205.378	5505	FY2011	5,738	5,738	6,153	5,695	
FY2012	\$3,780	(2011)	213.5	5723	FY2012		5,965	6,651	5,922	2
FY2013	\$3,838				FY2013				6,142	2
					FY2014				6,365	



Adjusted base for inflation using Annual CPI to adjust \$3600 to funding for FY1994, etc. CPI from US Department of Labor - All Urban Consumers - Kansas City, MO-KS - All Items (BLS000001-4)

Inflation:

(((138.1-134.3)/134.3)+1)*3600=3702 for FY1994 (((141.3-134.3)/134.3)+1)*3600=3788 for FY1995 (((145.3-134.3)/134.3)+1)*3600=3895 for FY1996 (((151.6-134.3)/134.3)+1)*3600=4064 for FY1997 (((155.8-134.3)/134.3)+1)*3600=4176 for FY1998 (((157.8-134.3)/134.3)+1)*3600=4230 for FY1999 (((160.1-134.3)/134.3)+1)*3600=4292 for FY2000 (((166.6-134.3)/134.3)+1)*3600=4466 for FY2001 (((172.2-134.3)/134.3)+1)*3600=4616 for FY2002 (((174-134.3)/134.3)+1)*3600=4664 for FY2003 (((177-134.3)/134.3)+1)*3600=4745 for FY2004 (((180.7-134.3)/134.3)+1)*3600=4844 for FY2005 (((185.3-134.3)/134.3)+1)*3600=4967 for FY2006 (((190.1-134.3)/134.3)+1)*3600=5096 for FY2007 (((194.479-134.3)/134.3)+1)*3600=5213 for FY2008 (((201.15-134.3)/134.3)+1)*3600=5392 for FY2009 (((200.959-134.3)/134.3)+1)*3600=5387 for FY2010 (((205.378-134.3)/134.3)+1)*3600=5505 for FY2011 (((213.5-134.3)/134.3)+1)*3600=5723 for FY2012

Augenblick & Myers:

May 2002 A&M Study recommended base should be \$4650 for FY2001 (LEG001414) June 2005 A&M Update came up with \$4806 base for FY2005 (LEG003516) October 2011 A&M Update came up with \$5738 base for FY2011 (EXP-MYERS000073) Used inflation to adjust from 5738:

(((213.5-205.378)/205.378)+1)*5738=5965 for FY12

Post Audit Study:

nuary 2006 LPA Report said base should be 4,167 for FY2006 (USD443 001586)	
nuary 2006 LPA Report said base should be 4659 for FY2007 (USD443 00586)	
nuary 17, 2006 LPA Memo shows the base using FY2007 dollars, through FY2014 (LEG003410):	
FY2007=\$4659	
FY2008=\$5012	
FY2009=\$5239	
FY2010=\$5466	
FY2011=\$5695	
FY2012=\$5922	
FY2013=\$6142	
FY2014=\$6365	

KANSAS FISCAL FACTS

EIGHTEENTH EDITION

August, 2011



Kansas Legislative Research Department 300 SW 10th Avenue Room 68-W – Statehouse Phone: (785) 296-3181/FAX (785) 296-3824 Topeka, Kansas 66612-1504 <u>http://www.kslegislature.org/klrd</u>

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K - 12 Education

Base State Aid Per Pupil

FY 1993 - FY 2012

Fiscal Year	Base Pe	State Aid er Pupil
1993	\$	3,600
1994		3,600
1995		3,600
1996		3,626
1997		3,648
1998		3,670
1999		3,720
2000		3,770
2001		3,820
2002		3,870
2003		3,863*
2004		3 <i>,</i> 863*
2005		3,863*
2006		4,257
2007		4,316
2008		4,374
2009		4,400
2010		4,012**
2011 Approved		3,937
2012 Approved		3,780

* In 2003, 2004, and 2005, the statute provided that the Base State Aid Per Pupil (BSAPP) would be funded at \$3,890; however, it was funded at \$3,863.

** In July 2009, the Governor issued allotments which resulted in a decrease in the BSAPP from \$4,280 to \$4,218. In November 2009, another allotment was issued further reducing the BSAPP to \$4,012.

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Data extracted on: October 5, 2011 (10:27:14 AM)

Consumer Price Index - All Urban Consumers

Series Id:CUUSA214SA0Not Seasonally AdjustedArea:Kansas City, MO-KSItem:All itemsBase Period:1982-84=100

Download: M .xls

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
1984		103.2		104.1		104.7		104.8		105.8		105.6	104.5	103.8	105.3
1985		105.9		107.7		107.8		108.1		108.8		108.4	107.7	107.0	108.4
1986		108.1		108.0		108.7		109.1		109.0		109.3	108.7	108.3	109.1
1987													113,1	111.5	114.6
1988													117.4	116.3	118.4
1989													121.6	120.6	122.6
1990													126.0	124.3	127.7
1991													131.2	130.2	132.3
1992													134.3	133.4	135.2
1993													138.1	137.5	138.7
1994													141.3	140.6	141.9
1995													145.3	144.3	146.3
1996													151.6	150.6	152.6
1997													155.8	155.2	156.4
1998													157.8	157.5	158.1
1999													160.1	158.5	161.8
2000													166.6	165.0	168.2
2001													172.2	171.9	172.5
2002													174.0	173.1	174.9
2003													177.0	176.6	177.4
2004													180.7	179.6	181.8
2005													185.3	183.3	187.3
2006													190.1	188.6	191.6
2007													194.479	193,206	195.753
2008													201.150	200.868	201.432
2009													200.959	199.152	202.767
2010													205.378	204.584	206.172
2011														211.860	

http://data.bls.gov/pdq/SurveyOutputServlet

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Consumer Price Index

How to Use the Consumer Price Index for Escalation

The Consumer Price Index (CPI) measures the average change in the prices paid for a market basket of goods and services. These items are purchased for consumption by the two groups covered by the index: All Urban Consumers (CPI-U) and Urban Wage Earners and Clerical Workers, (CPI-W).

Escalation agreements often use the CPI—the most widely used measure of price change—to adjust payments for changes in prices. The most frequently used escalation applications are in private sector collective bargaining agreements, rental contracts, insurance policies with automatic inflation protection, and alimony and child support payments.

The following are general guidelines to consider when developing an escalation agreement using the CPI:

DEFINE clearly the base payment (rent, wage rate, alimony, child support, or other value) that is subject to escalation.

IDENTIFY precisely which CPI index series will be used to escalate the base payment. This should include: The population coverage (CPI-U or CPI-W), area coverage (U.S. City Average, West Region, Chicago, etc.), series title (all items, rent of primary residence, etc.), and index base period (1982-84=100).

SPECIFY a reference period from which changes in the CPI will be measured. This is usually a single month (the CPI does not correspond to a specific day or week of the month) or an annual average. There is about a 2-week lag from the reference month to the date on which the index is released (e.g., the CPI for May is released in mid-June). The CPI's for most metropolitan areas are not published as frequently as are the data for the U.S. City Average and the 4 regions. Indexes for the U.S. City Average, the 4 regions, 3 city-size classes, 10 region-by-size classes, and 3 major metropolitan areas (Chicago, Los Angeles, and New York) are published monthly. Indexes for the remaining 23 published metropolitan areas are available only on a bimonthly or semiannual basis. Contact the BLS address at the end of this fact sheet for information on the frequency of publication for the 26 metropolitan areas.

STATE the frequency of adjustment. Adjustments are usually made at fixed time intervals, such as quarterly, semiannually, or, most often, annually.

DETERMINE the formula for the adjustment calculation. Usually the change in payments is directly proportional to the percent change in the CPI index between two specified time periods. Consider whether to make an allowance for a "cap" that places an upper limit to the increase in wages, rents, etc., or a "floor" that promises a minimum increase regardless of the percent change (up or down) in the CPI.

PROVIDE a built-in method for handling situations that may arise because of major CPI revisions or changes in the CPI index base period. The Bureau always provides timely notification of upcoming revisions or changes in the index base.

The CPI and escalation: Some points to consider

The CPI is calculated for two population groups: All Urban Consumers (CPI-U) and Urban Wage Earners and Clerical Workers (CPI-W). The CPI-U represents about 87 percent of the total U.S. population and is based on the expenditures of *all* families living in urban areas. The CPI-W is a subset of the CPI-U and is based on the expenditures of families living in urban areas who meet additional requirements related to employment: more than one-half of the family's income has to be earned from clerical or hourly-wage occupations. The CPI-W represents about 32 percent of the total U.S. population.

There can be small differences in movement of the two indexes over short periods of time because differences in the spending habits of the two population groups result in slightly different weighting. The long-term movements in the

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indexes are similar. CPI-U and CPI-W indexes are calculated using measurement of price changes for goods and services with the same specifications and from the same retail outlets. The CPI-W is used for escalation primarily in blue-collar cost-of-living adjustments (COLA's). Because the CPI-U population coverage is more comprehensive, it is used in most other escalation agreements.

The 26 metropolitan areas for which BLS publishes separate index series are by-products of the U.S. City Average index. Metropolitan area indexes have a relatively small sample size and, therefore, are subject to substantially larger sampling errors. Metropolitan area and other sub-components of the national indexes (regions, size-classes) often exhibit greater volatility than the national index. BLS strongly recommends that users adopt the U.S. City Average CPI for use in escalator clauses.

The U.S. City Average CPI's are published on a seasonally adjusted basis as well as on an unadjusted basis. The purpose of seasonal adjustment is to remove the estimated effect of price changes that normally occur at the same time and in about the same magnitude every year (e.g., price movements due to the change in weather patterns, model change-overs, holidays, end-of-season sales, etc.). The primary use of seasonally adjusted data is for current economic analysis. In addition, the factors that are used to seasonally adjust the data are updated annually. Also, seasonally adjusted data that have been published earlier are subject to revision for up to 5 years after their original release. For these reasons, the use of seasonally adjusted data in escalation agreements is inappropriate.

Escalation agreements using the CPI usually involve changing the base payment by the percent change in the level of the CPI between the reference period and a subsequent time period. This is calculated by first determining the index point change between the two periods and then the percent change. The following example illustrates the computation of percent change:

CPI for current period	136.0
Less CPI for previous period	129.9
Equals index point change	6.1
Divided by previous period CPI	129.9
Equals	0.047
Result multiplied by 100	0.047 x 100
Equals percent change	4.7

The Bureau of Labor Statistics neither encourages nor discourages the use of price adjustment measures in contractual agreements. Also, while BLS can provide technical and statistical assistance to parties developing escalation agreements, we can neither develop specific wording for contracts nor mediate legal or interpretive disputes which might arise between the parties to the agreement.

For any additional information about the CPI, please call (202) 691-7000, or write to:

Bureau of Labor Statistics Office of Prices and Living Conditions 2 Massachusetts Avenue, NE., Room 3615 Washington, DC 20212-0001

Last Modified Date: October 16, 2001

U.S. Bureau of Labor Statistics | Division of Consumer Prices and Price Indexes, PSB Suite 3130, 2 Massachusetts Avenue, NE Washington, DC 20212-0001

www.bls.gov/CPI | Telephone: 1-202-691-7000 | Contact CPI

http://data.bls.gov/cgi-bin/print.pl/cpi/cpi1998d.htm

10/25/2011 ₉₈₉₇₉₁ BLS000003 Table 16A. Consumer Price Index for All Urban Consumers (CPI-U): Selected areas, by expenditure category and commodity and service group-Continued

(1982-84=100, unless otherwise noted)

	Detrolt- Ann Arbor- Flint, MI		Honolulu, Hl		Houston- Galveston- Brazoria, TX		Kansas City, MO-KS	
Item and Group	Annual average 2011	Percent change from 2010 to 2011	Annual average 2011	Percent change from 2010 to 2011	Annual average 2011	Percent change from 2010 to 2011	Annual average 2011	Percent change from 2010 to 2011
Expenditure category								
All items ³ All items (1967=100) ⁴	211.760 629.440	3.3	243.622 670.684	3.7	200.495 643.059	3.3	213.500 633.960	4.0
Food and beverages ³ Food ³ Food at home Food away from home ⁵ Alcoholic beverages ⁵	206.941 207.617 203.243 214.614 190.732	3.5 3.7 4.2 3.1 4	232.656 233.256 243.147 219.140 222.459	3.5 3.8 4.5 2.6 6	207.023 206.148 209.418 198.318 210.483	3.6 3.7 5.0 2.3 2.7	233.794 238.350 231.145 249.439 181.611	5.4 5.9 5.4 6.2 1
Housing ³ Shelter Rent of primary residence ³ ⁶ Owners' equivalent rent of residences ⁶ ⁷	189.012 208.550 207.922 209.392	.4 .4 1.5 .3	260.606 277.348 271.986 287.113	3.4 1.9 2.5 1.7	183.594 206.455 194.705 192.993	.2 1.0 1.0 1.2	197.146 218.433 219.558 215.062	1.6 1.8 2.0 1.8
Owners' equivalent rent of primary residence of 7 Fuels and utilities Household energy Energy services 6 Electricity 6 Utility (plped) gas service 6 Household furnishings and operations	209.392 235.356 194.229 195.672 191.394 190.889 121.855	.3 .1 -1.0 -1.6 3.8 -8.0 1.4	287.113 335.109 305.047 300.711 295.459 336.101 153.134	1.7 19.6 26.6 26.6 27.0 21.2 -2.6	192.993 191.906 185.178 182.208 187.044 142.597 122.708	1.2 2 7 -1.0 .7 -13.5 -3.5	215.062 210.145 180.691 178.125 147.548 179.887 123.392	1.8 1.8 1.1 .6 4.4 -7.4 .5
Apparel ³	114.942	7.9	118.394	1.7	156.921	3.2	114.335	1.3
Transportation ³ Private transportation Motor fuel Gasoline (ali types) Gasoline, unleaded regular ⁸ Gasoline, unleaded midgrade ⁸ ⁹ Gasoline, unleaded premium ⁸	242.049 240.139 316.471 315.952 325.575 351.271 289.057	9.7 9.9 28.6 28.6 28.9 27.7 26.7	229.223 227.249 311.585 320.614 340.371 249.720 283.383	6.9 7.4 18.3 18.4 18.3 17.3 19.2	186.197 184.933 296,182 296,020 306.616 300.539 283.565	10.9 11.1 29.1 29.1 29.6 28.1 27.0	207.665 203.777 305.390 306.322 301.034 367.908 294.344	10.5 10.9 28.0 27.8 28.1 27.4 26.3
Medical care ³	364.051	2.1	324.180	1.3	387,209	4.1	320.650	3.5
Recreation ¹⁰	112.452	1.2	110.473	2.8	106.182	4	127.360	2.9
Education and communication ¹⁰	135.740	.8	132.248	2.9	114.980	1.4	126.893	1.4
Other goods and services ³	390.532	1.7	433.536	4.3	342.652	2.8	362.833	2.2
Commodity and service group								
All Items ³ Commodilies Commodilies less food and beverages Nondurables less food and beverages Durables Services	211.760 178.102 162.290 201.155 116.993 247.021	3.3 6.9 9.2 12.8 2.8 .6	243.622 192.510 165.441 208.464 118.151 288.467	3.7 3.9 4.2 7.8 -1.4 3.6	200.495 174.211 156.227 211.227 107.111 228.380	3.3 6.3 7.7 11.7 1.8 1.2	213.500 186.602 162.826 219.980 109.358 240.202	4.0 6.9 7.8 10.8 3.1 1.8
Special aggregate indexes					100.577		007 100	
All items less medical care ³ All items less shelter Commodities less food Nondurables less food Services less rent of shelter ⁷ Services less medical care services Energy ³ All items less energy All items less food and energy ³	205.661 216.275 163.670 204.597 200.823 301.214 238.507 254.324 209.863 210.809	3.3 4.5 8.9 8.0 12.0 .8 .5 15.1 1.9 1.5	239.365 229.363 167.835 221.716 209.303 302.484 284.353 308.050 241.020 243.891	3.9 4.8 4.0 5.3 7.2 5.9 3.9 21.9 2.3 2.3 2.0	190.808 198.355 158.296 210.055 210.999 250.946 211.933 237.947 199.096 197.742	3.2 4.3 7.5 7.8 11.1 1.5 .9 15.5 1.9 1.6	207.493 213.346 163.618 227.296 217.814 274.400 229.764 239.508 212.340 208.113	4.0 4.9 7.4 8.2 10.1 1.9 1.8 15.9 2.8 2.3

See footnotes at end of table.

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CALCULATION OF THE COST OF A SUITABLE EDUCATION IN KANSAS IN 2000-2001 USING TWO DIFFERENT ANALYTIC APPROACHES

Prepared for

Legislative Coordinating Council

Prepared by

John Augenblick John Myers Justin Silverstein Anne Barkis of Augenblick & Myers, Inc.

May, 2002

989751 LEG001325

Given that the costs of vocational education are similar to those of other programs that are embedded in the general curriculum, and given that the proportion of students taking vocational classes are not expected to vary dramatically from place to place, we do not believe it is necessary to use a separate weight for vocational education. We would make the same argument about foreign language, or science, or any other subject area that is an essential part of the general curriculum. Our sense is that vocational education costs should be included in the calculation of the base cost figure and not distinguished from other components of the basic program. The fact is that participants in the professional judgment panels included vocational education in their thinking (since it was part of the definition of a suitable education) and we included vocational education expenditures in our calculation of basic expenditures for the successful school district analysis. Our conclusion is that there is no need to weight vocational education but rather, to include vocational education costs in the foundation level.

Summary of Recommendations

We have made several recommendations in this chapter about both the structure of the Kansas school finance system and the parameters the system should use to allocate funds to school districts, which are summarized below:

- Kansas should continue to use a foundation program in combination with a second tier (Local Option Budget) as the primary basis for distributing public school support.
- The foundation level (base cost) should be raised in the future to a level that would be equivalent to \$4,650 in 2000-01.
- The foundation level should be adjusted by a regional cost factor using figures from the National Center for Education Statistics until such time as the state conducts its own study.
- The foundation level should be adjusted in recognition of the higher costs associated with: (1) the operation of moderate size and small school districts; (2) the needs of students in special education programs; (3) the needs of at-risk students (based on the number of students participating in the free lunch program); and (4) the needs of bilingual students. The adjustments should be based on formulas that are sensitive to the enrollment level of school districts, which are listed below:

• 430 stu.	= {[•(430 - Enroll.)/10• X .01] X 4,650} + \$5,923
430-1,300 stu.	= {[•(1,300 - Enroll.)/80• X .01] X 4,650} + \$5,417

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for school district size

UPDATING THE RESULTS OF THE A&M SCHOOL FINANCE ADEQUACY STUDY FOR KANSAS TO 2004-05

Prepared by: Augenblick, Palaich and Associates, Inc. Denver, CO

> Prepared for: John Robb

June 2005

In May 2002 Augenblick, Palaich and Associates, Inc. (APA, formerly Augenblick & Myers, known as A&M) issued its report to the Kansas Legislature that both described the procedures that had been used to estimate the cost of a suitable education in Kansas (in general, we refer to the cost of a suitable education as the cost of "adequacy") and recommended changes in the structure of the state's school finance system. One purpose of the study was to determine the funding levels needed to assure that all school districts in Kansas would have sufficient operating funds, excluding transportation and food services, to be able to meet the requirements and expectations used by the state of Kansas to directly and indirectly hold school districts accountable.

APA used two approaches to estimate costs: (1) the professional judgment (PJ) approach and (2) the successful school district (SSD) approach. Under the PJ approach, panels of educators were given a set of standards then asked to identify the resources schools and school districts, of various sizes and with different concentrations of students with special needs, would need to have in order to meet the standards. Under the SSD approach, APA identified a set of school districts that were doing reasonably well and estimated the cost of serving students with no special needs based on the basic expenditures (excluding spending for students with special needs) of successful districts. The May 2002 report identified several elements that would be necessary to determine the cost of a suitable education in several hypothetical school districts, including: (1) a base cost figure; (2) an adjustment to the base cost figure relative to the enrollment level of a school district; and (3) adjustments to the base cost figure students in special education programs, students eligible for free lunch, and bilingual students.

The report determined two base cost figures – one using the PJ approach and one using the SSD approach. The difference in the figures (the PJ figure was about 25 percent higher than the SSD figure) was consistent with the fact that, on average, the successful districts performed about 25 percent lower than the actual level of performance expected in the future (the work was done just as the No Child Left Behind Act, which included performance expectations in 2013-14, was being enacted). As a result, APA's school finance recommendations suggested using the lower base cost figure as the basis for calculating state aid while allowing districts to continue using a local optional budget (LOB) of up to 25 percent of the base to obtain revenue up to the

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PJ level (which would include additional state aid depending on both the wealth and tax effort of school districts).

The purpose of this document is to update the levels of the base cost and add-on weights that would need to be used for the 2004-05 school year. The figures were updated from those used in preparing the May 2002 report based on an inflation rate of 5.7 percent over 4 years. In the May 2002 report, the adjustment factors were treated as if they were student "weights," which are expressed in figures relative to the base cost amount: for example, a weight of .40 means that the added cost of providing a particular service is an additional 40 percent of the base cost figure for each student with that particular need - if the base cost were \$5,000 in a particular school district, the added cost would be \$2,000 for each student with that need. In Kansas, and in many other states, approaches other than student weights are used to deal with some special needs - typically, these other approaches are based on the reported spending of districts or on reimbursement procedures that are not based on costs at all. Since there is a relationship between district size and some of the adjustment factors, it is necessary to create formulas to determine the actual adjustment for districts of different size. The following formulas can be used to determine the value of the base cost figure or a particular adjustment in relation to district size:

1. Base Cost

Less than 430 students	={[((430 - Enroll.)/10) X .01] X 4,700} + \$6,045
430-1,300 students	={[((1,300 - Enroll.)/80) X .01] X 4,700} + \$5,535
1,300-11,200 students	={[((11,200 - Enroll.)/560) X .01] X 4,700} + \$4,700
Over 11,200 students	=\$4,700

- 2. Special Education
 - All districts = .90 + (enroll. X .00002)
- 3. At-Risk

200 students or less = .20 Over 200 = .60 - [(1.000/enroll.) X .08]

4. Bilingual

Less than 500 students = .15 for districts with less than 500 students

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500 to 1,000 students	= .15 + [.0014 X (enroll 500]
Over 1,000 students	= .85 + [.000004 X (enroll 1,000)]

Table 1 shows the appropriate base cost and adjustments for four categories of districts based on the four hypothetical size districts that were used in the PJ approach and reported in the May 2002 report. The table does not include other information, such as student performance or district personal income, which might be of interest to anyone trying to explain the level of spending or how spending is related to factors such as student performance.

Updating the base cost levels and student weights

The figures in table 1 show the updated amounts for the 2004-05 school year. The table includes figures for districts organized by size category (using the same categories that were used in the May 2002 report) and for the state as a whole:

Section I of table 1 shows the 2003-2004 demographic characteristics of school districts in Kansas grouped by size. There were 82 districts with fewer than 325 students, which enrolled a total of 17,559 students (therefore, that group had 27.3 percent of the state's school districts but only 4.0 percent of the state's students. For the purposes of the professional judgment groups, that group was represented by a school district with 200 students. At the same time, there were 22 districts with more than 3,600 students, which enrolled a total of 232,224 students; the large districts group had 7.3 percent of the state's school districts and 52.7 percent of the state's students. The large districts group was represented by a district with 11,200 students. For the state as a whole, there were 300 school districts and 440,634 students.

Section II of table 1 shows the base cost levels and student weights for 2004-2005 that would apply to districts with the characteristics of the hypothetical districts representing each size group. The base cost level is highest in the very small districts and drops to its lowest point in the large districts. The weight for special education rises slightly with district size. The weight for at-risk students rises more steeply as districts grow in size from very small to large. The weight for bilingual students is very low in very small and small districts and rises to a much higher level in moderate and large districts.

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LEG003515

TABLE 1

ESTIMATING THE COST OF ADEQUACY FOR KANSAS SCHOOL DISTRICTS in 2004-05

Using a Base Cost of \$4,806

Groups of School Districts are Based on the Prototype Districts Used in A&M Adequacy Study

	Prototype District Size Group				
	Very Small	Small	Moder.	Large	Total
I. District Characteristics					
Range in Size of		325-	556-		
District (Students)	≤324	555	3,600	≥3,600	
	00	70	406	22	200
Number of Districts	82	70	120	22	300
Number of Students	17,559	29,940	160,912	232,224	440,634
PJ District Size	200	430	1,300	11,200	

II. Base Cost Figures/Add-On Weights for <u>Prototype Districts of Size Indicated in I.</u>

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Base Cost	\$7,928	\$6,187	\$5,659	\$4,806
Special Education	.90	.91	.93	1.12
At-Risk	.20	.41	.54	.59
Bilingual	.15	.15	.85	.8

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LEG003516

UPDATING THE RESULTS OF THE A&M SCHOOL FINANCE ADEQUACY STUDY FOR KANSAS TO 2010-11

Prepared by: Augenblick, Palaich and Associates, Inc. Denver, CO

Prepared for: John Robb

October 2011

In May 2002 Augenblick, Palaich and Associates, Inc. (APA, formerly Augenblick & Myers, known as A&M) issued its report to the Kansas Legislature that both described the procedures that had been used to estimate the cost of a suitable education in Kansas (in general, we refer to the cost of a suitable education as the cost of "adequacy") and recommended changes in the structure of the state's school finance system. One purpose of the study was to determine the funding levels needed to assure that all school districts in Kansas would have sufficient operating funds, excluding transportation and food services, to be able to meet the requirements and expectations that the state of Kansas used to directly and indirectly hold school districts accountable.

APA used two approaches to estimate costs: (1) the professional judgment (PJ) approach and (2) the successful school district (SSD) approach. Under the PJ approach, panels of educators were given a set of standards and asked to identify the resources schools and school districts of various sizes and with different concentrations of students with special needs would need to have in order to meet the standards. Under the SSD approach, APA identified a set of school districts that were doing reasonably well and estimated the cost of serving students with no special needs based on the basic expenditures (excluding spending for students with special needs) of successful districts. The May 2002 report identified several elements that would be necessary to determine the cost of a suitable education in several hypothetical school districts, including: (1) a base cost figure; (2) an adjustment to the base cost figure associated with the proportion of students in special education programs, students eligible for free lunch, and bilingual students.

The report determined two base cost figures – one using the PJ approach and one using the SSD approach. The difference in the figures (the PJ figure was about 25 percent higher than the SSD figure) was consistent with the fact that, on average, the successful districts performed about 25 percent lower than the actual level of performance expected in the future (the work was done just as the No Child Left Behind Act, which included performance expectations in 2013-14, was being enacted). As a result, APA's school finance recommendations suggested using the lower base cost figure as the basis for calculating state aid while allowing districts to continue using a local optional budget (LOB) of up to 25 percent of the base to obtain revenue up to the PJ level (which would include additional state aid depending on both the wealth and tax effort of school districts).

The purpose of this document is to update the levels of the base cost and add-on weights to those that could have been used in the 2010-11 school year. It is important to note that APA believes that the results of a costing out (adequacy study) should be revisited every three to five years and not simply adjusted in perpetuity. Given the fact that no such updated study has been done recently, we have

989810 EXP-MYERS000072 agreed to look at the 2010-11 costs that can be derived from the 2002 study simply by adjusting these results by inflation. The base cost derived from the 2002 study was \$4,650. This figure was derived from the using the SSD approach. APA looked at the Consumer Price Index (CPI) information for the Kansas City, MO-KS metro area produced by the United State Bureau of Labor and Statistics. Using 2000 CPI information as the base year to represent the 2000-01 school year and 2010 CPI information, the latest year available, to represent the 2010-11 school year, inflation between the two school years is 23.4%. This means the 2000-01 base cost of \$4,650 would be \$5,738 when adjusted for inflation. This new base figure can be used with the adjustments generated in the original report (they are described below) to show the adequacy figures based on district size:

1. Base Cost

. . . .

Less than 430 students	= ((((430-Enroll.)/10) X .01) x 5,738) + \$7,309
430-1,300 students	= ((((1,300-Enroll.)/80) X .01) x 5,738) + \$6,685
1,300-11,200 students	= ((((11,200-Enroll.)/600) X .01) x 5,738) + \$5,738
Over 11,200 students	= \$5,738

- 2. Special Education
 - All districts = .90 + (Enroll. X .00002)
- 3. At-Risk

200 students or less	= .20
Over 200	= .60 - ((1,000/Enroll.) X .08)

4. Bilingual

Less than 500 students	= .15
500 to 1,000 students	= .15 + (.0014 X (Enroll 500))
Over 1,000 students	= .85 + (.000004 X (Enroll 1,000))

The following table shows the base figures and adjustments for different district sizes for the 2010-11 school year. It is important to remember that the adjustment weights would be applied to each districts individual base cost figure.

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Enrollment	Base Cost	Educ.	At-Risk	Biling.
50	\$9,489	.90	.20	.15
100	\$9,203	.90	.20	.15
200	\$8,629	.90	.20	.15
300	\$8,0\$5	.91	.33	.91
400	\$7,481	.91	.40	.15
500	\$7,259	.91	.44	.15
750	\$7,079	.92	.49	.50
1,000	\$6,900	.92	.52	.85
2,000	\$6,618	.94	.56	.85
4,000	\$6,427	.98	.58	.86
6,000	\$6,235	1.02	.59	.87
10,000	\$5,853	1.10	.59	.89
15,000	\$5,738	1.20	.59	.91
25,000	\$5,738	1.40	.60	.95
45,000	\$5,738	1.80	.60	1.03

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UPDATING THE RESULTS OF THE A&M SCHOOL FINANCE ADEQUACY STUDY FOR KANSAS TO 2010-11

Prepared by: Augenblick, Palaich and Associates, Inc. Denver, CO

> Prepared for: John Robb

September 2011

In May 2002 Augenblick, Palaich and Associates, Inc. (APA, formerly Augenblick & Myers, known as A&M) issued its report to the Kansas Legislature that both described the procedures that had been used to estimate the cost of a suitable education in Kansas (in general, we refer to the cost of a suitable education as the cost of "adequacy") and recommended changes in the structure of the state's school finance system. One purpose of the study was to determine the funding levels needed to assure that all school districts in Kansas would have sufficient operating funds, excluding transportation and food services, to be able to meet the requirements and expectations that the state of Kansas used to directly and indirectly hold school districts accountable.

APA used two approaches to estimate costs: (1) the professional judgment (PJ) approach and (2) the successful school district (SSD) approach. Under the PJ approach, panels of educators were given a set of standards and asked to identify the resources schools and school districts of various sizes and with different concentrations of students with special needs would need to have in order to meet the standards. Under the SSD approach, APA identified a set of school districts that were doing reasonably well and estimated the cost of serving students with no special needs based on the basic expenditures (excluding spending for students with special needs) of successful districts. The May 2002 report identified several elements that would be necessary to determine the cost of a suitable education in several hypothetical school districts, including: (1) a base cost figure; (2) an adjustment to the base cost figure associated with the proportion of students in special education programs, students eligible for free lunch, and bilingual students.

The report determined two base cost figures – one using the PJ approach and one using the SSD approach. The difference in the figures (the PJ figure was about 25 percent higher than the SSD figure) was consistent with the fact that, on average, the successful districts performed about 25 percent lower than the actual level of performance expected in the future (the work was done just as the No Child Left Behind Act, which included performance expectations in 2013-14, was being enacted). As a result, APA's school finance recommendations suggested using the lower base cost figure as the basis for calculating state aid while allowing districts to continue using a local optional budget (LOB) of up to 25 percent of the base to obtain revenue up to the PJ level (which would include additional state aid depending on both the wealth and tax effort of school districts).

The purpose of this document is to update the levels of the base cost and add-on weights to those that could have been used in the 2010-11 school year. It is important to note that APA believes that the results of a costing out (adequacy study) should be revisited every three to five years and not simply adjusted in perpetuity. Given the fact that no such updated study has been done recently, we have

989769 EXP-MYERS000059

agreed to look at the 2010-11 costs that can be derived from the 2002 study simply by adjusting these results by inflation. The base cost derived from the 2002 study was \$4,550. This figure was derived from the using the SSD approach. APA looked at the Consumer Price Index(CPI) information for the Kansas City, MO-KS metro area produced by the United State Bureau of Labor and Statistics. Using 2000 CPI information as the base year to represent the 2000-01 school year and 2010 CPI information, the latest year available, to represent the 2010-11 school year, inflation between the two school years is 23.4%. This means the 2000-01 base cost of \$4,550 would be \$5,615 when adjusted for inflation. This new base figure can be used with the adjustments generated in the original report (they are described below) to show the adequacy figures based on district size:

1. Base Cost

Less than 430 students	= ((((430-Enroll.)/10) X .01) x 5,615) + \$7,221
430-1,300 students	= ((((1,300-Enroll.)/80) X .01) x 5,615) + \$6,612
1,300-11,200 students	= ((((11,200-Enroll.)/600) X .01) x 5,615) + \$5,615
Over 11,200 students	= \$5,615

- 2. Special Education
 - All districts = .90 + (Enroll. X .00002)
- 3. At-Risk

200 students or less	= .20
Over 200	= .60 – ((1,000/Enroll.) X .08)

4. Bilingual

Less than 500 students	= .15
500 to 1,000 students	= .15 + (.0014 X (Enroll. – 500))
Over 1,000 students	= .85 + (.000004 X (Enroll. – 1,000))

The following table shows the base figures and adjustments for different district sizes for the 2010-11 school year. It is important to remember that the adjustment weights would be applied to each districts individual base cost figure.

> 989769 EXP-MYERS000060

<u>Enrollment</u>	Base Cost	Educ.	<u>At-Risk</u>	Biling .
				2-04.00
50	\$9,355	.90	.20	.15
100	\$9,074	.90	.20	.15
200	\$8,512	.90	.20	.15
300	\$7,951	.91	.33	.91
400	\$7,389	.91	.40	.15
500	\$7,174	.91	.44	.15
750	\$6,998	.92	.49	.50
1,000	\$6,823	.92	.52	.85
2,000	\$6,476	.94	.56	.85
4,000	\$6,289	.98	.58	.86
6,000	\$6,102	1.02	.59	.87
10,000	\$5,727	1.10	.59	.89
15,000	\$5,615	1.20	.59	.91
25,000	\$5,615	1.40	.60	.95
45,000	\$5,615	1.80	.60	1.03

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USD443 001542

1. ESTIMATED BASE-LEVEL COST OF MEETING OUTCOMES

The estimated <u>base-level cost</u> of meeting the 2005-06 performance outcome standards set by the Board of Education is \$4,167 per student. That amount is \$90 per student less than the current Base State Aid Per Pupil of \$4,257. The consultants' estimate of the baselevel cost of meeting the standards was \$4,024 per student. In order to use that estimate as a basis for what the State might fund, however, we made several adjustments:

- **Remove federal sources of funding.** The cost model was built using historical spending data that included federal sources of funding because those expenditures likely contributed to student outcomes. As a result, however, the consultants' estimate of base-level costs included costs that would be paid for with those federal funds. We reduced the estimated base-level costs to \$3,899 per student, which better reflects the costs the State might fund. We describe how we removed the federal funds in detail in **Appendix 1.2**.
- Adjust for inflation. The consultants' original estimate and our estimate (adjusted to remove federal funding) of the base-level cost of meeting standards were based on 2003-04 dollars. We had to increase the estimated base-level costs to account for inflation between the 2003-04 school year and the 2005-06 and 2006-07 school years. After adjusting for inflation, our estimate of the base-level cost of meeting standards in 2005-06 is \$4,167 per student.

Figure 1.2-4 compares our estimated base-level cost per regular education student of meeting the performance outcome standards with the Base State Aid Per Pupil in the current funding formula.

Figure 1.2-4 Comparison of Base Cost Per Student COST FUNCTION ESTIMATES vs. CURRENT FUNDING FORMULA 2005-06 and 2006-07 School Years						
Base Cost Per Student <u>ESTIMATED WITH COST FUNCTION</u>				Base State Aid Per Pupil	Difference	
Year	Original Estimate by Consultants	Adjusted by LPA to <u>Remove</u> <u>Federal Funds</u>	Adjusted by LPA for <u>Inflation</u>	CURRENT FORMULA	Per Student	
2005-06	\$4,024	\$3,899	\$4,167	\$4,257	(\$90)	
2006-07	\$4,346	\$4,221	\$4,659	\$4,257	\$402	
Source: I PA analysis of Duncombe and Yinger cost estimates						

As the figure shows, the estimated base-level cost of meeting the standards increases in 2006-07 to \$4,659, which is \$402 per student more than the current Base State Aid Per Pupil. Our estimate for 2006-07 increases in part because of inflation, but also because the standards are higher in 2006-07. For example, between 2005-06 and 2006-07, the standard for 10^{th} grade math increases from 47% proficiency to 56%, and the standard for 5^{th} grade reading increases from 63% proficiency to 70%.

The estimated base-level cost of meeting standards will continue to increase significantly in future years, because the standards adopted by the Board increase each year until 2013-14 (when 100% of all students are required to reach proficiency on Statewide assessment tests).

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MEMORANDUM

Legislative Division of Post Audit US Bank Building, 800 SW Jackson, Suite 1200 Topeka, KS 66612-2212 voice: 785.296.3792 fax: 785.296.4482 email: LPA@lpa.state.ks.us web: www.kslegislature.org/postaudit

TO: Members, Senate Education Committee
FROM: Barbara J. Hinton, Legislative Post Auditor
DATE: January 17, 2006
SUBJECT: Projection of Costs for Outcomes-Based Approach to 2013-14

During the presentation of our education cost study report last Monday, Senator Vratil asked us what the education costs would be in future years under the outcomes-based approach, using the standards adopted by the State Board of Education.

This information is presented in the accompanying table. Please note the following:

- the estimated costs are being shown in 2006-07 dollars, which allows you to see the effect of the increase in standards over the years.
- we included hold harmless funding in the figures for 2006-07, which increases the estimates for State supplemental equalization aid and KPERS slightly that year.
- the need for "hold harmless" funding <u>beyond</u> 2006-07 is essentially eliminated under the outcomes-based approach because of the fiscal impact of the increased outcome standards in future years.

Please let us know if you have any additional questions.

Enclosure

cc: Kathie Sparks, Legislative Research Department Carolyn Rampey, Legislative Research Department Theresa Kiernan, Revisor of Statutes Office

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LEG003409

		Estimate	d Cost of Meeti (in 2	ng Future Perfo 006-07 dollars)	rmance Standar	ds		
	STANDARDS							
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
OUTCOMES-BASED								
Foundation-Level	\$3,151,289,271	\$3,349,417,195	\$3,476,962,046	\$3,604,506,896	\$3,732,670,897	\$3,860,215,747	\$3,983,426,550	\$4,108,494,802
Hold Harmless	\$9,351,874	\$295,583						
Supplemental Aid	\$260,574,595	\$276,748,909	\$287,387.579	\$298,033,513	\$308,731,126	\$319,377.059	\$329,661.238	\$340,100,454
KPERS Contribution	\$198,941.334	\$209,869,264	\$217,200,749	\$224.547,832	\$231,930,580	\$239,277,663	\$246,375.088	\$253,579,510
TOTAL	\$3,620,157,075	\$3,836,330,951	\$3,981,550,373	\$4,127,088,241	\$4,273,332,603	\$4,418,870,470	\$4,559,462,876	\$4,702,174,765
BSAPP	\$4,659	\$5.012	\$5,239	\$5,466	\$5,695	\$5,922	\$6,142	\$6,365
CURRENT FORMULA								
Foundation-Level	\$2,752,015,150	\$2,752.015,150	\$2,752,015,150	\$2,752,015,150	\$2,752,015,150	\$2,752,015,150	\$2,752,015,150	\$2,752,015,150
Hold Harmless								
Supplemental Aid	\$222,186.876	\$222.186.876	\$222.186.876	\$222,186,876	\$222.186.876	\$222.186.876	\$222.186.876	\$222.186,876
KPERS Contribution	\$175.389,495	\$175.389.495	\$175,389.495	\$175,389,495	\$175.389,495	\$175,389,495	\$175,389,495	\$175,389,495
TOTAL	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521	\$3,149,591,521
DIFFERENCE	\$470,565,554	\$686,739,430	\$831,958,852	\$977,496,720	\$1,123,741,082	\$1,269,278,949	\$1,409,871,355	\$1,552,583,244
STANDARDS	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Math								10001
4th Grade	67%	73%	78%	82%	87%	91%	90%	100%
7th Grade	67%	73%	78%	82%	87%	91%	90%	100%
10th Grade	56%	65%	70%	/0%	82%	00%	94%	100.%
Reading								
5th Grade	70%	76%	80°;	84%	88%	92%	96%	100%
8th Grade	70%	76%	80%	84%	88%	92%	96%	100%
111h Grade	65%	72%	77%	81%	86%	91%	95%	100%
Graduation Rate	75%	75%	75%	75%	75%	75%	75%	75%

Source: LPA cost study results.

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1.1.