COMMISSION ON SCHOOL FUNDING

NOVEMBER 2022

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INTRODUCTION

The Commission on School Funding (the "Commission") was created by the Nevada State Legislature as a part of the enactment of Senate Bill 543 (Section 10) of the 2019 Legislative Session.

As required by the legislation, the Commission is comprised of a variety of professional disciplines, intended to provide a wide array of professional experience and expertise. Current members of the Commission on School Funding include:

- Dr. Nancy Brune, Luz Development Institute
- Dusty Casey, Chief Financial Officer, Oasis Academy
- Andrew J. Feuling, Superintendent, Carson City School District
- Jason Goudie, Chief Financial Officer, Clark County School District
- Guy Hobbs, Managing Director, Hobbs Ong & Associates
- Dr. David Jensen, Superintendent, Humboldt County School District
- Paul Johnson, Chief Financial Officer, White Pine County School District
- Mark Mathers, Chief Financial Officer, Washoe County School District
- Punam Mathur, Executive Director, Elaine P. Wynn & Family Foundation
- Jim McIntosh, Chief Financial Officer, City of Henderson
- Joyce Woodhouse, former Nevada State Senator

Dr. Karlene McCormick-Lee and Dr. Lisa Morris-Hibbler previously served on the Commission, and both made notable contributions to the work embodied in this report.

During the course of its work, the Commission has been supported by the State Superintendent of Education, the staff of the Nevada Department of Education, and the Office of the Attorney General. Where financial resources have permitted, the Commission has also been supported by the work of subject matter experts. The Commission has been meeting on a monthly basis since the fall of 2019.

Per Senate Bill 543 (Section 11), the Commission on School Funding was charged with several tasks by the Nevada State Legislature, including:

- The provision of guidance to school districts and the Department of Education on the implementation of the Pupil-Centered Funding Plan.
- The monitoring of the implementation of the Pupil-Centered Funding Plan, including the making of recommendations to the Legislative Committee on Education for the improvement of said implementation.
- The review of various cost adjustment factors and recommendation of revisions thereto.
- The review of the statewide base per pupil funding amount, the adjusted base per pupil funding for each school district, and the multipliers for weighted funding for each category of pupils, and recommendations for any revisions to create an optimal level of funding for public schools in Nevada. If more funding is required to achieve optimal funding than was appropriated from the State Education Fund in the immediately preceding biennium, the Commission is also charged with identifying a method to fully fund the recommendation within ten years of the date of the recommendation.
- The review and recommendation of any laws and regulations that would improve the efficiency or effectiveness of public education.

In addition to the direction set forth in SB 543, the Commission was further charged with examining sources of revenue to fund public education through the passage of AB 495 during the 2021 Session of the Nevada Legislature. AB 495 further mandated that a report from the Commission, with written findings and recommendations pertaining to funding for education be submitted to the Governor and the Director of the Legislative Counsel Bureau on or before November 15, 2022.

The focus of this report is upon the second and last bullet points listed above, as the various other tasks assigned to the Commission on Education Funding have been previously reported (or are reported under separate cover) and have been transmitted to the appropriate State body for consideration. It is noteworthy that the Commission filed a report in April 2021, with the appropriate State officials and agencies covering topics relating to the tasks described above.

Restated, the focus of this report is upon the identification of funding for schools in Nevada that would achieve the objective of optimal funding. The remaining focus is upon identification of a method (or methods) to fully fund the recommended funding level within ten years of the date of this report. This report is intended to meet the mandate set forth by the Nevada State Legislature when it adopted SB 543 in 2019 and AB 495 in 2021.

OPTIMAL K-12 FUNDING AND CURRENT K-12 FUNDING

Funding for the K-12 education system in Nevada has historically been considered sub-optimal. Whether viewed through the lens of various national rankings of student achievement, or through comparisons to peer states in terms of resources dedicated to the K-12 education system, Nevada arguably underachieves in providing the resources necessary to optimally fund education. In fact, the Legislature recently commissioned a study to estimate the cost of an adequate education given Nevada's education standards, and the report concluded that funding falls significantly short of meeting those standards (see Appendix III for the full report). Subsequent updates of this report in 2015 and 2018 reached similar conclusions.

SB 543 specifically attempts to address this issue by tasking the Commission with identifying a method to fully fund the identified shortfall in funding over a ten-year period. The recommended level of funding, per the language of SB 543, is intended to be the difference between the amount appropriated in the immediately preceding biennium and the amount needed to achieve optimal funding. This amount, then, represents the additional funding – above current funding for K-12 education – Nevada must commit to close the gap between current and the targeted, optimal funding levels.

The Commission spent considerable time and effort in defining and quantifying what optimal funding for education in Nevada may be. Optimal, by definition (per Miriam-Webster), means "most desirable or satisfactory", or (per the Cambridge Dictionary) the "most likely to bring success or advantage". Synonyms for the term "optimal" include excellent, first-rate, outstanding, peerless, superior, unmatched, and unsurpassed, among many others. Interestingly, antonyms for "optimal" include the terms mediocre, passable, and second-class, among others. By any definition or meaning, the determination of what may comprise optimal funding for education in Nevada leans toward a high standard.

Given that reasonable minds can differ regarding this topic, one thing that cannot be debated is how Nevada compares to peer states in terms of its commitment to funding education. This, in essence, profiles Nevada's funding efforts in a way that they can be described as either the synonyms would suggest, or as otherwise. Most would conclude that it is as otherwise.

The quantification of the amount of additional funding needed – above current commitments – is perhaps the most critical exercise in this report. It is this quantification that will establish the target funding needed for the ensuing decade and will provide a measuring stick against which annual and biennial funding can be measured for compliance with the targets. In essence, it is these values that will determine progress – or lack of progress - toward optimal funding over the coming ten years.

It is important to note that the comparative values that appear in this report have been reviewed to ascertain that they are similar in composition and can provide a fair, reasonable, and reliable basis for comparison. That is, there should not be any instances of one value including capital and another excluding capital, or one value including federal funds and another not. Establishing these targets is fundamentally critical to the process, and care has been taken to avoid argument regarding the scope and scale of the challenge. This, hopefully, will allow for focus to be placed upon finding solutions as opposed to debating whether there is a problem. The problem exists, and the quantification of the problem is addressed herein.

QUANTIFYING THE TARGET FUNDING LEVELS

The charge given to the Commission was to identify the funding needed to create an optimal level of funding for public schools in Nevada. Such an undertaking - achieving the "most desirable or satisfactory" level of funding, or that "most likely to bring success or advantage" - can involve divergent viewpoints as to the programming needed to meet these very high bars. However, one simple metric that is less subject to debate is how Nevada compares to peer states in funding education. Of course, increasing Nevada's per pupil spending to better represent national commitments to education does not necessarily achieve optimal spending. To test whether the national average is a fair marker for Nevada, the Commission also quantified the level of spending recommended by Augenblick, Palaich and Associates ("APA"), the subject matter experts that have studied Nevada's education and funding system for many years. In 2006, APA conducted a study for the Nevada legislature to determine the resources needed to ensure all Nevada students can meet state and federal requirements (see Appendix II for the full report). In 2015 and again in 2018, APA updated the 2006 study and also estimated the base cost figure for per pupil expenditures as well as the adjustments necessary for students with special needs, including Special Education, At-risk and English Language Learner (ELL) students (see Appendix III for the full report). The funding per pupil as recommended by APA is the closest current approximation of funding adequacy that would provide for quality education in Nevada, and it is this target that should be viewed as a rational funding goal for K-12 education in this report. The reports from APA are attached to this report as Appendix II and III.

As will be shown herein, the level of spending on a per pupil basis recommended by APA greatly exceeds the amount of spending that would align Nevada with the national average. This strongly argues that the national average, as a funding target, falls short of what the subject matter experts would consider "optimal" for Nevada. Moving Nevada to the national average represents a goal that only begins to achieve the objectives laid out in SB 543. It does, however, provide for a meaningful metric along the path.

The funding targets - expressed on a per-pupil funding basis - to achieve parity with spending on a national average basis or to achieve the APA recommended funding level have been quantified and expressed as a ten-year funding goal (as directed by SB 543). These targets are expressed as amounts of new funding needed each year to maintain pace in order to achieve parity with national averages or APA recommended funding levels.

The data that appears in the following table for Nevada spending per pupil and national average spending per pupil is sourced to *Revenue and Expenditures for Public Elementary and Secondary Education*, a publication of the National Center for Education Statistics (NCES) at the Institute of Education Sciences. The report date for this publication is May 2022, and the report includes data through the 2020 fiscal year (see Appendix IV for the full report). The information that is reflected in the NCES report is collected at the district level within each state and is reported to NCES by each state's department of education. These data are consistent across all states and include reporting on current expenditures; more specifically, they include funds spent to operate local public schools and local education agencies, including such expenses as salaries for school personnel, student transportation, schoolbooks and materials, and energy costs. The data exclude capital outlay, interest on school debt, and programs categorized as "other". Data reported by the states also include charter, special, and vocational schools. Federal

funds are also reflected in the per pupil spending values. These data are comparable between and among states, and between individual states and the national average. Providing further confidence is the fact that the data reported through NCES can be tied back to Nevada's 387 reporting for education. The May 2022 report from NCES is attached in its entirety as Appendix II to this report.

The following table, sourced to the NCES May 2022 report demonstrates how Nevada compares with other states on the basis of per pupil spending through Fiscal Year 2020 (the most recent year available from NCES), and also shows the national average per pupil spending for Fiscal Year 2020.

AMOUNTS AND PERCENTAGE CHANGES OF INFL. ADJ. CURRENT EXPENDITURES PER PUPIL, BY YEAR AND STATE OR JURISDICTION: FY 2018 THROUGH FY 2020

	CURRENT EXPENDITURES PER PUPIL [1]				
STATE OR JURISDICTION	INFL. ADJ. FY18	INFL. ADJ. FY19	% CHANGE (FY18 19)	FY20	% CHANGE (FY19 20)
United States [2]	$13,113	$13,395 [3]	2.2%	$13,489[3]	0.7%
Alabama	$10,073	$10,265	1.9%	$10,140	-1.2%
Alaska	$18,376	$18,681	1.7%	$18,313	-2.0%
Arizona	$8,680	$8,910	2.7%	$8,694	-2.4%
Arkansas	$10,541	$10,574	0.3%	$10,369	-1.9%
California	$13,129	$13,854 [3]	5.5%	$13,841[3]	-0.1%
Colorado	$10,614	$11,245	5.9%	$11,583	3.0%
Connecticut	$20,886	$21,471	2.8%	$20,889	-2.7%
Delaware	$15,843	$16,178	2.1%	$14,114	-12.8% [4]
District of Columbia	$24,011	$23,344	-2.8%	$23,754	1.8%
Florida	$10,018	$10,143	1.2%	$10,305	1.6%
Georgia	$11,155	$11,379	2.0%	$11,686	2.7%
Hawaii	$15,801	$16,384	3.7%	$16,564	1.1%
Idaho	$8,134	$8,168	0.4%	$8,337	2.1%
Illinois	$16,496	$16,535	0.2%	$17,483	5.7%
Indiana	$10,401	$10,412	0.1%	$10,798	3.7%
Iowa	$12,154	$12,120	-0.3%	$11,986	-1.1%
Kansas	$11,502	$11,505	#	$11,960	4.0%
Kentucky	$11,488	$11,457	-0.3%	$11,370	-0.8%
Louisiana	$12,063	$12,107	0.4%	$12,009	-0.8%
Maine	$15,622	$15,931	2.0%	$16,067	0.9%
Maryland	$15,711	$15,819	0.7%	$15,926	0.7%
Massachusetts	$19,000	$19,496	2.6%	$19,747	1.3%
Michigan	$12,117	$12,241	1.0%	$12,323	0.7%
Minnesota	$13,383	$13,505	0.9%	$13,502	#
Mississippi	$9,236	$9,398	1.8%	$9,614	2.3%
Missouri	$11,439	$11,527	0.8%	$11,397	-1.1%
Montana	$11,934	$12,171	2.0%	$12,065	-0.9%

AMOUNTS AND PERCENTAGE CHANGES OF INFL. ADJ. CURRENT EXPENDITURES PER PUPIL, BY YEAR AND STATE OR JURISDICTION: FY 2018 THROUGH FY 2020

STATE OR JURISDICTION	CURRENT EXPENDITURES PER PUPIL [1] INFL. ADJ. FY18	INFL. ADJ. FY19	% CHANGE (FY18 19)	FY20	% CHANGE (FY19 20)
Nebraska	$13,283	$12,945	-2.5%	$12,829	-0.9%
Nevada	$9,372	$9,426	0.6%	$9,548	1.3%
New Hampshire	$17,197	$17,730	3.1%	$17,825	0.5%
New Jersey	$21,062	$21,662	2.8%	$21,385	-1.3%
New Mexico	$10,328	$10,630	2.9%	$11,617	9.3% [5]
New York	$24,472	$25,271	3.0%	$25,273	#
North Carolina	$9,653	$9,953	3.1%	$9,903	-0.5%
North Dakota	$14,289	$14,253	-0.3%	$14,252	#
Ohio	$13,366	$13,643	2.1%	$13,729	0.6%
Oklahoma	$8,474	$9,347	10.3% [6]	$9,395	0.5%
Oregon	$12,340	$12,652	2.5%	$12,838	1.5%
Pennsylvania	$16,978	$17,156	1.0%	$17,172	0.1%
Rhode Island	$17,576	$17,813	1.4%	$17,725	-0.5%
South Carolina	$11,097	$11,166	0.6%	$11,286	1.1%
South Dakota	$10,640	$10,487	-1.4%	$10,392	-0.9%
Tennessee	$9,952	$10,097	1.5%	$9,974	-1.2%
Texas	$10,006	$10,023	0.2%	$10,394	3.7%
Utah	$7,854	$8,074	2.8%	$8,287	2.6%
Vermont	$20,961	$21,549	2.8%	$22,124	2.7%
Virginia	$12,672	$12,840	1.3%	$12,941	0.8%
Washington	$13,462	$14,566	8.2%	$14,542	-0.2%
West Virginia	$11,996	$12,461	3.9%	$12,647	1.5%
Wisconsin	$12,902	$12,888	-0.1%	$12,794	-0.7%
Wyoming	$16,726	$16,481	-1.5%	$16,665	1.1%
American Samoa	$5,040	$5,512	9.4%	‡	‡
Guam	$10,266	$10,039	-2.2%	$11,227	11.8% [7]
Commonwealth of the Northern Mariana Islands	-----	-----	-----	-----	-----
Puerto Rico	$6,840	$8,001	17.0% [8]	$7,260	-9.3% [8]
U.S. Virgin Islands	$16,054	$16,858	5.0%	$15,695	-6.9%

— Not available. Data are missing for the Commonwealth of the Northern Mariana Islands because the jurisdiction did not report student membership.
Rounds to zero.
‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY20 were reported to be 20 percent lower than in FY19; therefore, the data do not meet quality standards and are suppressed.
[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt. Per pupil expenditures are calculated using student membership. The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY20, Arizona, New York,

AMOUNTS AND PERCENTAGE CHANGES OF INFL. ADJ. CURRENT EXPENDITURES PER PUPIL, BY YEAR AND STATE OR JURISDICTION: FY 2018 THROUGH FY 2020

STATE OR JURISDICTION	CURRENT EXPENDITURES PER PUPIL [1] INFL. ADJ. FY18	INFL. ADJ. FY19	% CHANGE (FY18 19)	FY20	% CHANGE (FY19 20)

and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY18 and FY19, the data in the Nonfiscal public release file have been imputed and only include preschool students with disabilities, as reported for the Individuals with Disabilities Education Act (IDEA). The number of students enrolled in preschool in California is likely much higher. The NPEFS total student membership variable excludes prekindergarten membership in California for FY19 and FY20.

[2] United States totals include the 50 states and the District of Columbia.

[3] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. For FY19 and FY20, California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. For FY19 and FY20, this table only includes expenditures for K–12 and special education preschool programs in California. In FY18, fiscal data for all of California's prekindergarten programs are included.

[4] In Delaware, the decline in current expenditures per pupil is due primarily to a decrease in the amount reported for employee benefits paid by the state on behalf of local education agencies (LEAs). The state is reviewing this decline and may provide corrected data in the final file.

[5] New Mexico's increase in current expenditures per pupil is due to increases in instruction salary-related expenditures and student support services salary-related expenditures.

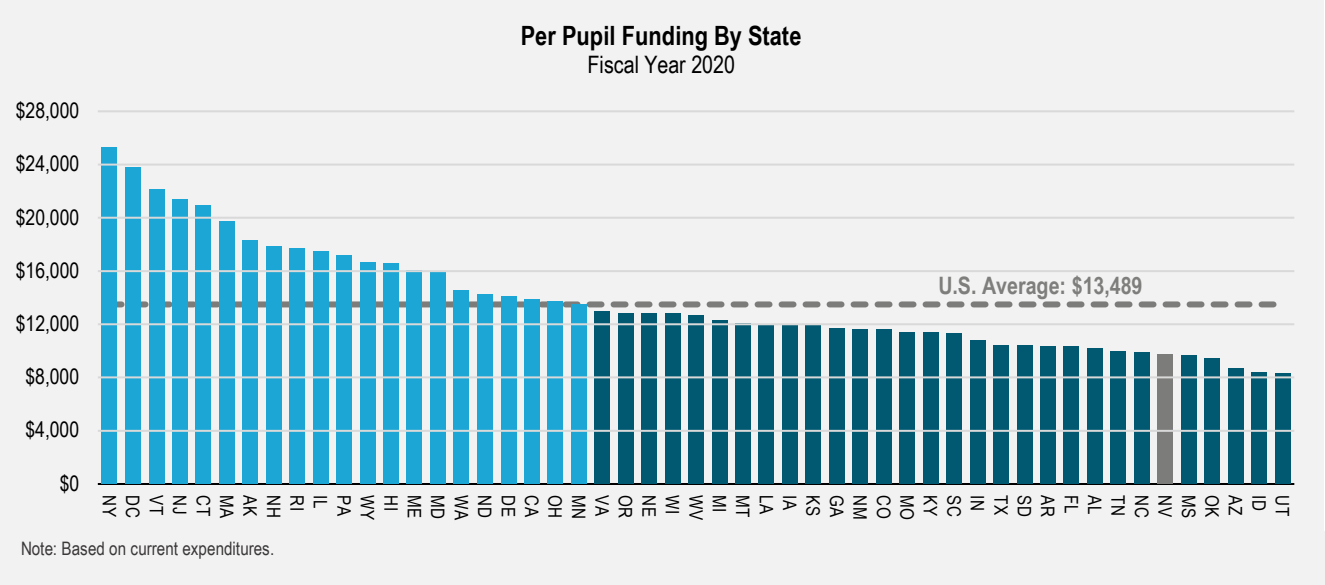
[6] Oklahoma's increase in current expenditures per pupil for FY19 is due to passage of House Bill 3705, which increased the compensation for certified and noncertified personnel. Additionally, the legislature approved the largest budget for common education in state history.

[7] Guam's increase in current expenditures per pupil is due to increases in instructional support and operations and maintenance expenditures to respond to COVID-19.

[8] In FY19, Puerto Rico's current expenditures per pupil increased due to a decrease in the number of students enrolled for FY19. In FY20, Puerto Rico's schools were closed for certain periods of time due to both earthquakes in the southern area of the Island and precautionary measures for COVID-19. These closures affected the provision of services for the school year.

NOTE: Data have been adjusted to FY20 dollars to account for inflation using the Consumer Price Index (CPI), which is published by the U.S. Labor Department, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers.

The illustration below compares per pupil spending, by state for Fiscal Year 2020.



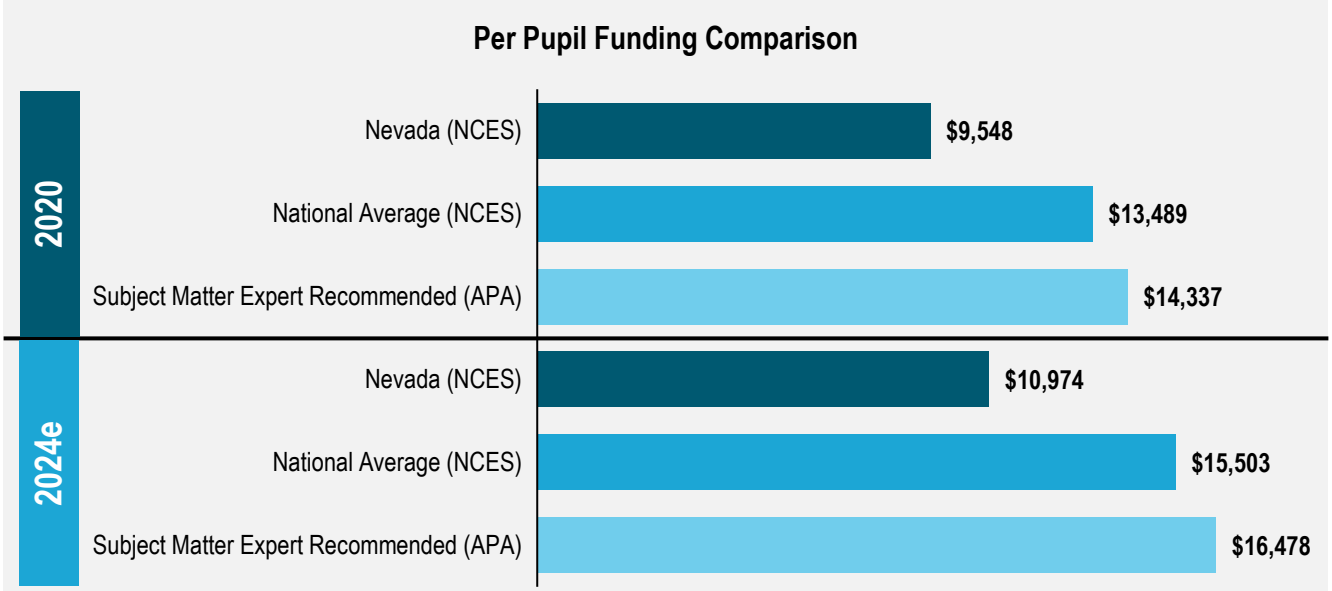
The target amount per pupil for the APA recommended funding level is also presented in a manner consistent with the structure and composition of the NCES values for Nevada and the national average. Thus, the amounts used for Nevada per pupil spending, national average per pupil spending, and APA recommended per pupil spending can be effectively used to compare and contrast spending levels and targets.

The most current data from NCES provides per pupil spending values for Fiscal Year 2020, which are shown below. The APA recommended per pupil spending has been inflated from the 2015 APA report to reflect this value in dollars consistent with the 2020 NCES data. Thus, all three values are presented in 2020 dollars.

PER PUPIL SPENDING FISCAL YEAR 2020	
Nevada Per Pupil Spending (FY 2020)	$9,548
National Average Per Pupil Spending (FY 2020)	$13,489
APA Recommended Per Pupil Spending for Nevada (FY 2020 dollars)	$14,337

From the above, it can be determined that Nevada spends $3,941 less per pupil than average state spending per pupil, and $4,789 less than the amount recommended by APA. It is these amounts, when multiplied by projected enrollment, that determine the amount of funding needed to close the gap between current spending and achievement of the national average and recommended funding level.

The task assigned to the Commission was to identify the level of funding needed, and to recommend methods of funding to achieve optimal funding over a ten-year period. Year one of that ten-year period is assumed to be the fiscal year beginning July 1, 2023 (Fiscal Year 24), with the tenth year being the fiscal year ending on June 30, 2033 (Fiscal Year 33). Accordingly, the Fiscal Year 2020 values cited above need to be inflated to Fiscal Year 2024 comparative values and, further, for the ensuing ten years. These amounts must also be multiplied by projected enrollment to produce the sum of money required each year to meet the stated funding targets. The 2020 values, inflated forward to 2024 are shown below.



The table below shows the incremental and cumulative funding needed each fiscal year beginning in Fiscal Year 24 through Fiscal Year 33 to achieve funding at the national average level by the tenth year. The incremental shortfall in funding shown for each fiscal year is the new funding needed in that year to maintain pace with the funding objective. The aggregate shortfall column illustrates the cumulative funding needed to meet the target. This represents the amount of new funding – above current funding levels – needed by each fiscal year to meet the target funding objective. The adjusted shortfall is discussed below.

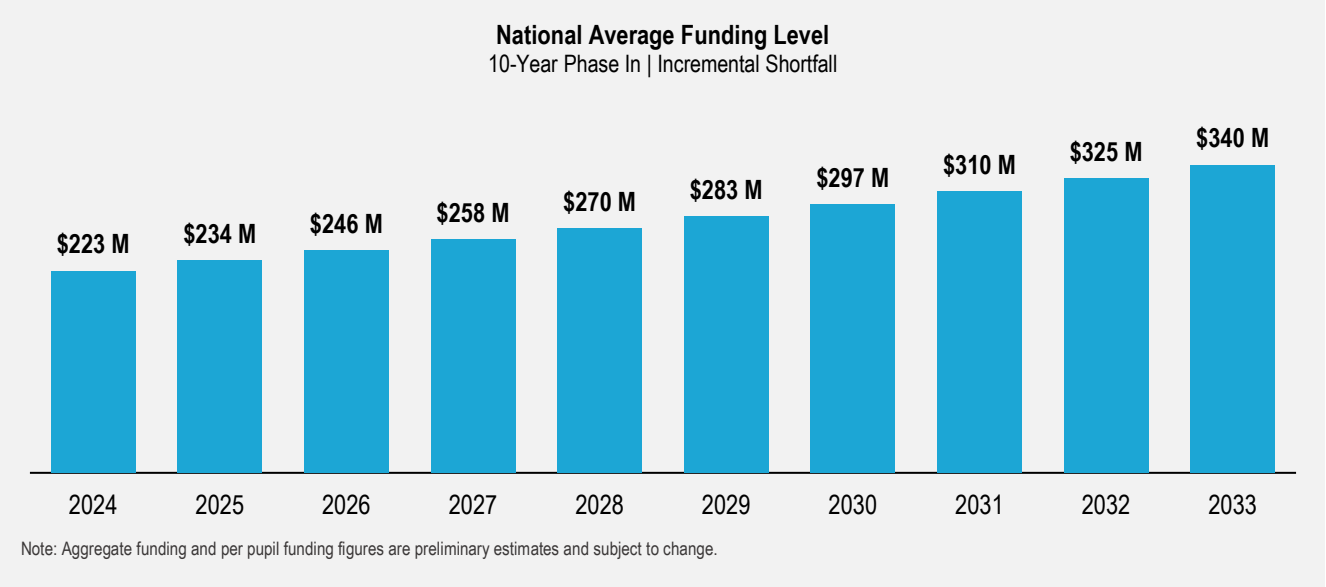
NATIONAL AVERAGE INCREMENTAL AND AGGREGATE FUNDING REQUIREMENTS

Fiscal Year	Incremental Shortfall	Aggregate Shortfall	Adjusted Shortfall
2024	$222,827,154	$222,827,154	$72,827,154
2025	$234,013,078	$456,840,232	$306,840,232
2026	$245,620,151	$702,460,383	$552,460,383
2027	$257,662,468	$960,122,851	$810,122,851
2028	$270,154,567	$1,230,277,418	$1,080,277,418
2029	$283,111,439	$1,513,388,858	$1,363,388,858
2030	$296,548,547	$1,809,937,404	$1,659,937,404
2031	$310,481,834	$2,120,419,238	$1,970,419,238
2032	$324,927,743	$2,445,346,981	$2,295,346,981
2033	$339,903,230	$2,785,250,211	$2,635,250,211

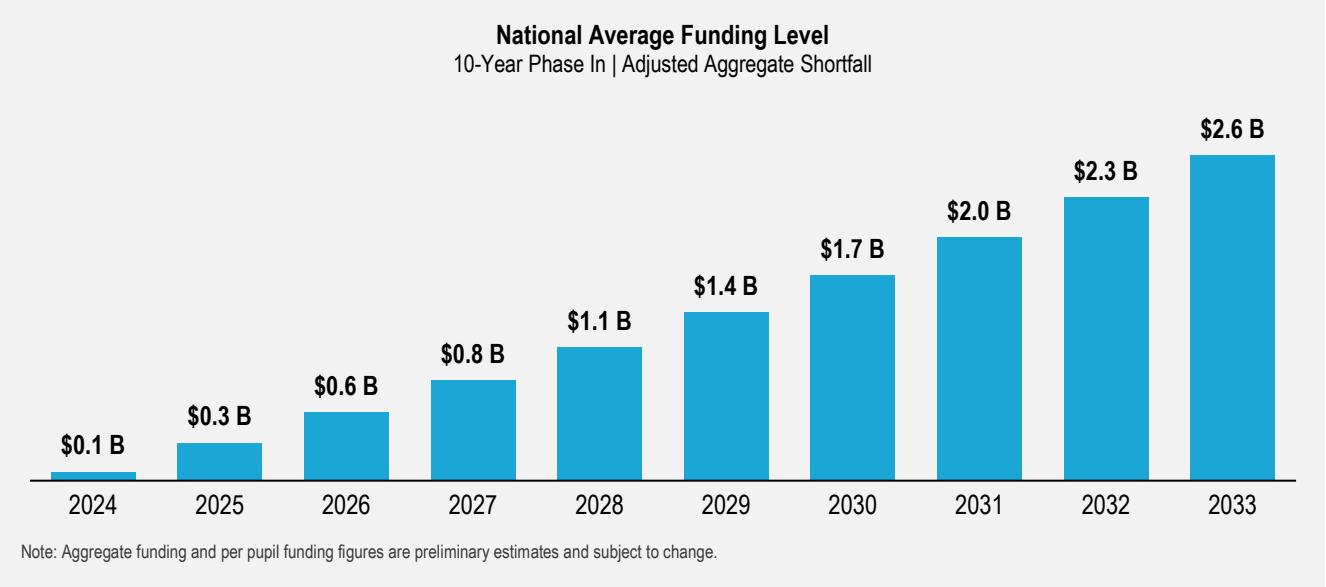
With the passage of AB 495 during the 2021 Legislative Session, additional revenue from a tax on the gross revenues of entities engaged in the business of extracting gold or silver will be available to the State Education Fund commencing in Fiscal Year 24, as will a portion of the Net Proceeds of Minerals Tax (NRS 362.100 and NRS 363D). The amount of revenue from both elements of the mining tax is estimated to be approximately $150 million per year. The adjusted aggregate shortfall is shown in the adjusted shortfall column for both the national average and APA-recommended illustrations, both above and

below. The amount of revenue from both elements of the mining tax is deducted from the aggregate shortfall in each year to yield the adjusted aggregate shortfall.

It is important to note that the amount of funding needed each year has been inflated by two percent annually and the growth in student population has been increased by 0.5 percent each year. These values are shown graphically below.



Over a ten-year period, the required annual investment ranges from a low of $222.8 million in Fiscal Year 24 to a high of $339.9 million in year 10. It is important to focus upon the aggregate shortfall, shown below, as this is the cumulative amount of new funding required to meet the national average funding objective.



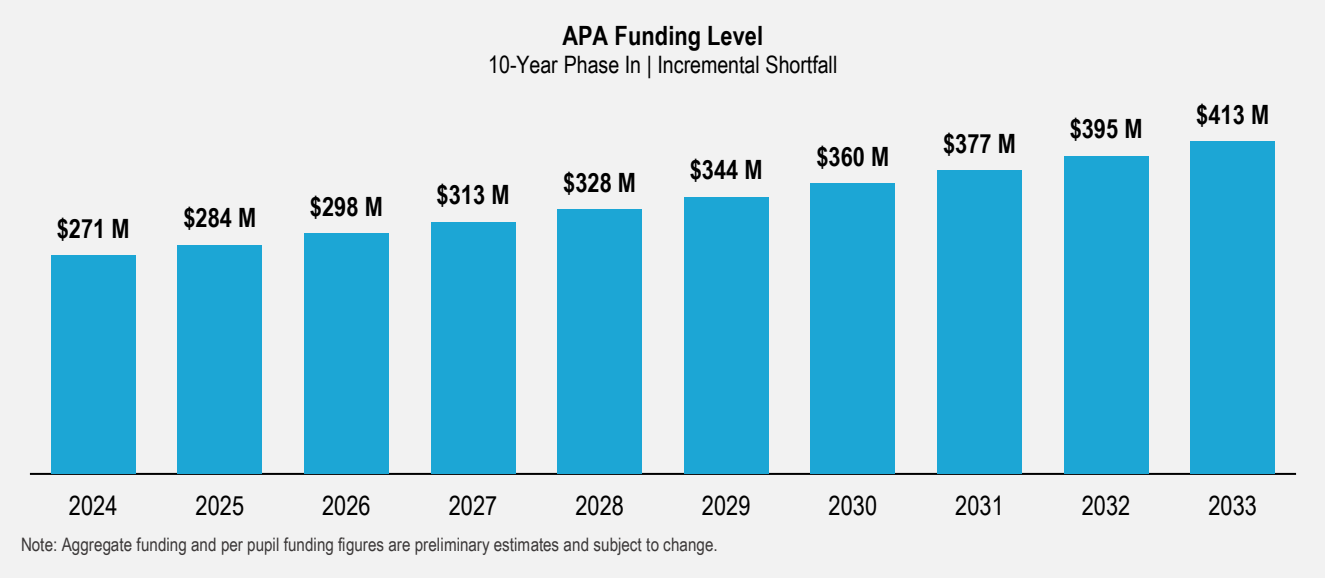
The amounts shown in the Incremental and Aggregate Shortfall illustrations, above, are the adjusted values.

The amounts needed each year (above current funding levels) to reach the APA recommended funding level per pupil are quantified below.

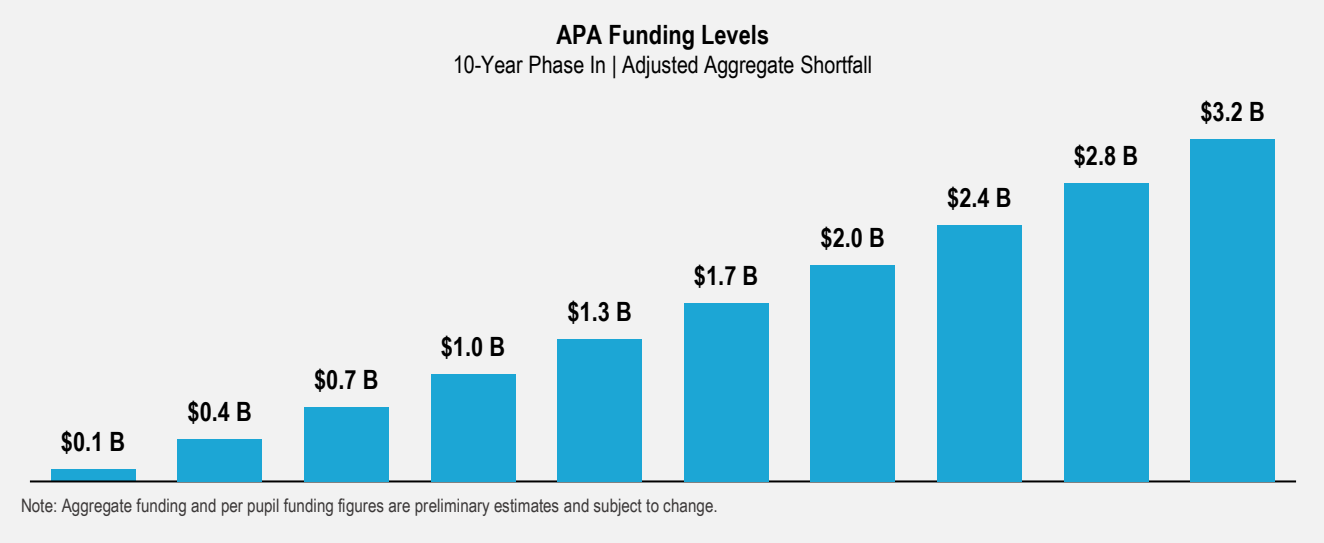
APA INCREMENTAL AND AGGREGATE FUNDING REQUIREMENTS			
Fiscal Year	Incremental Shortfall	Aggregate Shortfall	Adjusted Shortfall
2024	$270,773,723	$270,773,723	$120,773,723
2025	$284,366,564	$555,140,287	$405,140,287
2026	$298,471,175	$853,611,462	$703,611,462
2027	$313,104,684	$1,166,716,147	$1,016,716,147
2028	$328,284,756	$1,495,000,902	$1,345,000,902
2029	$344,029,608	$1,839,030,510	$1,689,030,510
2030	$360,358,028	$2,199,388,538	$2,049,388,538
2031	$377,289,394	$2,576,677,932	$2,426,677,932
2032	$394,843,685	$2,971,521,617	$2,821,521,617
2033	$413,041,505	$3,384,563,122	$3,234,563,122

Contrasted with the target funding levels to reach the national average in spending per pupil, the APA targets illustrate the funding needed to reach a level of funding that more closely resembles optimal funding - the goal established by the State Legislature via the passage of SB 543 (2019) and AB 495 (2021). Optimal funding may be viewed as the intersection between the estimated costs to meet Nevada's educational standards and the revenue needed to fund those costs.

Achieving the APA recommended funding levels over a ten-year period would require an average annual incremental investment of $324.0 million. The range over the ten-year period would be from a low of $270.8 million in year one to a high of $413.0 million in year ten. The amounts shown in the Incremental and Aggregate Shortfall illustrations, below, are the adjusted values.



Note: Aggregate funding and per pupil funding figures are preliminary estimates and subject to change.



The ten-year phase-in to reach the funding targets requires significant commitments of new funding per annum, generally well above the current level of funding commitments from state and local sources. The magnitude of the funding challenge dictates that administrative ease and transparency be considered, translating into a preference for the use of existing tax regimes versus those that would otherwise need to be developed from scratch. The capacity of existing tax sources suggests there may be sufficient room within those systems already in place to address the identified needs. Given that a premium is placed upon revenue sufficiency, predictability, and equity, the roster of potential funding sources shrinks considerably. This will be explored in further detail in sections of this report that follow.

SB 543 AND REQUIREMENTS TO FUND EDUCATION

Senate Bill 543 contains provisions that speak directly to the funding of the K-12 education system, depending upon revenue growth as projected by the Economic Forum from biennium to biennium. This language, repeated below, is intended to set the funding to respond to changes in projected revenue and to ensure that increased revenues, as projected by the Economic Forum, also inure to the benefit of the State Education Fund. Section 9, subsection 1 reads, in part, as follows:

> "1. *Except as otherwise provided in subsection 5, for the purpose of establishing budgetary estimates for expenditures and revenues for the State Education Fund as prescribed by the State Budget Act, the Governor shall, to the extent practicable, ensure that an amount of money in the State General Fund is reserved in the proposed executive budget for transfer to the State Education Fund which is sufficient to fully fund:*
>
> *a. If the Economic Forum projects that the revenue collected by the State for general, unrestricted uses will increase by a rate that is greater than the combined rate of inflation and the growth of enrollment in the public schools in this State in the immediately preceding biennium, an amount of money in the State General Fund for transfer to the State Education Fund for the subsequent biennium which is not less than the amount of money transferred to the State Education Fund from the State General Fund for the immediately preceding biennium increased by an amount not less than the rate of increase for the revenue collected by the State as projected by the Economic Forum."*

Provisions also exist within this section for projections of decreased revenue, in which case the State Education Fund would share in a proportionate reduction of State General Fund appropriations, and projections of increased revenue that are less than the combined growth in inflation and enrollment.

The importance of this statute cannot be overstated. It requires the Governor, by law, to increase the transfer to the State Education Fund in an amount that is commensurate with the growth in projected General Fund revenue from biennium to biennium (subject to the projected revenue growth exceeding the growth in inflation and enrollment). The only avenue for deviating from this funding requirement would be if the Governor, as the Executive Budget is prepared, determines the required increase to be impracticable. The State Legislature, during the budget approval process, could also determine the funding to be impracticable. During times of economic aberration, the practicability of meeting this requirement may prove to be challenging.

Given that this report is being crafted in advance of the Economic Forum's meeting in late 2022, it is not possible to quantify the increase in funding that may be due the State Education Fund if the Economic Forum projects revenues that are, in percentage terms, greater than the growth in inflation and enrollment. However, since it is entirely possible that the revenue projections will exceed this amount, it is worth noting that the amounts of funding identified in this report as being required to achieve either the national average or optimal funding levels have not been offset by any additional funding that may come via this statutory requirement. If such revenue augmentation were to arise from the projections of the Economic Forum, adjustments to the "Adjusted Shortfall" columns of the above tables could be made in a manner similar to adjustments made for the revenues from the mining taxes. The formula for these adjustments would be Aggregate Shortfall (as shown in the tables titled *National Average Incremental and Aggregate Funding Requirements* and *APA Incremental and Aggregate Funding Requirements*), less the amount to be credited to the State Education Fund from the mining taxes, less the revenue to be applied from the Economic Forum projections. This remainder equals the net Adjusted Shortfall.

HOW FUNDING WOULD BE INVESTED OVER THE 10-YEAR PERIOD

While the foregoing focuses upon the funding needed to reach the targets of parity with the national average and subject matter expert recommendation, it does not address the question as to how the funding would be deployed programmatically to improve the performance of the K-12 education system in Nevada. As noted previously, achieving the national average in per pupil spending falls short of the recommended level of spending that could be better argued as optimal. This aside, there may still be those who may argue that reaching the national average is unfounded, either in terms of what the investment may achieve or, more simply, from the standpoint of averages being meaningless. The second argument has been debunked by virtue of the subject matter expert opinion of funding that is needed to optimally fund education. The former point that pertains to more of a "return on investment" question is certainly valid and is worth exploring.

To address this question, the Nevada Association of School Superintendents (NASS) and the chief financial officers represented on the Commission undertook an analysis of how the funding would be applied as it became available under a 10-year funding scenario targeting both the national average and recommended levels of funding. The application of funding to classroom and education-related programs as envisioned by NASS is summarized in Appendix I, attached to this report. The objective of this analysis was to identify areas of need that are currently unfunded or underfunded and to quantify the cost of attending to each area of need. The fact that the overall needs exceed the amounts identified as gaps between current funding and either the national average or recommended levels of funding is not a surprise, as these have been identified by the actual practitioners in Nevada who best understand the needs in their respective school districts and as a whole across the state. This serves to provide added credence to the use of the national average and subject matter expert recommendations as targets that are not overstated.

On the surface, there are several critical areas where there are known deficiencies in funding. Among these are the filling of existing vacancies in the classroom, filling of instructional vacancies that would enable the State's class size objectives to be met, the addition of non-instructional staff to support the classroom activities, enhancement of funding for the weighted categories that would achieve the recommended targets, and the rightsizing of compensation that would allow for the vacancies to be more readily filled and compete against other degree bearing professions. To this latter point, the current level of vacancies in both instructional and support staff positions strongly suggests that the education system is not being competitive when it comes to attracting and retaining staff. Under any scenario, this is something that must be addressed as it runs counter to the class size objectives set forth by the State.

ACCOUNTABILITY, REVIEW AND TRANSPARENCY

As a part of any increased investment in K-12 education, equal attention should be given to developing systems to measure the ongoing return on the investment. While it can be presumed that increased funding will lead to desired outcomes – improved graduation rates, improved testing results, workforce assimilation, etc. – the achievements along the path to optimal funding need to be routinely tested and evaluated. Public funding is being recommended to be invested to create returns that are not measured in dollars. Rather, the returns are measured in improved performance and student achievement, which are arguably more challenging to quantify. Methods and means to assess the impacts should accompany the additional investment, and the results of the periodic assessments should be used to recalibrate the course of future investment.

New reporting requirements were included in SB 543 in anticipation of the receipt of additional funding for K-12 education. These requirements include the creation of an annual report that includes a description of the personnel employed and services provided by the school district and by each public school during the prior year and any changes that the district or school anticipates making to the personnel and services during the current school year. Both the district and the schools are required to post this information on their respective websites and, in the case of schools, provide a written copy of the report to the parent or legal guardian of each pupil. Additional reporting requirements to those noted in this paragraph are listed in SB 543.

Development of the methods of assessment can be assigned to the Commission, as a starting point, or can be developed by the Department of Education through collaboration with the school districts. Once developed, the results of the assessment should be provided to the Legislature through the Legislative Counsel Bureau or the Legislative Committees on Education for broader dissemination to all members of the Legislature. The results of the assessments should be thoroughly reviewed and serve as a basis for continuation or alteration of the funding strategy discussed in this report.

APPROACH TO IDENTIFICATION OF FUNDING SOURCES TO ACHIEVE OPTIMAL FUNDING

The Commission chose to approach the task of identifying the potential revenue sources required to meet target funding levels through a tax reform or restructuring lens. Rather than identify a new funding source, increasing current tax rates, or targeting single industry taxes, the Commission preferred to examine the Nevada tax system as a means of adjusting the way taxes are collected or managed, improving the efficiency of the tax base, and maximizing economic and social benefits. As a critical first step to this process, the Commission identified characteristics and attributes of various taxation approaches. Among the attributes discussed and considered were economic neutrality, flexibility, integration, simplicity, ease of administration, exportability, uniformity, transparency, sufficiency, horizontal and vertical equity, predictability, stability, and political palatability. As a result, the Commission adopted the following key principles – in order of priority - to guide discussions and future decisions regarding revenue sources:

1. Sufficiency - The ability of the realized revenue to sufficiently fund targeted expenses.
2. Stability/Predictability - The ability of the tax to produce consistent and/or expected revenue in the face of changing economic circumstances over time.
3. Competitiveness - Maintaining a reasonable competitive balance with bordering states.
4. Equity (Horizontal & Vertical) - Individuals with similar wealth should pay about the same amount in taxes and those individuals with the ability to pay more taxes should contribute more.

The revenue source characteristics and principles prioritized by the Commission were in the forefront of consideration as a variety of funding alternatives were introduced. From the outset, the Commission chose to focus attention upon revenue sources already relied upon in Nevada to fund public programs and services. The rationale for this approach was a recognition that existing revenue sources represent accepted funding methodologies and have existing systems of administration. As such, identifying additional capacity within these sources was a logical step prior to exploring new funding regimes that may be less politically palatable. The sources initially explored included a wide array of funding options. Given that revenue sufficiency was viewed by the Commission as a primary objective, other traditional funding sources that would produce insufficient revenues to support optimal education funding were excluded from consideration. The focus remained on those revenue sources that could meet the sufficiency threshold: property (ad valorem) taxes, sales and use tax, business taxes, gaming tax, and mining tax. The Commission raised the following concerns:

- The stability and predictability of certain revenue sources – particularly the industry-specific taxes that are subject to economic volatility.
- Business-specific tax sources may prove to be problematic as primary education funding sources due to exposing the funding sources to periodic economic cycles and further exacerbated by conditions created by the COVID-19 pandemic.
- Equity between and among certain clusters of taxpayers, and,
- Designing a balanced revenue portfolio for the ensuing decade may require blending and expanding reliance on an array of funding sources to meet the overall funding objectives.

Via thorough and lengthy deliberations, the Commission determined that a nearer-term focus on broader-based property tax and sales/use tax systems would best satisfy the adopted revenue principles. Therefore, the Commission's identification process for sufficient, predictable, and equitable funding sources concentrated on existing excise (sales and use tax) and upon property (ad valorem) taxes.

FUNDING THE TARGET – REVENUE SOURCES

As noted, there are only two sources of tax revenue that have the capacity to achieve the identified levels of annual funding increases over time – property tax and sales tax. While other tax sources can certainly be considered to complement or supplement the overall funding strategy, the revenue demands to achieve the targeted levels of funding in the coming decade would not be achievable without significant contributions from the tax capacity that exists within the property and sales tax systems.

Perhaps as important as revenue sufficiency, an examination of Nevada's property tax system also offers a much-needed opportunity to modernize the system. Once heralded as Nevada's most stable and predictable revenue source, the introduction

of property tax abatements has complicated and confounded the calculation of the value of a unit of property tax, while the unique use of depreciation and replacement value has further separated property assessments from a market-based reality.

It is also notable that of the ten states in the US with the highest amount of funding on a per pupil basis, each relies upon property tax as a primary funding source. Property tax has also historically been one of Nevada's principal methods of funding education, as have revenues from sales and use tax.

With respect to Nevada's sales and use tax system, we are now confronted with comparatively high excise tax rates on applicable transactions against a base of transactions that continues to become narrower. This is not a new issue and, inevitably, Nevada will need to attend to this to maintain both fairness in the application of the tax and to manage very apparent volatility issues. Changes in the economy attributable to technology and the clear shift to services versus tangible goods threaten to weaken Nevada's transaction tax base as time goes on.

Of course, the raising of either (or both) of these revenue and funding sources presents itself as particularly challenging from a political and popular perspective. Both of these revenue sources impact all residents and businesses, which is to say that both are broad-based. This reality aside, these are the two revenue sources that fund state and local government services – including education - to the highest degree. These are the traditional and customary funding sources for education in Nevada, both through state support and through locally generated revenues that now inure to the State Education Fund. As there is significant tax capacity available within both of these revenue systems – much of which was created through the design of both – it is logical to focus upon these systems as potential solutions to the funding challenge for K-12 education. It is also logical for the State to consider modernizing each to align them with the realities of today's economy.

AD VALOREM REVENUE AND TAXATION PRINCIPLES

As previously noted, property tax is being discussed as a revenue source to fund the target funding levels for education for the following reasons:

- It is a traditional method of funding education in Nevada and elsewhere throughout the country.
- Because of the application of abatements and other limitations upon the rates of taxation, there is significant capacity within the existing property tax system to contribute to the education funding challenge.
- The property tax system in Nevada has undergone many changes since the Tax Shift in 1981 and needs modernization to align the methods of assessment, application of tax rates, and the various limitations that have been imposed over time with best practices.
- Property tax is broad-based and does not rely upon single industries or select groups of taxpayers to bear the burden.

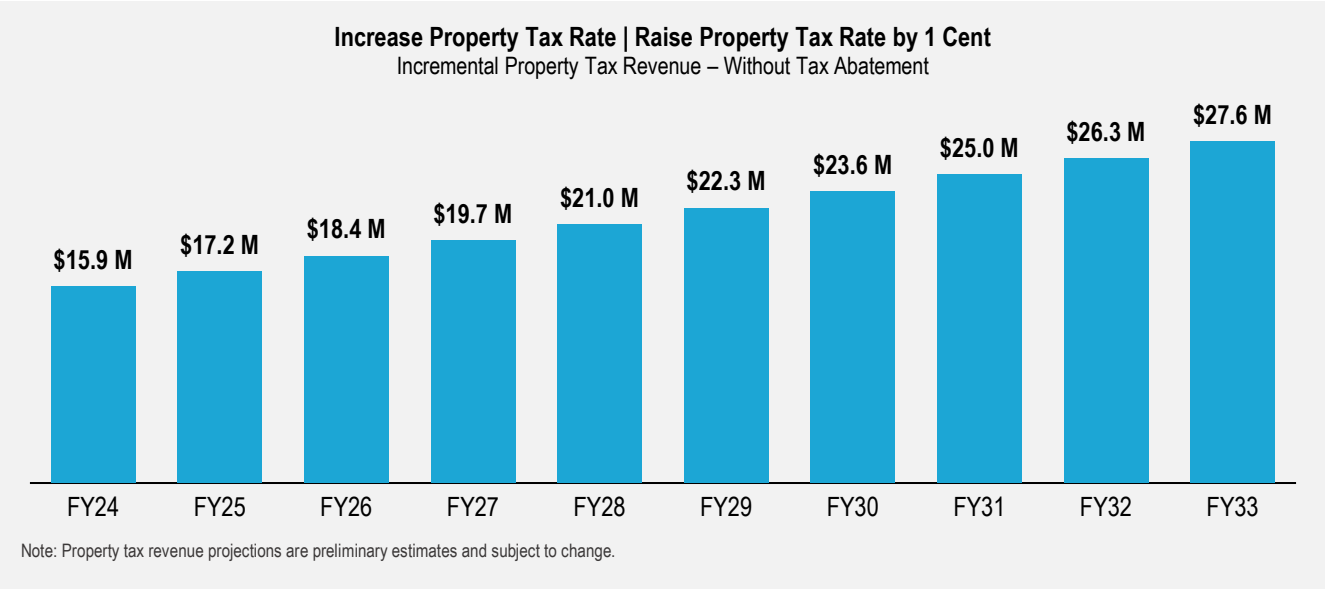
Property tax in Nevada is determined by multiplying the assessed valuation of property (divided by one hundred) times the combined ad valorem tax rate for the taxing districts in which the property is located. Thus, it is the product of the assessed valuation and the applicable overlapping tax rate. Assessed valuation is a function of taxable valuation, which is determined by adding the full cash value of the land to the replacement cost of the improvements (less depreciation).

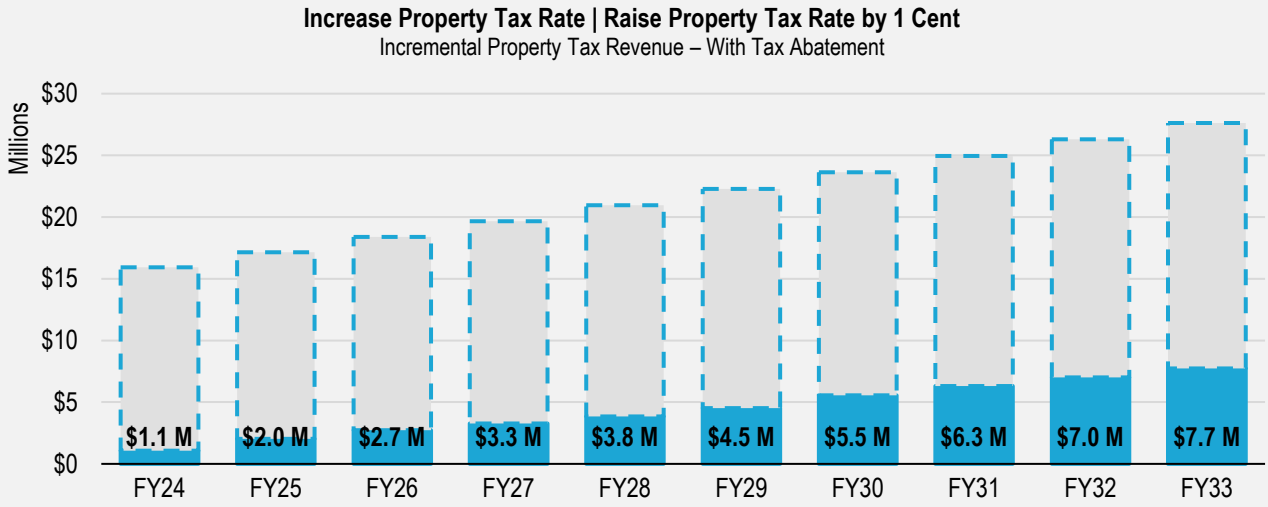
Tax rates are governed by both the Nevada Constitution and Nevada Revised Statutes. Simply put, the Constitution places a limitation of no more than $5.00 per $100 of assessed valuation upon the combined property tax rate levied against property. This is further constrained by a statutory limit of no more than $3.64 per $100 of assessed valuation. Considering levies outside of the statutory limit, the upward limit of combined ad valorem rates stands at no more than $3.66 per $100 of assessed valuation. There are several units of government - particularly in the less urbanized parts of the State – that impose combined

tax rates equal to (or near) the $3.66 cap. Thus, while there may be headway within the Constitutional cap of $5.00, no room exists above the $3.66 combined rate (on a Statewide basis) as currently defined in statute.

Further limiting ad valorem tax revenue opportunities is the impact of property tax limitations known as the "abatements." The abatements serve to limit the growth of a taxpayer's property tax obligation from year to year by imposing an upward growth limit of three percent for single-family owner-occupied and qualifying rental residential property and eight percent for all other property. Beyond these limits, there are also secondary calculations (that consider the ten-year average of growth in assessed valuation by county and the change in the consumer price index (CPI) times two) that may further limit the growth in property tax bills from year to year. Application of the abatement limitations from year-to-year result in realized property tax revenue that – even if the tax rate is held constant – lags well behind the growth in actual assessed valuation. In application, growth in property tax revenue may, from time to time, also lag the growth allowed by the abatement limits. The result is that a penny of property tax, in a more traditional sense, is no longer worth a penny of property tax. For those local governments (including school districts) that depend upon property tax, the yield is far less than it was prior to the imposition of the abatement laws. While taxpayers enjoy constrained property tax bills, local governments and school districts must contend with growth in revenue that can be less than the growth in the cost of providing services.

To further illustrate the point regarding the diminished value of a unit of property tax due to the abatements, consider the graphics, below, that show the full value of a penny of property tax and the value remaining after the application of the abatement. Note that the value of the $.01 increase in property tax in Fiscal Year 24, unabated, is $15.9 million and that the abated value of this same penny is only $1.1 million. By year ten, the gap widens to nearly $20 million. The gap represents taxes that are assessed, but not passed through on the tax bill from year to year.





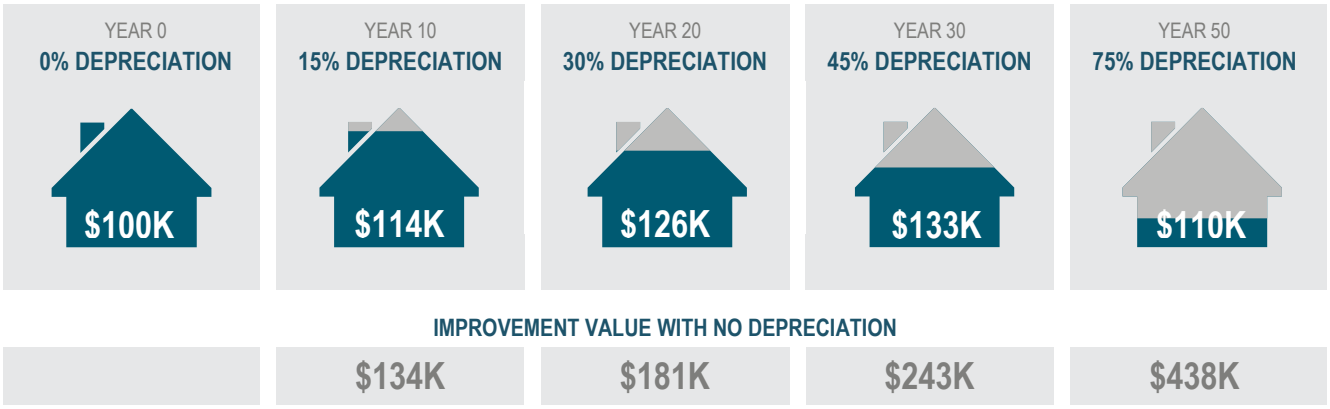
It is important to clarify that the use of the term "abatements" as it is used in this section refers specifically to property taxes on real and personal property that are calculated as due from property owners each year through the normal property valuation process with accompanying application of approved tax rates. This does not include the abatement of taxes upon real and personal property that may be approved under statutory eligibility criteria in support of economic development. Specifically, the economic development abatements that are approved by the Governor's Office of Economic Development (GOED) are not a part of this abatement discussion.

As noted, Nevada assesses property at the full cash value of the land plus the replacement cost of improvements to the land (depreciated by 1.5 percent per year for 50 years, to a residual value of 25 percent of replacement cost). Note here that the value of the improvements is determined by replacement cost – not by market value. Note also that the replacement cost is depreciated each year, further increasing the gap between market value and replacement cost. Nevada is the sole state in the country that applies a statutory depreciation factor in valuing property for taxation. The accumulation of depreciation over time is further demonstrated in the illustration, below.

YEAR 0	YEAR 10	YEAR 20	YEAR 30	YEAR 50
0%	15%	30%	45%	75%
DEPRECIATION FACTOR	DEPRECIATION FACTOR	DEPRECIATION FACTOR	DEPRECIATION FACTOR	DEPRECIATION FACTOR

Inherent to the explanation above is a recognition that Nevada does not align the value of property for taxation with the actual or market value of the property. Nevada's system necessarily results in property valuations that are markedly less than the true or market value of the property.

To further illustrate the impacts of depreciation over time, please refer to the illustration below, which demonstrates the spread between depreciated replacement cost values and the projected value of those improvements that continues to widen as properties accrue depreciation. This is a contributor to the gap between market and taxable values in Nevada that arises from the use of both replacement value and depreciation.



Note: For a property with improvements valued at $100,000 in replacement cost. Assumes 3 percent annual replacement and cost appreciation.

The discussion of the effects of depreciation is an important one. As noted, the application of depreciation of the replacement value of improvements, over time, creates an ever-widening gap between market value and depreciated value. While likely well-intended as a means of moderating tax impacts and, perhaps, to reward longer-term residents, it has resulted in revenue diminishment within the property tax system. Since the depreciation stays with the property and is not transported by the owners when they move to newer properties, the net result of the use of depreciation is a deeper chasm between true market value and depreciated value. Making modifications to the application of depreciation is not a new concept, as this was one of the objectives of SJR 14 (2019) and other past reviews. Of course, standing in the way of modernizing the tax system to eliminate this rather novel use of depreciation is the tax abatement scheme. In essence, elimination of depreciation would not produce appreciable additional revenue until and unless the abatements are addressed.

Given the above, the Commission focused its attention upon the application of abatements and on the effects of depreciation. The mere fact that one of the largest sources of annual funding for schools is derived from the levy of the $0.75 per $100 of assessed valuation operating rate across all school districts in the State necessitates that this funding source be examined for improved application. Beyond the $0.75 tax rate imposed by the State for school operations, several school districts across the State also rely upon property tax to fund significant portions of their annual capital needs. If this funding source were optimized without encroaching upon tax rate limitations, and the resulting revenue were administered through the State Education Fund and Pupil-Centered Funding Plan, it offers the most promising, predictable, and sufficient funding source available (in keeping with the criteria noted earlier).

It is noteworthy that the $0.75 per $100 of assessed valuation levy to support school operations is a rate that has remained unchanged since the 1983 session of the Nevada Legislature. Prior to the Tax Shift in 1981, the school operating levy had been $1.50 per $100 of assessed valuation but was lowered when sales and use tax was introduced as an offset to property taxes. The point remains that while much has changed within the economy and fiscal system since 1983, the school operating levy has remained unchanged despite changes to other revenue sources imposed to fund education (e.g., Room Tax, Cannabis Tax).

Any measure that would improve the yield from property tax must be accompanied by a change in the abatement laws or revenue will continue to be constrained at the prior abated levels. In other words, the abatements work to constrain the size

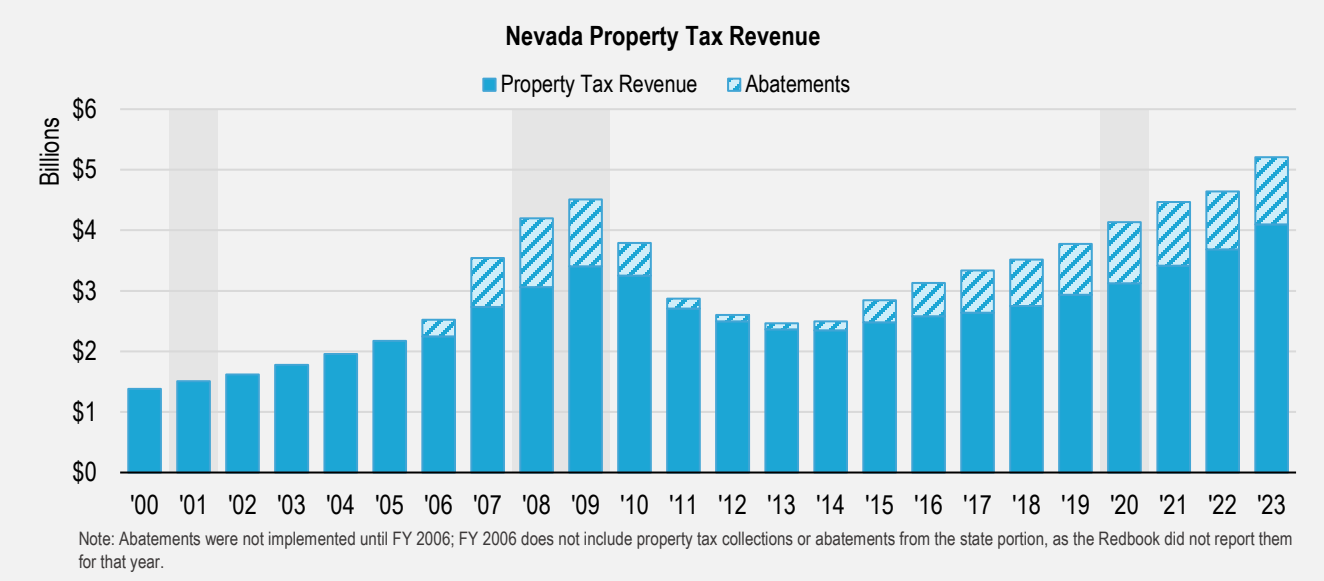
of the tax bill for property owners and do not affect the method of assessment or the tax rates applied to the assessed valuations. Consequently, changes to assessment methodology (including depreciation, taxable to assessed valuation ratios, or any other factor) would not serve to enhance revenue production. To be effective, nearly all solutions that include property tax revenue begin with changes to the abatement calculations.

Property tax is one form of taxation that may be partially offset by the federal government, thereby reducing the net burden borne by some individual taxpayers. In times when state and local property taxes are deductible from federal taxes for many taxpayers, the federal government does pay part of the freight. In a state where return of federal dollars is often at the lower end of the state-to-state comparisons, any increased federal support of governmental programs should be considered desirable.

As stated, virtually no meaningful property tax enhancement opportunities exist without first addressing the constraints inherent to the current system of property tax abatements. While the abatement program has served to suppress the growth of property tax assessments to property owners, it has also served to diminish the revenue capacity of property taxation. It is worth bearing in mind that the abatement program was put into place at a time – just prior to the housing bubble in the mid-2000's - when county assessors were concerned that property assessments would be the cause of rising property tax bills. Much has changed since that time.

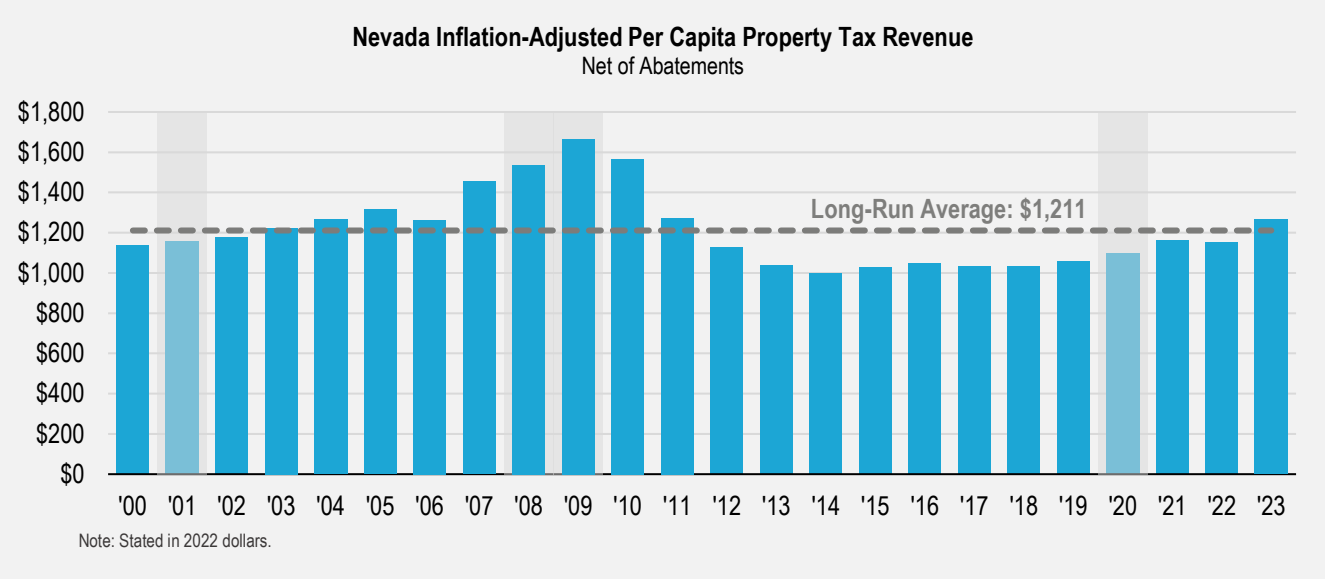
Some important facts about the impact of the abatements:

- Property tax revenue, as a staple of funding for education and other essential public services should grow on an inflation adjusted basis to maintain pace with per capita inflation-adjusted costs.
- Abatements represent taxes that are assessed, but not billed or collected.
- All other changes to the system of property taxation are constrained by the abatements, meaning that changes to the application of depreciation, method of assessment, increases to rates, or any other alteration would be muted by the abatements.
- Only since Fiscal Year 2021 has the total statewide property tax revenue exceeded the level of revenue produced in Fiscal Year 2009. This is illustrated in the exhibit below.

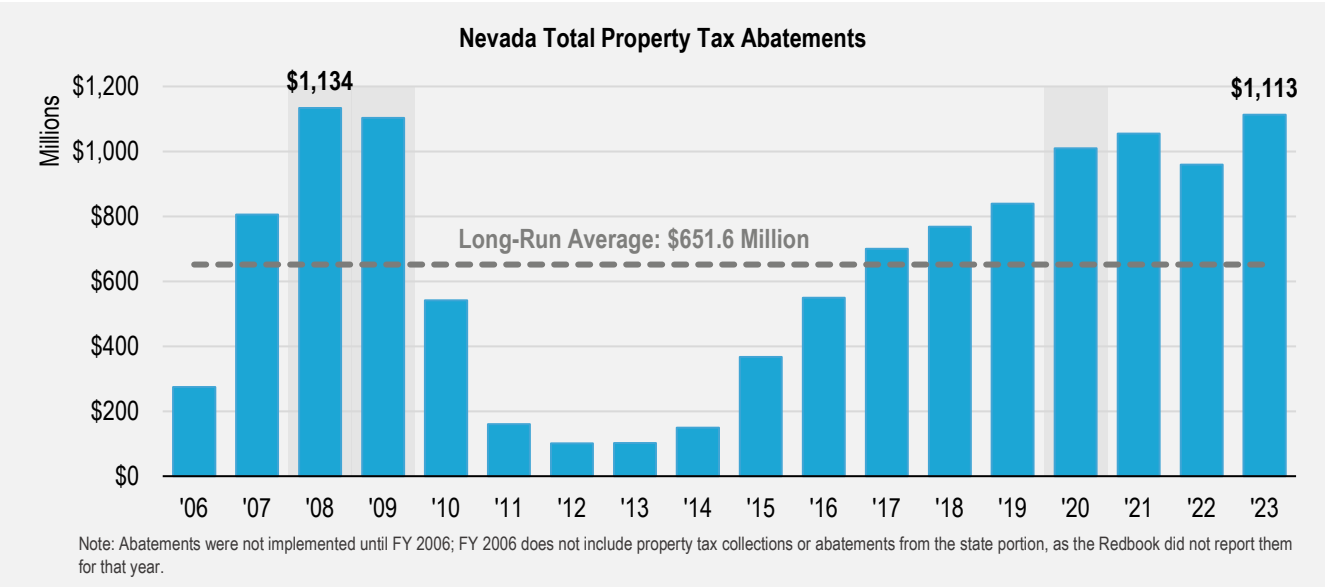


Note: Abatements were not implemented until FY 2006; FY 2006 does not include property tax collections or abatements from the state portion, as the Redbook did not report them for that year.

- When inflation adjusted and applied on a per capita basis, property tax revenue in Fiscal Year 2022-23 is comparable to Fiscal Year 2010-11 and Fiscal Year 2005-06. In recent years, property tax had declined on an inflation-adjusted per capita basis. This is illustrated below.

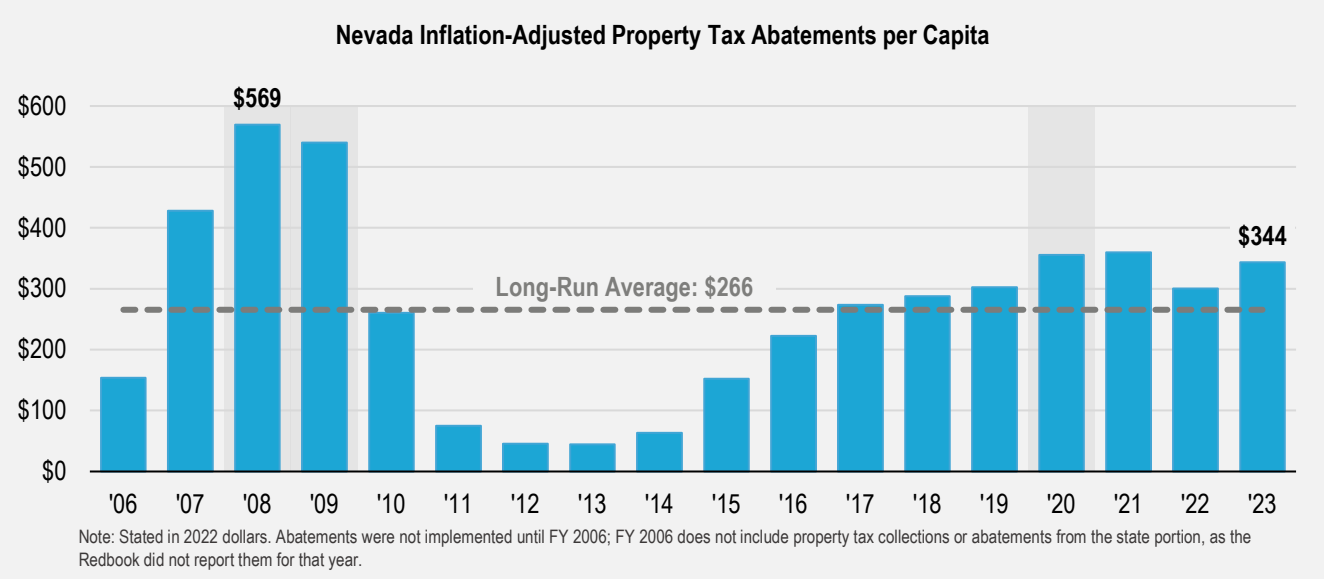


- Today, on a statewide basis, abatements total over $1.1 billion. Over the course of the 2021-23 biennium, cumulative abatements were expected to total $2.1 billion. Under current conditions, the aggregate level of abatement is expected to continue to grow each year.



- K-12 education's share of the abatements is roughly 38 percent of the total, amounting to $808 million over the 2021-23 biennium.

- Inflation-adjusted property tax abatements per capita are estimated at $344 per person, which is well in excess of the long run average of $266 per capita.



- In recent years, there are cases where the growth of the abatements, in percentage terms, exceeded the growth of the property tax revenue.

The current level of accrued statewide abatement exceeds $1.1 billion, which is an annualized value that continues to grow. If approximately 38 percent of this amount is directly attributable to the tax rate for education (including both operating and capital levies) and further presuming that the abatements will continue to grow over time and over the course of the ten-year funding period, it is estimated that placing the abated amounts into productive use could address a significant part of the funding challenge identified in the "Quantifying the Target Funding Levels" section of this report.

Since the abatements form an essential element of any funding plan for education, the next question properly focuses upon how the abatements may be used to address the challenge.

This discussion is not entered into lightly. Changes to the current property tax mechanics, whether it be through a relaxing of the abatements, adjustments to depreciation, or changes to assessment methodology, will result in increases in property taxes. The only way that this would not be the case would be if changes were made for purposes of modernization that are designed to be revenue neutral. Of course, if this were the case there would be no accompanying increase in revenue for education. Tax system modernization is a worthwhile endeavor on its own. However, the focus of this report and the substance underlying the discussion that follows is aimed at revenue enhancement for education (per the direction of SB 543 and AB 495).

Since the abatements act as an impediment to any significant revenue enhancement, it stands to reason that modifications to the abatements must be the first order of business. Following is a discussion of approaches that should be considered to alleviate the constricting effect of the abatements. Each of these approaches carries a different level of potential revenue production and, where possible, the revenue possibilities are quantified.

Regarding property taxes, the Commission recommends the following series of funding options for consideration. Modernization of the application of abatements necessarily includes all recipients of overlapping property tax rates. Stated another way, abatement relief that might benefit education also, under most circumstances, benefits other recipients of property tax revenue including the State, counties, cities, unincorporated towns, and special districts.

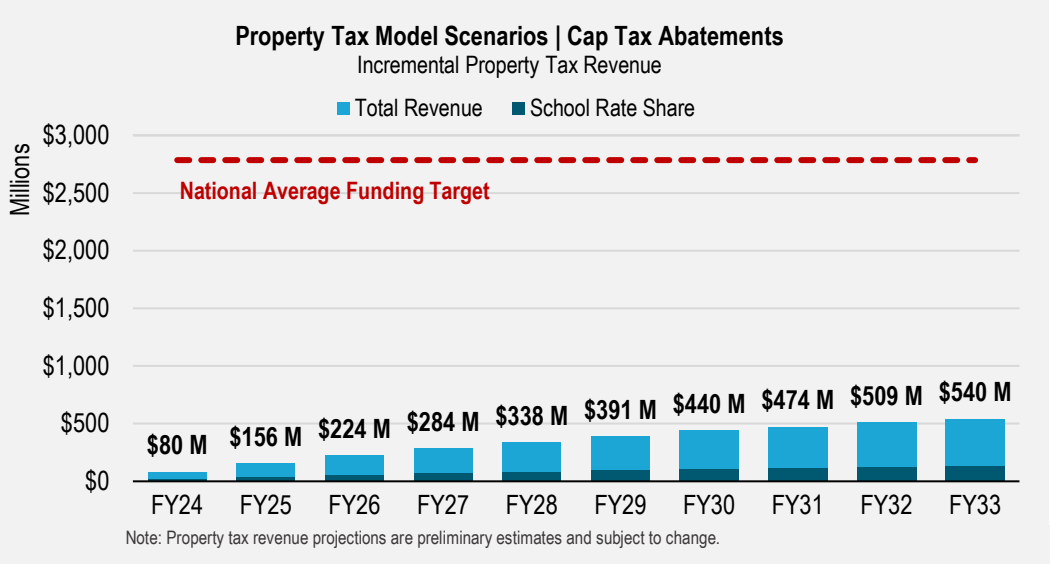
In the illustrations that follow, the national average funding target is used to demonstrate the degree to which each approach would meet the funding target. This is not to say that the achievement of the national average is a substitute for optimal funding. Rather, this is simply to show the revenue producing capability of the various approaches against a consistent target.

1. To stop the ongoing accrual of the abatements, **abatements can be capped at their current (Fiscal Year 2023) levels**. The more the abatements increase over time, the greater the opportunity cost of foregone revenue each year and the further the valuations diverge from market values. As the tables in this report evidence, the longer it takes to achieve the target funding, the more funding is needed each year to catch up. Capping abatements at current levels would yield revenues that, by year ten, would amount to an estimated **$129 million of a needed $2.6 billion** in additional funding for education (just to reach the national average). In the chart that appears below, the total amount of abatement relief for all property tax recipients is shown; of the $540 million shown in year ten, $129 million would flow to education.

SCENARIO ASSUMPTIONS

Cap Abatements at FY 23 Level

No Change to Depreciation

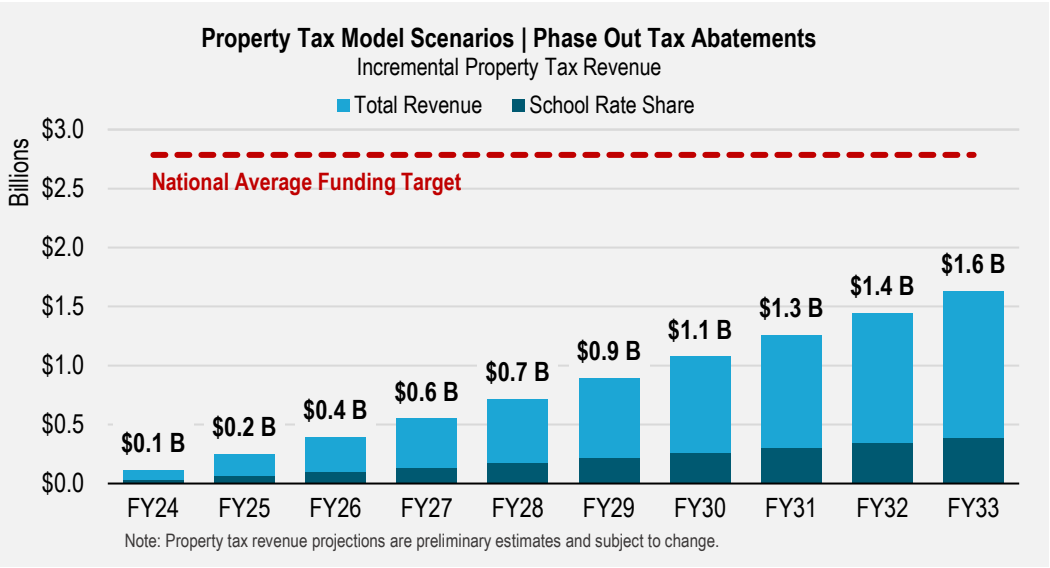


2. **Abatements can be phased out over time** to bring the abated funding into the equation for education and/or other government programs. The ten-year funding horizon noted in this report and mandated by SB 543 and AB 495 can serve as the phase-out period. Such a phase-out would eliminate further abatement accrual and would bring existing abatements into productive use. As is shown below, elimination of the abatements would return $1.6 billion in property tax revenue by year ten. Of this sum, **$390 million would inure directly to education**.

SCENARIO ASSUMPTIONS

Phase Out Abatements Between FY 24 and FY 33

No Change to Depreciation

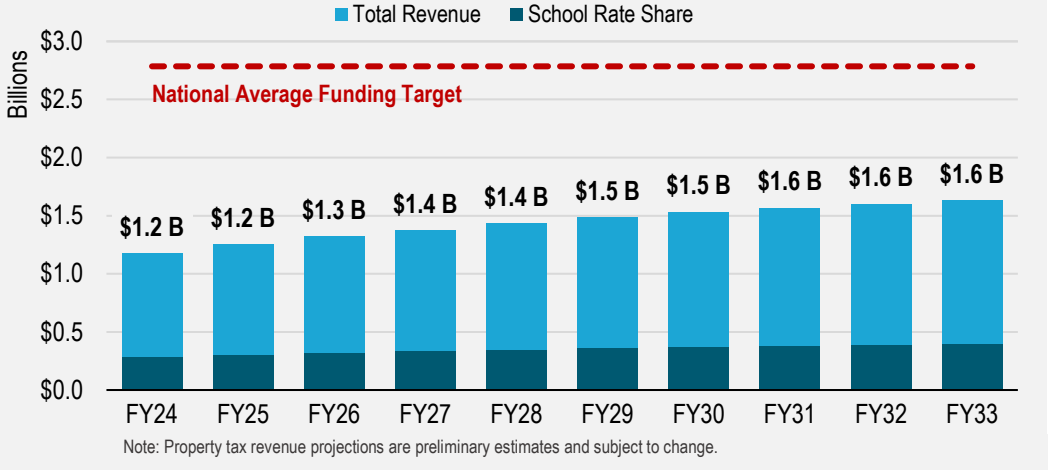


3. **An alternative to phasing out the abatements would be to eliminate them immediately**. Elimination of the abatements in Fiscal Year 2024 would produce the same result in year ten as would the phasing out of abatements. The primary difference with this approach would be a **superior production of revenues each year in advance of achieving the full benefit in year ten**.

SCENARIO ASSUMPTIONS

Eliminate Abatements in FY 24

No Change to Depreciation



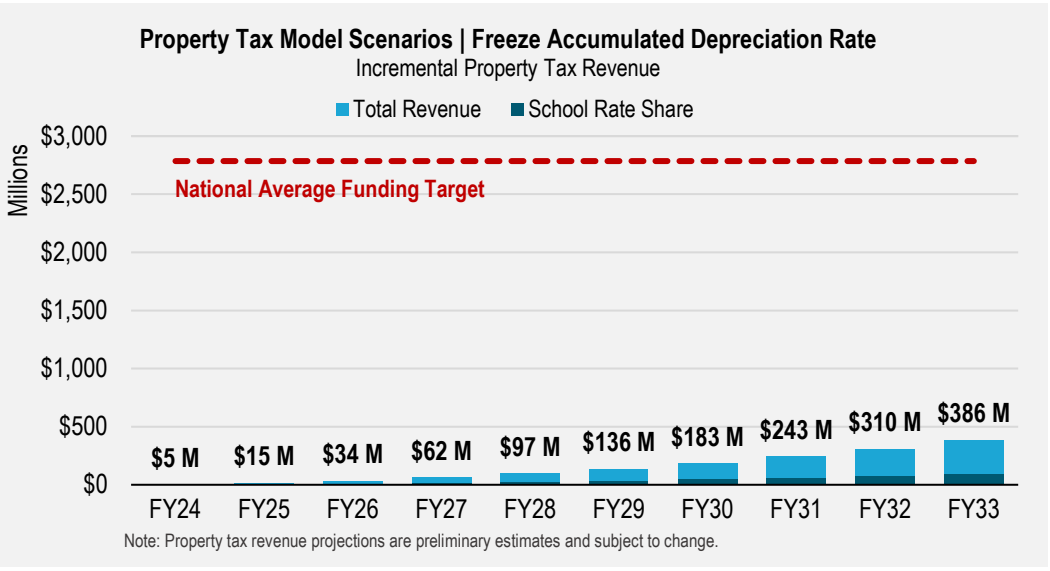
The next set of recommendations focus upon the effect of depreciation on property tax revenues and recommends alternative treatments of depreciation to yield property tax revenue relief for the funding of K-12 education. Due to the abatements, gaining revenue from the freezing, phased elimination, or immediate elimination of the depreciation factor is muted. However, due to new property being added to the tax roll and growth in valuations, there could be some revenue gains from addressing depreciation.

4. **Depreciation can be frozen at current levels**, whereby no additional depreciation beyond that accrued to this point would be added. As is shown in the illustration below, the revenue gain in the early years is negligible, particularly from the standpoint of that which would be available for education. Of the $386 million in added property tax revenue projected in year ten, **an estimated $92 million would be attributable to the school operating rate**. By itself, freezing depreciation would only produce three percent of the revenue needed by year ten to achieve funding at the national average, with scant contributions in the years preceding Fiscal Year 2033.

SCENARIO ASSUMPTIONS

No Change to Tax Abatements

Freeze Accumulated Depreciation Rate (No Increase)

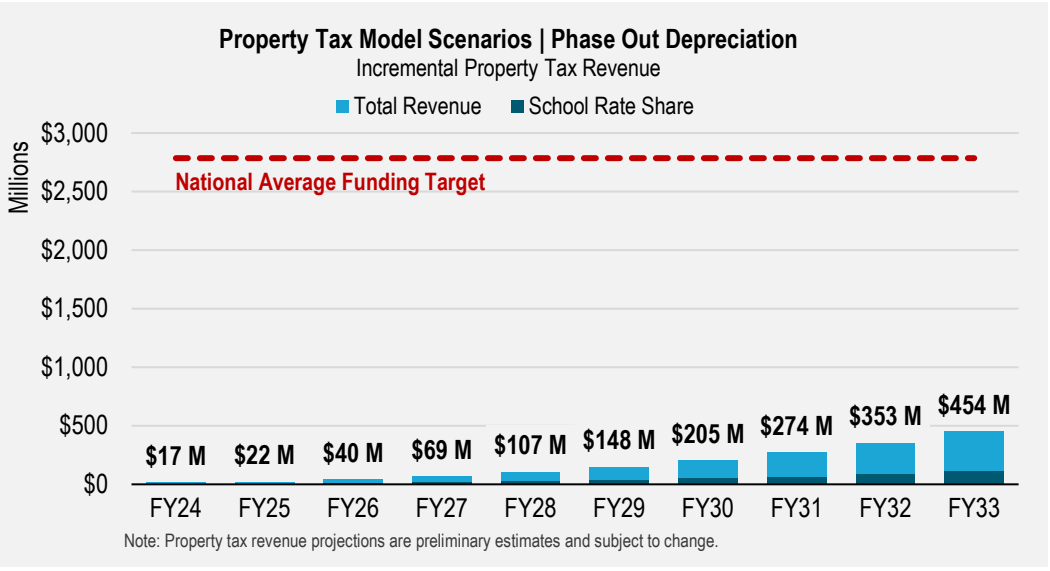


5. **Depreciation can be phased out over the ten-year period**. Phasing out the effects of depreciation over a ten-year period would increase the revenue yield above that of the freezing option, though it would still fall short of the mark of $2.6 billion in Fiscal Year 2033. For education, phasing out depreciation **would be expected to produce $108 million** of the $2.6 billion needed by year ten to achieve funding parity with the national average.

SCENARIO ASSUMPTIONS

No Change to Tax Abatements

Phase Out Depreciation Between FY24 and FY33

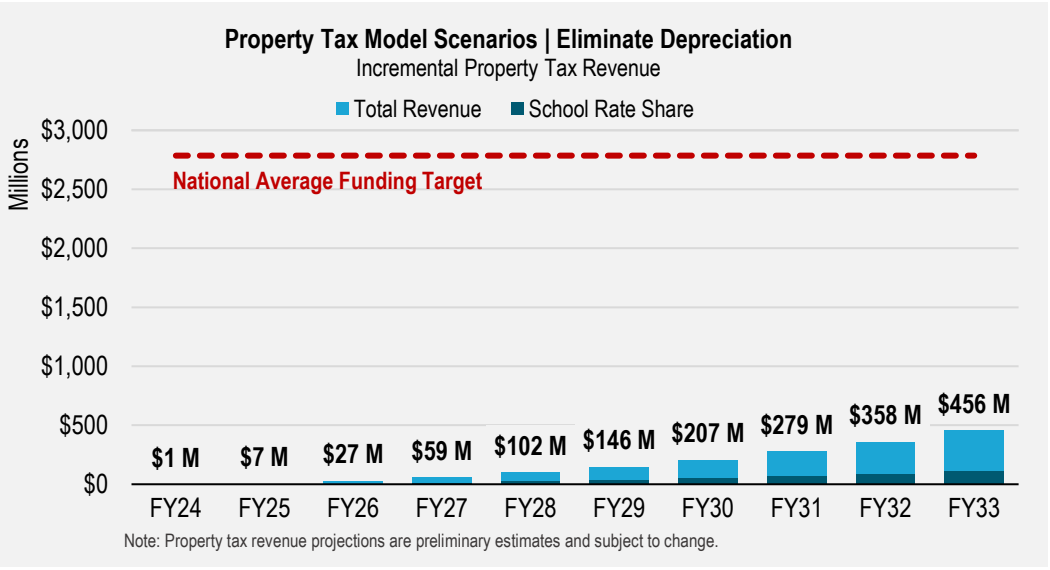


6. **Depreciation can be eliminated immediately**. Similar to the elimination of abatements, the yield in year ten is identical to the yield from phasing out depreciation. The **revenue production is estimated to be $108 million in year ten**. As is the case with other scenarios, the total property tax revenue production – including revenue for other recipients of property tax – greatly exceeds that which is exclusive to education.

SCENARIO ASSUMPTIONS

No Change to Tax Abatements

Eliminate Depreciation in FY24



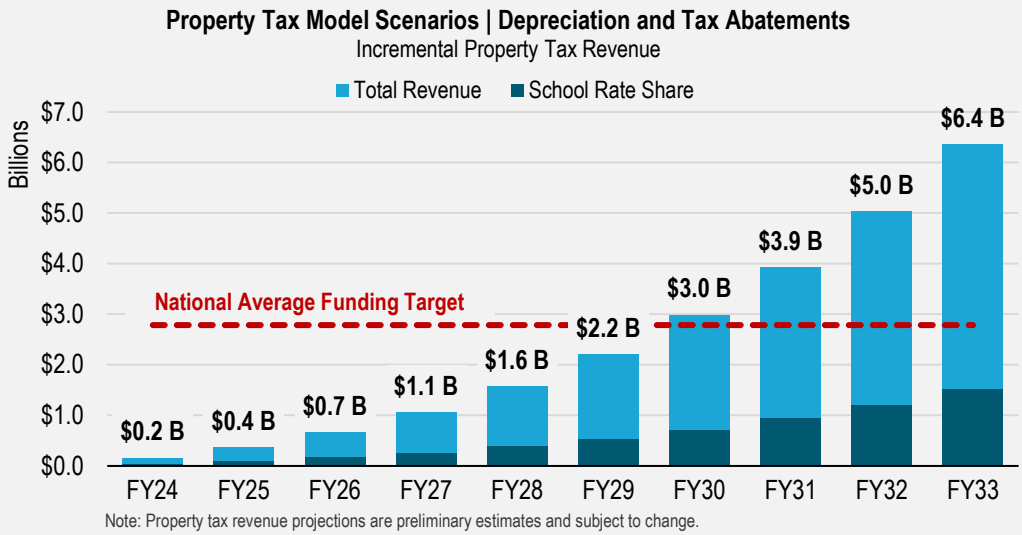
The next group of scenarios combine the effects of modernizing both the abatement constraints and the application of depreciation. As it should be clear that neither the modification of abatements nor depreciation, on their own, meet the test of revenue sufficiency for achieving the education funding target, a combination of modifications to both the abatements and depreciation are worth exploring.

7. The first combined scenario that was explored involves **phasing out both the abatements and depreciation over the ensuing ten years**. As is shown below, additional revenue estimated to be available from phasing out both of these constraints yields considerably more revenue in combination than if either were done individually. Of the estimated $6.4 billion in revenue, **$1.5 billion would inure to education**. While this is still considerably short of the $2.6 billion needed to reach parity funding with the national average, it does begin to demonstrate promise as a viable contributor to the funding goal.

SCENARIO ASSUMPTIONS

Phase Out Abatements Between FY24 and FY33

Phase Out Depreciation Between FY24 and FY33

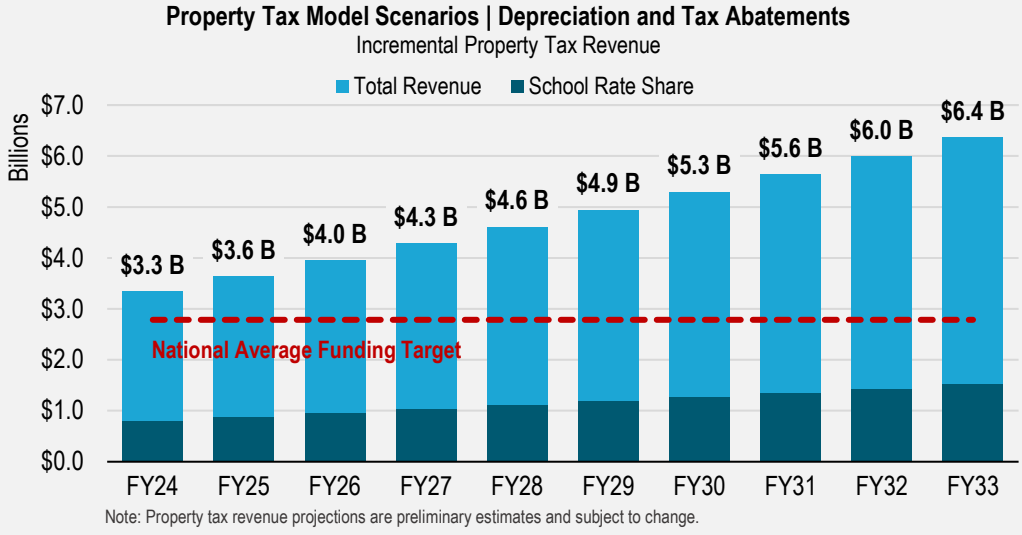


8. As opposed to phasing out depreciation and abatements, **eliminate both abatements and depreciation immediately**. Eliminating both immediately achieves the same level of revenue in year ten for education (at **$1.5 billion**) and makes considerable gains in earlier year revenue production.

SCENARIO ASSUMPTIONS

Eliminate Abatements in FY24

Eliminate Depreciation in FY 24

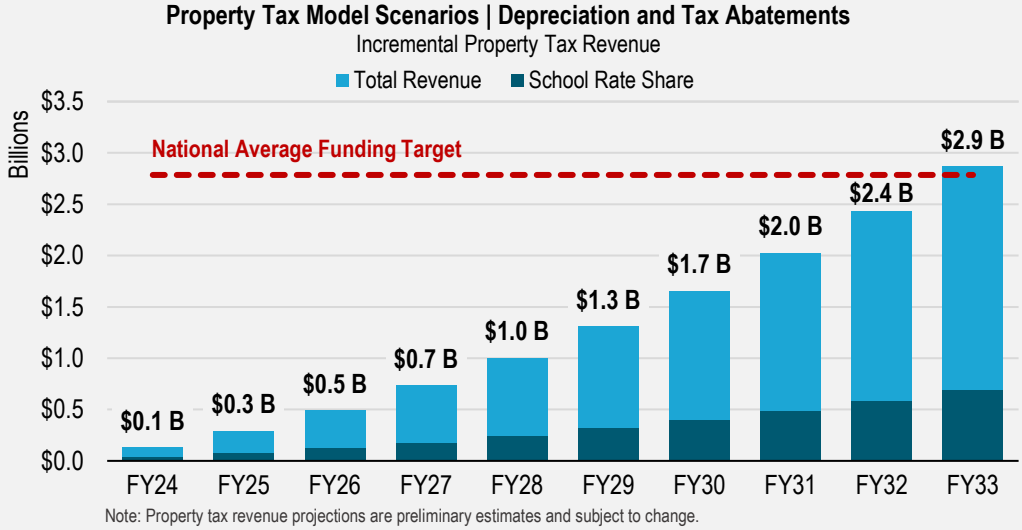


9. **Phase out abatements and freeze depreciation at current levels**. Lowering the depreciation rates from the current 1.5 percent per year was also examined. Predictably, these variations did not produce as much revenue as freezing accumulated depreciation on a going forward basis. The contribution to the K-12 education from this scenario, in year ten, is **estimated to be $686 million**. Other variations, including the capping of abatements and freezing of depreciation, were also tested. These produces lesser levels of revenue than the variation shown below.

SCENARIO ASSUMPTIONS

Phase Out Abatements Between FY24 and FY33

Freeze Accumulated Depreciation Rate (No Increase)



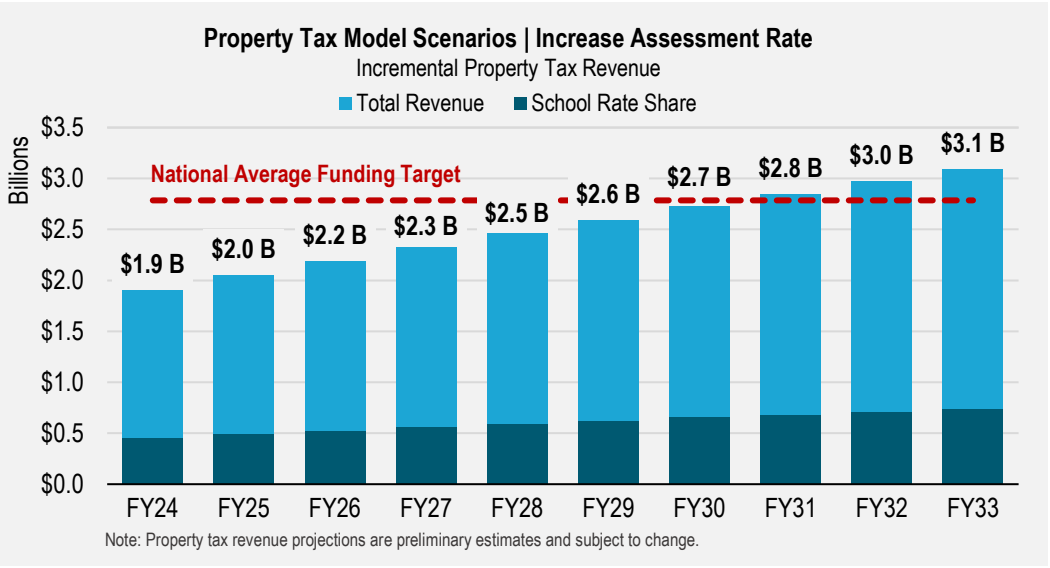
10. Assessed valuation is 35 percent of taxable value, per statutes. The 35 percent that is applied to the taxable value of property is referred to as the assessment ratio and was set into place by the Legislature decades ago. There was no mathematical derivation for this ratio, other than it being selected as the method for reducing taxable valuation to assessed valuation. Consequently**, a change to the assessment ratio could be considered** – either as a standalone approach, or in combination with changes to the abatements and depreciation. Shown below is a variation that assumes that the assessment ratio is modified to 40 percent from 35 percent coupled with the elimination of abatements. In this illustration, no changes to the current method of depreciation are assumed. Of the $3.1 billion increase in revenue, **$737 million would inure to education**. Such a change in the assessment ratio would help to close the gap between taxable and market valuation.

SCENARIO ASSUMPTIONS

Increase Assessment Rate to 40 Percent

Eliminate Tax Abatements

No Change to Depreciation



11. **Consider revisiting the $3.66 combined ad valorem rate cap**. This can take one of two forms. The first would be to consider any additional headroom that may be needed to reach the funding targets (following the alternation of the abatement constraints and the modernization of the assessment system) and allow for property tax rates to migrate upward to assist in filling that gap. As noted earlier in this report, it is the statutory caps that constrain current rates; rates are materially under the State's constitutional cap of $5.00 per $100 of assessed valuation.

12. As noted in an earlier section, the current property tax levy in support of K-12 operations is $0.75 per $100 of assessed valuation. **The school operating levy could be exempted from abatement on a going forward basis**, thereby increasing the yield on this levy. Local levies related to school district capital projects could likewise be exempted from the abatements. This would generate additional dollars to fund education, but the revenue gain would be relatively minimal.

13. An alternative approach would be to remove the abatements and make other adjustments to the assessment system (i.e., elimination of depreciation, market-based valuation, etc.) while reducing current ad valorem tax rates to a point of revenue neutrality. While this approach would not generate additional revenue, per se, it would significantly reduce current combined ad valorem tax rates, thereby increasing headroom under the statutory caps. This headroom could then be used to increase education funding – whether by direct legislative action or through initiatives placed before the electorate. Note that due to the requirement for equal and uniform taxation, such a ballot initiative – if placed before the voters in lieu of legislative enactment - would require approval on a statewide basis.

SUMMARY PROPERTY TAX SCENARIOS EDUCATION SHARE		
Modifications to Abatements		**Incremental Revenue FY33**
1	Cap abatements at current FY23 levels with no change to depreciation	$129 Million
2	Phase out abatements between FY24 and FY33 with no change to depreciation	$390 Million
3	Eliminate abatements in FY24 with no change to depreciation	$390 Million
Modifications to Depreciation		
4	Freeze accumulated depreciation rate with no change to tax abatements	$92 Million
5	Phase out depreciation between FY24 and FY33 with no change to tax abatements	$108 Million
6	Eliminate depreciation in FY24 with no change to tax abatements	$108 Million
Modifications to Both Depreciation and Abatements		
7	Phase out both depreciation and tax abatements between FY24 and FY33	$1.5 Billion
8	Eliminate both depreciation and tax abatements in FY24	$1.5 Billion
9	Phase out abatements between FY24 and FY33 and freeze accumulated depreciation rate (no increase)	$686 Million
Modifications to Assessment Ratio		
10	Increase assessment rate to 40 percent and eliminate tax abatements with no change to depreciation	$737 Million
Other Possible Modifications		
11	Revisit the $3.66 combined ad valorem rate cap	N/A
12	Exempt school operating levy from abatements going forward	N/A
13	Modernize tax system (remove abatements and adjust assessment system) while reducing current ad valorem tax rate to revenue neutrality	N/A

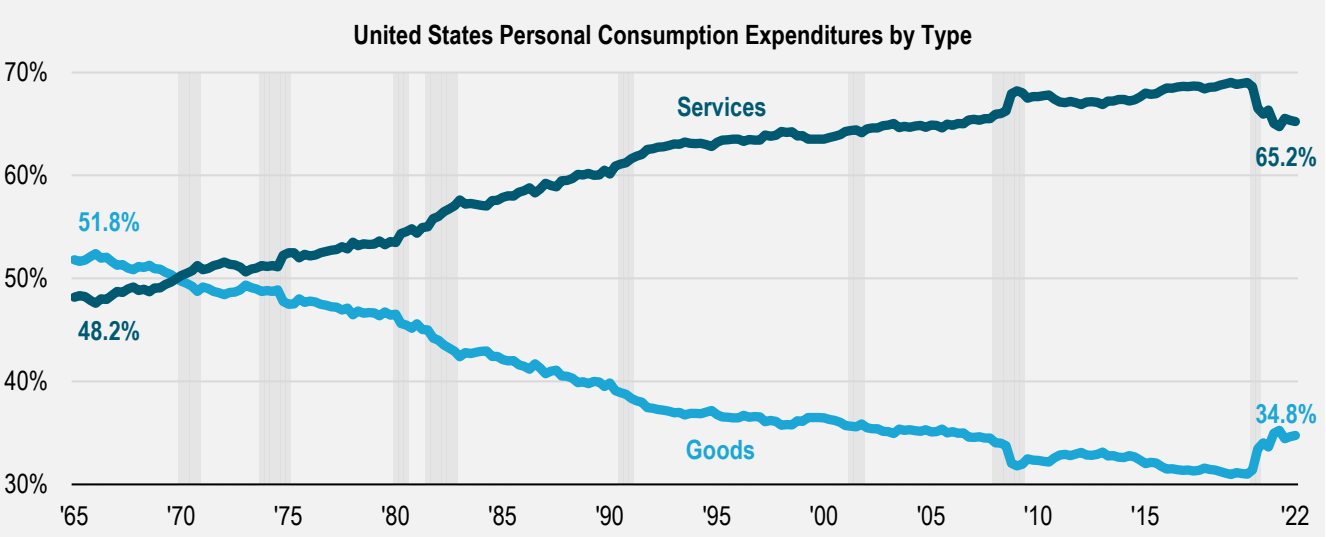
Of the approaches summarized above, the one that makes the most significant gain in meeting the funding target is option number 8 ("Option 8"). Option 8 is estimated to produce $1.5 billion of an identified $2.6 billion target to achieve the national average. To close the remainder of the gap using property tax alone would require – in addition to the elimination of abatements and depreciation – the increasing of the combined property tax caps sufficient to generate the remaining funds. To achieve this, it would require an increase of approximately $0.70 per $100 of assessed valuation above and beyond the elimination of abatements and depreciation in the coming ten years. This rate example is based upon current statewide assessed valuation and may vary by year ten of the funding horizon. This would require increasing the current $0.75 tax levy to $1.45 – a near doubling of the current rate. As noted, this would be necessary if the entirety of the funding gap were to be funded through property tax modernization. It may, however, be possible to supplement the shortfall with other revenue opportunities.

A fundamental issue that should be considered is whether revenues arising from any of these approaches should solely benefit education or benefit all recipients of property tax distributions. From the illustrations of the approaches in this section, it becomes clear that there is a macro effect from making these modifications that would direct revenue to all recipients of property tax revenue, one of which is education. An alternative to allowing revenue to flow to all recipients would be to isolate the amounts attributable to the change in approach and direct all of the resulting revenue to education. This latter approach would maximize the overall benefit to education.

SALES TAX AND TRANSACTION EXCISE TAX REVENUES AND PRINCIPLES

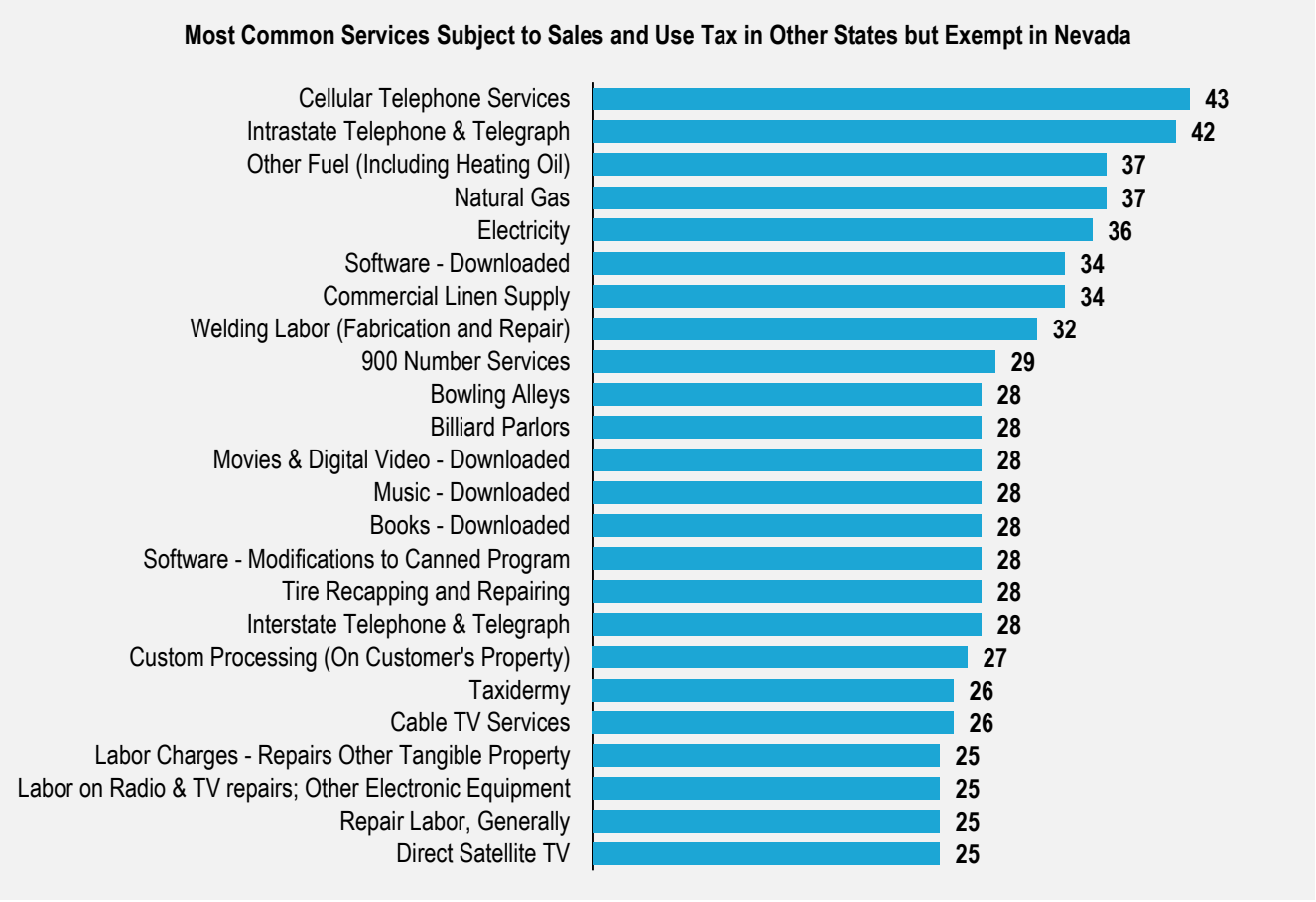
In Nevada, taxable sales are defined as tangible personal property sold at retail that is not otherwise exempt from the application of a sales tax. If the transaction is neither a retail purchase nor a purchase of tangible property, it is not subject to the sales tax and is thereby implicitly exempted. Services and intangible goods, which comprise nearly two-thirds of the overall economy, are implicitly exempt since they are not considered tangible. As more of the economy has shifted toward untaxed services and away from taxable goods, this is an area of taxation that has not kept pace with changes over time.

The graphic below illustrates the migration away from tangible goods which has been accompanied by a considerable increase in services. Sales tax, since it has not kept pace with these changes in the economy over time, has suffered as the consumption of tangible goods has become a less material part of the overall economy.



In addition to the implicit exemptions, there are tangible goods that are explicitly exempted from sales tax by way of Constitutional provision or legislative act such as food purchased at grocery stores, prescription medications, and a host of other goods. What is left of the sales tax base is merely a fraction of today's economy, leaving 65 percent of Nevada's annual commerce exempted from the application of sales tax with only certain areas of trade left to form the base against which the sales tax is applied. Stated again, approximately two-thirds of Nevada's economic activity is not captured by the existing sales and use tax system. This results in a comparatively narrow sales tax base, evidenced by historical performance, and exposes the base to more volatility than if it were more broadly distributed over more of the economy. Broadening the tax base would create benefits beyond the opportunity to increase revenue, including creating a base that would be far less dependent upon certain areas of trade – which we know to be economically susceptible to fluctuations – carrying a disproportionate load. It would also add equity to the application of this transaction-oriented tax as purchases covering a broader spectrum would be subject to the tax. As it currently stands, sellers of intangible products or services escape the application of a tax that sellers of tangible goods must factor into their pricing strategies.

Examples of items that are taxable in other states but either implicitly or explicitly exempted from taxation in Nevada are shown in the illustration below. Some of these categories of trade may be taxed in forms other than sales and use tax.



As more of the taxable base has moved away from taxation over time with commerce shifting from tangible to intangible goods or services, addressing this erosion of the tax base can also be viewed as a tax modernization effort. Little has changed over the past few decades with respect to how taxable sales are defined, and this narrowing of the tax base has been cited in a number of prior studies of Nevada's fiscal system (e.g., Governor's Task Force on Tax Policy 2003). Over the years, there has been considerable economic leakage as more commerce moves into the intangible or service realm. This leakage, among other things, causes Nevada entities to chase the declining base with increases to the tax rates to maintain pace with public service demands. A more sensible approach would be to add balance to the tax base as a part of an overall modernization effort.

It is important to distinguish between expansion of the existing sales tax base (against which existing sales and use tax levies are applied) and extending an excise tax to areas of trade that are currently not taxed. As Nevada's definition of a transaction that is subject to the sales and use tax is based upon tangible goods sold at retail, we must recognize that intangible items sold at retail are not covered by the definition in Nevada law. Accordingly, applying a tax to this category of intangible items would have to be accomplished through the creation of a transaction-based excise tax that is separate from the current sales and use tax. This is certainly a distinction but should not be considered an impenetrable barrier.

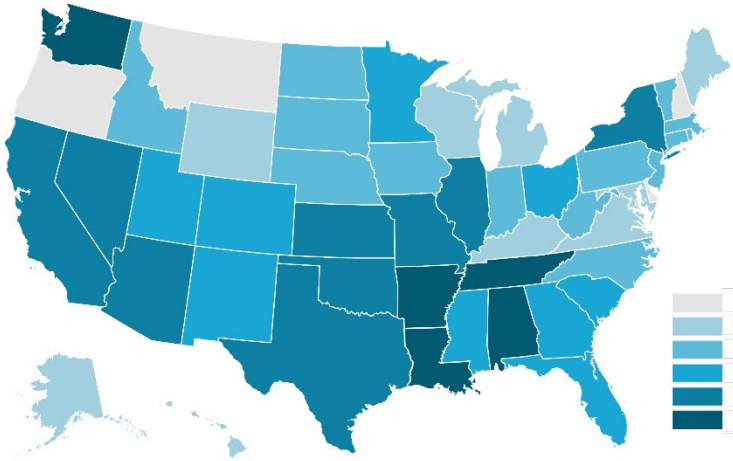
To address the guiding principle of equity when considering adding depth and breadth to the transaction tax base, the State would need to distinguish between discretionary and non-discretionary goods and services. Non-discretionary goods or services are those that consumers cannot do without, while discretionary goods and services are more a matter of personal

choice. Levying taxes upon non-discretionary goods and services gives rise to concerns of regressivity as such taxes disproportionately impact those with less ability to pay for them. The focus, then, should be upon discretionary goods and services. Note that broadening the application of any transaction or excise tax also gives rise to a more level playing field among those selling goods and services into the economy. Currently, only some providers of goods and services must account for the application of a sales tax in determining pricing strategies for their products, while others are able to ignore such application.

Opportunities exist within Nevada's sales and use tax system, beyond simply increasing the tax rate. In fact, due to the comparatively high tax rates in the more urbanized areas of the State, there is far less headroom with respect to the tax rate. It is worth noting that Nevada's average sales and use tax rate is the 13th highest rate in the country. See the illustration, below, which uses weighted-average tax rates to draw a comparison. Nevada's comparatively narrow base against which tax rates are applied offers far more opportunity to not only enhance revenue production but to also reduce future volatility and to equalize rates between and among different areas of commerce.

Nationwide Comparison of Sales Tax Rates

2022 Combined* Sales Tax Rates



RANK	STATE	RATE
1	Louisiana	9.55%
2	Tennessee	9.55%
3	Arkansas	9.47%
4	Washington	9.29%
5	Alabama	9.24%
6	Oklahoma	8.97%
7	California	8.82%
8	Illinois	8.81%
9	Kansas	8.70%
10	New York	8.52%
13	**Nevada**	**8.23%**

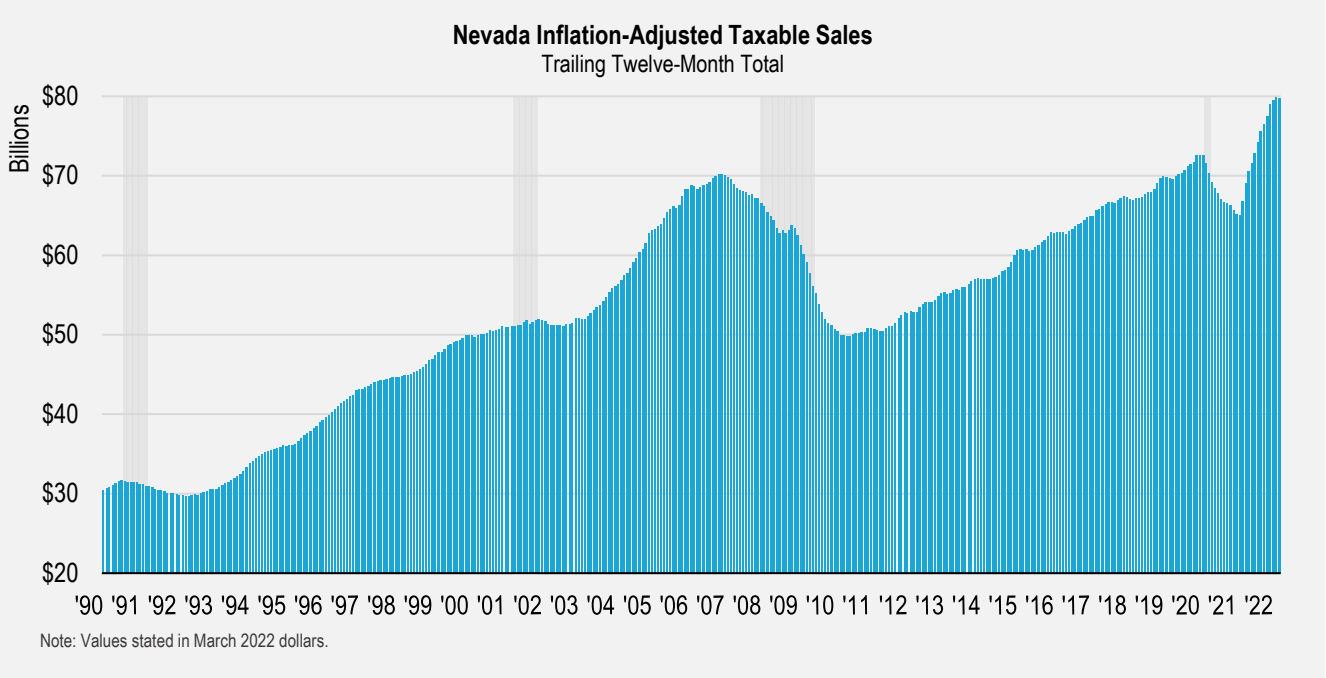
Note: *Combined rate includes state tax rate and average local tax rate. City, county and municipal rates vary. These rates are weighted by population to compute an average local tax rate. The sales taxes in Hawaii, New Mexico and South Dakota have broad businesses that include many business-to-business services. D.C.'s rank does not affect state ranks.

Increases in the existing sales tax rate remain an option, though expansion of the taxable transaction base would offer more benefit to the tax system as a whole. For perspective, increases in the existing sales and use tax rate, based upon statewide taxable sales over the most recent 12 months of $81.8 billion, would produce the following estimated amounts of revenue on an annual basis and would grow with the economy over time. The estimated below assume a four percent growth rate in annual taxable sales.

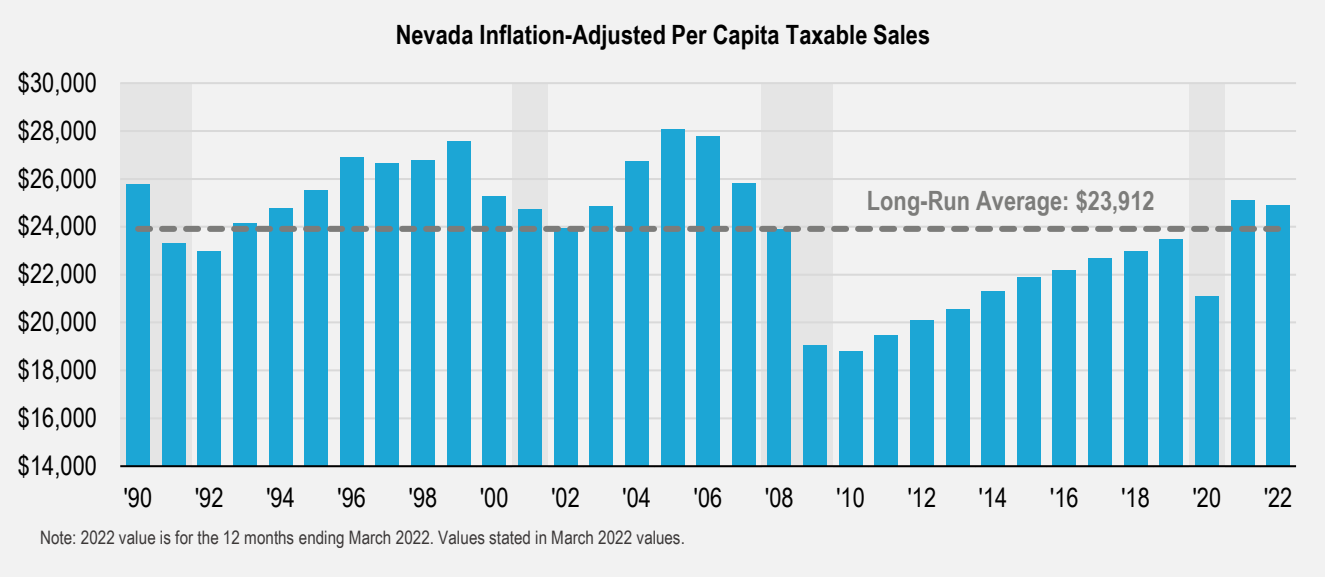
REVENUE POTENTIAL FROM INCREASING EXISTING SALES AND USE TAX RATE		
Levy Amount	**Estimated Revenue FY24**	**Estimated Revenue at Year 10**
0.25 Percent	$204.5 Million	$302.7 Million
0.50 Percent	$409.0 Million	$605.4 Million
1.00 Percent	$818.0 Million	$1.2 Billion

As is shown, increases in the existing sales tax rate produce considerable revenue that could be dedicated to the State Education Fund. Coupled with property tax modernization efforts, the sales tax revenue could provide a significant supplement.

When compared to property tax revenues, which can be more predictable and stable, sales tax revenue does experience periodic economic volatility. The graphic below illustrates the change in taxable sales on a trailing twelve-month basis since 1990. Evident in viewing this chart are the growth periods from 1990 through 2007 – the peak prior to the Great Recession – and from 2011 through 2020. The trough following the Great Recession in 2010 and the bottoming out of taxable sales in the midst of the COVID-19 pandemic are also evident. Notwithstanding the periodic volatility, sales tax revenues have generally shown growth over time. This is partially attributable to the population growth in Nevada over time as well as continued economic growth. This has been accomplished with a comparatively narrow sales tax base and despite migration of certain areas of trade from tangible to intangible.



Inflation-adjusted taxable sales per capita show the same general patterns, but also give added insight into the per capita burden over time. As is shown below, per capita taxable sales have only recently returned to the levels that they were prior to the Great Recession.



Returning to the taxable transaction base, considerable gains could also be realized from extending an excise tax to certain areas of trade that are currently exempt from the application of the sales and use tax. Consideration may also be given to broadening the transaction tax base while also elevating the tax rate.

Using a companion tax rate of 6.85 percent (which represents the statewide minimum sales tax rate), every additional **$1 billion in trade that is captured by a transaction excise tax** would generate **$68.5 million in the first year**. As this is in current dollar terms, **this amount could grow to more than $100 million by year ten** of the funding horizon. Taken further, if **$5 billion in additional trade** could be captured by the transaction excise tax, the revenue would increase to $342.5 million in the base year and **more than $500 million by year ten**. As an excise tax on these transactions is separate from the sales and use tax applied to taxable transactions, the full amount of the new tax revenue could be dedicated to education. Alternatively, if the distribution of the new tax revenue were to mimic the distribution of the current sales tax, only a portion of the revenue would inure to education.

The matrix on the following page illustrates the revenue producing capability of an enhanced taxable transaction base at a series of assumed tax rates. The question that would emerge is whether there are sufficient areas of trade to which an excise tax could be applied to produce appreciable revenue for education.

SERVICE TAX RATE	TAXABLE SERVICE BASE										
	$1.0 Billion	$2.0 Billion	$3.0 Billion	$4.0 Billion	$5.0 Billion	$10.0 Billion	$15.0 Billion	$25.0 Billion	$50.0 Billion	$75.0 Billion	$100.0 Billion
0.10%	$1.0 M	$2.0 M	$3.0 M	$4.0 M	$5.0 M	$10.0 M	$15.0 M	$25.0 M	$50.0 M	$75.0 M	$100.0 M
0.20%	$2.0 M	$4.0 M	$6.0 M	$8.0 M	$10.0 M	$20.0 M	$30.0 M	$50.0 M	$100.0 M	$150.0 M	$200.0 M
0.30%	$3.0 M	$6.0 M	$9.0 M	$12.0 M	$15.0 M	$30.0 M	$45.0 M	$75.0 M	$150.0 M	$225.0 M	$300.0 M
0.40%	$4.0 M	$8.0 M	$12.0 M	$16.0 M	$20.0 M	$40.0 M	$60.0 M	$100.0 M	$200.0 M	$300.0 M	$400.0 M
0.50%	$5.0 M	$10.0 M	$15.0 M	$20.0 M	$25.0 M	$50.0 M	$75.0 M	$125.0 M	$250.0 M	$375.0 M	$500.0 M
0.75%	$7.5 M	$15.0 M	$22.5 M	$30.0 M	$37.5 M	$75.0 M	$112.5 M	$187.5 M	$375.0 M	$562.5 M	$750.0 M
1.00%	$10.0 M	$20.0 M	$30.0 M	$40.0 M	$50.0 M	$100.0 M	$150.0 M	$250.0 M	$500.0 M	$750.0 M	$1.0 B
1.25%	$12.5 M	$25.0 M	$37.5 M	$50.0 M	$62.5 M	$125.0 M	$187.5 M	$312.5 M	$625.0 M	$937.5 M	$1.3 B
1.50%	$15.0 M	$30.0 M	$45.0 M	$60.0 M	$75.0 M	$150.0 M	$225.0 M	$375.0 M	$750.0 M	$1.1 B	$1.5 B
1.75%	$17.5 M	$35.0 M	$52.5 M	$70.0 M	$87.5 M	$175.0 M	$262.5 M	$437.5 M		$1.3 B	$1.8 B
2.00%	$20.0 M	$40.0 M	$60.0 M	$80.0 M	$100.0 M	$200.0 M	$300.0 M	$500.0 M	$1.0 B	$1.5 B	$2.0 B
2.50%	$25.0 M	$50.0 M	$75.0 M	$100.0 M					$1.3 B	$1.9 B	$2.5 B
3.00%	$30.0 M	$60.0 M	$90.0 M	$120.0 M	$150.0 M	$300.0 M	$450.0 M	$750.0 M	$1.5 B	$2.3 B	$3.0 B
3.50%	$35.0 M	$70.0 M	$105.0 M	$140.0 M					$1.8 B	$2.6 B	$3.5 B
4.00%	$40.0 M	$80.0 M	$120.0 M	$160.0 M	$200.0 M	$400.0 M	$600.0 M	$1.0 B	$2.0 B	$3.0 B	$4.0 B
4.50%	$45.0 M	$90.0 M	$135.0 M	$180.0 M				$1.1 B	$2.3 B	$3.4 B	$4.5 B
5.00%	$50.0 M	$100.0 M	$150.0 M	$200.0 M	$250.0 M	$500.0 M	$750.0 M	$1.3 B	$2.5 B	$3.8 B	$5.0 B
5.50%	$55.0 M			$220.0 M				$1.4 B	$2.8 B	$4.1 B	$5.5 B
6.00%	$60.0 M	$120.0 M	$180.0 M	$240.0 M	$300.0 M	$600.0 M	$900.0 M	$1.5 B	$3.0 B	$4.5 B	$6.0 B
6.50%	$65.0 M			$260.0 M				$1.6 B	$3.3 B	$4.9 B	$6.5 B
6.85%	$68.5 M	$137.0 M	$205.5 M	$274.0 M	$342.5 M	$685.0 M	$1.0 B	$1.7 B	$3.4 B	$5.1 B	$6.9 B

To address the question as to the depth of the economy and its ability to support additional areas of trade being added to the transaction excise tax base, the following examples are provided. These areas of trade provide foundation for further consideration of categories of trade for the application of a transaction excise tax. Using the chart above, these also provide insight into revenue producing capabilities by each area of trade.

TOTAL SALES OF MAJOR TAXABLE SERVICE CATEGORIES					
1	TRANSPORTATION	$12.1 B	9	RECREATION	$4.2 B
2	BROADCASTS	$0.4 B	10	AUTO REPAIR	$1.7 B
3	TELECOMMUNICATIONS	$3.4 B	11	CAR WASH	$1.2 B
4	INFORMATION	$2.0 B	12	OTHER REPAIRS	$1.0 B
5	FINANCE	$57.9 B	13	PERSONAL CARE	$5.8 B
6	PROF. & BUSINESS	$34.8 B	14	GIVING & RELIGIOUS	$1.1 B
7	EDUCATION	$1.9 B	15	BUSINESS ASSOC.	$0.2 B
8	HEALTHCARE	$19.1 B	16	LABOR & CIVIC CLUBS	$0.8 B

From the above major categories, and to illustrate revenue potential, the categories of Recreation and Personal Care will be used. At sales levels of $4.2 billion and $5.8 billion, respectively, these two areas of economic activity combine for an estimated $10 billion in economic activity. Referring back to the revenue matrix, this level of economic activity – if captured through a transaction excise tax - would generate $500 million at a rate of five percent or $685 million at the statewide base rate of 6.85 percent. These are based upon 2019 economic data (the last full fiscal year preceding the COVID-19 pandemic). Inflated forward to year ten of the funding horizon, the five percent rate applied to these areas of trade would **produce an estimated $770 million.** Using the 6.85 percent rate, the **estimated revenue would be $1.05 billion in year ten.** The adjusted target to achieve the national average in education funding is just over $2.6 billion by year ten, with over $3.2 billion required to achieve the optimal funding level recommended by APA. Clearly, broadening the transaction base for the application of an excise tax provides a revenue opportunity that could meet a significant portion of these targets.

In the interest of transparency, there may be activities within the sample areas of trade that may prove to be challenging to include. Bearing in mind that the goal would be to avoid non-discretionary purchases, any such activities within the sample categories may need to be exempted. This is to be expected and would be founded in good tax policy. However, the point remains that there is sufficient capacity within the various areas of trade noted above that similar results can be realized by including a broader array of categories.

Special note should be given to the past efforts, through AB 447 in 2019 and SB 346 in 2021, to recognize the narrowing of the tax base and the economic leakage that occurs as a consequence of items that were previously taxable in their tangible form becoming non-taxable in digital form. Focusing upon SB 346, this bill would have made downloaded software, digital audio, digital books, and digital audio-video works taxable. This effort provides one of the clearest examples of proactive tax policy due to its recognition of the migration of certain products away from their former tangible form to an intangible and non-taxable form. While these past efforts were aimed at stopping economic leakage and the protection of the existing tax base, these same principles can be applied to other areas of trade. This is an effort, in the opinion of the Commission on School Funding, that should be embraced as a beginning point of meaningful tax policy modernization.

In addition to supporting these past efforts, it is also important to recognize the shift away from taxable tangible goods to other areas of trade as this shift has eroded the overall tax base over the past several years. The examples that have been provided herein with respect to adding areas of trade to the base for excise taxation further these same principles. Additionally, they serve to provide a foundation for additional revenue generation for education.

With regard to the expansion of the tax base, the Commission recommends the following tax policy improvements and revenue options for the Legislature's consideration.

1. Give serious consideration to efforts, such as those made through the introduction of SB 346 in the 2021 Session, that recognize that advances in technology have led to a degradation of the base against which sales and use taxes are applied. This would be a first step in addressing the economic leakage that is occurring while also recognizing that the tax base is better served through broader application.

2. Consider creating a pool of currently untaxed transactions, including certain services and intangibles, to form a base against which an excise tax – similar to the use of sales tax for tangible retail transaction – can be applied to generate additional revenue for education. These services and intangibles should include only those items that are discretionary and not life essentials. The revenue producing capability of such an action could form a material part of the funding needed to address the education funding targets noted herein. In addition to enhancing revenue for education, creating a pool of services and intangibles against which an excise tax can be applied also improves equity in taxation between tangible and intangible goods and services.

3. In addition to broadening the application of a transaction-based excise tax, consideration can be given to increasing the Local School Support Tax component of the sales and use tax rate to further generate revenue.

Between addressing tax modernization issues within the property tax and transaction tax systems, sufficient revenue capacity does exist to form a solution to meet the funding targets. Through the use of a combination of the methods described in this report, a fiscal plan can be fashioned that will maintain progress in meeting the ten-year funding targets.

A fundamental issue that will need to be addressed with either property or transaction tax reform will be whether revenues arising from these efforts are solely benefiting education or benefiting all recipients of property and sales tax distributions. Arguments can certainly be made in either case, as the constricting effects of the abatements and depreciation coupled with the narrowness of the sales tax base also affect other units of government. This will be an important consideration as these recommendations are discussed.

OTHER REVENUE SOURCES

As noted previously in this report, the Commission focused its efforts on identifying revenue capacity that already exists within the property tax and sales/use tax systems in Nevada. It has been noted several times in this report that both the property tax and sale/use tax systems are in need of modernization to be more responsive to changes that have occurred in the economy and to address funding needs for education. The melding of an effort to update and modernize the fiscal system to address its many unintended defects and an effort to bring funding for education up to a more rational level is, in the opinion of the Commission, a task of the highest priority for the State.

The magnitude of the funding challenge dictates that the revenue sources that will make up a funding solution be both robust and scalable over time. Frankly, for a funding challenge as large as the one identified herein – notwithstanding the fact that there are few public investments as important as education - there are few revenue alternatives available capable of meeting the challenge at hand.

It should be added that the Commission also considered, or were asked to consider, other revenue sources that could be used to augment or supplement funding in the coming years. However, none of the alternative revenue sources discussed in this section have the independent capacity to meet the funding challenge quantified in this report. These sources are mentioned only within the context of supplemental funding sources that could be used to relieve pressure upon the primary funding sources. The past overuse of single and limited sources of revenue to enhance funding for education – while individually well-intended – led to a patchwork system that failed to fully fund the need and one that added layers of complexity to an already complex system.

The discussion of these additional revenue sources will be somewhat limited, but the Commission would be prepared to expand on any of these at the request of the Legislature.

Payments in Lieu of Taxes: The Payments in Lieu of Taxes (PILT) program was created in 1976 and provides payments to counties and other local governments to offset losses in tax revenue due to the presence of federal land within their jurisdictions. Federal lands are exempt from taxes, but counties and other local governments are still required to provide services within the public lands. The PILT program provides a limited amount of funding from the federal government to compensate for the services that are provided by local governmental entities, though it generally only pays for a small fraction of those services. A strong argument can be made that PILT funding should be increased, but this would require federal action. While education is not typically one of the services that is thought of when PILT is discussed, increases in PILT funding could relieve stresses on other revenue sources.

Room Tax from Third Party Booking Companies: Traditional room tax revenue is a source that is dedicated, in part, to the funding of education. During the 2009 Legislative Session, room tax was increased by three percent (not to exceed 13 percent) on the rental of transient lodging in Clark and Washoe Counties. Effective July 1, 2021, the proceeds of this tax are distributed to the State Education Fund.

An often-discussed issue with the application of room tax over the past several years has been the loss of room tax revenue attributable to the way that third-party online booking companies purchase and resale rooms. Simply described, the online booking companies purchase room blocks at a certain price from the hotel operators and re-sell those rooms at a higher price. The room tax is paid by the booking company at the discounted price but is charged to the end purchaser based upon the higher price. The result is a material loss of revenue that would otherwise be due under the application of the room tax. Addressing this defect would increase revenue for education (and the other recipients of room tax) without raising the room tax itself. There is currently a lawsuit pending regarding this matter. Another element of room tax administration would be the extension of the room tax to the portion of the cost of transient lodging related to mandatory resort fees.

Real Property Transfer Tax: The Real Property Transfer Tax (RPTT) is levied on each $500 of value of most real property transferred from one person to another. The value of the real property is the actual consideration paid for the property. The tax is collected by the County Recorder at the time the deed is recorded. This revenue source currently inures to the State General Fund, the State Low Income Housing Fund, the Local Government Tax Distribution Fund, and, in Clark County, to the Clark County School District Capital Projects Fund.

Concerns have arisen recently that there may be some leakage in the collection of the RPTT attributable to buyers acquiring a limited liability company or other entity that holds ownership of the real estate instead of purchasing the property directly and having these transactions occur between subsidiaries. The resulting impact is a loss of RPTT revenues. Considering that there have been billions of dollars in sales of this sort over the past several years, the avoided tax revenue is considerable. As noted, RPTT is not currently a revenue that flows directly to education, other than the Clark County School District being a recipient of a portion of the revenue for its capital program. Regardless, it does represent an opportunity to collect additional revenue under an already-existing tax regime.

Live Entertainment Tax: The Live Entertainment Tax (LET) was created in 2003 (and substantially modified in 2015) to make the tax more uniform in application to live entertainment. The rate of taxation is nine percent of the admission charge to live entertainment events occurring in facilities with occupancy over 200 persons. The proceeds of the LET inure to the State General Fund, with a small amount ($150,000) of the total credited annually to the Nevada Arts Council. Each one percent of the tax produces roughly $15 million in annual tax revenue.

With the tremendous success of professional sports in southern Nevada and future prospects of continued growth in this area, it should be noted that professional sports teams that play their home games in Nevada are exempt from this tax. This includes minor league as well as major sports franchises.

Commerce Tax: The Commerce Tax is imposed on businesses and individuals doing business in Nevada who have Nevada gross revenues exceeding $4 million. The rates of the tax range from 0.051 percent to 0.331 percent, depending upon the North American Industrial Classification System (NAICS) code for the business. Credits against the tax paid against the Modified Business Tax (MBT) are allowed. The proceeds of this tax inure to the State General Fund.

Commerce Tax is noted due to the fact that it generates well over $200 million per year for the State General Fund, making it a material contributor to the State's annual revenues. Modifying the tax rates could produce additional revenues that could be used to support education. Likewise, reducing the current $4 million threshold for the application of the tax could produce significant additional revenue that could be routed to the State Education Fund. The Commerce Tax is among the broadest based taxes in the State's revenue portfolio.

RECOMMENDATIONS

Following is a summary of recommendations that the Commission on School Funding is pleased to provide to the Legislature for consideration. These recommendations are made following a three-year effort on the part of the Commission to not only meet the mandates of SB 543 and AB 495, but to go further in providing the Legislature with a serious and thoughtful work product.

The Commission fully recognizes the importance of the task assigned, and agrees with the Legislature that there are few, if any, public services as important as the provision of a quality education for our next generation of Nevadans. Comparisons and analytics strongly suggest that we have challenging work ahead of us if we are to meet the workforce needs of our State which, in turn, support the future economic prospects of the State. Most importantly, the work ahead of us will evidence our commitment to our most precious state resource – our children.

The Commission fully realizes that the funding challenge is considerable, and that it will take incredible will on the part of elected leaders to address it. However, we also recognize that failure to act is not a viable option. In the opinion of the Commission, the cost of inaction greatly exceeds the cost of implementing any of the funding strategies discussed herein.

The Legislature, in their wisdom, provided for a ten-year horizon over which these funding plans are to be put into place. These recommendations should be viewed with that timeline in mind, and we should collectively develop a strategy and workable plan to meet the identified needs. The Commission stands ready to assist in any way possible.

The recommendations of the Commission follow.

1. The Commission on School Funding recommends that the Legislature extend the life of the Commission to continue its work in improving the implementation of the Pupil-Centered Funding Plan and assisting with the implementation of a funding strategy to meet the objectives set forth in SB 543. The Commission further recommends that the Commission be provided with sufficient resources to support its mission.

2. Related to the first recommendation, the Commission also recommends that responsibility for the maintenance of the model that drives Pupil-Centered Funding Plan be vested jointly with the Commission and the Nevada Department of Education.

3. The Commission on School Funding recommends that the Legislature adopt the target values for both achievement of the national average per pupil spending and recommended level of per pupil spending described in this report as the standards that should be achieved by the 2032-33 biennium. These target values – aimed at achievement of performance goals and standards for education - will serve as a gauge against which progress over the next five biennia can be measured.

4. The Commission on School Funding recommends that the Legislature create a pathway for smaller school districts to acquire capital and engage in building improvement and modernization programs that are otherwise unavailable to these districts. This may take the form of the creation of a revolving fund to extend loans to smaller districts, additional funding to the State Infrastructure Bank for expansion of the lending program, or the use of a state bond bank.

5. The Commission on School Funding recommends that the Legislature direct the creation of performance metrics to assess the impact of enhanced investment in K-12 education. These metrics would provide a foundation for measuring the return on added investment, as envisioned by SB 543, AB 495, and as recommended in this report. Any increased investment should be accompanied by a transparent system of reporting and accountability for the effective use of the additional investment as progress toward optimal funding is made.

6. The Commission recommends that the Legislature study the imbalance between number of professional educators matriculating from institutions of higher education in the State and the number of new units of professional educators demanded each year by school districts in the State. This should be coupled with a classification and compensation review for professional educators and support personnel to determine whether insufficient compensation is contributing to the difficulty in attracting and retaining these positions. This would provide additional foundation for determining the cost associated with the achievement of the State's class size mandates over the ten-year funding horizon.

7. The Commission recommends that the Legislature consider modernization of both the Nevada sales and use tax and Nevada property tax systems. As the primary and traditional funding sources for State services and specifically for the funding of K-12 education, and since significant capacity exists within both of these systems of taxation, it is further recommended that the roster of recommendations in this report – specifically those enumerated in the property tax and excise tax sections – be considered as a menu of funding options to achieve the identified funding needs by Fiscal Year 2033. These recommendations meet the mandate given to the Commission on School Funding to identify methods of funding, while also providing the Legislature with a series of choices that can be used in combination to achieve the desired results.

8. The Commission recommends that upon the release of the Economic Forum estimates, that State General Fund appropriations to education be increased in a manner consistent with the formula and direction established in SB 543 (2019).

APPENDIX I

SUPPORTING COMMENTARY FROM THE NEVADA ASSOCIATION OF SCHOOL SUPERINTENDENTS

SUPPORTING COMMENTARY FROM THE NEVADA ASSOCIATION OF SCHOOL SUPERINTENDENTS

To justify such a significant investment in education and make it relatable to school communities including families and policy makers, the Commission on School Funding asked Nevada superintendents one very simple question: How would you spend the additional funding? In response, school districts provided the following four priorities that they believe will generate the greatest gains for Nevada's students and optimize the return on investment for taxpayers:

Priority 1: Additional funding to attract, hire and retain high quality staff in a highly competitive labor market including the additional school-level positions identified in the subject matter expert (APA) adequacy study. Estimated cost - $1.7 billion

PRIORITY 1: FUND DISTRICTS AND SCHOOLS TO HIRE AND RETAIN HIGH QUALITY STAFF IN A COMPETITIVE LABOR MARKET		
	Description	**Estimate**
1	**Increase salaries to provide a livable and competitive wage for all employees (base salary and potential for growth)** – 10% increase was utilized for ease of calculation of a higher percentage as deemed appropriate	$325,180,100
2	**Ensure adequate staffing patterns consistent with the recommendations listed in prior legislatively driven APA studies** - Amount listed is less the amount to address mental health needs of students through ensuring FTE equivalent Social Worker and Counselor allocations at every school as noted in first bullet point of Priority 3	$1,067,025,894
3	**Create new pathways into the education profession, providing a natural sequence to meet targeted staffing levels (quantity) of staff for administrative, certified, and classified positions** - Estimate based on using student to teacher pipeline models as well as other routes to licensure through higher education institutions.	$35,000,000
4	**Create staff leadership pathways within the existing K-12 school system, for both teacher leaders and administration**	$16,750,000
5	**Provide standardized curriculum and additional professional development for teachers to highlight best practices and increase student achievement** - Estimate includes two additional professional development days for teachers and $100 per pupil cost for curriculum	$71,933,687
6	**Improved working conditions** - Add approximately 45 minutes per day with pay to teachers without students to allow for better preparation, professional learning, and consultation with other instructional leaders	$192,819,797
	Total Priority 1	**$1,708,709,478**

Teachers, school leadership and student support significantly influence student achievement more so than many non-school factors. Collectively, school staff provide direct instruction and a system of support that creates a culture and climate that addresses student physiological, safety, and social, and emotional needs in order to promote innovation and creativity. The school community also supports families and helps provide stability which are perhaps the main factors that influence student performance. Investments in direct instruction, instructional support and school leadership can improve student outcomes and equip Nevada's students with skills and knowledge that better prepare them to successfully transition into a connected and globally competitive market. In order to address this priority, school districts must confront those factors that influence teacher/employee recruitment, induction, and retention. These factors include, but are not limited to, the following:

- Compensation
- Teacher preparation

- Instructional staff support
- Working conditions

Compensation considerations include increasing salaries to provide a livable family wage for all school employees and ensuring adequate staffing patterns consistent with the recommendation listed in prior legislatively driven studies (i.e., Estimating the Cost of an Adequate Education in Nevada, 2006). The cost estimates with respect to adequacy attempt to determine the cost every school or district would incur in order to meet state performance standards. When the staffing recommendations from this study were compared with current levels, the results were astounding. An additional 8,175 licensed instructional staff, 2,880 instructional support positions, 640 school leadership positions and 4,852 student and administrative support positions would be necessary to meet Nevada's standards. The estimated cost of these positions in addition to a 10 percent wage increase for existing staff totals approximately $1.4 billion. While NASS does not believe that a simple 10 percent wage increase will truly provide a livable or competitive wage, this assumption was utilized to provide a starting point and a figure that can easily be calculated using a different percentage increase assumption.

Teacher preparation and working conditions involve professional development opportunities, career pathways, and leadership development. Among the significant contributing factors for teachers leaving the profession involve lack of support, school culture and climate, and burnout. Compensation helps attract teachers, but it is the system of support and culture that serves to keep them. The same systems of support that create safety, security, support, and sense of belonging for students are also essential for employees. It is essential that teachers are provided ongoing training and education to improve pedagogy and provided a natural sequence to meet targeted staffing levels for instruction, support, and leadership pathways. This also includes providing sufficient resources for standardized curriculum including professional development to highlight best practices to improve student outcomes, two additional professional development days per teacher, and ongoing research with respect to effective teacher retention strategies. The estimated cost for these aspects of teacher preparation and working conditions is approximately $317 million.

Priority 2: Increase equitable educational opportunities for all students. Estimated cost - $976 million

PRIORITY 2: INCREASE EQUITABLE EDUCATION OPPORTUNITIES BY ENSURING ADEQUATE RESOURCES TO MEET THE NEEDS OF ALL STUDENTS		
Description		**Estimate**
1	**Fully fund the weights so all students receive the same level of instruction and needed support no matter their zip code**	$591,451,892
2	**Expanded opportunities such as Work Based Learning (WBL), Career and Technical Education (CTE), Dual Enrollment and "Jump Start" programs, STEM/STEAM, robotics, other elective offerings, teacher academies, etc. ensuring access to innovative programs and offerings at all schools and grade levels throughout the state**	$263,750,000
3	**Provide all students with devices for one-to-one connectivity and access to Wi-Fi at school facilities**	$121,223,000
	Total Priority 2	**$976,424,892**

This priority addresses equitable educational opportunities and adequate resources to meet the needs of ALL students. Educational equity means that every child receives what they need to develop their full potential regardless of their unique history, background, culture, and socioeconomic situation. This includes increasing base funding for all students in addition to increased funding for English Learners, at-risk students, special education, and gifted and talented programs. Increased funding would allow school districts to secure the essential staff, materials, and instructional programs to address the educability of all students. Education is a social phenomenon that relies upon the influence of individuals (i.e., teachers,

leaders, and support staff) to facilitate learning and address student educational needs in order to meet Nevada's standards. In order to adequately fund program weights for English learners, at-risk populations and gifted and talented students, an additional $591 million will be necessary to meet the weighted targets identified in the adequacy study. Other educational opportunities include expanding work-based learning (WBL), career and technical education (CTE), dual enrollment in the system of higher education, robotics, student pipeline to teacher programs, and other elective offerings that foster innovation and creativity while preparing students for life beyond high school. In addition to expanding student opportunities, it has become essential for school districts to provide students with one-to-one connectivity. This means that schools will provide standardized devices to every student allowing students to leverage technology to supplement classroom instruction to enrich their educational experience. The estimated costs for these expanded opportunities and devices are approximately $395 million.

Priority 3: Improve needed supports for students and families. Estimated cost - $1.0 billion

PRIORITY 3: IMPROVE NEEDED SUPPORTS FOR STUDENTS AND FAMILIES		
	Description	**Estimate**
1	**Address mental health needs of students through ensuring FTE equivalent Social Worker and Counselor allocations at every school (Aligned with staff - Priority #1)** - Estimate also includes a 10% increase in current salaries to align with first bullet point of Priority 1	$792,007,165
2	**Help to address growing mental health crisis among children and youth (providing social-emotional learning tools, counseling, ongoing case management, therapy, in-school programs)**	$77,920,000
3	**Improve extra/co-curricular offerings at all schools including after school programs and clubs which support the whole student**	$80,000,000
4	**Empower and inspire families to positively impact their child's education through academic and technology training, to include areas such as academic/parent teams, and mental health training and supports**	$52,580,000
	Total Priority 3	**$1,002,507,165**

The process of public education is a complex social web that extends beyond just teaching academics. Public education requires that schools foster students' development with their relationships, identities, emotional skills, and overall well-being. Learning is social, emotional, and academic. This is referred to as addressing the needs of the whole child and requires school districts to equip themselves with qualified professionals and engage families in order to support those nonacademic needs that may inhibit student performance. Based on the adequacy study commissioned by the Nevada Legislature, this will require an additional 4,200 mental health professionals including counselors, psychologists, social workers, other specialists, and support personnel. The estimated cost for these professionals is $792 million. Supporting programs and materials for the non-academic needs including improved extra- curricular opportunities is expected to be approximately $210 million.

Priority 4: Invest in school facilities to accommodate growth; address equity; ensure a more safe, healthy, secure, and effective learning environment; and improve operational efficiency. This cost merits further investigation and requires an objective assessment of school facilities, affordability, equitable funding, and opportunity.

The State of Nevada has a constitutional obligation to provide a "uniform system of schools". For some reason, this concept has not applied to the physical schools. Although public education is the State's responsibility, school construction has remained a local obligation. Because each school district's local wealth varies significantly, this local obligation concept has caused wide variations with respect to the affordability, quality, and ability to construct and improve schools. Wealthier, diverse, and growing economies simply have better school facilities than smaller, stagnant, or economically disadvantaged

communities. There is clear and convincing evidence that supports the notion that the quality and condition of school facilities influences the quality of education. In addition, there are also studies that indicate the benefit of quality schools extends to economic development, quality of life, community culture and climate. Public safety and security threats are also a concern that a number of districts struggle to meet in addition to the integration of technology. In certain school districts, it is simply mathematically and financially impossible to secure school construction bonds to replace old, obsolete facilities. No statewide estimate has been provided for this priority and the Legislature should consider addressing these issues on a case-by-case basis. These include, without limitation:

- Constructing new schools in order to keep up with growth and decrease class sizes
- Ensuring a safer, more secure learning environment through updated technology and infrastructure
- Operational and preventative maintenance for buildings to reduce down time due to system issues and ultimately reduce repair maintenance costs

PRIORITIES 1, 2, 3 AND 4: COST SUMMARY	
Priority 1	$1,708,709,478
Priority 2	$976,424,892
Priority 3	$1,002,507,165
Priority 4	TBD
Total	**$3,687,641,535**

It should be emphasized that the cost estimates for the improvements to education programming noted above and elsewhere in this summary are expressed in current (2022) dollars. To adequately compare these values to the target funding values at year ten of the funding horizon would require these values to be inflated forward to 2033 dollars. Regardless of the need to inflate these values forward, it has been demonstrated that the cost to bring the education system to a level of optimality – per the opinion of the members of NASS – exceeds the sums identified to achieve the national average or the APA-recommended levels.

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APPENDIX II

ESTIMATING THE COST OF AN ADEQUATE EDUCATE IN NEVADA (2006)

Estimating the Cost of an Adequate Education in Nevada

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EXECUTIVE SUMMARY

In today's world of No Child Left Behind (NCLB), increased accountability for student, school and district performance, and a steady growth in high-stakes testing, there is ever-increasing pressure on education systems to ensure that all students leave school with the tools and skills they need to succeed in life. Such increased pressure can have a positive influence on performance, but only if policymakers and education leaders also have the capacity to answer what might appear to be a simple question: Do schools and districts have the resources they need to meet performance expectations?

Many state education finance systems have not addressed this question of "adequate" education funding. In many states, for instance, policymakers have developed academic standards and timetables to achieve performance expectations. And they have created accountability systems with consequences for schools and districts when expectations are not met. Most often, however, these expectations and consequences are created without understanding what it costs for schools and districts to meet desired outcomes.

This "funding adequacy" report is designed to help address this issue in Nevada and to develop a supportable means for policy makers and other education leaders to estimate what it will cost for each district in the state to achieve the performance that is expected of them. Furthermore, this report is designed to address both what is it costs to meet **present-day standards** as well as **future standards,** where 100 percent of students are required to be meeting proficiency by both the federal and state government in 2013-14.

This report – prepared by Augenblick, Palaich and Associates, Inc. (APA), a Denver-based consulting firm that has worked with state policy makers on school funding issues for more than 20 years – focuses on determining two key cost elements:

1) A <u>base, per-student cost</u> adjusted by size of district; and

2) <u>Additional cost "weights"</u> (which are applied to the base cost) for students with special needs, including: children who are:
   - In special education;
   - At-risk of failing in school (based on the number of students receiving free or reduced-price lunches);
   - English language learners (ELL); and
   - In career and technical education (CTE) programs.

APA's experience conducting funding adequacy studies in other states, however, has revealed the importance of addressing a variety of additional factors. In Nevada's case, APA also examines the cost impacts of career and technical

education (CTE) as well as specific school and district characteristics such as: size, geographic location, and inflation. In conjunction with the base cost and added weights for special need students, these characteristics can be used to more accurately estimate the cost of adequacy.

In conducting its work, APA uses a combination of well established data gathering and analysis techniques: 1) a "successful school" (SS) approach; 2) a "professional judgment" (PJ) approach; 3) evidence-based research findings to strengthen our PJ work; and 4) statistical analysis to understand how inflation, cost of living, and district size impact Nevada education costs.

Under the SS approach a base, per-student cost is determined by examining the spending of schools that successfully meet **current** academic performance standards (118 schools were identified as successful for purposes of this study). The SS approach offers an important view on the present-day spending of successful schools. It does not, however, provide information about the added cost adjustments required for special education, ELL, at-risk, or CTE students.

The PJ approach relies on panels of experienced educators and education service experts – informed by education research – to specify the resources needed for different size schools and districts to educate their students to meet the much higher state and federal performance expectations set in the future. Panelists, for instance, review current state and federal academic standards and requirements and are asked to outline the resources they believe are needed to meet those requirements in large, medium and small K-12 districts. In contrast to the successful school analysis, the professional judgment approach is particularly useful in identifying special need student costs and in examining the **future** costs of districts in meeting state and federal performance standards.

The combination of the SS, PJ, evidence-based, and statistical work produce a powerful set of data that APA can use to develop recommendations for how Nevada might ensure that all schools and districts meet rapidly escalating academic performance expectations.

It is important to note that capital, transportation, food services, adult education, and community services were *excluded* from consideration and therefore not included in cost estimates.

Key Findings

Comparing and integrating the findings from all of APA's analyses provides a clearer picture of the resources needed for Nevada schools and districts to succeed. Through this work, APA identified **two equally important figures**:

- **A "starting" cost**. Drawn primarily from the SS analysis using 2003-04 data, this cost offers Nevada policymakers a launching point from which to

begin addressing the needs of districts that currently do not receive adequate funds to meet state and federal performance standards. According to our SS work, 12 Nevada districts need an additional $79.6 million, or $231 per student on average, to bring them up to the successful schools adequacy level. In total Nevada would need to spend $2,295.5 million annually to meet the 2003-04 successful schools adequacy level, plus an additional $15.3 million in hold harmless money for the 5 districts currently spending over adequacy (if the state decides to continue funding them at previous levels initially).

- This "starting" cost would provide adequate funds to meet **present-day performance standards.** For the purposes for this study, present-day standards the AYP performance targets for 2008-09. In most test subject areas, these targets require **just over half** of all students to be proficient.
- This figure must also be adjusted for inflation, and APA provides a process within this report to make such an adjustment. Nevada could choose to also adjust this figure to account for regional cost differences between different Nevada districts. To provide this option, APA creates a statistically-based "Location Cost Metric" (LCM) that calculates a regional cost adjustment.

- **A "<u>goal</u>" cost**. This cost is drawn primarily from the professional judgment group analysis, represents the full cost of educating students (including the base cost and added weights for CTE and students with special needs) to reach **future performance standards.** These future standards, as specified by the state and federal government, include the goal of nearly **100 percent student proficiency** in 2013-14. Including the LCM to account for regional cost differences, the PJ-produced end-point would be $3,551.3 million or $1,320.8 more than 2003-04 spending ($3,579 per student), not allowing for hold harmless money.
  - This figure also needs to be adjusted for inflation.
  - The significance of this funding increase is directly related to the significant new resources that research and education experts indicate are needed to reach the much higher 2013-14 goal of nearly 100 percent of students being proficient.
  - The "goal" cost includes several universal recommendations by the PJ panels where are:
    - Small class sizes: through either a lower teacher to pupil ratio, or additional support personnel for larger classes;
      Full-day kindergarten;
    - Before/after school, summer school, and Saturday school programs to help struggling students;
    - Additional funding for equipment and consumable materials to be used in career and technical education programs;

- Support staff, such as instructional aides, to address the needs of English language learners and at-risk students and supplement their regular classroom education;
- Increased professional development for teachers, this includes five days in addition to those in existing contracts specifically for professional development and $500 per teacher for other associated costs such as travel, supplies, presentation costs, and conference fees.

One caveat, the purpose of the PJ work is not to specify exactly how funding should be spent, but instead to estimate the level of funding necessary to provide programs and resources such as the ones mentioned above. The intent is that schools and districts would have the power to decide how to use the funds once available.

Given the scope of costs involved, it should not be expected that the state will be able to reach the goal overnight. Instead, the state can and should pursue other alternatives designed to achieve the goal gradually over time. This incremental approach could be accomplished in two ways:

(1) The increase could be based on the annual percentage change needed to move from the lower costs to the higher costs; or
(2) The increase could be based on the annual constant amount that would be needed to move from the lower costs to the higher costs.

Regardless of the approach chosen to increase funding to schools and districts, the gaps between current spending and the amount needed to reach the starting point and ultimate funding goal indicate there is significant work to be done. And yet, this work is certainly achievable. The conclusions reached here do not suggest that the overall structure of Nevada's school finance system is flawed. Rather, the knowledge gained through this report could be used to modify the state's existing aid system so that it guarantees every school district has sufficient revenue to successfully meet existing performance expectations.

In closing, it is important to note that APA's analysis focuses on the total amount of funding required to raise school districts in Nevada to an adequate funding level. The report does not discuss where needed revenues might come from, but all funds do not necessarily need to come from state aid. Instead the costs identified here can be paid through a combination of federal, state, and local revenue sources.

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INTRODUCTION

This report was prepared by Augenblick, Palaich and Associates, Inc. (APA), a Denver-based consulting firm that has worked with state policy makers on school funding issues for more than 20 years. Over this time, the firm has evaluated school finance systems in more than 20 states and has helped to create the school finance systems in Colorado, Kansas, Louisiana, Maryland, Mississippi, New Hampshire, Ohio, and South Dakota.

The report was prepared at the request of Nevada's Legislative Committee on School Financing Adequacy (the Committee). In late 2005 the Committee released a request for proposals (RFP) seeking to identify contractors interested in helping Nevada study its school finance system. A competitive bidding process was held in which several firms responded to the state's RFP. In early 2006, APA was selected by the Committee to conduct the work that produces this report. As part of this work, APA met several times with the committee and conducted two outreach meetings (one in Las Vegas and one in Reno) which were open to the public and were designed to receive feedback and to help explain and clarify the process APA would use in developing the current report.

The purpose of this report is to estimate the cost of an "adequate" education in Nevada. As used here, "adequacy" means the cost of meeting state and federal resource requirement and student performance expectations, including those in Nevada's education accountability system and the state's federally-approved plan to comply with the No Child Left Behind Act (NCLB). By defining the cost of adequacy, this report can therefore help school districts, taxpayers, and policy makers understand the revenues schools need to produce the student results that are expected of them. To accomplish this work, APA focuses on two key costs:

1) A base cost, per-student (including the cost of plant operation and maintenance, but excluding costs of student transportation, food services, community services, adult education, capital costs, and debt service costs) adjusted for the size of the district; and

2) Additional cost "weights" for students with special needs (including at-risk students, special education students, English language learners, and career and technical education).

APA also looked at the cost impacts of the geographic location of districts, and possible inflation adjustments.

As discussed in greater detail in the next chapter, APA combined several approaches to help determine the base cost and additional cost weights for special need students. These included the professional judgment approach, the

successful schools approach, and aspects of the evidence based and statistical approaches.

APA also for the first time created an in-state panel to help us understand Nevada's unique fiscal, policy, and education environment. Working with the Committee, three people were identified who have a great deal of Nevada-specific, school funding knowledge to be on this panel. This team served several roles: (1) as a source of background information; (2) as a statewide panel to review the work of the school-level, district-level, and special needs professional judgment panels (described in Chapter III of this report); and (3) to discuss finance system options. We talked with members of the team on several occasions and met as group in Carson City. The team also helped us to understand the fiscal data collected by the state, develop prices used in costing out the resources identified by the professional judgment panels, and create a school finance model sensitive to the characteristics of the state and its school districts.

The remaining chapters of this report are organized as follows:

- Chapter I offers a discussion on what it means to examine the cost of an "adequate" education. It provides a background on adequacy, outlines the four main approaches used to conduct adequacy studies, and describes the experiences of three states that have used such studies in the past.

- Chapter II describes the successful school approach and the base, per-student cost figures it produced.

- Chapter III describes the professional judgment approach and the results it produced, including base cost figures and added costs for students with special needs.

- Chapter IV describes the statistical analyses APA conducted to create base cost and funding formula adjustment factors. These statistical analyses address the cost impact of three factors: 1) school and district size; 2) regional cost differences; and 3) inflation.

- Chapter V discusses how APA used its analyses to estimate the cost of adequacy for school districts and individual schools with various demographic characteristics.

- Chapter VI compares the cost of adequacy with actual spending in Nevada's school districts.

- Chapter VII provides an overview of Nevada's existing school finance system and compares this system to several other states.

- Chapter VIII discusses how Nevada's school finance system can be designed to deliver both equitable and adequate levels of state aid to all schools and districts.

I. WHAT DOES "ADEQUACY" MEAN?

For purposes of this report "adequate revenues," or "adequacy," mean: sufficient funding so that schools and districts have a reasonable chance to meet state and federal student performance expectations. Such performance expectations are reflected in Nevada's state education accountability system, the state's federally-approved plan to comply with the No Child Left Behind Act (NCLB), and other requirements.

There are two primary reasons to determine the cost of adequacy:

(1) To understand the cost implications associated with meeting state and federal requirements/expectations; and

(2) To estimate needed adjustments to existing state school finance formulas.

With regard to meeting state and federal requirements, the fact is that most states (including Nevada) and the federal government have decided that standards-based reform is the best way to improve the elementary and secondary education system in this country. Under standards-based reform, the role of the state is to: (1) set standards for students, teachers, schools, and/or school districts (in terms of both "inputs", such as teacher qualifications, course offerings, or service requirements, and "outcomes", such as attendance and student performance on achievement tests); (2) measure how well students, teachers, schools, and/or school districts are doing (which may mean developing assessment procedures specifically tied to the standards); and (3) hold students, teachers, schools, and/or school districts accountable for their performance (sometimes associated with consequences either for meeting or not meeting standards).

At the outset of the standards-based reform movement, starting with the reform of the Kentucky education system in 1990, most states and the federal government did not attempt to estimate the costs that every school or district would incur in order to meet state/federal performance standards. Determining such costs has therefore become an essential missing piece that state policy makers need in order to understand what resources are required for schools and districts to succeed. Once these costs are determined, state policy makers also need to be able to properly incorporate them into the state's school finance system.

Nevada, like many states, uses a "foundation-type" formula as the basis for allocating a majority of the state's aid to school districts. Under a foundation approach, the state typically determines a "target" amount of revenue per student (combining a fixed, base amount – the foundation level – with added amounts for students with special needs). Districts are required to make a state-calculated

amount of local tax effort to help meet the foundation level. In Nevada, that amount is based on property wealth and Local School Support Tax (LSST) revenues. Due to differences in property values and LSST revenues, however, the same local tax effort can raise varying amounts of funds from district to district. To help level the playing field between wealthy and poor districts, the state makes up the difference between the amount of revenue generated by the property taxes and LSST and the amount guaranteed as the foundation target.

In some states the foundation level is calculated based on the amount of revenue needed for a student with no special needs attending school in an average size school district. In other states, student weights are used to help reflect the added cost of serving students with special, high cost needs. Weights can also be used to reflect the added cost of providing services in districts that face uncontrollable cost pressures – often related to a district's size or regional cost differences. In many states – including Nevada – however, the determination of the foundation level does not take into account the state (and federal) expectations for district and school performance. Such a method for determining the foundation does not reflect the level of resources needed to fully implement standards-based reform.

Approaches to Estimating the Cost of Adequacy

In the past few years, states have begun to develop approaches that can calculate a cost that reflects a particular level of desired student performance. These efforts are designed to create a base cost that has meaning beyond simply reflecting available state revenue. Four approaches have emerged as ways to determine such a base cost:

(1) The successful school approach;
(2) The professional judgment approach;
(3) The evidence-based approach; and
(4) The statistical approach.

Each of these methodologies has strengths and weaknesses. They differ in their underlying philosophies, the amounts of information they require, the types of information they produce, the number of states in which they have been used, and the magnitude of the parameters that they estimate.

APA has come to believe that the successful school approach provides a reasonable estimate of the base cost in relation to what school districts are accomplishing at present. Under this approach a "base cost" is determined by examining the basic spending of districts that meet current state standards. The base cost applies to students with no special needs attending schools in districts that do not face unusual cost pressures.

We have found that the professional judgment approach provides a reasonable estimate of the base cost for a level of performance expected in the future. It

also provides information about the additional costs of serving students with special needs or of serving students in districts that vary in size. The approach relies on the views of experienced educators and education service providers to specify the resources needed for schools and districts to achieve a set of specified performance objectives. Once the services have been specified (with a focus on numbers of personnel, regular school programs, extended-day and extended-year programs, professional development, and technology), costs are attached and a per pupil cost is determined.

APA has found that the statistical approach – which is based on understanding those factors that statistically explain differences in spending across school districts while controlling for student performance – cannot be used effectively in many states due to a lack of available information. In particular, there is often a lack of needed fiscal data at the school level. We have found the evidence-based approach – which seeks to use information gleaned from research to define the resource needs of a hypothetical school district – to also be limited in its usefulness. This limited usefulness is driven by the limited findings that current education research offers. For instance, existing research speaks only to limited kinds of resources, primarily teachers and some of the staff who support them – and studies even in these areas can offer conflicting or unclear results. In addition, research says nothing about many critical resources that schools utilize such as librarians, counselors, plant operation and maintenance, and school district administration.

Drawing on our experience, APA therefore recommended – and subsequently conducted – an adequacy analysis for Nevada based primarily upon both the successful school and professional judgment approaches. The use of both is advantageous to policy makers because it allows for a more thorough examination that can better account for inherent differences among approaches.

However, APA also integrated aspects of both the statistical and evidence based approaches. The evidence based work was used to guide and strengthen our professional judgment panels. We relied on two national experts to inform these panels of the types of resources which research shows may be needed for improving student performance. With regard to the statistical approach, our work (as described in Chapter IV) was made possible by the availability of school level data in Nevada and helps provide a much more thorough cost picture that takes into account inflation as well as cost differences based on school/district size and location differences. We believe that, by integrating the best aspects of the statistical and evidence based analyses into our professional judgment and successful school work, APA provides the strongest possible set of analyses for Nevada.

How Adequacy Studies Are Used: Case Studies in Three States

This section describes the experience of three states (Kansas, Maryland, and Mississippi) that have conducted studies designed to understand the cost of an adequate education. Each state's unique context and circumstances result in different stories for how the adequacy studies are used and implemented by policymakers.

Kansas

Kansas is an interesting example of the interaction between a state's constitution, its legislature, and its courts in terms of education adequacy. The Kansas constitution (1966) requires that the "legislature shall make suitable provision for finance of the educational interests of the state." In 1994, the Kansas Supreme Court upheld the recently enacted school finance system (the School District Finance and Quality Performance Act). In 2002 APA released its study, which was commissioned by the state Legislature. The study estimated the factors that could be used to estimate the cost of a "suitable" education. APA, however, never used the factors to make a district by district estimate of such costs. Instead, the state, through the state Department of Education, did its own analysis and determining that the cost was $726 million over the $1.95 billion that was being spent in school districts at the time.

In 2003, a state district court declared the school finance system to be unconstitutional and gave the legislature until the end of the 2004 session to fund the system at an appropriate level. The legislature did not modify funding that year and in 2005 the Kansas Supreme Court found the school finance system to be in violation of the state constitution cited above.

During the 2005 legislative session, the legislature developed a plan to increase education funding by $141 million and to do so by phasing-in new funds over time. The Kansas Supreme Court required the legislature to add $143 million to the $141 million already provided, and this was accomplished before the 2005-06 school year began. During the 2005 session the legislature also required that the Legislative Division of Post Audit (LDPA) conduct an independent study of the costs of a suitable education. A driving factor behind the legislature's request for the LDPA study was a statement made by the Supreme Court that the only information it had to guide its thinking about cost was the 2002 APA study.

The study by the LDPA was released in 2006 and recommended total spending that was consistent with the state's interpretation of the APA study. In 2006, the legislature added additional funding for education and established a plan to phase in additional funding over the next eight years. The Kansas Supreme Court is reviewing the legislature's work and is expected to issue a ruling soon about whether the school finance system is in compliance with the state constitution.

Maryland

Maryland is an example of a state taking the lead in identifying and providing the adequate cost of education. In 1999, Maryland established the Commission on Education Finance, Equity, and Excellence (Thornton Commission). The Thornton Commission first looked at the overall structure of the state's school finance system and then began to examine the adequacy of the system. One of the big reasons the commission turned to adequacy was Maryland's strong accountability system and the commission's belief that districts needed to be assured of having the resources necessary to meet the standards.

The Thornton Commission relied on APA, then Augenblick & Myers, to conduct both the Successful Schools and Professional Judgment approaches. The approaches created two base costs and a number of adjustments for students with special needs. The Thornton Commission's final report suggested using the Successful Schools base number as a starting point with district's having the ability to get to the Professional Judgment base. The adjustments for students with special needs were also adjusted to be in line with the number of students who would fall into more than one category.

The legislature took the Thornton Commission's recommendations and passed them in legislation in 2002. There was a six year phase in of a $1.1 billion dollar increase in funding for schools. The phase-in continues today and is nearing full implementation.

Mississippi

Mississippi is an example of a state that has used the successful school (in this case focusing on districts) approach as the basis for developing the base cost figure it uses in its school finance system (the Mississippi Adequate Education Program, or MAEP). MAEP was adopted in 1996, replacing a system that had been based on numbers of personnel and a statewide teacher salary schedule. Both MAEP and its predecessor are foundation-type systems, which require the state to specify the revenue needs of each school district.

At the time MAEP was enacted, the legislature was looking for a way to determine how much school districts needed to spend in order to meet state school district accreditation requirements. The MAEP base, developed by APA, is therefore composed of four accreditation components – instruction, administration, plant operation and maintenance (M&O), and ancillary (primarily student and staff support). APA created a procedure to identify districts that were "successful" in terms of meeting specific criteria associated with each component. First school districts that met the highest level of school district accreditation were selected. Then, within each component, efficiency criteria were specified to identify districts that had personnel ratios that were not too far

from the statewide average. So, for example, with instruction, the per student expenditure figures of districts that both met accreditation standards at the highest level and did not have unusually low student-teacher ratios were used to create a statewide average figure for instruction. Figures for the other components were combined with instruction to create a base cost.

In 2005 APA was asked to help the legislature update the figures in light of student performance information (which had not been available earlier) and new efficiency criteria. The legislature adopted the new procedure in 2006 and student performance criteria now play a central role in the state's accreditation standards. It should be noted that the legislature has not made changes in the ways it provides support for students with special needs, some of which are based on student weights. Additional analysis, using an approach other than the successful school approach would be required to make such adjustments.

II. IMPLEMENTING THE SUCCESSFUL SCHOOLS APPROACH IN NEVADA

The successful schools (SS) approach examines the actual spending of schools or districts that successfully meet state and federal performance expectations. The base spending of identified successful districts or schools is then used to help determine an overall adequate base funding level. The selection of successful schools is impartial and is based solely on whether identified performance criteria are met. At the same time, it is not correct to label those districts or schools that do not meet the criteria as "unsuccessful." Such schools may, in fact, be doing very well with their students, they simply do not meet the specific criteria established by the SS approach.

Using the Successful Schools Approach in Nevada

As mentioned above, the SS approach looks at the performance of either high-performing districts or high-performing schools to calculate a base cost figure. The approach does not generally look at both districts and schools but focuses instead on one or the other. In the case of Nevada, it was readily apparent that the level of analysis should be the school level. This was largely because Nevada has such a small number of school districts (17). Such a small number of districts does not lend itself well to conducting the SS approach at the district level. APA therefore decided to focus on the school level.

In order to undertake the SS approach APA requires spending data for each school in the state. The spending data must be organized in such a manner that APA can isolate the base spending (spending for students without special needs) for each school. In many states, such school level data is simply unavailable. In Nevada, however, the state pays for the collection of In$ite® data, which offers school level information. In$ite® is a registered trademark of EdMin.Com (referred to hereinafter as In$ite). This In$ite data provided APA with all the spending data needed to undertake the SS approach at the school level.

With this school level data in hand APA identified the process described in the following sections for running an SS analysis in Nevada. This process includes:

1) Selecting successful schools using two primary criteria.
2) Identifying the base spending for the successful schools.
3) Using the base spending data to apply efficiency screens that exclude schools that are inefficient in their spending.
4) Identifying an overall base cost.

Selecting Successful Schools

When selecting schools for the SS approach, APA picked criteria that would identify Nevada schools which are on their way to meeting future state and federal student performance standards. In other words, the criteria were not

designed simply to identify those schools doing better on today's tests. Instead, we sought to identify those showing rates of performance improvement needed to meet the escalating future standards.

The strength of this approach is that it does not simply identify schools that are doing well today and who may enroll students who are already likely to meet performance expectations. Instead, the approach identifies schools that either consistently attained performance levels called for in the future, or show an improvement in performance that trended toward meeting those future goals. APA also wanted the criteria to measure success with a broad range of students, not just success with the average student. The testing systems allow this by breaking out performance results for different types of students. To be selected as a successful school, APA therefore examined two criteria:

1. 2008-09 English and math general student population performance objectives; and
2. 2004-05 English and math test scores for students with special needs.

The first criteria focused on Nevada's No Child Left Behind (NCLB) Annual Yearly Progress standards for the 2008-09 school year. The standard differed by grade level as seen in the following table. APA used performance data for each school from the 2002-03, 2003-04 and 2004-05 school years to see if the school was on target to meet the 2008-09 objectives. We did this by regressing the proportion of students making adequate yearly progress against time for each school and using the resulting formula to predict the school's 2008-09 performance. If the school was on target to meet the 2008-09 objectives they were deemed successful.

Nevada	Elementary		Middle School		High School	
AYP Objectives,	*ELA*	*Math*	*ELA*	*Math*	*ELA*	*Math*
2008-2009	52%	56%	58%	55%	82%	62%

The second criteria focused on how well schools were doing with their special student populations. The populations APA looked at were special education, at-risk pupils, and English language learners. We then looked at reading and math tests for each of those three populations. This gave us six tests to examine for each school. APA looked at the performance on the 2004-05 tests and set the standard as the 2004-05 objectives, which are shown in the following table.

Nevada	Elementary		Middle School		High School	
AYP Objectives,	*ELA*	*Math*	*ELA*	*Math*	*ELA*	*Math*
2004-2005	40%	45%	48%	43%	78%	52%

To be considered "successful" for our purposes, a school who met the first criteria (based on the 2008-09 AYP targets) also had to meet the 2004-05 objective for two of the six special population tests. By using this combination of

criteria, 118 schools were identified as successful. The list of successful schools is shown in Table II-1.

Identifying Base Spending for Successful Schools

Once successful schools were identified, the next step was to identify the base spending amount for each successful school. As mentioned earlier in the section, Nevada uses the In$ite data collection system. This provides data for every school in the state and breaks down such data by different types of spending. For the SS approach, we needed to identify the base spending for every school. This spending excludes spending for at-risk students, special education students, ELL students, transportation, food service and capital. To get this base spending data APA worked with the contractor for Nevada's In$ite data.

APA was provided with In$ite data that included general education spending for three different areas: 1) Instruction; 2) Administration; and 3) Building Operations and Maintenance. The table below shows the categories of spending within each of these three areas.

Instruction	
	Instructional Teachers
	Substitutes
	Instructional Paraprofessionals
	Pupil-Use Technology & Software
	Instructional Materials, Trips & Supplies
	Guidance & Counseling
	Library & Media
	Extracurricular
	Student Health & Services
	Curriculum Development
	In-Service, Staff Development & Support
	Sabbaticals
	Program Development
	Therapists,Psych,Eval,Pers Att. & Soc Workers
	Safety
Administration	
	Business Operations
	Principals & Assistant Principals
	School Office
Building Operations and Maintenance	
	Building Upkeep, Utilities & Maintenance

Applying Efficiency Screens

Once APA identified the base spending for each successful school, we then looked to apply efficiency screens in each of the three spending areas (instruction, administration, and operations and maintenance). The screens are designed to exclude schools whose spending in any one of the areas is out of line with the other schools. The screens measure efficiency in two ways: 1) For instruction and administration APA looked at the number of personnel per 1,000 students; 2) For buildings operations and maintenance, personnel data was not available, so spending per pupil was used for the efficiency screen.

The personnel data for instruction and administration was collected from the state. For instruction, APA looked at the number of teachers per 1,000 pupils in each school. We then excluded any school that had a teacher-per-1,000 pupil figure one standard deviation above the mean or higher. The administration efficiency screen relied on the number of administrators per 1,000 pupils and again excluded those schools with a figure higher than one standard deviation above the mean. Finally for building maintenance and operations, APA excluded any school whose spending per pupil in the category was one standard deviation above the mean or higher. In each of the three categories some data was missing for a few schools and these schools were excluded from the calculation of base spending in that area. The list of schools used for each spending area can be seen in Tables II-2A through II-2C listed at the end of this chapter.

Identifying the Overall Base Cost

Once the efficiency screens were applied, APA was left with 101 schools for instruction, 93 schools for administration and 98 schools for building maintenance and operations. We examined per pupil spending for each of these sets of schools in the three different categories and came up with the following base costs for each area:

1) Instruction weighted average base cost is $3,277;
2) Administration weighted average base cost is $429; and
3) Building maintenance and operations weighted average base cost is $556.

APA next needed to add in district costs to the school level base spending. We again used In$ite data for this information. Through the work done for the statistical approach we were able to identify the district level costs associated with the base cost figures described above. The district costs were $398. This creates an SS base cost of $4,660. This figure will be comparable to the large district figure developed in the PJ work. The size adjustment developed using the PJ approach will also need to be applied to the SS base to create an SS base cost for every district.

TABLE II - 1

SCHOOLS MEETING THE SUCCESSFUL SCHOOLS APPROACH CRITERIA

01-202	Northside Elementary School
01-204	West End Elementary School
01-301	Churchill County Junior High School
02-103	Lundy Elementary School
02-126	David Cox Elementary School
02-136	King Martha Elementary School
02-137	Bartlett Elementary School
02-138	Bendorf Elementary School
02-141	Lummis Elementary School
02-148	Richard Bryan Elementary School
02-154	Vanderburg Elementary School
02-156	Bryan Roger Elementary School
02-162	Morrow Elementary School
02-174	Rogers Elementary School
02-176	Twitchell Elementary School
02-178	Alamo Elementary School
02-202	Hoggard Elementary School
02-225	Cahlan Elementary School
02-230	Taylor Glen Elementary School
02-235	Red Rock Elementary School
02-246	Bracken Elementary School
02-271	Bilbray Elementary School
02-272	Frias Elementary School
02-280	Bass Elementary School
02-283	Ober Elementary School
02-286	Staton Elementary School
02-296	Marion Earl Elementary School
02-298	McDoniel Elementary School
02-303	Hyde Park Middle School
02-309	Knudson Middle School
02-318	Garrett Middle School
02-320	Sandy Valley Middle School
02-321	Laughlin High School
02-323	Johnson Middle School
02-324	Greenspun Middle School
02-326	White Middle School
02-327	Becker Middle School
02-328	Sawyer Middle School
02-329	Lyon Middle School
02-334	Silvestri Middle School
02-337	Lawrence Middle School
02-338	Bob Miller Middle School
02-339	Rogich Middle School
02-347	Fertitta Middle School
02-349	Canarelli Middle School
02-412	SNVTC
02-418	Las Vegas Academy
02-420	Advanced Technologies Academy
02-421	Silverado High School
02-422	Community College East
02-423	Community College West
02-601	Boulder City High School
02-607	Centennial High School
02-608	Foothill High School
02-611	Sierra Vista High School
02-612	Coronado High School
03-205	Meneley Elementary School
03-207	Scarselli Elementary School
03-208	Kingsbury Middle School
03-209	Pinon Hills Elementary School
03-301	Carson Valley Middle School
03-302	Pau Wa Lu Middle School
03-501	Douglas High School
03-502	Whittell High School
04-209	Mountain View Elementary School
04-210	Spring Creek Elementary School
04-211	Sage Elementary School
04-503	Elko Junior High School
04-504	Spring Creek Middle School
04-505	Jackpot Junior High School
04-606	Spring Creek High School
08-301	Battle Mountain Junior High School
08-601	Battle Mountain High School
09-202	Panaca Elementary School
09-203	Pioche Elementary School
09-302	Pahranagat Valley Middle School
09-601	Pahranagat Valley High School
10-208	Dayton Intermediate
10-302	Yerington Intermediate
10-303	Fernley Intermediate
10-602	Smith Valley High School
12-108	Johnson Elementary School
12-206	Mt Charleston Elementary School
12-313	Round Mountain Middle School
12-315	Gabbs Middle School
12-316	Amargosa Valley Middle School
13-302	Eagle Valley Middle School
14-301	Pershing Middle School
05-301	Virginia City Middle School
16-207	Beck Elementary School
16-210	Melton Elementary School
16-212	Double Diamond Elementary School
16-215	Corbett Elementary School
16-216	Gomm Elementary School
16-222	Maxwell Elementary School
16-223	Drake Elementary School
16-227	Lincoln Park Elementary School
16-229	Brown Elementary School
16-235	Verdi Elementary School
16-257	Lenz Elementary School
16-261	Caughlin Ranch Elementary School
16-262	Hidden Valley Elementary School
16-267	Moss Elementary School
16-268	Desert Heights Elementary School
16-274	Hunsberger Elementary School
16-301	Clayton Middle School
16-306	Dilworth Middle School
16-309	Incline Middle School
16-310	Billinghurst Middle School
16-311	Mendive Middle School
16-313	Gerlach Middle School
16-315	Damonte Ranch Middle School
16-503	Sparks High School
17-101	Lund Elementary School
17-601	Lund High School
	Dyer Elementary School
	Silver Peak Elementary School
	Eureka High School

TABLE II - 2A

SCHOOLS USED TO CALCULATE THE SUCCESSFUL SCHOOL INSTRUCTION AMOUNT PER PUPIL

01-202	Northside Elementary School
01-204	West End Elementary School
01-301	Churchill County Junior High School
02-103	Lundy Elementary School
02-126	David Cox Elementary School
02-136	King Martha Elementary School
02-137	Bartlett Elementary School
02-138	Bendorf Elementary School
02-141	Lummis Elementary School
02-148	Richard Bryan Elementary School
02-154	Vanderburg Elementary School
02-156	Bryan Roger Elementary School
02-162	Morrow Elementary School
02-174	Rogers Elementary School
02-176	Twitchell Elementary School
02-202	Hoggard Elementary School
02-225	Cahlan Elementary School
02-230	Taylor Glen Elementary School
02-235	Red Rock Elementary School
02-271	Bilbray Elementary School
02-272	Frias Elementary School
02-280	Bass Elementary School
02-283	Ober Elementary School
02-286	Staton Elementary School
02-296	Marion Earl Elementary School
02-298	McDoniel Elementary School
02-303	Hyde Park Middle School
02-309	Knudson Middle School
02-318	Garrett Middle School
02-320	Sandy Valley Middle School
02-321	Laughlin High School
02-323	Johnson Middle School
02-324	Greenspun Middle School
02-326	White Middle School
02-327	Becker Middle School
02-328	Sawyer Middle School
02-329	Lyon Middle School
02-334	Silvestri Middle School
02-337	Lawrence Middle School
02-338	Bob Miller Middle School
02-339	Rogich Middle School
02-347	Fertitta Middle School
02-349	Canarelli Middle School
02-412	SNVTC
02-418	Las Vegas Academy
02-420	Advanced Technologies Academy
02-421	Silverado High School
02-422	Community College East
02-423	Community College West
02-601	Boulder City High School
02-607	Centennial High School
02-608	Foothill High School
02-611	Sierra Vista High School
02-612	Coronado High School
03-205	Meneley Elementary School
03-207	Scarselli Elementary School
03-208	Kingsbury Middle School
03-209	Pinon Hills Elementary School
03-301	Carson Valley Middle School
03-302	Pau Wa Lu Middle School
03-501	Douglas High School
03-502	Whittell High School
04-209	Mountain View Elementary School
04-210	Spring Creek Elementary School
04-211	Sage Elementary School
04-503	Elko Junior High School
04-504	Spring Creek Middle School
04-606	Spring Creek High School
08-301	Battle Mountain Junior High School
08-601	Battle Mountain High School
10-208	Dayton Intermediate
10-302	Yerington Intermediate
10-303	Fernley Intermediate
10-602	Smith Valley High School
12-108	Johnson Elementary School
12-206	Mt Charleston Elementary School
13-302	Eagle Valley Middle School
14-301	Pershing Middle School
16-207	Beck Elementary School
16-210	Melton Elementary School
16-212	Double Diamond Elementary School
16-215	Corbett Elementary School
16-216	Gomm Elementary School
16-222	Maxwell Elementary School
16-223	Drake Elementary School
16-227	Lincoln Park Elementary School
16-229	Brown Elementary School
16-235	Verdi Elementary School
16-257	Lenz Elementary School
16-261	Caughlin Ranch Elementary School
16-262	Hidden Valley Elementary School
16-267	Moss Elementary School
16-268	Desert Heights Elementary School
16-274	Hunsberger Elementary School
16-301	Clayton Middle School
16-306	Dilworth Middle School
16-310	Billinghurst Middle School
16-311	Mendive Middle School
16-503	Sparks High School
17-601	Lund High School
	Dyer Elementary School

TABLE II - 2B

SCHOOLS USED TO CALCULATE THE SUCCESSFUL SCHOOL ADMINISTRATION AMOUNT PER PUPIL

01-202	Northside Elementary School
01-204	West End Elementary School
01-301	Churchill County Junior High School
02-126	David Cox Elementary School
02-136	King Martha Elementary School
02-137	Bartlett Elementary School
02-138	Bendorf Elementary School
02-141	Lummis Elementary School
02-148	Richard Bryan Elementary School
02-154	Vanderburg Elementary School
02-156	Bryan Roger Elementary School
02-162	Morrow Elementary School
02-174	Rogers Elementary School
02-176	Twitchell Elementary School
02-178	Alamo Elementary School
02-202	Hoggard Elementary School
02-230	Taylor Glen Elementary School
02-235	Red Rock Elementary School
02-271	Bilbray Elementary School
02-272	Frias Elementary School
02-280	Bass Elementary School
02-283	Ober Elementary School
02-286	Staton Elementary School
02-296	Marion Earl Elementary School
02-298	McDoniel Elementary School
02-303	Hyde Park Middle School
02-309	Knudson Middle School
02-318	Garrett Middle School
02-323	Johnson Middle School
02-324	Greenspun Middle School
02-326	White Middle School
02-327	Becker Middle School
02-328	Sawyer Middle School
02-334	Silvestri Middle School
02-337	Lawrence Middle School
02-338	Bob Miller Middle School
02-339	Rogich Middle School
02-347	Fertitta Middle School
02-412	SNVTC
02-418	Las Vegas Academy
02-420	Advanced Technologies Academy
02-421	Silverado High School
02-422	Community College East
02-423	Community College West
02-601	Boulder City High School
02-607	Centennial High School
02-608	Foothill High School
02-611	Sierra Vista High School
02-612	Coronado High School
03-205	Meneley Elementary School
03-207	Scarselli Elementary School
03-209	Pinon Hills Elementary School
03-301	Carson Valley Middle School
03-302	Pau Wa Lu Middle School
03-501	Douglas High School
04-209	Mountain View Elementary School
04-210	Spring Creek Elementary School
04-211	Sage Elementary School
04-503	Elko Junior High School
04-504	Spring Creek Middle School
04-606	Spring Creek High School
08-301	Battle Mountain Junior High School
08-601	Battle Mountain High School
09-202	Panaca Elementary School
09-601	Pahranagat Valley High School
10-208	Dayton Intermediate
10-302	Yerington Intermediate
10-303	Fernley Intermediate
12-108	Johnson Elementary School
12-206	Mt Charleston Elementary School
13-302	Eagle Valley Middle School
14-301	Pershing Middle School
16-207	Beck Elementary School
16-210	Melton Elementary School
16-212	Double Diamond Elementary School
16-215	Corbett Elementary School
16-216	Gomm Elementary School
16-222	Maxwell Elementary School
16-223	Drake Elementary School
16-227	Lincoln Park Elementary School
16-229	Brown Elementary School
16-235	Verdi Elementary School
16-257	Lenz Elementary School
16-261	Caughlin Ranch Elementary School
16-262	Hidden Valley Elementary School
16-267	Moss Elementary School
16-268	Desert Heights Elementary School
16-274	Hunsberger Elementary School
16-301	Clayton Middle School
16-306	Dilworth Middle School
16-310	Billinghurst Middle School
16-311	Mendive Middle School
16-503	Sparks High School

TABLE II - 2C

SCHOOLS USED TO CALCULATE THE SUCCESSFUL SCHOOL MAINTENANCE AND OPERATIONS AMOUNT PER PUPIL

01-202	Northside Elementary School
01-204	West End Elementary School
01-301	Churchill County Junior High School
02-126	David Cox Elementary School
02-136	King Martha Elementary School
02-137	Bartlett Elementary School
02-138	Bendorf Elementary School
02-141	Lummis Elementary School
02-148	Richard Bryan Elementary School
02-154	Vanderburg Elementary School
02-156	Bryan Roger Elementary School
02-162	Morrow Elementary School
02-174	Rogers Elementary School
02-176	Twitchell Elementary School
02-178	Alamo Elementary School
02-202	Hoggard Elementary School
02-225	Cahlan Elementary School
02-230	Taylor Glen Elementary School
02-235	Red Rock Elementary School
02-246	Bracken Elementary School
02-271	Bilbray Elementary School
02-272	Frias Elementary School
02-280	Bass Elementary School
02-283	Ober Elementary School
02-286	Staton Elementary School
02-296	Marion Earl Elementary School
02-298	McDoniel Elementary School
02-303	Hyde Park Middle School
02-309	Knudson Middle School
02-318	Garrett Middle School
02-323	Johnson Middle School
02-324	Greenspun Middle School
02-326	White Middle School
02-327	Becker Middle School
02-328	Sawyer Middle School
02-334	Silvestri Middle School
02-337	Lawrence Middle School
02-338	Bob Miller Middle School
02-339	Rogich Middle School
02-347	Fertitta Middle School
02-349	Canarelli Middle School
02-412	SNVTC
02-418	Las Vegas Academy
02-420	Advanced Technologies Academy
02-421	Silverado High School
02-601	Boulder City High School
02-607	Centennial High School
02-608	Foothill High School
02-611	Sierra Vista High School
02-612	Coronado High School
03-205	Meneley Elementary School
03-207	Scarselli Elementary School
03-209	Pinon Hills Elementary School
03-301	Carson Valley Middle School
03-302	Pau Wa Lu Middle School
03-501	Douglas High School
04-209	Mountain View Elementary School
04-210	Spring Creek Elementary School
04-211	Sage Elementary School
04-503	Elko Junior High School
04-504	Spring Creek Middle School
04-606	Spring Creek High School
08-301	Battle Mountain Junior High School
08-601	Battle Mountain High School
09-202	Panaca Elementary School
09-203	Pioche Elementary School
09-302	Pahranagat Valley Middle School
10-208	Dayton Intermediate
10-302	Yerington Intermediate
10-303	Fernley Intermediate
12-108	Johnson Elementary School
12-206	Mt Charleston Elementary School
12-316	Amargosa Valley Middle School
13-302	Eagle Valley Middle School
14-301	Pershing Middle School
16-207	Beck Elementary School
16-210	Melton Elementary School
16-212	Double Diamond Elementary School
16-215	Corbett Elementary School
16-216	Gomm Elementary School
16-222	Maxwell Elementary School
16-223	Drake Elementary School
16-227	Lincoln Park Elementary School
16-229	Brown Elementary School
16-235	Verdi Elementary School
16-257	Lenz Elementary School
16-261	Caughlin Ranch Elementary School
16-262	Hidden Valley Elementary School
16-267	Moss Elementary School
16-268	Desert Heights Elementary School
16-274	Hunsberger Elementary School
16-301	Clayton Middle School
16-306	Dilworth Middle School
16-309	Incline Middle School
16-310	Billinghurst Middle School
16-311	Mendive Middle School
16-315	Damonte Ranch Middle School
16-503	Sparks High School

III. IMPLEMENTING THE PROFESSIONAL JUDGMENT APPROACH IN NEVADA

The professional judgment (PJ) approach relies on the assumption that experienced educators can specify the resources hypothetical schools need in order to meet state standards, and that the costs of such resources can be determined based on a set of prices specific to those resources. Identified resources are typically divided into two groups:

(1) Those associated with a "base cost" that applies to all students; and
(2) Those associated with students who have special needs.

For example, thinking about the base cost, a PJ panel of experienced educators might find that, for a hypothetical school with 200 students, ten teachers would be needed so that students can meet state academic standards. If the statewide average salary and benefits of a teacher were $40,000, then the cost per student based on the professional judgment panel's input would be $2,000 (10 teachers times $40,000/teacher divided by 200 students). Based on the panel's judgments, other costs might also need to be incurred such as those associated with teacher aides, school principals, supplies and materials, and so on. Together, these costs could be added to determine the total "base" cost of providing an adequate education.

In the case of this study, APA also examined whether base costs should vary by such factors as school district size. Professional judgment panels were also asked to separately estimate the resources needed to serve students with special needs. Students with special needs include:

- Those in special education programs (for which students require individual education plans [IEPs]);
- Those with language difficulties (who we refer to as English language learners [ELL students]);
- Those who are at risk of failing in school (the count for which we estimate based on a generally accepted proxy measure – which is eligibility for free or reduced-price lunch – rather than on a direct measure of student performance)
- Students in career and technical education (CTE) programs.

Using the PJ approach, the additional cost of serving students with such special needs can be expressed through student "weights" relative to the base cost.[1]

[1] Pupil weights are factors used to express the added cost of serving students with special needs. Every student, regardless of special needs, is counted as 1.00 student. In order to determine the base cost of a district, the number of students enrolled in the district is multiplied by 1.00 and that product is then multiplied by the base cost figure. If the *added* cost of serving a student with a special need were determined to be 60 percent of the base cost, then the weight applied to such a student would be .60 (for a total weight of 1.60). Additional weighting might be applied to all students in a district to account for certain district characteristics (such as size) that can impact per student costs.

The ability to identify resources for such special needs students distinguishes the professional judgment approach from the successful school approach discussed in Chapter II of this report. This is because the successful school approach only allows for an examination of base, per-student costs.

Creating Hypothetical Schools

Hypothetical schools are ones designed to act as a proxy to reflect statewide average characteristics of school districts. To the extent that all of the schools within a state would be reasonably well represented by a single set of hypothetical schools, a single PJ panel would be sufficient to estimate funding adequacy. Due to the existing variations among Nevada school districts, however, APA needed to use multiple PJ panels, each focused on hypothetical schools and/or districts of different configuration and size.

As shown in Table III-1, some 369,023 students attended public, non-charter schools in Nevada in 2003-04. Those students attended schools in 17 districts. Among these 17 districts, 8 school districts have fewer than 1,500 students, 7 districts have between 1,501 and 49,999 students, and 2 districts have over 50,000 students. The 8 districts with fewer than 1,500 students enroll less than 1 percent of all students. The 2 largest districts (with more than 50,000 students) enroll 86 percent of all students.

Based on these variations, we divided Nevada's school districts into three groups based on size: 1) "small"; 2) "moderate"; and 3) "large". APA then determined the average characteristics of each group and developed a set of hypothetical schools and districts based on these averages. The characteristics of the hypothetical groups are shown in Table III-2. For example, the small K-12 hypothetical district had 780 students who attended one small elementary school with 70 students, two large elementary schools with 175 students each, one middle school with 120 students, and one high school with 240 students.

To address the added cost of students with special needs in hypothetical schools APA similarly looked at the average characteristics in existing schools in Nevada and developed enrollment levels for each of the three hypothetical district sizes (shown in Table III-2). Special education percentages were kept constant across the three district groups; 9.5 percent are mild special education students, 3.5 percent are moderate, and 1 percent are severe[2]. At-risk and English language learner (ELL) percentages differed to mirror the populations found in existing school districts. For instance, in the hypothetical small size district, 48 percent of students are identified as at-risk, which is higher than the 29 percent seen in moderate and large districts. This is not unusual as small, rural districts often

[2] Mild Special Education includes Learning Disabilities and Speech; Moderate includes Mentally, Aurally, Visually, Emotionally, and Orthepedically Handicapped/Impaired, Other Health Impairments, and Developmentally Delayed; Severe includes Deaf/Blind, Autistic, Multiple Disabilities, and Traumatic Brain Injury.

have higher concentrations of at-risk students than their larger counterparts. ELL percentages vary conversely with district size; 4 percent of students in small districts are ELL, while 9 percent are ELL in the hypothetical moderate and large districts.

By approaching cost evaluation for special needs students in this way, APA's analysis gains several advantages. First, the numbers more closely resemble those found in actual schools across Nevada. Second, the use of more realistic numbers means that the PJ panelists were better able to relate to the hypothetical schools and districts that they were attempting to create.

Professional Judgment Panel Design

Based on APA's previous experience using the PJ approach in other states, we felt that it was best to continue using multiple levels of professional judgment panels as we have done before. There are several reasons to use multiple panels: (1) it allows for the separation of school-level resources (which include such things as teachers, supplies, materials, and professional development) from district-level resources (which include such things as facility maintenance and operation, insurance, and school board activities); (2) multiple panels can study schools and districts of varying sizes so that APA can determine whether size has an impact on cost; and (3) APA believes strongly in the importance of having each panel's work reviewed by another panel.

Building on the multiple panel format APA took a unique approach in Nevada and added two additional student population-specific panels. These two panels focused on special needs populations and Career and Technical Education (CTE). By convening these two additional panels, APA believes the needs of these specific sub-groups were more accurately identified and addressed than in any previous work.

Overall, the PJ panel structure in Nevada was designed as follows:

(1) First round panels. Two panels were convened to address school-level needs in three hypothetical K-12 school districts (small, moderate, and large). Schools in moderate and large districts were addressed in a single moderate/large panel. Both the small panel, and the moderate/large panel "built" hypothetical elementary, middle, and high schools designed to accomplish a specific set of performance objectives and standards (which are described later in this chapter in the section on "Professional Judgment Panel Procedures").
    - The moderate/large panel created several different sized schools of various grade configurations. The resulting input was then later used to build two separate districts. The moderate/large panel also looked at school-level resources needed for "regular" education

students, at-risk and ELL students, but not special education students (these were addressed in the second round panels).
- The small panel looked at school-level resources for "regular" education students and all special needs student populations, including special education, as well as district-level resources for all students.

(2) Second round panels. Three panels were held at this stage: one district-level panel, a panel for special needs populations, and a panel for CTE.
- Moderate and large districts were handled by the district-level panel which reviewed the work of the first round, school-level panel, then looked at additional district-level resources necessary.
- The special needs panel reviewed the resources identified by the first round small district panel. The special needs panel then added in resources needed for special needs students in moderate and large districts.
- The CTE panel examined additional resources needed in all districts to run such a program.

(3) Final in-state panel. This panel reviewed previous panel work, discussed resource prices, examined preliminary cost figures and attempted to resolve some of the inconsistencies that arose across panels.

First and second round panels each had 6-8 participants, including a combination of classroom teachers, principals, personnel who provide services to students with special needs, superintendents, and school business officials. The in-state panel had three members. A total of 39 panelists participated in the three rounds of panels. A list of panel members is provided in Appendix A to this report.

APA did not select the panel members, they were selected through a nomination process that included the:
- School superintendents
- Superintendent of public instruction
- Nevada Manufacturers Association
- Nevada State Education Association
- Nevada Association of School Boards
- Nevada Association of School Administrators
- Commission on Educational Excellence

In order to set the panels, APA did however provide a list of the job titles we were looking for, as well as some suggestions for selection criteria such as: (1) participants should be from districts that fit within the size range of the panels they would be serving on, i.e. for the small district panel participants were asked to be from districts of less than 1,500 students, (2) participants should be experienced and, if possible had received recognition for excellence, and (3) school-level personnel should be from schools identified as successful (based on

our use of the successful school approach as discussed in Chapter II) to the extent that it is possible. This request was made to help assure that panelists based their recommendations on experiences in school districts that are already performing comparatively well.

Nominated panelists were then contacted by APA with panel details. Observers were invited to watch panel discussions. One individual chose to attend the first day of panel discussion during the second round of panels. This observer did not participate in any discussions, but was able to freely move from room to room and to watch and listen to all discussions.

The first round of panels met for two days in Las Vegas in late March 2006; the second round met for two days in Carson City at the end of April; and the overview panel met in Carson City for a day in mid-May, 2006.

Identifying the "Standard": State and Federal Accountability Requirements in Nevada

Prior to the commencement of any PJ panel discussions, all panelists first met jointly with APA staff to review a specific set of background materials and instructions. These background materials were prepared by APA. In particular, panelists were instructed that their task was to identify what constitutes an "adequate" level of resources for hypothetical schools and districts. To accomplish this task, it was therefore necessary for panelists to understand the state's academic performance standards as described in this chapter. Panelists were instructed to focus on this standard in order to appropriately estimate the resources that schools and districts need to be successful.

To identify the appropriate standard, APA collected information about accountability requirements that school districts in Nevada must adhere to according to state and federal law. This information was used to guide the discussion and allocation of resources in the professional judgment panels. From the Nevada Department of Education's website, APA accessed information about Nevada's statewide assessments, content standards and performance criteria, graduation requirements, high school completion indicators, NCLB targets, recent results on the statewide assessments, high school completion rates, and the state's progress towards meeting adequate yearly progress. In addition to the website, APA accessed the Nevada legislature's homepage to find information about state statutes that mandate the use of resources in particular ways (e.g., minimum number of days of instruction per year, student/teacher ratios).

Following the collection of all of these data, APA synthesized the information and summarized it in a draft form. The draft was distributed to the committee overseeing the study. The committee then shared it with others, including the Nevada Department of Education. Comments APA received back from the

reviewers were incorporated into the final version of the standard that was used in the professional judgment panels.

APA reviewed the standard with the professional judgment panelists and said that the information contained within the standard was a summary of key accountability requirements within Nevada and federal law. Panelists were instructed to use the standard, as well as their knowledge of other critical education policies and practices in Nevada, to guide the allocation of resources needed in order to increase the number of students meeting or exceeding the standards. A copy of the standard used in the professional judgment panels is shown in Appendix B.

Using the Evidence-Based Approach to Strengthen PJ Work

In a number of states, the evidence-based approach to adequacy has been used to fully cost out an adequate education. APA feel's that this work treats a state exactly like any other state creating generic, one-sized fits all recommendations. To avoid this, but to still incorporate research evidence, APA convened two national researchers (a third dropped out at the last minute)[3] to identify the resources needed to meet Nevada's specific goals for its children. This panel was familiar with current research – and could apply their knowledge of the research to Nevada's specific demographic characteristics and performance expectations.

The national expert group's job was to set the initial "research-based" resource levels for consideration by the Nevada professional judgment panelists. The national expert group was given both the Nevada standard and hypothetical school characteristics to estimate initial resource needs.

<u>The actual instructions for the expert group were written as follows</u>:

- Please review the description of the attached Nevada standards that has been provided. The resources you identify should all be associated with meeting this standard.

- The following assumptions should be made while completing this exercise.
    - It is assumed that you can attract and retain highly qualified personnel for any position you need.
    - It is assumed that your facilities can handle any programming you create.
    - For the purpose of this exercise, the source of the money to pay for the needed resources does not matter.

[3] The two national experts were Dr. C. Kent McGuire, Dean of the School of Education at Temple University and Dr. David Conley, Professor of Education at the University of Oregon.

- Please use the accompanying template to record the resources you think each school (elementary, middle and high school) needs to help their students reach the above standards. For each school there are three separate columns that need to be filled in.
    - The first is the “Regular” education column. Assume that the schools total student population has no identifiable special needs (at-risk, limited English proficient or special education) and identify the resources the school needs to help these students meet the above standards.

    - Second is the At-Risk column. This second column assumes that the school has the same total population, but a specified number of students are identified as being at-risk. The task is to specify what additional resources would be needed to help these students to meet the standard.

    - Finally, the last column is focused on the resources for the LEP students. This third column assumes that the school has the same total population, but a specified number of students are identified as being limited English proficient. The task is to specify what additional resources would be needed to help these students to meet the standard.

The following tables summarize the initial personnel resources identified by the national expert group. The estimates were made based on Nevada standards and school characteristics, expert experiences, and the selected references listed in Appendix C. As shown in the following tables, the “instructional facilitator” position provides mentoring and professional development for teachers. A teacher tutor works directly with students to provide one on one tutoring.

ELEMENTARY SCHOOL RESOURCE MODEL 600 TOTAL PUPILS, 100 PER GRADE, 200 AT-RISK, 54 ESL			
Personnel	**K-5** **Regular Ed**	**At Risk**	**ESL**
Classroom Teachers	27.8	5.0	2.8
Other Teachers	7.8		
Librarians/Media Specialists	2.0		
Technology Specialist	0.3		
Pupil Support Staff	5.8	5.0	
Counselors	2.4		
Nurses	0.0		
Psychologists	0.8		
Instructional Aides	6.8		
Clerical/Data Entry	1.1		
Principal	1.0		
Assistant Principal	0.7		
Instructional Facilitators	0.7		
Teacher Tutor	5.1		
Substitutes	1.3		

MIDDLE SCHOOL RESOURCE MODEL 750 TOTAL PUPILS, 250 PER GRADE, 250 AT-RISK, 135 ESL			
Personnel	**6-8** **Regular Ed**	**At Risk**	**ESL**
Classroom Teachers	32.6	2.8	2.9
Other Teachers	8.2		
Librarians/Media Specialists	2.0		
Technology Specialist	0.5		
Pupil Support Staff	7.9	4.4	
Counselors	3.0		
Nurses	0.5		
Psychologists	1.0		
Instructional Aides	14.9		
Clerical/Data Entry	4.3		
Principal	1.0		
Assistant Principal	1.0		
Instructional Facilitators	1.2		
Teacher Tutor	0.7		
Substitutes	1.8		

HIGH SCHOOL RESOURCE MODEL 1,250 TOTAL PUPILS, 312 PER GRADE, 412 AT-RISK, 225 ESL			
Personnel	**9-12** **Regular Ed**	**At Risk**	**ESL**
Classroom Teachers	62.0	10.0	5.0
Other Teachers		5.0	1.0
Librarians/Media Specialists	2.0		
Technology Specialist	4.0		
Pupil Support Staff			
Counselors	7.0		
Nurses	1.0		
Psychologists	1.0		
Instructional Aides		5.0	
Clerical/Data Entry	10.0		
Principal	1.0		
Assistant Principal	1.0	1.0	
Instructional Facilitators	4.0		1.0
Teacher Tutor			
Substitutes	3.0	2.0	

It is important to note that the expert group did not specify resources needed for every size of school. The expert group also did not look at school-level personnel categories beyond the list above (such as custodians), district-level personnel, or other non-personnel costs (supplies and materials, technology, etc). As such, the work of the expert panel cannot be used as is to cost out the needs of a school district. Instead, APA used the expert panel's work as a starting point to stimulate discussion within the professional judgment panels.

Professional Judgment Panel Procedures

Once panelists were provided with a performance standard to guide their efforts (as described previously) the PJ panels were convened. All panels followed a specific procedure in doing their work.

Individual panels examined the following types of resources:

1) Personnel, including classroom teachers, other teachers, psychologists, counselors, librarians, teacher aides, administrators, nurses, etc.
2) Supplies and materials, including textbooks and consumables.
3) Non-traditional programs and services, including before-school, after-school, pre-school, full day kindergarten, and summer-school programs.
4) Technology, including hardware, software, and licensing fees.
5) Other personnel costs, including the use of substitute teachers and time for professional development.

6) Other costs, including security, extra-curricular programs, insurance, facilities operation and maintenance, etc.

As described in the previous section, APA provided panelists with research-based figures, based on the work of the expert group, to use as a starting point in their discussion. Since the expert group did not specify what resources would be needed for every size of school, the figures provided to the panel were increased or decreased in relation to the size of the hypothetical school the individual panel was building. For example, the elementary resource list from the expert group shows 27.8 teachers needed for a school of 600. If the panel is instead being asked to look at an elementary school of 400, the research-based starting figure would be 18.5 teachers. Similarly, if the panel was working with an elementary school of 800 the research-based starting figure would be increased to 37.1 teachers.

Thus, in the categories of personnel (teachers, principals, instructional aides, teacher tutors) where research-based figures were given panelists reviewed and adjusted these figures to better fit the hypothetical school they were looking at. Panelists then added additional personnel in the categories without research-based figures (like custodians, clinical aides, superintendents, or directors) as needed to meet standards.

It is important to note that capital, transportation, food services, adult education, and community services were *excluded* from consideration. For a variety of reasons, these elements pose data gathering difficulties and are generally too cost-specific to the characteristics of an individual district to be usefully included in a PJ adequacy analysis.

For each panel, the figures recorded by APA represented a consensus agreement among members. At the time of the meetings, no participant (either panel members or APA staff) had a precise idea of the costs of the resources that were being identified. Instead, the costing of resources by APA took place at a later date. This is not to say that panel members were unaware that higher levels of resources would produce higher base cost figures or weights. But without specific price information and knowledge of how other panels were proceeding, it would have been impossible for any individual, or panel, to suggest resource levels that would have led to a specific base cost figure or weight, much less a cost that was relatively higher or lower than another.

Once the panels completed their work, APA gathered salary data to cost out the personnel component of resources. To calculate these costs, we used statewide average salaries provided by the state, which were also reviewed by the final in-state panel.

Professional Judgment Results

This section reviews the results produced by the professional judgment groups in Nevada including some of the "raw" resources they identified, the prices that were attached to those resources, and the costs that were produced by combining resource quantities and resource prices. Specifically the section:

1. Discusses the resource needs identified by the professional judgment groups for hypothetical schools and districts to meet academic standards.
2. Identifies associated prices for the resources.
3. Applies the prices to the identified resources to generate a series of school-level, district-level, and total base costs and added costs for students with special needs.

It should be noted that the resources identified by the PJ panels here are examples of how funds might be used to organize programs and services in hypothetical situations. APA cannot emphasize strongly enough that the resources identified are not the only way to organize programs and services to meet state standards.

Caveats to the Professional Judgment Approach in Nevada

1. The purpose of the exercise is to estimate the cost of adequacy, not to determine the best way to organize schools and school districts.
2. Figures are in full-time equivalent personnel terms and assume that schools can employ people on a part-time basis.
3. APA asked a specific special needs panel to distinguish the extra resources that students with special needs require.
4. APA also asked another specific panel to look at the extra resources needed for CTE students.
5. We asked panels to be as precise as they could, but panel members sometimes found it difficult to precisely link resources to performance expectations.
6. APA treated each group of students with special needs as if they were independent while, in reality, there may be cross-over among groups that leads to some double counting of resources (for example, some ESL students might also be eligible for free/reduced-price lunch).
7. Some resources, such as custodians, do not appear at the school level because they are accounted for at the district level.
8. The cost estimates do not include transportation, food services, adult education or capital outlay and debt service related to facilities. **Some panelists noted that existing facilities might not be able to accommodate the programs they designed** for hypothetical schools.

In fact, *there is no one best way to provide services and no member of our panels would suggest that resources be deployed precisely in the way the panels did for the purpose of estimating cost in each individual school district.* Instead, the purpose of the exercise is to estimate the overall cost of adequacy – not to determine the best way to organize schools and districts. This is particularly true when the circumstances in an actual district differ from those associated with the hypothetical ones. With this in mind, the box offers a series of caveats for the reader to consider when reviewing this chapter.

Resource Needs Identified by the Professional Judgment Panels

While panels varied in the resources they identified as necessary for an adequate education, several key recommendations were seen across panels:

- Small class sizes: through either a lower teacher to pupil ratio, or additional support personnel for larger classes;
- Full-day kindergarten;
- Before/after school, summer school, and Saturday school programs to help struggling students;
- Additional funding for equipment and consumable materials to be used in career and technical education programs;
- Support staff, such as instructional aides, to address the needs of English language learners and at-risk students and supplement their regular classroom education;
- Increased professional development for teachers, this includes five days in addition to those in existing contracts specifically for professional development and $500 per teacher for other associated costs such as travel, supplies, presentation costs, and conference fees.

It is important to note that the purpose of the PJ work is not to specify exactly how funding should be spent, but instead to estimate the level of funding necessary to provide programs and resources such as the ones mentioned above. The intent is that schools and districts would have the power to decide how to use the funds once available.

The panels addressed additional resources in areas such as Personnel, Supplies/Materials, Student Programs, and Teacher Services which may be different or needed on higher level than currently seen in Nevada school districts. For example in the area of Personnel, panelists may have suggested additional teachers to create smaller class sizes, or added pupil support staff positions that may not currently be present in Nevada schools, such as reading specialists or teacher tutors. The following table lists these areas and possible resources discussed by the PJ panels, including the recommendations listed above.

RESOURCES SUGGESTED BY THE PROFESSIONAL JUDGMENT APPROACH THAT MAY BE HIGHER THAN THOSE USED BY SUCCESSFUL SCHOOLS OR BY SCHOOL DISTRICTS ON AVERAGE

Personnel
- Regular classroom teachers
- Other teachers, including Reading and Math specialists
- Counselors
- Librarians
- Technology specialists
- Teacher tutors
- Social workers
- School-parent liaisons
- Clerical Staff

Supplies/Materials
- Computer hardware and software (instructional, data analysis, or other)
- Materials for students with special needs
- Equipment and materials for CTE programs
- Assessment materials

Student Programs
- Pre-school
- Full-day kindergarten
- Before/after school programs
- Summer school programs

Teacher Services
- Professional development

Moving on to the work of specific PJ panels, the figures shown in Tables III-3A, 3B, and 3C indicate in detail the personnel needs of hypothetical elementary, middle, and high schools in different size school districts.

For example, looking at Table III-3B (the moderate size K-12 district), the panel identified the need for 35 classroom teachers and 3 instructional aides for 600 elementary students (a pupil teacher ratio of 15:1 for K-3, and 25:1 for 4-5) and that 5 other teachers were also needed (to cover topics such as art, music, or language while providing classroom teachers with planning time). In addition, other personnel were needed to serve students with special needs (for example, two teachers and two instructional aides to serve 21 students with moderate special education needs and three teachers to provide assistance to the 174 at-risk students.

As discussed previously, the research-based figures created by the expert group were used as a starting point by the PJ panels. Panelists could then decide to modify those figures as they saw fit. The following tables show how the research-based figures were modified by PJ panelists participating in the Moderate panel:

Elementary School Resources, Research-based Starting Figures vs. PJ Panel End Figures for Regular Education (All Students) 600 Total Pupils, 100 per grade		
Personnel	**K-5 Regular Ed**	
	Research-based	**PJ**
Classroom Teachers	27.8	35.0
Other Teachers	7.8	5.0
Librarians/Media Specialists	2.0	1.0
Technology Specialist	0.3	1.0
Pupil Support Staff	5.8	
Counselors	2.4	1.0
Nurses	0.0	1.0
Psychologists	0.8	0.4
Instructional Aides	6.8	6.0
Clerical/Data Entry	1.1	3.0
Principal	1.0	1.0
Assistant Principal	0.7	1.0
Instructional Facilitators	0.7	3.0
Teacher Tutor	5.1	1.0
Substitutes	1.3	7 sub days/tch.

Middle School Resources, Research-based Starting Figures vs. PJ Panel End Figures for Regular Education (All Students) 750 Total Pupils, 250 per grade		
Personnel	**6-8 Regular Ed**	
	Research-based	**PJ**
Classroom Teachers	32.6	30.0
Other Teachers	8.2	6.0
Librarians/Media Specialists	2.0	1.0
Technology Specialist	0.5	1.0
Pupil Support Staff	7.9	
Counselors	3.0	2.0
Nurses	0.5	1.0
Psychologists	1.0	0.4
Instructional Aides	14.9	4.0
Clerical/Data Entry	4.3	4.0
Principal	1.0	1.0
Assistant Principal	1.0	1.0
Instructional Facilitators	1.2	3.0
Teacher Tutor	0.7	3.0
Substitutes	1.8	7 sub days/tch.

High School Resources, Research-based Starting Figures vs. PJ Panel End Figures for Regular Education (All Students) 1,250 Total Pupils, 312 per grade		
Personnel	**9-12 Regular Ed**	
	Research-based	**PJ**
Classroom Teachers	62.0	65.0
Other Teachers		
Librarians/Media Specialists	2.0	1.0
Technology Specialist	4.0	3.0
Pupil Support Staff		
Counselors	7.0	4.0
Nurses	1.0	1.0
Psychologists	1.0	0.5
Instructional Aides		4.0
Clerical/Data Entry	10.0	10.0
Principal	1.0	1.0
Assistant Principal	1.0	3.0
Instructional Facilitators	4.0	4.0
Teacher Tutor		2.0
Substitutes	3.0	7 sub days/tch.

In order to make it easier to compare the resource needs of different size schools/districts, we took some of the information shown in the Table III-3 series of tables and "normed" them so that figures could be shown in terms of "personnel per 1,000 students." For example, in Tables III-4A, 4B, and 4C the number of teachers, counselors, librarians, and principals (among others) are shown in such terms. Standardizing the personnel data in this way facilitates a better understanding of the relationship between personnel needs and district/school size.

Aside from personnel needs, the figures in Tables III-5A, 5B, and 5C show other resources needed in schools, including those associated with instructional supplies and materials, equipment, assessment, student activities (sports, extracurricular activities, field trips, etc.) professional development, and curriculum adoption. Many of these costs were standardized by the final in-state overview panel after reviewing the various approaches different panels took to develop their estimates.

One item which is shown separately is professional development. The attention to this particular cost area reflects the strong opinion of most panels that one of the most important contributors to the future success of schools is the assurance that teachers have time to: become familiar with their students, form strong working relationships with their colleagues, participate in enrichment programs,

visit other schools, take part in training sessions, and improve their knowledge of curriculum, technology, and research.

APA's experience is that, as standards-based reform has become the approach most states have embraced to improve schools, educators and policy makers have concluded that teachers and other school personnel need many more opportunities, and much more time, to engage in serious professional development. Such development is needed in education perhaps even more than other professions and opportunities need to go well beyond what is traditionally provided. In the case of Nevada, panelists found it was necessary to add five additional days for professional development in addition to any days already stipulated in existing teacher contracts, plus $500 per teacher for other associated costs such as travel, supplies, presentation costs, and conference fees. This was true across small, moderate, and large districts.

Tables III-6A, 6B, and 6C indicate other kinds of services – such as a preschool program for at-risk students – the panels felt were needed to assure schools could meet state and federal performance expectations. Many of these programs are designed with the belief that investments made early, even before kindergarten, would alleviate the need for some services later on. Other programs are designed to supplement services in higher grades, particularly for at-risk students, or to comply with service requirements for special education students.

The technology needs of elementary, middle, and high schools are shown in Tables III-7A, 7B, and 7C. In order to develop the technology needs, panels were given a standard list of equipment, based on recommendations of the Education Commission of the States (an interstate policy consortium of states to which Nevada belongs). The panels modified this list as necessary. In most cases, panelists called for an array of technology available in classrooms, computer labs, media centers, and for teachers and administrative staff.

Resource Prices

The primary prices needed to cost out the resources specified above are the *salaries and benefits of personnel* and the prices assigned to different kinds of *technology equipment* (see Table III-8). For personnel salaries, we used statewide average salaries for different personnel categories. These salaries were then reviewed by the in-state overview panel. A benefit rate of 33 percent was applied to all salaries to account for the costs associated with contributions to retirement programs and health care programs. In determining technology costs, we assumed equipment would be replaced every four years.

School and District-Level Costs

School Level Costs

Tables III-9A, 9B, and 9C show the school-level costs that result from applying the prices discussed above to the resources specified by the PJ panels. Per student figures were calculated for regular students and for students with special needs by multiplying numbers of resources (such as personnel or technology equipment) by prices and dividing either by the number of students in each hypothetical school or by the number of students with a particular special need.

In looking at the tables, we have divided the information into two categories: (1) figures related to base, per-student spending; and (2) figures related to spending for students with special needs. Within the first category, we divided figures for regular programs (services available to all students, the costs of which include personnel, annually consumed supplies and materials, and ancillary school-based costs such as professional development), technology, and other programs.

For all figures we show school-level costs and then combine costs across levels to calculate a district-wide figure based on an assumed distribution of students. In small districts where there were two different sized elementary schools, the distribution was assumed to be 9.0% in the small elementary school, 45.0% in the large elementary schools, 15.0% in middle school, and 31.0% in high school. In the moderate and large districts the distribution was 46.1% in elementary schools, 23.1% in middle schools, and 30.8% percent in high schools.

For example, looking at moderate size schools in K-12 districts (Table III-9B), we found that the total base cost per student would include: (1) $5,823 for basic instruction, support, and administration; and (2) $176 for technology. Other programs for students with no special needs, like summer school, added $243 per student. These elements produce a total of $6,242 at the school level for every student. In addition, the added costs per student for students with particular special needs would be: (1) $4,425 for students with mild special education needs; (2) $7,557 for students with moderate special education needs; (3) $17,320 for students with severe special education needs; (4) $1,726 per at-risk student; (7) $3,854 for ELL students; and (8) $444 for CTE students.

One should be careful in drawing conclusions based on school level costs since such costs exclude district level costs and different panels included different costs at the school and district levels. It is really the combination of school and district costs that reflect the true, total cost of providing services and that permit the most appropriate comparison across school districts of different size.

District Level Costs

Complete cost figures for school districts of different size are shown in Table III-10. District costs are for central services, some of which affect all students – such as administration and facilities maintenance and operation (M&O). Other costs affect only students with special needs. The figures in Table III-10 indicate that district-level administration costs are between about $719 and $1,431 per student. Plant maintenance and operation costs range between $431 and $641. Other costs ($254 to $625 per student) include such items as insurance, legal expenditures, textbooks purchased centrally, and so on. In the end, district-level costs are between 19-24% of total base costs (excluding added costs for special need students).

There are some district costs associated with students with special needs, that may reflect a specialized facility, such as an alternative school in moderate and large districts (which would be attributable to the costs for at-risk students), central services for special education (including diagnostic services or services that are shared across schools), and the cost of language interpreters (attributable to the cost of ELL students). In the case of special education, it was impossible to distinguish which district-level costs were associated with mild, moderate, or severe levels of special education.

Table III-10 also shows total spending after combining school and district spending. For example, in moderate size K-12 districts, combined school-level and district-level base costs are $7,868 per student. In addition, students with mild special education needs add $6,918, students with moderate special education needs add $10,050, and students with severe special education needs add $19,813. At-risk students add $2,256, ELL students add $4,426 per student, and CTE students require an additional $568.

While this is the basic information produced by the PJ analysis, *it is impossible to use this information in the form in which it has been presented to estimate the cost of an adequate education in districts that have different characteristics from the hypothetical districts shown in this chapter*. The purpose of Chapter V is to explain how the information gained from both the professional judgment and successful school approaches can be used to estimate costs in Nevada school districts of any size and with any proportion of special education students, at-risk students, and ELL students.

TABLE III-1

NUMBER AND SIZE DISTRIBUTION OF DISTRICTS THAT PROVIDE ELEMENTARY AND SECONDARY EDUCATION SERVICES IN NEVADA

WITHOUT CHARTERS

	Small < 1,500	**Moderate** 1,500 - 49,999	**Large** > 50,000	**Total**
# of Districts	8	7	2	17
# of Students	5,789	45,260	317,974	369,023

TABLE III-2

CHARACTERISTICS OF HYPOTHETICAL DISTRICTS AND SCHOOLS USED IN THE PROFESSIONAL JUDGMENT ANALYSIS IN NEVADA

	Small	Moderate	Large
Total Enrollment	780	6,500	50,000
Number of Schools			
Elementary	3	5	25
Middle	1	2	8
High	1	2	6
Size of School			
Elementary (K-5)	-	600	900
Elementary (K-6)	70 or 175	-	-
Middle (6-8)	-	750	1,500
Middle (7-8)	120	-	-
High (9-12)	240	1,250	2,500
Proportion of Special Needs Students			
Special Education			
Mild	9.5%	9.5%	9.5%
Moderate	3.5%	3.5%	3.5%
Severe	1.0%	1.0%	1.0%
At-Risk	48.0%	29.0%	29.0%
English Language Learners	4.0%	9.0%	9.0%

TABLE III-3A

PERSONNEL NEEDED BY ELEMENTARY, MIDDLE AND HIGH SCHOOLS IN *SMALL* K-12 DISTRICTS TO MEET ACCOUNTABILITY STANDARDS IN NEVADA

Small Elementary	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	70	7	3	1	3	34
Personnel						
Classroom Teachers	7.0	0.5	0.5	0.5		
Other Teachers	0.5				0.2	1
Librarians/Media Specialists	0.3					
Technology Specialists	0.2					
Pupil Support Staff						
- Counselors	0.5					
- Nurses	0.2					
- Psychologists	0.1					
Instructional Aides	1.5	0.2	0.4	0.6	1	0.5
Clerical/Data Entry	1.0					
Principal	1.0					
Assistant Principal						
Instructional Facilitator	0.1					
Teacher Tutor						
Clinical Aide	1.0					

Large Elementary	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	175	17	6	2	7	84
Personnel						
Classroom Teachers	11.0	1	1	0.6	0.6	3
Other Teachers	1.5					
Librarians/Media Specialists	1.0					
Technology Specialists	0.5					
Pupil Support Staff						
- Counselors	0.5					
- Nurses	0.5					
- Psychologists	0.2					
Instructional Aides	3.5	0.5	1	0.5	1	1
Clerical/Data Entry	1.5					
Principal	1.0					
Assistant Principal						
Instructional Facilitator	0.2					
Teacher Tutor						
Clinical Aide	1.0					0.5

TABLE III-3A Continued

Middle School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	120	11	4	1	5	58
Personnel						
Classroom Teachers	6.0	1	0.5	0.5		
Other Teachers	2.0				1	3
Librarians/Media Specialists	1.0					
Technology Specialists	0.5					
Pupil Support Staff						
- Counselors	0.5					
- Nurses	0.2					
- Psychologists	0.1					
Instructional Aides	2.0	0.5	0.5	0.5		
Clerical/Data Entry	1.0					
Principal	1.0					
Assistant Principal						
Instructional Facilitator	0.2					
Teacher Tutor						
Clinical Aide	1.0					

High School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	240	23	8	2	10	115
Personnel						
Classroom Teachers	13.0	2.0	1.0	0.5		
Other Teachers	4.0				1.0	5.0
Librarians/Media Specialists	1.0					
Technology Specialists	1.0					
Pupil Support Staff						
- Counselors	1.5					0.5
- Nurses	0.1			0.1		0.1
- Psychologists	0.1	0.1				
Instructional Aides	1.0	1.0	0.5	1.5	2.0	
Clerical/Data Entry	2.0					
Principal	1.0					
Assistant Principal	0.5		0.2			0.3
Instructional Facilitator	0.4					0.2
Teacher Tutor						
Clinical Aide	1.0					1.0
SRO	0.5					

Note: Panel also recommended 7 Substitute days per teacher

TABLE III-3B

PERSONNEL NEEDED BY ELEMENTARY, MIDDLE AND HIGH SCHOOLS IN *MODERATE* K-12 DISTRICTS TO MEET ACCOUNTABILITY STANDARDS IN NEVADA

Elementary	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	600	57	21	6	54	174
Personnel						
Classroom Teachers	35.0	3.0	2.0	1.0		
Other Teachers	5.0				2.0	3.0
Librarians/Media Specialists	1.0					
Technology Specialists	1.0	0.1				
Pupil Support Staff						
- Counselors	1.0					1.0
- Nurses	1.0					
- Psychologists	0.4					
Instructional Aides	6.0	1.0	2.0	1.0	1.0	
Clerical/Data Entry	3.0					
Principal	1.0					
Assistant Principal	1.0					
Instructional Facilitator	3.0				0.3	0.8
Teacher Tutor	1.0	0.2				0.2
Parent Liason					0.5	0.5
Clinical Aide	1.0		0.4	0.3		0.3

Middle School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	750	71	26	8	68	218
Personnel						
Classroom Teachers	30.0	3.5	2.0	1.5		
Other Teachers	6.0				2.0	2.0
Librarians/Media Specialists	1.0					
Technology Specialists	1.0	0.5				
Pupil Support Staff						
- Counselors	2.0					1.0
- Nurses	1.0					
- Psychologists	0.4	0.2	0.1	0.1		
Instructional Aides	4.0	1.0	1.0	1.0	3.0	
Clerical/Data Entry	4.0					
Principal	1.0					
Assistant Principal	1.0					
Dean	1.0					
Instructional Facilitator	3.0				0.3	0.8
Teacher Tutor	3.0	0.5				
Parent Liason					0.5	1.0
Librarian Aide	1.0					
Clinical Aide	1.0		0.4	0.3		0.3

TABLE III-3B Continued

High School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	1250	119	44	12	113	363
Personnel						
Classroom Teachers	65.0	5.5	3.0	2.0	4.0	
Other Teachers						
Librarians/Media Specialists	1.0					
Technology Specialists	3.0	0.5				
Pupil Support Staff						
- Counselors	4.0					
- Nurses	1.0					
- Psychologists	0.5	0.3	0.1	0.1		
Instructional Aides	4.0	1.0	1.0	2.0	3.0	1.0
Clerical/Data Entry	10.0	0.5	0.3	0.2		
Principal	1.0					
Assistant Principal	3.0					
Deans	3.0					
Instructional Facilitator	4.0				0.3	0.8
Teacher Tutor	2.0	1.0				2.0
Parent Liaison					0.5	1.0
Library Aides	2.0					
Clinical Aide	1.0		0.4	0.3		0.3
Truancy Officer	0.5					0.5

Note: Panel also recommended 7 Substitute days per teacher

TABLE III-3C

PERSONNEL NEEDED BY ELEMENTARY, MIDDLE AND HIGH SCHOOLS IN *LARGE* K-12 DISTRICTS TO MEET ACCOUNTABILITY STANDARDS IN NEVADA

Elementary	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	900	86	32	9	81	261
Personnel						
Classroom Teachers	52.0	5.0	3.0	1.0		
Other Teachers	7.5				3.0	6.0
Librarians/Media Specialists	1.0					
Technology Specialists	1.0	0.1				
Pupil Support Staff						
- Counselors	1.5					1.5
- Nurses	1.0					
- Psychologists	0.0					
Instructional Aides	9.0	2.0	3.0	2.0	2.0	
Clerical/Data Entry	5.0	0.2	0.1	0.1		
Principal	1.0					
Assistant Principal	1.0					1.0
Dean	1.0				0.3	0.8
Instructional Facilitator	3.0					0.4
Teacher Tutor	2.0	0.4				
Parent Liason						1.0
Librarian Aide	1.0					
Clinical Aide			0.4	0.3		0.3

Middle School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	1500	143	53	15	135	435
Personnel						
Classroom Teachers	60.0	8.0	4.0	2.0		
Other Teachers	12.0	0.5			4.0	6.0
Librarians/Media Specialists	1.0					
Technology Specialists	2.0	0.3	0.1	0.1		
Pupil Support Staff						
- Counselors	4.0					1.0
- Nurses	1.0					
- Psychologists		0.2	0.2	0.1		
Instructional Aides	8.0	2.0	2.0	2.0	4.0	
Clerical/Data Entry	8.0					
Principal	1.0					
Assistant Principal	2.0	0.3	0.1	0.1		
Dean	2.0	0.3	0.1	0.1		0.5
Instructional Facilitator	4.0				0.5	1.5
Teacher Tutor	6.0					
Parent Liason						1.0
Librarian Aide	2.0					
Clinical Aide	1.0		0.4	0.3	0.3	

TABLE III-3C Continued

High School	All Students	Mild Special Ed	Mod. Special Ed	Severe Special Ed	ELL	At-Risk
# of Students in Category	2500	238	88	25	225	725
Personnel						
Classroom Teachers	130.0	13.0	6.0	4.0		
Other Teachers					6.0	7.0
Librarians/Media Specialists	1.0					
Technology Specialists	3.0	0.3	0.1	0.1		
Pupil Support Staff						
- Counselors	8.0					
- Nurses	2.0					
- Psychologists	1.0	0.6	0.2	0.2		
Instructional Aides	8.0	2.0	2.0	4.0	4.0	3.0
Clerical/Data Entry	12.0					
Principal	1.0					
Assistant Principal	4.0	0.6	0.2	0.2		
Deans	4.0					1.0
Instructional Facilitator	6.0				0.3	0.8
Teacher Tutor	4.0					4.0
Parent Liaison					1.0	2.0
Library Aides	3.0					
Clinical Aide	1.0		0.4	0.3		0.3
Truancy Officer	1.0					1.0

Note: Panel also recommended 7 Substitute days per teacher

TABLE III-4A

ELEMENTARY SCHOOL PERSONNEL PER 1,000 STUDENTS FOR SMALL, MODERATE AND LARGE SIZE K-12 DISTRICTS

		Size of School District			
		Small		Mod.	Large
		Small Elem.	Large Elem.		
(1)	Teaching Staff				
	Classroom Teacher	100.0	62.8	58.3	57.7
	Other Teacher	7.1	8.6	8.3	8.3
	Instructional Facilitator	1.4	1.1	5.0	3.3
	Instructional Aide	21.4	20.0	10.0	10.0
(2)	Pupil Support Staff				
	Guidance Counselor	7.1	2.9	1.7	1.7
	Nurse	2.9	2.9	1.7	1.1
	Psychologist	1.4	1.1	0.7	0.0
(3)	Other Staff				
	Librarian/Media Spec.	4.3	5.7	1.7	1.1
	Technology Spec.	2.9	2.9	1.7	1.1
(4)	Administration				
	Principal	14.3	5.7	1.7	1.1
	Asst. Principal	0.0	0.0	1.7	1.1
	Clerical	14.3	8.6	5.0	5.6

TABLE III-4B

MIDDLE SCHOOL PERSONNEL PER 1,000 STUDENTS FOR SMALL, MODERATE AND LARGE SIZE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Teaching Staff			
	Classroom Teacher	50.0	40.0	40.0
	Other Teacher	16.7	8.0	8.0
	Instructional Facilitator	1.7	4.0	2.7
	Instructional Aide	16.7	5.3	5.3
(2)	Pupil Support Staff			
	Guidance Counselor	4.2	2.7	2.7
	Nurse	1.7	1.3	0.7
	Psychologist	0.8	0.5	0.0
(3)	Other Staff			
	Librarian/Media Spec.	8.3	1.3	0.7
	Technology Spec.	4.2	1.3	1.3
(4)	Administration			
	Principal	8.3	1.3	0.7
	Asst. Principal	0.0	1.3	1.3
	Clerical	8.3	5.3	5.3

TABLE III-4C

HIGH SCHOOL PERSONNEL PER 1,000 STUDENTS FOR SMALL, MODERATE AND LARGE SIZE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Teaching Staff			
	Classroom Teacher	54.2	52.0	52.0
	Other Teacher	16.7	0.0	0.0
	Instructional Facilitator	1.7	3.2	2.4
	Instructional Aide	4.2	3.2	3.2
(2)	Pupil Support Staff			
	Guidance Counselor	6.3	3.2	3.2
	Nurse	0.4	0.8	0.8
	Psychologist	0.4	0.4	0.4
(3)	Other Staff			
	Librarian/Media Spec.	4.2	0.8	0.4
	Technology Spec.	4.2	1.6	0.8
(4)	Administration			
	Principal	4.2	0.8	0.4
	Asst. Principal	2.1	2.4	1.6
	Clerical	8.4	8.0	4.8

TABLE III-5A

NON-PERSONNEL COSTS NEEDED FOR A HYPOTHETICAL *ELEMENTARY* SCHOOL IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District			
		Small		Mod.	Large
		Small Elem.	Large Elem.		
(1)	Instructional Supplies/Materials/ Equipment	$375/stu.	$375/stu.	$250/stu.	$250/stu.
(2)	Student Activities	$20/stu.	$20/stu.	$20/stu.	$20/stu.
(3)	Professional Development	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days

TABLE III-5B

NON-PERSONNEL COSTS NEEDED FOR A HYPOTHETICAL *MIDDLE* SCHOOL IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Instructional Supplies/Materials/ Equipment	$450/stu.	$300/stu.	$300/stu.
(2)	Student Activities	$40/stu.	$60/stu.	$60/stu.
(3)	Professional Development	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days

TABLE III-5C

NON-PERSONNEL COSTS NEEDED FOR A HYPOTHETICAL *HIGH* SCHOOL IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Instructional Supplies/Materials/ Equipment	$675/stu.	$450/stu.	$450/stu.
(2)	Student Activities	$560/stu.	$300/stu.	$250/stu.
(3)	Professional Development	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days	$500/tch.+ 5 extra days

TABLE III-6A

PERCENT OF STUDENTS PARTICIPATING IN OTHER PROGRAMS NEEDED AT HYPOTHETICAL *ELEMENTARY* SCHOOLS IN SMALL, MODERATE, AND LARGE K-12 DISTRICTS

	Size of School District			
	Small		Mod.	Large
	Small Elem.	Large Elem.		
*(1) Pre-School**				
All Students				
At-Risk Students	100%	100%	100%	100%
Special Education	100%	100%	58%	52%
(2) After School				
All Students	25%	25%	25%	25%
At-Risk Students				
Special Education				
(3) Summer School				
All Students	20%	20%	20%	20%
At-Risk Students				
Special Education				
(4) Extended School Year				
All Students				
At-Risk Students				
Special Education	50%	48%	36%	36%

Note: Regular Pre-School costs are not included in school or district level cost totals, but Special Ed Pre-School costs are included

TABLE III-6B

PERCENT OF STUDENTS PARTICIPATING IN OTHER PROGRAMS NEEDED AT HYPOTHETICAL *MIDDLE* SCHOOLS IN SMALL, MODERATE, AND LARGE K-12 DISTRICTS

	Size of School District		
	Small	Mod.	Large
(1) After School			
All Students	10%	20%	20%
At-Risk Students			
Special Education			
(2) Saturday School			
All Students	10%	3%	3%
At-Risk Students			
Special Education			
(3) Summer School			
All Students	20%	20%	20%
At-Risk Students			
Special Education			
(4) Extended School Year			
All Students			
At-Risk Students			
Special Education	48%	14%	17%

TABLE III-6C

PERCENT OF STUDENTS PARTICIPATING IN OTHER PROGRAMS NEEDED AT HYPOTHETICAL *HIGH* SCHOOLS IN SMALL, MODERATE, AND LARGE K-12 DISTRICTS

	Size of School District		
	Small	Mod.	Large
(1) Saturday School			
All Students	8%		
At-Risk Students			
Special Education			
(2) Dual Credit			
All Students	10%	20%	20%
At-Risk Students			
Special Education			
(3) Credit Recovery			
All Students			
At-Risk Students	17%	17%	18%
Special Education			
(4) Summer School			
All Students	20%	20%	20%
At-Risk Students			
Special Education			
(5) Extended School Year			
All Students			
At-Risk Students			
Special Education	30%	20%	15%

TABLE III-7A

TECHNOLOGY NEEDS OF HYPOTHETICAL *ELEMENTARY* SCHOOLS IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District			
		Small		Mod.	Large
(1)	Classroom	Small Elem.	Large Elem.		
	Computers	7	11	95	139
	Printers (Inkjet)	7	11	35	52
	LCD Projectors	7	11	35	52
	Smartboards	7	11	-	-
	ELMOs (Opaque Projectors)	-	-	35	52
	Scanners	7	11	-	-
(2)	Computer Lab (Standing and Mobile)				
	Computers	-	-	50	50
	Laptops	30	90	-	-
	Scanners	-	-	2	2
	Printers (Laser)	-	-	2	2
(3)	Media Center				
	Computers	5	10	10	15
	Dig. Video Cam.	2	4	2	2
	Digital Cameras	2	13	2	2
	Vid. Edit Comp.	1	1	1	1
(4)	Admin./Support/Other Staff				
	Computers	3	5	6	8
	Printers (Laser)	2	3	3	4
	Copiers	1	2	-	-
	Scanners	1	1	-	-
(5)	Other				
	Faculty Laptops	11	19	51	71
	Servers	1	1	2	2
	Mobile Smartboards	2	2	-	-

TABLE III-7B

TECHNOLOGY NEEDS OF HYPOTHETICAL *MIDDLE* SCHOOLS IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Classroom			
	Computers	6	150	300
	Printers (Inkjet)	6	30	60
	LCD Projectors	6	30	60
	Smartboards	6	-	
	ELMOs (Opaque Projectors)	-	30	60
	Scanners	6	-	-
(2)	Computer Lab (Standing and Mobile)			
	Computers	25	-	-
	Laptops	40	100	150
	Scanners	1	4	6
	Printers (Laser)	1	4	6
	Smartboards	1	-	-
(3)	Media Center			
	Computers	8	10	10
	Dig. Video Cam.	4	2	2
	Digital Cameras	9	2	2
	Vid. Edit Comp.	1	1	1
(4)	Admin./Support/Other Staff			
	Computers	5	10	16
	Printers (Laser)	3	5	8
	Copiers	2	-	-
	Scanners	1	-	-
(5)	Other			
	Faculty Laptops	14	48	94
	Servers	1	2	3

TABLE III-7C

TECHNOLOGY NEEDS OF HYPOTHETICAL *HIGH* SCHOOLS IN SMALL, MODERATE AND LARGE K-12 DISTRICTS

		Size of School District		
		Small	Mod.	Large
(1)	Classroom			
	Computers	26	325	650
	Printers (Inkjet)	13	65	130
	LCD Projectors	13	65	130
	Smartboards	13	-	-
	Scanners	13	-	-
(2)	Computer Lab (Standing and Mobile)			
	Computers	60	75	125
	Laptops	30	100	150
	Scanners	4	7	11
	Printers (Laser)	4	7	11
	Smartboards	2	-	-
(3)	Media Center			
	Computers	15	30	30
	Dig. Video Cam.	6	2	2
	Digital Cameras	18	2	2
	Vid. Edit Comp.	2	1	1
	Smartboards	2	-	-
(4)	Admin./Support/Other Staff			
	Computers	7	20	20
	Printers (Laser)	3	10	10
	Copiers	3	-	-
	Scanners	1	-	-
(5)	Other			
	Faculty Laptops	27	80	166
	Servers	2	3	3

TABLE III-8

PRICES FOR HYPOTHETICAL SCHOOL AND DISTRICT RESOURCES IN 2003-04

Resource Element

(1) Average Salaries and Benefits

	Salary	Salary + 33% Benefit Rate
School Level		
Classroom Teachers	$44,721	$59,479
Other Teachers (incl. Teacher Tutor, Inst. Facilitator, Parent Liason)	$44,721	$59,479
Librarians/Media Specialists	$47,632	$63,350
Technology Specialists	$46,092	$61,302
Counselors/ Social Workers	$52,043	$69,217
Nurses	$52,043	$69,217
Psychologists/ Therapists	$52,043	$69,217
Aides (Instructional, Library, Clinical)	$16,250	$21,613
Clerical/Data Entry	$24,773	$32,948
Principal	$75,967	$101,036
Assistant Principal	$63,504	$84,460
Dean	$63,504	$84,460
Truancy Officer	$31,000	$41,230
School Resource Officer	$44,721	$59,479
Custodian	$32,000	$42,560
District Level		
Superintendent	$109,460	$145,582
Assistant Superintendent	$102,370	$136,152
Director	$80,812	$107,480
Coordinator	$80,812	$107,480
Supervisor	$80,812	$107,480
Specialists/Trainers	$52,043	$69,217
Interpreters	$20,000	$26,600

(2) Technology

	Cost Per Item
Computer	$1,000
Printer (Basic Laser)	$455
Printer (Quality Laser)	$650
Copier	$2,259
Scanner	$100
Digital Video Camera	$600
Digital Camera	$400
Video Editing Complex	$5,500
Laptop	$1,400
Server	$5,000
LCD Projector	$1,849
Smart Board	$1,599
ELMO (Opaque Projector)	$1,815

Note: All salary figures provided by the state and reviewed by in-state panel.
Technology figures gathered independently and reviewed by in-state panel.

TABLE III-9A

SCHOOL-LEVEL COSTS FOR *SMALL* K-12 SCHOOL DISTRICTS BASED ON THE WORK OF THE NEVADA PROFESSIONAL JUDGMENT PANELS IN 2003-04

	Small Elem. School	Large Elem. School	Middle School	High School	Total
(1) Enrollment	70	175	120	240	-
(2) Base Spending					
Regular*	$11,049	$7,401	$7,668	$7,944	$7,937
Technology	$464	$359	$352	$308	$350
Other Programs for Students with No Special Needs:	$357	$401	$421	$220	$343
(3) Added Spending for Special Student Populations**					
Special Education:					
- *Mild*	$5,601	$4,696	$7,178	$7,111	$5,899
- *Moderate*	$14,097	$14,678	$11,291	$12,021	$13,294
- *Severe*	$46,468	$26,338	$44,269	$37,720	$34,368
At-Risk Students:	$2,308	$2,766	$3,376	$4,222	$3,268
ELL Students:	$11,750	$8,812	$12,798	$11,081	$10,378
CTE Students:	-	-	-	$892	$892

* Basic base spending includes school level personnel salaries and benefits, supplies and materials, and other expenditures.

** Costs are shown per student in the program.

Note: All combined figures, except CTE, are based on the following proportions of students: small elementary schools, 9.0%, large elementary schools, 45.0%, middle schools, 15.0%, and high schools, 31.0%. The CTE figure is based on the following: high school, 100% (panelists did not idenitfy a CTE program in elementary or middle schools).

TABLE III-9B

SCHOOL-LEVEL COSTS FOR *MODERATE* K-12 SCHOOL DISTRICTS BASED ON THE WORK OF THE NEVADA PROFESSIONAL JUDGMENT PANELS IN 2003-04

	Elem. School	Middle School	High School	Total
(1) Enrollment	600	750	1,250	-
(2) Base Spending				
Regular*	$6,053	$5,111	$6,013	$5,823
Technology	$175	$175	$177	$176
Other Programs for Students with No Special Needs:	$276	$354	$112	$243
(3) Added Spending for Special Student Populations**				
Special Education:				
- *Mild*	$4,238	$4,691	$4,505	$4,425
- *Moderate*	$8,961	$6,766	$6,007	$7,557
- *Severe*	$17,218	$18,176	$16,827	$17,320
At-Risk Students:	$2,168	$1,568	$1,182	$1,726
ELL Students:	$3,939	$3,850	$3,729	$3,854
CTE Students:	-	$298	$531	$444

* Basic base spending includes school level personnel salaries and benefits, supplies and materials, and other expenditures.

** Costs are shown per student in the program.

Note: All combined figures, except those for CTE, are based on the following proportions of students: elementary schools, 46.1%, middle schools, 23.1%, and high schools, 30.8%. The CTE figure is based on the following: middle school, 33.3%, and high school, 66.7% (panels did not identify a CTE program in elementary school).

TABLE III-9C

SCHOOL-LEVEL COSTS FOR *LARGE* K-12 SCHOOL DISTRICTS BASED ON THE WORK OF THE NEVADA PROFESSIONAL JUDGMENT PANELS IN 2003-04

	Elem. School	Middle School	High School	Total
(1) Enrollment	900	1,500	2,500	-
(2) Base Spending				
Regular*	$5,838	$4,745	$5,359	$5,438
Technology	$159	$159	$161	$159
Other Programs for Students with No Special Needs:	$296	$271	$100	$229
(3) Added Spending for Special Student Populations**				
Special Education:				
- *Mild*	$4,756	$4,491	$4,339	$4,567
- *Moderate*	$8,766	$6,721	$5,865	$7,403
- *Severe*	$14,933	$15,302	$17,456	$15,793
At-Risk Students:	$2,968	$1,270	$1,666	$1,704
ELL Students:	$3,581	$3,162	$2,935	$3,286
CTE Students:	-	$299	$532	$454

* Basic base spending includes school level personnel salaries and benefits, supplies and materials, and other expenditures.

** Costs are shown per student in the program.

Note: All combined figures, except those for CTE, are based on the following proportions of students: elementary schools, 46.1%, middle schools, 23.1%, and high schools, 30.8%. The CTE figure is based on the following: middle school, 33.3%, and high school, 66.7% (panels did not identify a CTE program in elementary school).

TABLE III-10

DISTRICT-LEVEL COSTS BASED ON THE WORK OF THE NEVADA PROFESSIONAL JUDGMENT PANELS IN 2003-04

		Small	Mod.	Large
(1)	Enrollment	780	6,500	50,000
(2)	District Level Spending			
	Basic			
	Administration	$1,431	$833	$719
	Plant M & O	$641	$500	$431
	Other*	$625	$293	$254
	Special Needs			
	*Special Education***	$5,883	$2,493	$1,906
	At-Risk Students	$270	$530	$382
	ELL Students	$3,313	$572	$123
(3)	Total Spending			
	Base Spending			
	School Level	$8,630	$6,242	$5,826
	District Level	$2,697	$1,626	$1,403
	Total Base Cost	**$11,327**	**$7,868**	**$7,229**
	Added Cost of Spec. Need Student			
	Special Education			
	Mild	***$11,781***	***$6,918***	***$6,472***
	Moderate	***$19,177***	***$10,050***	***$9,309***
	Severe	***$40,250***	***$19,813***	***$17,699***
	At-Risk Students	***$3,538***	***$2,256***	***$2,558***
	ELL Students	***$13,691***	***$4,426***	***$3,409***
	CTE Students	***$1,622***	***$568***	***$176***

* Includes legal, insurance, central office technology, and other items placed at the district level (textbooks and tuition, in some cases).

** Special Education district costs include Special Ed Pre-School program costs

IV. STATISTICAL ANALYSES: INFLATION, SIZE, AND REGIONAL COST OF LIVING

As mentioned earlier, APA used the statistical approach to strengthen our work and focused on an examination of three factors:

1. **Inflation impacts.**
2. **Cost impacts based on school and district size differences.**
3. **Regional cost of living differences.**

Our experience working on school finance issues over the past 20 years tells us that these are three factors which districts cannot control, but which can have significant cost impacts. Much of our statistical analyses of these three factors was made possible through the availability in Nevada of In$ite's school-level data.

Understanding Inflation Cost Differences

Understanding how inflation affects costs in Nevada is an important consideration as the state implements any adequacy-based funding changes to its school finance system. In fact, failure to properly account for the impact of inflation could, over time, alter the impact of any funding changes which are made. APA was asked to create a possible inflation adjustment as part of our contract with Nevada. We developed the following approach that fulfills that obligation.

APA believes the key goal in any inflation analysis is to identify a process which Nevada can use regularly to identify year to year inflation adjustments. Our discussion in this section is therefore designed to describe how such a process could be used by Nevada. Nevada can use the process we describe with data from subsequent years to create year to year inflation adjustments. Such adjustments can then be accurately applied to the state's school funding formula to ensure that districts have the actual purchasing power intended by the state.

The basic process used to identify state-level inflation rates is:

1) Identify an overall, nationwide inflation rate; and
2) Gather state data to compare with the nationwide rate and extrapolate whether state inflation is higher or lower than the rest of the country.

For the first step above, the most widely used measure of nationwide inflation is the Consumer Price Index (CPI) provided by the U.S. Department of Labor. The CPI is a measure of the average change over time in the prices paid by

consumers for a set of goods and services.[4] Because the CPI is reliable and regularly updated, APA recommends its use for Nevada's inflation analysis.

For the second step above, state level consumer price data is often available from the federal government. This federal data typically focuses on the price changes taking place in large urban areas within a state. Federal data in Colorado, for instance, focuses on the Denver area, and this data can then be extrapolated to approximate price changes and inflation rates for the state as a whole.

In Nevada, however, such localized federal data is not available. Therefore, APA used data from the Council for Community and Economic Research (ACCRA).[5] ACCRA provides data for three specific urban areas in Nevada: 1) Las Vegas; 2) Reno; and 3) Carson City. When combined, these three areas make up the large majority of the state's population and therefore offer an effective means of approximating inflation changes for the state as a whole. To generate a more accurate inflation adjustment, the ACCRA data should be weighted to reflect the differences in population represented by each urban area. APA's calculations indicate the following weights should be applied: Las Vegas (80.0%), Reno = (17.5%), and Carson City = (2.5%).

The table on the next page outlines five steps for how Nevada can use both CPI and ACCRA data to determine a statewide Inflation Adjustment Factor. For illustrative purposes, the table carries out calculations using 2003-04 data to generate a 2005 Inflation Adjustment Factor. However, Nevada can use the outlined approach in any given year to calculate an updated adjustment factor. The resulting adjustment factor can be applied to the state's school finance system in order to increase funding to Nevada schools and districts as necessary to keep up with inflation.

[4] For more information, visit the Department of Labor Web site at http://www.bls.gov/cpi/cpifaq.htm.
[5] For more information, visit the ACCRA Web site at http://www.accra.org/index.asp.

Calculating a Year to Year Inflation Adjustment Factor for Nevada

Step	Description of Calculation
1.0	Identify national CPI Increase in past year (CPI increase from 2003 to 2004 was 3.4%)
2.0	Identify the cost of living for Las Vegas, Reno, and Carson City for two years using ACCRA data and weighting each city's figure by population: (Las Vegas = 80.0%, Reno = 17.5%, and Carson City = 2.5%)
3.0	Calculate: Nevada Cost of Living This Year/Nevada Cost of Living Last Year (relative to national average of 1.00) Using 2003-04 data, this calculation looks like this: 1.127/1.081 = 1.0426
4.0	Calculate inflation adjustment factor: Step 3 result times (1 + national CPI increase) minus 1 For example, the 2005 adjustment for Nevada would be: 1.0426(1 + .034) -1 = 0.078
5.0	Therefore, for 2005, Nevada's Inflation Adjustment Factor would be .078 or 7.8%.

Creating a School and District Size Adjustment

The idea that size can impact a district's cost in delivering education services is supported by years of research, including many APA studies conducted in other states. These studies consistently show that cost differences exist across different size districts. Determining the extent of these differences in Nevada is therefore an important step to ensure that resources are properly allocated in the state's education funding formula.

Other states have taken notice of size-related cost differences and have made adjustments to their school finance formulas to account for such differences. For instance, states such as Colorado, Kansas, Montana, and Nebraska all now include size adjustments in their school funding formulas. In many of these states, geographic separation and other factors mean that many school districts are small by necessity. District consolidation is, therefore, not a viable option.

There are three basic principles which apply to the cost impacts of school and district size:

a) Fixed cost. Schools and districts all have an initial, fixed operating cost that will be incurred to establish and run any school or district, regardless of its enrollment.
b) Added per student cost. There is an added cost for every student that is added to the school or district's enrollment.
c) Economies of scale. There is also a cost savings for every student added to a school or district's enrollment. This savings grows exponentially as the number of students increase and greater economies of scale are realized.

To understand how size truly impacts cost in Nevada, APA created a quadratic formula based on the three principles described above. Where "a" represents the fixed cost, "b" represents the added cost for educating each student, "c"

represents economies of scale, and "x" represents the number of students enrolled, APA's quadratic formula looks like this:

$$a + b(x) - c(x^2)$$

With this formula in hand, APA examined the per-student spending of different sized Nevada schools and districts. To conduct our analysis, we used In$ite data and definitions of school and district spending.[6] Since In$ite addresses actual spending, APA's analysis was also focused on actual spending. The numbers shown in this section are not, therefore, reflective of the spending level that might be necessary for adequacy purposes. In other words, the numbers shown here do not necessarily reflect the level of resources school and districts might need to meet state and federal performance standards.

School-level Size Adjustment

At the school level, APA used In$ite data to graph the relationship between actual spending data and school size. The parameters of the lines of best fit for that data using the quadratic equation described above are shown below.

School-Level Actual Spending

Level	Fixed	Student	Student^2
elementary	$78,709	$5,711	-$2.016
middle	$224,515	$5,000	-$0.754
high school	$727,957	$4,241	-$0.175

The numbers in the "fixed," "student," and "student squared" columns above can be respectively plugged into the "a," "b," and "c" variables in our quadratic formula. Once this is accomplished, we can generate per-student, actual costs for schools of all different types and sizes. For instance, for the elementary level, our calculations are based on the following: Total cost = $78,709 + ($5,711 X students) - ($.2.016 X students^2). Results are shown in the table below. As expected, the costs reflect that smaller schools – with fewer students to absorb and spread out the same fixed costs – are more expensive per student. Conversely, the largest schools – with greater economies of scale – have the lowest per-student costs.

[6] Nevada pays In$ite to collect a variety of education spending data, including school-level spending data. In$ite has its own method of defining school and district spending (for instance, maintenance and operations spending is allocated to the school level).

School-Level Cost by Size and Grade Span

Level	Size	Cost per Student
Elementary	100	$6,296
	300	$5,369
	500	$4,860
	700	$4,412
Middle	300	$5,522
	600	$4,922
	900	$4,571
	1200	$4,282
High School	300	$6,615
	600	$5,349
	1,200	$4,638
	1,800	$4,330
	2,400	$4,124

District-level Size Adjustment

Our district-level size analysis was conducted in a similar way to the school level analysis shown above. APA graphed the relationship between actual spending data and district size. The parameters of the line of best fit for that data using the quadratic equation described above is shown below.

District-Level Actual Spending

Fixed	Student	Student^2
$338,204	$387	$0.00014

Again, the numbers in the "fixed," "student," and "student squared" columns above can be respectively plugged into the "a," "b," and "c" variables in our quadratic formula. This results in the following calculation: Total cost = $338,204 + ($387 X students) - ($.00014 X students^2). Results are shown below.

District-Level Cost by Size

District Size	Per Student Cost
100	$3,769
500	$1,063
1,000	$725
4,000	$471
8,000	$428
60,000	$384
280,000	$349

Understanding Regional Cost of Living Differences

In this section, APA analyzes adjustment factors which can be included in Nevada's education funding formula that take into account geographic cost of living differences across school districts. The purpose of this analysis is to:

1) Identify if there are cost of living differences between districts in different parts of Nevada that impact the cost of delivering education services; and

2) Create a "Location Cost Metric" (LCM) which is a factor that can be included in Nevada's school funding formula to adjust the amount of state aid districts receive.

The rationale for conducting such an analysis is well established. In fact, it is now widely recognized that cost of living differences can have a significant impact on the ability of districts to provide equivalent education services. This is especially true with regard to labor. To retain teachers and other employees, school districts must be able to offer compensation that is competitive with other employers, and employee compensation must be sufficient to purchase goods at local prices.

A few states around the country have developed a procedure to quantify cost of living differences. These states use a variety of approaches. Some, such as Ohio, focus on wage differences among districts. Others, such as Florida, have fewer school districts and look at the cost of delivering a wide range of education goods and services in order to identify differences among districts.

In Nevada, our analysis focuses specifically on the cost of living issue. We do not, therefore, seek to address any differences between districts or regions that might affect their "attractiveness" to potential employees. Such an attractiveness analysis would need to address a myriad of subjective factors (for example, recreational opportunities and overall quality of life) that we believe are not useful (or easily quantified) for inclusion in a state education funding formula.

APA's approach to studying cost of living differences in Nevada is to focus on the cost of providing labor. We chose this focus because, as in most states, labor in Nevada represents approximately 80 percent of all district operating costs. This makes it by far the most important driver of district cost differences. Because the remaining 20 percent of district costs are very difficult to quantify, APA holds this 20 percent constant across districts in its LCM formula: .20 + (.80 x Cost of Living Indicator).

With this focus on labor costs in mind, the main focus of APA's work to develop an LCM for Nevada was to identify a Cost of Living Indicator. This indicator is comprised of the primary costs which employees face. To identify such costs, APA reviewed data from the Council for Community and Economic Research

(ACCRA)[7] and the Economic Policy Institute. The most significant findings which this data yielded were:

- Cost of living variances in Nevada are largely based on housing cost differences.
- Areas across the state can be separated into high cost housing areas and lower cost housing areas.
- Aside from housing, other living costs do not significantly vary in Nevada (available data showed non-housing costs across the state ranged only from $2,112 to $2,196 per month).

Based on these findings, APA decided that the LCM's Cost of Living Indicator should be based on Nevada's housing cost differences and that the housing cost analysis should be separated into lower cost areas and high cost areas. The counties considered high cost areas include Carson City, Clark, Douglas, Lyon, Nye, Storey, and Washoe. The Cost of Living Indicator receives a higher weight (29 percent of cost) in these counties. All remaining areas in the state are considered lower cost. For these counties, the Cost of Living Indicator receives a slightly lower weight (25 percent of cost).

Once the decision was made to focus on housing costs, APA next created a Housing Index. This index, which is weighted to reflect county population differences, is expressed as a ratio of each county's median housing sale price[8] to the statewide average price.[9] The index is shown in the table below.

Nevada's Housing Index

County	Median Price	Index
Carson City	$305,000	94.2
Churchill	$192,500	59.5
Clark	$329,612	101.8
Douglas	$390,000	120.5
Elko	$151,500	46.8
Esmeralda	$65,940	20.4
Eureka	$61,760	19.1
Humboldt	$136,900	42.3
Lander	$68,825	21.3
Lincoln	$79,000	24.4
Lyon	$241,500	74.6
Mineral	$42,009	13.0
Nye	$249,000	76.9
Pershing	$71,000	21.9
Storey	$300,000	92.7
Washoe	$368,287	113.8
White Pine	$52,981	16.4

[7] For more information, visit the ACCRA Web site at http://www.accra.org/index.asp.
[8] Based on median sales price as of June 30, 2005. Data availability required the median price to be imputed based on a regression analysis for Esmeralda, Eureka, and White Pine Counties.
[9] The statewide average price was $323,649.

It is not surprising that, since the Housing Index weights each county by population, Clark County's index value of 101.8 is not far above the statewide average (which would be represented as 100 in the index). Since Clark County represents a large portion of the state's overall population, it necessarily also has a large impact on the state sales price average.

Once the Housing Index was calculated, APA was able to plug the resulting data into its Cost of Living Indicator for both high cost and low cost areas. These indicators could then be included into the overall Location Cost Metric to generate an LCM index for each county in the state. The index, shown below, can be applied to each school district's base cost when building Nevada's school finance formula.

Nevada's LCM Index

County	LCM
Carson City	98.6
Churchill	91.8
Clark	100.3
Douglas	104.7
Elko	89.3
Esmeralda	84.0
Eureka	83.7
Humboldt	88.4
Lander	84.2
Lincoln	84.8
Lyon	98.3
Mineral	82.5
Nye	94.6
Pershing	84.3
Storey	98.4
Washoe	103.1
White Pine	83.2

V. ESTIMATING THE COST OF ADEQUACY IN NEVADA

This chapter discusses how APA used the successful school and professional judgment analyses to estimate the cost of adequacy for school districts and individual schools with various demographic characteristics.

Alternative Base Cost Figures

The successful school and professional judgment approaches produce data and information that is specific to successful schools with specific characteristics or to hypothetical districts. That information, however, needs to be translated so it can be applied to schools and districts with any set of demographic characteristics. For these purposes, several specific questions need to be addressed:

(1) What do the differences in the base cost (the cost of educating a student with no special needs) produced by the successful school (SS) and professional judgment (PJ) approaches mean?
(2) Does the base cost differ by district size?
(3) How can the costs of serving students with special needs be used to create student weights?

Once we respond to these questions, it becomes possible to estimate costs for each of the 17 Nevada districts. The two approaches we used to study the cost of adequacy produced two different base cost results. The base cost from the PJ approach is $7,229. The base cost from the SS approach is $4,660, which is approximately 64.4 percent of the PJ base.

It is important to note that the SS and PJ approaches really address two different standards. In some sense, the SS base cost represents what districts are spending today (2003-04 figures) to be successful. The PJ base figures represent the resources that panels of educators felt are necessary for districts of varying size to get students to meet higher performance expectations by 2013. This higher performance expectation explains the higher cost associated with the PJ base.

Developing Formulas for Base Cost Adjustment Factors: Size and Special Need Students

Although we obtained base cost figures from both the successful school (SS) and professional judgment (PJ) approaches, only the PJ produced base cost figures for K-12 districts of *varying size*. Also, only the PJ approach could provide APA with information needed to generate a series of weights regarding the cost of *serving special need students*. As discussed at the beginning of Chapter III, such student weights are designed to reflect the cost of serving students with special needs relative to the base cost. APA developed the size and student

need formulas described below and applied them to both the $7,229 and $4,660 base cost figures identified by the PJ and SS approaches.

The PJ-derived figures shown in Table V-1 indicate that the per-student base cost for K-12 districts vary based on school district size. They also indicate the different levels of cost involved with adequately educating special need students. As shown in the table, the total base cost per student is highest in small districts. This is not surprising, since these districts have fewer students across which to spread a variety of fixed education costs. Conversely, the base cost drops as district size increases and economies of scale are realized. The table also generally shows that the cost of serving students with special needs drops as district size increases and districts are able to provide more centralized services.

Table V-1
District Level Costs Including Adjustments for Size and Special Need Students
(Based on PJ Panel Work)

School Size	**Small**	**Moderate**	**Large**
Enrollment	780	6,500	50,000
Total Base Cost	$11,327	$7,868	$7,229
Added Cost of Special Need Students			
Special Education			
Mild	***$11,781***	***$6,918***	***$6,472***
Moderate	***$19,177***	***$10,050***	***$9,309***
Severe	***$40,250***	***$19,813***	***$17,699***
At-Risk Students	***$3,538***	***$2,256***	***$2,558***
ELL Students	***$13,691***	***$4,426***	***$3,409***
CTE Students	***$1,622***	***$568***	***$176***

Based on the figures in Table V-1, APA generated a series of cost weights to help reflect the cost impact of different special need students in different sized districts. These weights were generated simply by dividing the added cost figure for each category by the total base cost. So, for instance, to generate a mild special education student weight for small districts, one would divide $11,781 by the base cost of $11,327. This yields a cost weight of 1.04. Using this process, all the resulting student weights are shown in Table V-2 below.

APA used the cost weights shown in Table V-2 to generate a series of formulas to calculate the full PJ cost of an adequate education (including both the base and any adjustments for district size and special need students). These are shown in the box on the following page. It is important to note that it was not feasible to run an individual PJ panel for every existing district size in Nevada.

APA's PJ-derived data was therefore limited to a range of 780 students (at the small district end) and 50,000 students (at the large district end).

Table V-2
Special Need Student Cost Weights by District Size
(Based on PJ Panel Work)

School Size	Small	Moderate	Large
Enrollment	780	6,500	50,000
Total Base Cost	$11,327	$7,868	$7,229
Added Cost Weight for Special Need Students			
Special Education			
Mild	***1.04***	***.88***	***.89***
Moderate	***1.69***	***1.28***	***1.29***
Severe	***3.55***	***2.52***	***2.44***
At-Risk Students	***.31***	***.29***	***.35***
ELL Students	***1.21***	***.56***	***.47***
CTE Students	***.14***	***.05***	***.04***

To address districts larger than 50,000, APA examined In$ite actual spending data and identified the ratio of spending differences between Nevada's largest districts. We used this data to create a cost "floor" below which no district could go. We applied this ratio to the $7,229 based cost figure to obtain a $6,966 floor using PJ figures (similarly we obtained a $4,486 cost floor using the SS figures).

To address districts smaller than 780 students, APA used its statistical size analysis (discussed in Chapter IV of this report). This statistical analysis indicated a specific data line tracking the differences in cost as one moves from small to large districts. Importantly, the statistical analysis was able to identify the cost differences even for Nevada's very smallest districts. Our statistical analysis, however, relied on In$ite data and definitions of school and district spending. Since In$ite addresses only actual spending, the data produced do not reflect the level of spending that might be necessary for adequacy purposes. In other words, the data do not reflect the level of resources school and districts might need to meet state and federal performance standards.

While the statistical size analysis data did not reflect the level of spending required for adequacy purposes, the data line it produced was parallel to that of the data generated by our adequacy-based PJ work. APA was therefore able to use the same slope of the line produced by the statistical work to develop a formula for districts smaller than 780 students for both the PJ and SS.

FORMULAS TO DETERMINE BASE COST AND WEIGHTS FOR SIZE AND STUDENT NEED IN SCHOOL DISTRICTS

Base Cost

Professional Judgment

Conditions	*Formulas for Base Cost*
Less than 780 students	$16,101 + (Students X (-6.120))
781 – 6,500 students	$11,799 + (Students X (-.6047))
More than 6,500 students	$7,961 + (Students X (-.0144))

Note: the minimum is $6,966.

Successful Schools

Conditions	*Formulas for Base Cost*
Less than 780 students	($16,101 + (Students X (-6.120)) X .644
781 – 6,500 students	($11,799 + (Students X (-.6047)) X .644
More than 6,500 students	($7,961+ (Students X (-.0144)) X .644

Note: the minimum is $4,486.

Special Education

Mild

Conditions	*Formula for Mild Special Ed Weight*
All size districts	(Students X (-0.00005)) + 1.0605

Note: the minimum weight is .89 and the maximum weight is 1.04.

Moderate

Conditions	*Formula for Mod. Special Ed Weight*
All size districts	(Students X (-0.00007)) + 1.7445

Note: the minimum weight is 1.29 and the maximum weight is 1.69.

Severe

Conditions	*Formula for Severe Special Ed Weight*
Less than 780 students	3.55
781 – 6,500 students	(Students X (-0.0002)) + 3.6905
More than 6,500 students	(Students X (-0.000002)) + 2.532

Note: the minimum weight is 2.44.

At-Risk (number of students eligible for free/reduced price lunch)

Conditions	*Formulas for At-Risk Weight*
All size districts	(Students X (0.000001)) + .2925

Note: the minimum weight is .30 and the maximum weight is .35.

English Language Learners (ELL)

Conditions	*Formulas for ELL Weight*
Less than 780 Students	1.21
781 – 6,500 Students	(Students X (-0.0001)) + 1.2986
More than 6,500 Students	(Students X (-0.000002)) + .5734

Note: the minimum weight is 0.47.

Career-Technical Education (CTE)

Conditions	*Formulas for CTE Weight*
All size districts	(Students X (-.00002)) + 0.1523

Note: the minimum weight is 0.05 and the maximum weight is .14.

Note: In all formulas, students refers to the number of students in the district.

In cases where the weights were almost identical, APA blended them together into a single weight. For instance, there was a minimal difference in mild special education student weights between the moderate and large size district (.88 and .89 respectively). In its formula therefore, APA selected the .89 weight as the overall minimum for mild special education students.

A major advantage to the formulas APA created is that they produce gradual changes in projected costs based on enrollment differences. Such gradual change is preferable because it helps avoid the creation of perverse incentives for school districts to gain or shed a few students in order to reach a specific formula-driven plateau that would provide them with a significantly higher level of funding. With APA's formulas, no such plateaus exist and districts therefore have no incentive to artificially alter their student counts.

Examples of How APA's Formulas Work

A) If a Nevada K-12 district had 200 students, 27 of whom were in special education programs (18 mild, 7 moderate, and 2 severe); 80 were at-risk; 10 were in ELL programs; and 15 in career and technical education (CTE) programs; the cost of adequacy would be calculated as follows:

1. Base cost = 200 X $14,877 or $2,975,400
2. At-risk = 80 X .30 X $14,877 or $357,048
3. ELL = 10 X 1.21 X $14,877 or $180,012
4. CTE = 15 X .14 X $14,877 or $31,242
5. Special Education
   - *Mild* = 18 X 1.04 X $14,877, or $278,497
   - *Moderate* = 7 X 1.69 X $14,877, or $175,995
   - *Severe* = 2 X 3.55 X $14,877, or $105,627

DISTRICT TOTAL: $4,103,821
TOTAL PER STUDENT: $4,103,821 divided by 200 = $20,519

B) For a larger Nevada district (with 50,000 students) that has 6,750 children in special education (4,500 mild, 1750 moderate, and 500 severe); 20,000 at-risk; 2,500 in ELL programs; and 3,750 in CTE; the calculation would be as follows:

1. Base cost = 50,000 X $7,241 or $362,050,000
2. At-risk = 20,000 X .3425 X $7,241, or $49,600,850
3. ELL = 2,500 X .4734 X $7,241, or $8,569,724
4. CTE = 3,750 X .05 X $7,241, or $1,357,688
5. Special Education
   - *Mild* = 4,500 X .89 X $7,241, or $29,000,205
   - *Moderate* = 1,750 X 1.29 X $7,241, or $16,346,558
   - *Severe* = 500 X 2.44 X $7,241, or $8,834,020

DISTRICT TOTAL: $475,759,045
TOTAL PER STUDENT: $475,759,045 divided by 50,000 = $9,515

Calculating Funding Adequacy In an Individual School

Another set of formulas can also be developed to estimate the cost of adequacy at an individual school, recognizing that per student costs may differ between schools based on the grades served. There is a separate formula to determine the school-level cost of elementary, middle, and high schools. However, one formula is used to determine district-level costs for each school regardless of type, and the same weights as seen at the district-level are applied to every school. The formulas based upon the PJ approach are as follows:

FORMULAS TO DETERMINE SCHOOL AND DISTRICT-LEVEL BASE COSTS IN AN INDIVIDUAL SCHOOL

School-level Base Cost

Elementary

Conditions	*Formulas for School-level Base Cost*
Less than 175 students	$1,434 + (Students X (-35.324))
176- 600 students	$8,843 + (Students X (-3.8988))
More than 600 students	$6,926 + (Students X (-0.7033))

Note: the minimum is $5,664.

Middle

Conditions	*Formulas for School-level Base Cost*
Less than 750 students	$8,975 + (Students X (-4.446))
More than 750 students	$6,105 + (Students X (-0.62))

Note: the minimum is $4,658.

High School

Conditions	*Formulas for School-level Base Cost*
Less than 1,250 students	$8,988 + (Students X (-2.1485))
More than 1,250 students	$6,984 + (Students X (-0.5456))

Note: the minimum is $5,508.

District-level Base Cost

All School Types

Conditions	*Formulas for School-level Base Cost*
Less than 6,500 students	$2,843 + (Students X (-0.1872))
More than 6,500 students	$1,659 + (Students X (-0.0051))

Note: the minimum is $1,307.

Note: Minimums for the school-level base costs were set at 90% of the lowest per pupil figure from the PJ panel work for each of the three school types. The minimum for the district-level costs was set using the same rationale as described in an earlier chapter.

SS base figures could then be calculated as 64.4 percent of PJ figures (since the SS base is 64.4 percent of the PJ base) as seen when formulas were applied at the district level. To illustrate the application of these formulas, using an example of a 200 student school:

- If it was an **elementary school**, the school-level PJ base cost would be $8,064 per student and the SS school-level base would be $5,193.
- If it was a **middle school** the school-level PJ base cost would be $8,085 per student, and the SS school-level base would be $5,207.
- If it was a **high school** the school-level PJ base cost would be $8,558 per student, and the SS school-level base would be $5,511.

Once the school-level base cost was determined, a district level-base cost would be added depending on the size of district the school was in. Using the same example of a 200 student school, regardless of type:

- If it was in a **district of 500**, the added PJ district-level base cost would be $2,749 per student, the SS district-level base cost would be $1,771.
- If it was in a **district of 5,000**, the added PJ district-level base cost would be $1,907 per student, the SS district-level base cost would be $1,228.
- If it was in a **district of 50,000**, the added PJ district-level base cost would be $1,404 per student, the SS district-level base cost would be $904.

The two figures (school-level and district-level costs) would then be combined to determine the total base cost to which the previously discussed weights would be applied.

Table V-3 identifies 20 example schools for which the cost of adequacy was calculated. The selected schools were chosen so there would be a relatively even mix of elementary, middle, and high schools from different sized districts. An effort was also made to have at least one school from each district represented. Individual schools were then chosen at random from those in a given district.

Table V-3 also provides the demographics of each school, including total enrollment and the number of students in each special needs subgroup as reported by In$ite for 2003-04. The final two columns in Table V-3 show the cost of adequacy using the SS and PJ base costs for each school.

TABLE V-3

ESTIMATING THE COST OF ADEQUACY FOR SELECT NEVADA SCHOOLS USING BOTH THE *SUCCESSFUL SCHOOLS* AND *PROFESSIONAL JUDGMENT* BASES IN 2003-04

District	School	School Enrollment	Mild Special Ed	Moderate Special Ed	Severe Special Ed	At-Risk	ELL	CTE	SS Adequacy per pupil	PJ Adequacy per pupil
Esmeralda	Dyer Elem	43	3	0	0	30	0	0	$13,675	$21,235
Eureka	Eureka HS	91	16	2	0	26	0	46	$11,916	$18,503
Storey	Virginia City HS	137	18	4	1	0	0	65	$10,954	$17,009
Mineral	Schurz Elem	79	11	3	1	65	0	0	$15,955	$24,775
Pershing	Pershing County Middle	218	32	10	0	94	41	0	$12,634	$19,619
Lincoln	Lincoln County Sr. High	191	5	3	0	76	6	96	$9,627	$14,948
Lander	Eleanor Lemaire Elem	273	19	3	1	69	0	0	$8,565	$13,299
White Pine	White Pine Middle	299	37	6	2	83	0	0	$9,501	$14,753
Humboldt	Albert M. Lowery HS	987	113	29	3	259	238	494	$9,719	$15,091
Churchill	Numa Elem	544	53	18	2	257	71	0	$8,703	$13,514
Nye	Rosemary Clark Middle	1,045	152	63	7	566	20	0	$7,703	$11,962
Douglas	George Whitell HS	228	10	3	1	34	28	101	$8,238	$12,792
Lyon	Silver Springs Elem	416	21	9	2	252	0	0	$7,678	$11,922
Carson City	Carson Middle	1,220	136	38	6	439	120	0	$6,580	$10,218
Elko	Elko Sr. High	1,217	90	16	3	49	14	609	$6,269	$9,734
Washoe	Mamie Towles Elem	393	36	14	2	84	22	0	$7,716	$11,981
Washoe	Reno HS	1,831	108	43	6	109	48	655	$5,831	$9,055
Clark	Jim Thorpe Elem	579	70	23	6	168	56	0	$7,669	$11,909
Clark	Charles West Middle	1,215	163	53	13	1,021	223	0	$7,648	$11,876
Clark	Western HS	2,190	215	69	17	898	400	1,095	$7,080	$10,994

VI. COMPARING ADEQUACY COSTS WITH ACTUAL SPENDING IN NEVADA SCHOOL DISTRICTS

Tables VI-1A, B, C and D, compare the cost of adequacy to actual, comparable spending in 2003-04, excluding capital, transportation, and food service, for the 17 districts in Nevada not including charter schools. Figures are disaggregated into three size categories of districts: (1) Small, which includes districts below 1,500 students; (2) Moderate, which includes districts with 1,501- 49,999 students; and (3) Large, which includes districts above 50,000.

The tables are organized into two categories:

- Tables **VI-1A and VI-1B** focus on the **Successful School (SS) approach** adequacy figures. Table VI-1A shows adequacy figures without using the Location Cost Metric (LCM), and Table VI-1B shows adequacy figures to which the LCM has been applied.

- Tables **VI-1C and VI-1D** focus on the **Professional Judgment (PJ) approach** adequacy figures. Table VI-1C shows figures without the LCM, and Table VI-1D shows the figures with the LCM.

All figures in the tables are in 2003-04 dollars.

Section I of Tables VI-1A, B, C, and D shows the 2003-04 demographic characteristics of Nevada school districts. There were 8 small districts, 7 moderate size districts, and 2 large districts. Of the 369,023 students enrolled in the 17 districts, 5,789 students were in small districts, 45,260 students were in moderate districts, and 317,974 students were in large districts.

Section II of Tables VI-1A, B, C, and D indicates the total cost of adequacy for the state as a whole in 2003-04 based on the SS approach (in Tables VI-1A and VI-1B), and the PJ approach (in Tables VI-1C and VI-1D). For example, in Table VI-1A, using the SS approach base cost without LCM, the total cost of an adequate education in 2003-04 would have been about $2,295.5 million. The cost of providing base services to all students would have been $1,714.4 million. The added cost to serve students with special needs would have been: $226.5 million to serve special education students; $206.0 million to serve at-risk students; $132.7 million to serve ELL students; and $15.9 million to serve CTE students. Taken together, these costs equate to $6,221 per student (as shown in Section III of Table VI-1A).

Section IV of Tables VI-1A, B, C, and D display actual, comparable spending in 2003-04. In the example of Table VI-1A, using the SS approach without LCM, for the given year, the 17 school districts spent $2,231.3 million, or $6,046 per student. These figures suggest that school districts would have needed to spend

$64.2 million more than what they were spending in order to reach an SS-adequate level of spending.

To gain a better understanding of variations in resources currently available to districts, it is important to examine separately those districts that appear to be spending above adequate levels and those spending below adequate levels. Section V of Tables VI-1A, B, C and D shows districts spending above than the amount estimated to be adequate in 2003-04. Using the same example of Table VI-1A, of the 17 districts, 5 were spending above SS-adequate levels. Those districts, which enrolled 23,975 students, spent $15.3 million over SS adequacy, or $640 per student, on average. The districts that were spending above adequacy fell into the small and moderate size categories. Section VI of Tables VI-1A, B, C, and D show which districts were spending below the adequacy level estimated by the SS approach. In the example of Table VI-1A, the data shows that 12 districts would have needed a total of $79.6 million, or $231 per student, on average, to bring them up to the successful schools adequacy level.

The degree to which districts were spending above or below adequacy varied by which approach was used and if the LCM was applied. In the example of Table VI-1A (using the SS approach without the LCM) the cost of adequacy again was $2,295.5 million or $64.2 million more than current actual spending, with 5 districts spending above the adequate amount and 12 districts spending below. In Table VI-1B (using the SS approach but also applying the LCM) the cost of adequacy was $2,287.0 million or $55.7 million over current spending, with 10 districts spending above the adequate amount and 7 districts spending below.

Table VI-1C and VI-1D both used the professional judgment approach to determine the cost of adequacy using the 2013-14 standard. Since this standard is, by definition, higher than that used for the SS approach, the costs for providing resources to meet that standard as shown in Tables VI-1C and D are much higher than the estimates of the previous tables. Table VI-1C (using the PJ approach without applying the LCM) shows an adequacy cost of $3,564.5 million (or $1,333.2 million more than current spending) with only one district spending above the estimated adequate amount, and the other 16 spending below. In Table VI-1D, (using the PJ approach with the LCM) the cost of adequacy was $3,551.3 million (or $1,320.0 million more than current spending) with 2 districts spending above adequacy and 15 spending below.

TABLE VI-1A

ESTIMATING THE COST OF ADEQUACY FOR NEVADA SCHOOL DISTRICTS USING THE *SUCCESSFUL SCHOOLS* BASE IN 2003-04

WITHOUT LCM

	Small	Moderate	Large	**TOTAL**
I. School District Characteristics				
Range in Size of District (Students)	< 1,500	1501 - 49,999	> 50,000	
Number of Districts	8	7	2	17
Number of Students	5,789	45,260	317,974	369,023
II. Estimated Aggregate Cost of Adequacy (millions)*				
Base Cost	$43.1	$239.1	$1,432.2	**$1,714.4**
Special Education	$8.6	$37.9	$180.0	**$226.5**
At-Risk	$4.1	$24.2	$177.6	**$206.0**
ELL	$1.7	$11.6	$119.4	**$132.7**
CTE	$1.8	$3.1	$11.0	**$15.9**
Grand Total	$59.2	$316.0	$1,920.3	**$2,295.5**
III. Estimated Cost of Adequacy Per Student*				
Grand Total	*$10,232*	*$6,981*	*$6,039*	***$6,221***
IV. Actual Comparable Spending*				
Aggregate Total (millions)	$54.2	$319.8	$1,857.3	**$2,231.3**
Per Student Total	*$9,356*	*$7,065*	*$5,841*	***$6,046***

TABLE VI-1A (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
V. Districts with ***Higher*** Spending than the Amount Estimated to be Adequate				
Number of Districts	2	3	0	**5**
Number of Students	279	23,696	0	**23,975**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$3.6	$152.5	--	**$156.2**
Actual 2003-04 Spending (Aggregate in millions)*	$5.5	$166.0	--	**$171.5**
Actual Spending *Over* Adequacy (Aggregate in millions)*	$1.9	$13.4	--	**$15.3**
Per Student Spending *Over* Adequacy	*$6,767*	*$567*	--	***$640***

TABLE VI-1A (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
VI. Districts with ***Lower*** Spending than the Amount Calculated to be Adequate				
Number of Districts	6	4	2	**12**
Number of Students	5,509	21,564	317,974	**345,047**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$55.6	$163.4	$1,920.3	**$2,139.4**
Actual 2003-04 Spending (Aggregate in millions)*	$48.6	$153.8	$1,857.3	**$2,059.8**
Actual Spending *Under* Adequacy (Aggregate in millions)*	$7.0	$9.7	$63.0	**$79.6**
Per Student Spending *Under* Adequacy	*$1,264*	*$448*	*$198*	***$231***

* Figures exclude spending for capital, transportation, and food service

TABLE VI-1B

ESTIMATING THE COST OF ADEQUACY FOR NEVADA SCHOOL DISTRICTS USING THE *SUCCESSFUL SCHOOLS* BASE IN 2003-04

WITH LCM

	Small	Moderate	Large	**TOTAL**
I. School District Characteristics				
Range in Size of District (Students)	< 1,500	1501 - 49,999	> 50,000	
Number of Districts	8	7	2	17
Number of Students	5,789	45,260	317,974	369,023
II. Estimated Aggregate Cost of Adequacy (millions)*				
Base Cost	$36.8	$229.2	$1,442.2	**$1,708.2**
Special Education	$7.4	$36.4	$181.4	**$225.2**
At-Risk	$3.5	$23.1	$178.8	**$205.4**
ELL	$1.4	$11.0	$120.1	**$132.6**
CTE	$1.5	$3.0	$11.1	**$15.5**
Grand Total	$50.6	$302.7	$1,933.7	**$2,287.0**
III. Estimated Cost of Adequacy Per Student*				
Grand Total	*$8,741*	*$6,689*	*$6,081*	***$6,198***
IV. Actual Comparable Spending*				
Aggregate Total (millions)	$54.2	$319.8	$1,857.3	**$2,231.3**
Per Student Total	*$9,356*	*$7,065*	*$5,841*	***$6,046***

TABLE VI-1B (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
V. Districts with ***Higher*** Spending than the Amount Estimated to be Adequate				
Number of Districts	5	5	0	**10**
Number of Students	3,147	33,326	0	**36,473**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$27.9	$218.0	--	**$245.9**
Actual 2003-04 Spending (Aggregate in millions)*	$32.0	$238.3	--	**$270.3**
Actual Spending *Over* Adequacy (Aggregate in millions)*	$4.1	$20.3	--	**$24.4**
Per Student Spending *Over* Adequacy	*$1,307*	*$609*	--	***$669***

TABLE VI-1B (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
VI. Districts with ***Lower*** Spending than the Amount Calculated to be Adequate				
Number of Districts	3	2	2	**7**
Number of Students	2,642	11,934	317,974	**332,550**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$22.7	$84.8	$1,933.7	**$2,041.1**
Actual 2003-04 Spending (Aggregate in millions)*	$22.1	$81.5	$1,857.3	**$1,960.9**
Actual Spending *Under* Adequacy (Aggregate in millions)*	$0.6	$3.3	$76.3	**$80.2**
Per Student Spending *Under* Adequacy	*$209*	*$275*	*$240*	***$241***

* Figures exclude spending for capital, transportation, and food service

TABLE VI-1C

ESTIMATING THE COST OF ADEQUACY FOR NEVADA SCHOOL DISTRICTS USING THE *PROFESSIONAL JUDGMENT* BASE IN 2003-04

WITHOUT LCM

	Small	Moderate	Large	**TOTAL**
I. School District Characteristics				
Range in Size of District (Students)	< 1,500	1501 - 49,999	> 50,000	
Number of Districts	8	7	2	17
Number of Students	5,789	45,260	317,974	369,023
II. Estimated Aggregate Cost of Adequacy (millions)*				
Base Cost	$66.9	$371.3	$2,223.9	**$2,662.1**
Special Education	$13.3	$58.9	$279.6	**$351.8**
At-Risk	$6.4	$37.7	$275.8	**$319.9**
ELL	$2.6	$18.0	$185.5	**$206.1**
CTE	$2.7	$4.9	$17.0	**$24.7**
Grand Total	$92.0	$490.6	$2,981.8	**$3,564.5**
III. Estimated Cost of Adequacy Per Student*				
Grand Total	*$15,888*	*$10,841*	*$9,378*	***$9,659***
IV. Actual Comparable Spending*				
Aggregate Total (millions)	$54.2	$319.8	$1,857.3	**$2,231.3**
Per Student Total	*$9,356*	*$7,065*	*$5,841*	***$6,046***

TABLE VI-1C (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
V. Districts with ***Higher*** Spending than the Amount Estimated to be Adequate				
Number of Districts	1	0	0	**1**
Number of Students	67	--	--	**67**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$1.39	--	--	**$1.39**
Actual 2003-04 Spending (Aggregate in millions)*	$1.43	--	--	**$1.43**
Actual Spending *Over* Adequacy (Aggregate in millions)*	$0.04	--	--	**$0.04**
Per Student Spending *Over* Adequacy	*$627*	--	--	***$627***

TABLE VI-1C (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
VI. Districts with ***Lower*** Spending than the Amount Calculated to be Adequate				
Number of Districts	7	7	2	**16**
Number of Students	5,721	45,260	317,974	**368,955**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$90.6	$490.6	$2,981.8	**$3,563.1**
Actual 2003-04 Spending (Aggregate in millions)*	$52.7	$319.8	$1,857.3	**$2,229.8**
Actual Spending *Under* Adequacy (Aggregate in millions)*	$37.9	$170.9	$1,124.5	**$1,333.2**
Per Student Spending *Under* Adequacy	*$6,616*	*$3,776*	*$3,536*	***$3,614***

* Figures exclude spending for capital, transportation, and food service

TABLE VI-1D

ESTIMATING THE COST OF ADEQUACY FOR NEVADA SCHOOL DISTRICTS USING THE *PROFESSIONAL JUDGMENT* BASE IN 2003-04

WITH LCM

	Small	Moderate	Large	**TOTAL**
I. School District Characteristics				
Range in Size of District (Students)	< 1,500	1501 - 49,999	> 50,000	
Number of Districts	8	7	2	17
Number of Students	5,789	45,260	317,974	369,023
II. Estimated Aggregate Cost of Adequacy (millions)*				
Base Cost	$57.2	$355.9	$2,239.5	**$2,652.6**
Special Education	$11.5	$56.5	$281.7	**$349.7**
At-Risk	$5.4	$35.9	$277.6	**$319.0**
ELL	$2.2	$17.1	$186.6	**$205.9**
CTE	$2.3	$4.6	$17.2	**$24.1**
Grand Total	$78.6	$470.1	$3,002.6	**$3,551.3**
III. Estimated Cost of Adequacy Per Student*				
Grand Total	*$13,573*	*$10,386*	*$9,443*	***$9,623***
IV. Actual Comparable Spending*				
Aggregate Total (millions)	$54.2	$319.8	$1,857.3	**$2,231.3**
Per Student Total	*$9,356*	*$7,065*	*$5,841*	***$6,046***

TABLE VI-1D (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
V. Districts with ***Higher*** Spending than the Amount Estimated to be Adequate				
Number of Districts	2	0	0	**2**
Number of Students	279	--	--	**279**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$4.7	--	--	**$4.7**
Actual 2003-04 Spending (Aggregate in millions)*	$5.5	--	--	**$5.5**
Actual Spending *Over* Adequacy (Aggregate in millions)*	$0.8	--	--	**$0.8**
Per Student Spending *Over* Adequacy	*$2,801*	--	--	***$2,801***

TABLE VI-1D (Continued)

	Small	Moderate	Large	**TOTAL**
	< 1,500	1501 - 49,999	> 50,000	
VI. Districts with ***Lower*** Spending than the Amount Calculated to be Adequate				
Number of Districts	6	7	2	**15**
Number of Students	5,509	45,260	317,974	**368,743**
Estimated 2003-04 Adequate Spending (Aggregate in millions)*	$73.8	$470.1	$3,002.6	**$3,546.5**
Actual 2003-04 Spending (Aggregate in millions)*	$48.6	$319.8	$1,857.3	**$2,225.7**
Actual Spending *Under* Adequacy (Aggregate in millions)*	$25.2	$150.3	$1,145.3	**$1,320.8**
Per Student Spending *Under* Adequacy	*$4,573*	*$3,322*	*$3,602*	***$3,579***

* Figures exclude spending for capital, transportation, and food service

VII. NEVADA'S CURRENT SCHOOL FINANCE SYSTEM

This chapter serves two key purposes:

- It provides a discussion and overview of Nevada's current school finance system and funding formula and compares key components of this funding system with several surrounding states; and

- It provides a comparison of Nevada to other selected states in terms of a series of school finance-related variables:
    - Numbers of students and schools, and growth over time;
    - Percentages of students with special needs;
    - Teachers per 1,000 students and teachers as percentage of staff;
    - Changes over time of per student revenues and expenditures;
    - Capital spending and long term debt per student; and
    - School district revenue sources.

An Overview of Nevada's Current School Finance System

The "Nevada Plan" is the State's mechanism for providing a "reasonably equal educational opportunity" for students in every district and all charter schools (Nevada Revised Statutes 387.121). The system guarantees a level of funding on a per student basis. The per-student amount is established by each Session of the Legislature for each of the following two years. The funds are then divided statewide by a weighted apportionment enrollment. The weighted apportionment enrollment includes:

- A partial count (.6) of kindergarten and pre-kindergarten students);
- A full count (1) for students in grades 1-12;
- A full count (1) for ungraded students; and
- The inclusion of net transfers (transfers out of the school district minus transfers in).

In an effort to meet the diverse needs of Nevada's school districts the Nevada Plan has an equity allocation process that looks at each district's unique characteristics. Specifically, student enrollment, teacher and licensed staffing, other operating costs, the school district's degree of urbanization and school dispersal through the concept of "attendance areas," transportation cost equalization, and a local wealth factor incorporating each district's relative ability to raise specific local education taxes.[10] All of these adjustments are combined to create a per-student funding amount for each district.

The State guarantees to provide the per-student funding support to each district based on student enrollment. To meet this requirement there are two sources of

[10] Nevada Department of Education, Administrative and Fiscal Services (2006). "The "NEVADA PLAN" and Distributive School Account (DSA): The DSA Equity Allocation Model. p. 3.

money: (1) the Distributive School Account in the State General Fund and (2) two-locally generated revenues –a county-specific and apportioned 2.25% Local School Support Tax (LSST) and a 1/3 ($0.25) Public Schools Operating Property Tax (PSOPT). The LSST and PSOPT are subtracted from the state-guaranteed support to determine the state's financial responsibility. If the revenue from these two local sources is more than anticipated, state aid is decreased, if, on the other hand, the revenue is less than expected the state aid is increased to ensure the basic support level guaranteed.

Approximately 80 percent of school districts' operating funds are guaranteed by the state.[11] This money is allocated through the Distributive School Account (DSA) in the State General Fund. In addition to the General Fund resources, the state uses several other dedicated revenue sources to meet its share of the financial obligation. These revenue sources include: A share of the annual slot tax; Investment income from the permanent school fund; Federal mineral land lease receipts; Sales tax on out-of-state sales that cannot be attributed to a particular county; and Estate tax.

The remaining 20 percent of the school districts' operating budgets are provided through local revenues that are considered "outside" of the Nevada Plan. These additional components of local revenue include the remaining 2/3 ($0.50) of the PSOPT; a share of basic government services tax distributed to school districts; Franchise taxes; Interest income; Tuition; Rent; Non-categorical federal funds (such as Title VIII of the Elementary and Secondary Education Act of 1965); and Opening general fund balance.[12] These additional revenues do not affect state aid like the two other local revenue sources –state aid does not increase or decrease if estimations are met or not. However, this revenue is considered when determining each school district's relative wealth.

To better understand the funding system in Nevada, key components of the funding system were compared to several surrounding states' systems. Table VII-1 on the following page outlines important components of the finance system.

There are several interesting findings shown in the table. First, the Legislature sets the base cost per-pupil support in every state, including Nevada. In several states, including California and Oregon, the base cost is determined by previous year support or average daily membership. Another similarity among the states is the relationship between local and state support. In every state, local school districts are required to levy property tax to meet their financial obligation. Depending on the ability of each school district to raise money, the State pays the difference between what is guaranteed per-student support and local revenue for student support. However, Nevada requires local districts to levy a local

[11] Fiscal Analysis Division, Legislative Counsel Bureau (2003). The NEVADA PLAN for School Finance: An Overview. p. 3.
[12] Fiscal Analysis Division, Legislative Counsel Bureau (2003). The NEVADA PLAN for School Finance: An Overview. p. 5

school tax in addition to property taxes. This differs from the surrounding states. In some states there is an option for local school districts to raise additional revenue above the base cost determined by the state. Arizona, Idaho, and Utah school district's all have the opportunity to ask voters to approve additional taxation to support schools. Nevada, California, and Oregon do not have this local option.

Special populations of students, including Special Education, At-Risk, and English Language Learners, have implications for school funding systems. Oftentimes, local school districts face higher costs in educating these students. The support for special education students varies in the above comparison. Nevada allocates special education units and Idaho says that funding is included in the base cost, while Utah gives school districts an added weight of 1.53. There is more homogeneity in supporting at-risk and ELL students. Three states (Nevada, Arizona, and Idaho) do not include additional support for at-risk students in the calculation of per-student support. Oregon and Utah, on the other hand, include additional support for at-risk students in the base cost. Finally, Nevada is the only state that does not include additional support for ELL students. All surrounding states either include these students in the base cost or provide some additional support (like $100 per student in California) to local school districts. These differences may reflect important assumptions about the cost of educating Special Education, At-risk, and/or ELL students.

The last funding component compared is the support for Capital. With certain exceptions on a case-by case basis, Nevada and Idaho are the only two states in the comparison that do not provide any support for Capital. The other four states support local school districts by providing funds or assuming the cost of construction and then leasing the buildings back to the district. In both Arizona and Utah districts either match state support or can go beyond what state support is given.

TABLE VII - 1

OTHER STATE APPROACHES TO SCHOOL FINANCE

		Nevada	Arizona	California	Idaho	Oregon	Utah
Base Cost		Set by legislature for following two years	Weighted Student Formula, Legislature sets base cost	Set by state legislature based on previous year	Foundation set by the Legislature	Set by Legislature, system based on defined amount per ADM	Set by the Legislature
Pay for the Base		Use the LSST, PSOPT and State funds	District Primary Tax Levy is deducted from the base and the State pays the difference	Controlled by Proposition 13 with limited local funding coming from property taxes and the State paying the difference	Districts must levy a set amount and State pays the difference	Districts levy property tax and then state picks up difference, also use the timber tax	Districts levy property tax and then state picks up difference
Local Option			Secondary Levy option is available with voter approval		Additional Levy available with voter approval		Additional Levy available with voter approval
Special needs	**Special Ed**	Special Education Units are allocated	Based on a number of weights specified in the funding formula	Receive a per pupil amount derived from a base year of actual spending and then adjusted for inflation yearly	Funded as part of regular program	Included in base amount up to $30,000 per pupil which is then reimbursed	Added weight of 1.53
	At-Risk	Not Included	Not included	State funds an Economic Impact Aid program and allows certain districts to raise local resources	Not included	Included in base amount	Considered in Base or from local levy
	ESL	Not Included	Based on a weight in the funding formula	$100 per identified student	Additional funding has been made available based on legal requirements	included base amount	Considered in Base or from local levy
Capital		Not generally provided by the state	State funds a definition of adequate facilities, districts can go above	State passes bonds to build facilities and then leases them back to Districts	None provided by the State	Up to 8% of the construction cost of new classrooms	State provide funds with District match

Comparison of Nevada to Selected Other States in Terms of School Finance-Related Variables

The purpose of this section is to describe a variety of school funding characteristics in Nevada and to compare those characteristics with selected other states. APA identified two sets of states for comparison purposes. The first set includes the five states that are geographically close to Nevada (Arizona, California, Idaho, Oregon, and Utah). The second set includes three states (Florida, Maryland, and New Mexico) that are similar to Nevada in two ways that school districts are organized – they have a relatively small number of school districts (less than half of the national average of 300 or so) and they have at least one large, urban school district (similar to Clark County). We chose these two sets because it is not unusual that states near to one another tend to fund schools at similar levels and because the way states organize their school districts may affect school funding.

In addition to these two sets of states, we also show national average information. The comparisons use data from the National Center for Education Statistics (NCES) and are for three years: 2002-03, the latest year for which all of the variables we wanted to look at were available; 1997-98, five years prior to 2002-03; and 1992-93, ten years prior to 2002-03.

First, we looked at the basic demographic characteristics of the education system in the states, including the number of school districts, schools, and students. Information about these demographic characteristics is shown in Table VII-2. Some interesting findings include:

- Clearly, Nevada has the fewest number of school districts among the states selected for comparison. In most of the other comparison states, school districts are not organized by county (in many states, some, but not all, districts are county based) as they are in Nevada but, rather, reflect communities or groups of communities.

- The growth in Nevada's number of schools from 1992-2003 is impressive. Only Arizona had faster growth over this timeframe and, in most states, the number of schools increased less than half as fast as Nevada.

- The growth in the number of students in Nevada far outpaced student population growth in all other selected states. In fact, Nevada's pace of student growth from 1992-2003 was more than 50 percent greater than the next fastest growing state (Arizona).

TABLE VII-2

NUMBERS OF SCHOOL DISTRICTS, SCHOOLS, AND STUDENTS WITH CHANGE BETWEEN 1992-93 AND 2002-03

		Schools					*Students*				
	School Districts	1992-93	1997-98	2002-03	Change 92-93 to 02-03	Change 97-98 to 02-03	1992-93	1997-98	2002-03	Change 92-93 to 02-03	Change 97-98 to 02-03
Nevada	**17**	**383**	**455**	**542**	**41.5%**	**19.1%**	**222,169**	**295,972**	**368,794**	**66.0%**	**24.6%**
U.S.	*15,873*	*84,374*	*89,508*	*96,048*	*13.8%*	*7.3%*	*41,955,413*	*45,307,422*	*47,666,276*	*13.6%*	*5.2%*
Nearby States											
Arizona	522	1,117	1,429	1,928	72.6%	34.9%	672,557	808,089	957,188	42.3%	18.5%
California	1,056	7,665	8,182	9,100	18.7%	11.2%	5,089,808	5,634,519	6,181,021	21.4%	9.7%
Idaho	115	605	642	697	15.2%	8.6%	230,485	244,510	248,604	7.9%	1.7%
Oregon	205	1,213	1,253	1,263	4.1%	0.8%	507,429	539,118	551,605	8.7%	2.3%
Utah	53	714	759	804	12.6%	5.9%	452,509	469,890	473,274	4.6%	0.7%
Similarly Organized States											
Florida	73	2,592	2,888	3,526	36.0%	22.1%	1,981,407	2,295,671	2,541,478	28.3%	10.7%
Maryland	24	1,263	1,300	1,404	11.2%	8.0%	783,139	817,013	861,255	10.0%	5.4%
New Mexico	89	697	745	809	16.1%	8.6%	307,890	331,673	320,264	4.0%	-3.4%

Source: National Center for Education Statistics (Build a Table)

Note: Similarly organized states are those with a relatively small number of school districts and at least one comparatively large district.

Second, it is important to understand something about the nature of the students being served in a state. This is important because, in addition to raw enrollment growth, the number of students with special needs and associated higher costs places a significant fiscal responsibility on the state. Just looking at 2002-03, as shown in Table VII-3, it is clear that Nevada's proportion of students in special education programs and the proportion eligible for free or reduced-price lunch (often used as a proxy for the number of "at-risk" students, who might not keep pace with other students unless added services are provided) is slightly below the national average and below the averages of the two groups of comparison states. On the other hand, Nevada's proportion of students who are English language learners, and may require special services, is higher than the national average and those of the comparison groups.

When students are "weighted" to reflect the relative cost of serving them, a ratio of weighted to unweighted students can be created. Such a ratio is shown in the last column of Table VII-3. To created this ratio, APA used a common set of weights for all states in the table. This common set was based on APA experience, not on any specific weights generated through the current Nevada study. Nevada's ratio of weighted to unweighted students of 1.47 suggests that it costs 47 percent more to educate the actual students enrolled as compared to the cost of serving students with no special needs. Nevada's costs are slightly more than the national average but generally similar to those of the comparison states (with the exception of California and New Mexico, which had much higher costs).

TABLE VII-3

TOTAL STUDENTS, PERCENTAGE OF STUDENTS WITH SPECIAL NEEDS, AND RATIO OF WEIGHTED TO UNWEIGHTED STUDENTS IN 2002-03

	2002-03 Total Students	*Percentage of All Students with Special Needs in 2002-03*			2002-03 Ratio of Weighted to Unweighted Students*
		Special Education	Free and Reduced-Price Lunch Eligible	English Language Learners	
Nevada	**368,794**	**11.5%**	**34.1%**	**15.9%**	**1.47**
U.S.	*47,666,276*	*13.5%*	*36.8%*	*8.6%*	*1.45*
Nearby States					
Arizona	957,188	10.6%	47.6%	15.0%	1.54
California	6,181,021	10.9%	48.6%	25.9%	1.64
Idaho	248,604	11.6%	36.4%	7.5%	1.41
Oregon	551,605	13.0%	38.4%	9.5%	1.46
Utah	473,274	11.9%	31.6%	9.1%	1.40
Simple Average		11.6%	40.5%	13.4%	1.49
Similarly Organized States					
Florida	2,541,478	15.3%	45.2%	8.0%	1.51
Maryland	861,255	12.3%	30.9%	3.2%	1.35
New Mexico	320,264	19.9%	57.0%	20.4%	1.74
Simple Average		15.8%	44.4%	10.5%	1.53

* Student weights are: special education, 1.10; free and reduced-price lunch eligible, .60; and ELL, .90 (based on prior APA work in other states).

Source or raw data: National Center for Education Statistics (Build a Table)

Note: Similarly organized states are those with a relatively small number of school districts and at least one comparatively large district.

Table VII-4 shows the number of employees working in the public schools relative to the number of students enrolled. It should be noted that most states do not specify how revenues should be spent (to hire specific numbers of employees, such as teachers) so the figures shown in the table reflect the average of decisions made by all of the school districts, and schools, in the states. While the number of teachers per 1,000 students has grown over time in Nevada, from 53.8 in 1992-93 to 54.3 in 2002-03, that level is well below the U.S. average, higher than most nearby states, and below two of the three similarly organized states; weighting students does not change this result. Nevada's teachers represent a high proportion of all staff, which grew in the mid 1990's

and has remained constant at about 57.4 percent. In fact, Nevada's teacher proportion is well above the national average and above all comparison states.

TABLE VII-4

TEACHERS PER 1,000 STUDENTS AND TEACHERS AS A PERCENTAGE OF ALL STAFF IN 1992-93, 1997-98, AND 2002-03

	Teachers per 1,000 Students			Teachers per 1,000 Weighted Students	Teachers as Percent of Staff		
	1992-93	1997-98	2002-03	2002-03	1992-93	1997-98	2002-03
Nevada	**53.8**	**54.2**	**54.3**	**36.8**	**55.7%**	**57.7%**	**57.4%**
U.S.	*56.1*	*57.6*	*63.3*	*44.0*	*56.6%*	*54.7%*	52.7%
Nearby States							
Arizona	53.6	50.9	48.7	42.9	50.4%	50.8%	48.7%
California	42.4	47.0	48.7	29.6	50.8%	54.1%	52.4%
Idaho	51.3	54.0	55.9	39.5	60.4%	57.2%	55.8%
Oregon	52.5	50.2	49.2	33.8	51.6%	46.7%	49.3%
Utah	42.4	45.2	47.7	34.0	55.1%	53.4%	54.1%
Simple Average	48.5	49.5	50.0	36.0	53.7%	52.4%	52.1%
Similarly Organized States							
Florida	54.3	54.2	54.4	36.0	43.8%	48.6%	48.1%
Maryland	60.3	59.1	64.3	47.6	54.7%	55.3%	53.9%
New Mexico	56.1	59.2	66.1	37.9	49.6%	49.2%	48.0%
Simple Average	56.9	57.5	61.6	40.5	49.4%	51.0%	50.0%

Source of raw data: National Center for Education Statistics (Build a Table)

Note: Similarly organized states are those with a relatively small number of school districts and at least one comparatively large district.

Table VII-5 shows per student revenue and expenditure figures. It is important to note that revenues include all revenues, for current operations and for capital purposes (NCES does not separate revenues except by source), while expenditures are for current operating purposes only. In 2002-03, the total revenue per weighted student in Nevada were well below the national average, higher than in three of the five nearby states, and higher than two of the three similarly organized states. Revenues grew sluggishly over time compared to four of five nearby states and two of three similarly organized states.

Nevada does not fare quite as well in terms of expenditures. Table VII-5 shows that, in 2002-03, Nevada's expenditures were well below the national average. Increases in Nevada's per student expenditures were also slower than the national average and all comparison states. When the figures are adjusted for inter-state cost-of-living differences and weighted students (which is the fairest way to compare expenditure figures since it is sensitive to factors beyond the control of states) Nevada's per student spending was 20 percent below the

national average, five percent above the average of nearby states, and 14 percent below the average of similarly organized states.

TABLE VII-5

CHANGE OVER TIME IN PER STUDENT REVENUE (CURRENT AND CAPITAL) AND CURRENT EXPENDITURE ADJUSTED FOR NEED AND INTER-STATE COST-OF-LIVING

	Total Revenue per Student							Current Expenditure per Student						
	1992-93	1997-98	2002-03	Change: 92-93 to 02-03	Change: 97-98 to 02-03	Total Revenue per Weighted Student in 02-03*	Per Weighted Student in 02-03 Adjusted for Cost-of-Living**	1992-93	1997-98	2002-03	Change: 92-93 to 02-03	Change: 97-98 to 02-03	Expenditure per Weighted Student in 02-03*	Per Weighted Student in 02-03 Adjusted for Cost-of-Living**
Nevada	**$5,295**	**$6,456**	**$7,551**	**42.6%**	**17.0%**	**$5,138**	**$5,501**	**$4,661**	**$5,307**	**$6,104**	**31.0%**	**15.0%**	**$4,140**	$4,432
U.S.	*$5,902*	*$7,194*	*$9,234*	*56.5%*	*28.4%*	*$6,368*	*$6,386*	*$5,266*	*$6,301*	*$8,131*	*54.4%*	*29.1%*	*$5,608*	*$5,608*
Nearby States														
Arizona	$5,060	$5,855	$7,680	51.8%	31.2%	$4,987	$5,200	$4,094	$4,629	$6,155	50.4%	33.0%	$3,997	$4,168
California	$5,509	$6,769	$9,225	59.7%	36.3%	$5,625	$4,614	$4,758	$5,814	$7,763	63.2%	33.5%	$4,721	$3,873
Idaho	$3,891	$5,401	$6,832	75.6%	26.5%	$4,845	$5,165	$3,489	$4,719	$6,081	74.3%	28.9%	$4,301	$4,585
Oregon	$6,180	$7,204	$8,339	34.9%	15.8%	$5,712	$5,514	$5,615	$6,445	$7,525	34.0%	16.8%	$5,161	$4,982
Utah	$3,663	$4,906	$6,155	68.0%	25.5%	$4,396	$4,323	$3,042	$4,079	$5,001	64.4%	22.6%	$3,566	$3,506
Simple Average	$4,860	$6,027	$7,646	57.3%	26.9%	$5,113	$4,963	$4,200	$5,137	$6,505	54.9%	26.6%	$4,366	$4,223
Similarly Organized States														
Florida	$5,738	$6,529	$7,470	30.2%	14.4%	$4,947	$5,252	$4,876	$5,548	$6,435	32.0%	16.0%	$4,256	$4,518
Maryland	$6,670	$7,900	$10,064	50.9%	27.4%	$7,455	$7,388	$6,173	$7,152	$9,211	49.2%	28.8%	$6,825	$6,764
New Mexico	$4,643	$5,887	$8,386	80.6%	42.5%	$4,820	$5,010	$4,028	$5,005	$7,124	76.9%	42.3%	$4,085	$4,246
Simple Average	$5,684	$6,772	$8,640	52.0%	27.6%	$5,741	$5,883	$5,026	$5,902	$7,590	51.0%	28.6%	$5,056	$5,176

Source of raw data: National Center for Education Statistics (Build a Table)

* Student weights are: special education, 1.10; free and reduced-price lunch eligible, .60; and ELL, .90 (based on prior APA work in other states).

** Inter-state cost-of-living differences are based on figures from the American Federation of Teachers for the year 2000.

Note: Similarly organized states are those with a relatively small number of school districts and at least one comparatively large district.

Given that enrollment has grown and schools have been built so rapidly in Nevada (see Table VII-2), it makes sense to examine how spending for capital purposes has changed over time. Table VII-6 shows that, in 2002-03 (and 1997-98) Nevada spent more for capital purposes than the national average and more than all of the comparison states. While Nevada's rate of capital expenditure growth was lower than many of the comparison states, this is primarily attributable to the state's much higher spending in 1992-93. Nevada also had the highest levels of long term debt per student in 1997-98 and 2002-03. What should be kept in mind is that most capital, and debt, is paid by local school districts (this is the case in Nevada and several, but not all, of the comparison states).

TABLE VII-6

CHANGE OVER TIME IN PER STUDENT CAPITAL EXPENDITURE AND LONG TERM DEBT

	Capital Expenditure per Student					Long Term Debt per Student		
	1992-93	1997-98	2002-03	Change: 92-93 to 02-03	Change: 97-98 to 02-03	1997-98	2002-03	Change: 97-98 to 02-03
Nevada	**$915**	**$1,190**	**$1,607**	**75.6%**	**35.0%**	**$6,214**	**$8,697**	**40.0%**
U.S.	*$631*	*$904*	*$1,167*	*84.9%*	*29.1%*	*$3,127*	*$5,077*	*62.4%*
Nearby States								
Arizona	$1,052	$1,015	$934	-11.2%	-8.0%	$4,856	$4,228	-12.9%
California	$531	$890	$1,294	143.7%	45.4%	$1,360	$3,947	190.2%
Idaho	$359	$691	$771	114.8%	11.6%	$2,270	$3,058	34.7%
Oregon	$445	$696	$1,160	160.7%	66.7%	$3,354	$6,939	106.9%
Utah	$530	$877	$1,132	113.6%	29.1%	$2,362	$3,191	35.1%
Simple Average	$583	$834	$1,058	104.3%	28.9%	$2,840	$4,273	50.4%
Similarly Organized States								
Florida	$896	$1,038	$1,313	46.5%	26.5%	$2,921	$3,989	36.6%
Maryland	$472	$724	$824	74.6%	13.8%	$1,819	$2,317	27.4%
New Mexico	$531	$837	$1,300	144.8%	55.3%	$1,815	$2,737	50.8%
Simple Average	$633	$866	$1,146	88.6%	31.9%	$2,185	$3,014	38.0%

Source: National Center for Education Statistics (Build a Table)

Note: Similarly organized states are those with a relatively small number of school districtsand at least one comparatively large district.

Finally, in Table VII-7, we show the distribution of revenues to school districts by source. We were somewhat hesitant to show these figures – not because they are not correct but because they are not very meaningful given Nevada's funding system. As mentioned earlier, revenue figures include current operations and capital. In Nevada, however, local school districts have no control over their current operating tax rates – other states provide some flexibility to districts, which can set current operating tax rates in order to supplement state support. And, unlike other states, Nevada uses two major sources of local revenue, property and sales taxes, where in most states local school districts rely primarily on property tax revenues.

TABLE VII-7

DISTRIBUTION OF REVENUE TO SCHOOL DISTRICTS BY SOURCE IN 1992-93, 1997-98 AND 2002-03

	1992-93			1997-98			2002-03		
	Local	State	Federal	Local	State	Federal	Local	State	Federal
Nevada	**61.1%**	**34.2%**	**4.7%**	**63.6%**	**31.8%**	**4.6%**	**62.8%**	**30.2%**	**7.0%**
U.S.	*45.8%*	*44.8%*	*7.0%*	*48.4%*	*44.5%*	*6.8%*	*48.7%*	*42.5%*	*8.5%*
Nearby States									
Arizona	44.1%	41.5%	8.8%	41.8%	44.3%	10.2%	37.9%	48.5%	11.4%
California	29.8%	62.2%	8.0%	31.6%	60.2%	8.2%	31.3%	58.9%	9.9%
Idaho	30.4%	61.1%	8.4%	30.3%	62.7%	7.0%	31.1%	59.1%	9.8%
Oregon	54.5%	37.9%	6.3%	35.4%	56.8%	6.4%	38.4%	50.9%	9.1%
Utah	34.9%	58.0%	7.1%	32.1%	61.0%	6.9%	34.3%	56.4%	9.3%
Simple Average	38.7%	52.1%	7.7%	34.2%	57.0%	7.8%	34.6%	54.7%	9.9%
Similarly Organized States									
Florida	43.2%	48.5%	8.3%	43.6%	48.8%	7.6%	45.8%	43.6%	10.5%
Maryland	55.2%	39.4%	5.4%	55.8%	39.0%	5.2%	55.0%	38.3%	6.7%
New Mexico	13.8%	73.7%	12.6%	14.6%	72.2%	13.2%	12.9%	72.1%	15.0%
Simple Average	37.4%	53.8%	8.8%	38.0%	53.3%	8.7%	37.9%	51.3%	10.7%

Source of raw data: National Center for Education Statistics (Build a Table)

Note: Similarly organized states are those with a relatively small number of school districts and at least one comparatively large district.

Note: Revenue includes both current and capital funds. In Nevada local districts do not have flexibility in setting local tax rates so the distinction between state and local funds is very different than in other states where local districts have more control over tax decisions.

Looking at the figures in Table VII-7, it is clear that Nevada is very different from the national average and from the comparison states in its reliance on local funds to support public schools. This pattern of reliance has not changed much over time. Such patterns tend not to change over time although, as the figures for Oregon indicate, a change in state policy – in that case limiting local property taxes – can dramatically change the balance between state and local revenues. In our view, the figures shown in this table overall are difficult to interpret. We do not believe that these figures necessarily suggest a change in Nevada's state-local share is needed.

VIII. DESIGNING NEVADA'S SCHOOL FINANCE SYSTEM TO ACCOMMODATE BOTH EQUITY AND ADEQUACY

This chapter provides recommendations for incorporating the findings of APA's equity and adequacy analyses into Nevada's school finance system. It therefore addresses four main topics:

- A discussion of school finance systems in general.
- A discussion of equity analysis in general
- An equity analysis of Nevada's funding system.
- Incorporating APA's analyses into Nevada's school finance system.

A Discussion of School Finance Systems in General

School finance systems are used by states for two primary purposes: to distribute state aid to school districts and to control the taxing and spending behavior of school districts. The centerpiece of most school finance systems is a mathematical formula that calculates state aid on the basis of comparable, auditable school district information. A state's school finance formula can be complex, reflecting the desire to make the formula sensitive to factors that simultaneously:

1. Affect the cost of providing education services;
2. Are beyond the control of districts; and
3. Vary significantly among districts.

Over the past 30 years, states have become more sophisticated about identifying these factors and estimating the extent of their fiscal impact. Fiscal needs can be calculated by establishing a base cost and a series of adjustments to the base cost.

The base cost is the cost of providing services to students with no special needs who attend schools that are not affected by external cost factors (such as size). It is important that the base cost have some "meaning" – that is, that it reflects the cost of doing something that the state considers to be important, such as providing a specific array of services or reaching a specific achievement level. Too often, however, states set a base cost solely on the basis of available revenue, which obscures whatever meaning the figure would otherwise have.

The series of adjustments to the base cost can be expressed as student "weights." Such weights reflect the cost of a particular factor relative to the base cost and can either apply to all students (as in the case of district size or geographic cost) or only to some students (as in the case of a weight for low income students or students in a particular grade level). Weights typically are incorporated in a school aid formula when three criteria are met: 1) the cost factor is important – it should be the case that knowledgeable people believe the

factor impacts school district cost even if they cannot agree on the extent of the impact; 2) a significant number of students are affected by the factor (at least 5-10 percent of all students in the state); and 3) there is significant variation in the number of students affected by the cost factor across all districts. If these three criteria are not met, then adding a weight to a state aid formula serves to unnecessarily complicate matters.

With a proper base cost and weights that meet the three criteria described above, a state can accurately estimate the costs districts face in fulfilling whatever expectations are specified. In this way, the state aid system can complement state education policy as reflected in school district accreditation, teacher certification, and education accountability requirements.

Once costs have been estimated for each district, it is necessary to determine how costs will be split between state and local sources of revenue (assuming that federal funds are considered to be supplemental or are accounted for by reducing the student weights associated with special education and at-risk students). Since one of the primary purposes of a school finance system is to "equalize" revenue (or spending), states use one of several procedures to assure that wealthy school districts pay a higher share of total cost than less wealthy districts: 1) a foundation program, under which districts make a uniform tax effort and state aid is the difference between estimated cost and the local revenue produced by the uniform tax rate; or 2) a formula that takes into consideration the relative wealth of districts. Under both options, the state determines the overall share of total cost it wants to pay and sets the parameters of the allocation procedure to accomplish that result.

Numerous other issues arise in designing a state aid system for public elementary and secondary education. At the highest level, policymakers need to decide whether state aid should be subdivided into components. Typically, current operating funds are separate from capital funds and it is not unusual that transportation funds are separated from other operating funds – but it is also possible to separate funding for special education or to create distinct funding streams for programs such as vocational education or ELL funds.

While creating separate funding streams complicates the system, it also provides greater flexibility to policymakers, who can choose to equalize some components of the system but not others or who could decide to provide a higher share of state support for one component than another. For example, it would be possible to create a school finance system in which the state separated capital costs from current operating costs, provided a small fixed amount of funding per student for capital purposes, and provided an equalized formula with the state paying 60 percent of costs in a district with average wealth for operating costs.

One of the issues many states have focused on is local tax effort, particularly tax effort beyond whatever might be required in the basic aid program (such as a

foundation program with state aid calculated as the difference between an estimate of district cost and the revenue raised by a specified level of tax effort). Typically, school districts have wide leeway in the effort they make above the base requirement – in some cases there is no state control over that tax effort or the control is in the form of requiring voter approval (many states require voter approval of *increases* in spending, local revenue, tax rates, and/or tax effort). Some states limit the extent to which districts can tax themselves above the base (based on the tax rate or the revenue produced by the tax rate). In addition, some states attempt to equalize the revenues that can be generated by such tax rates, by providing state aid that is inversely related to district wealth and directly related to the level of effort.

School finance systems can become extremely complicated depending on the decisions made by policymakers. The more complex systems become, the more difficult it is to assure that they achieve appropriate levels of adequacy and equity, two longstanding goals of school finance.

A Discussion of Equity Analysis in General

Over the last century, school finance equity has received a great deal of attention. State policymakers first became interested in the topic when they began to realize there were enormous differences in districts' fiscal capacity and that some districts could obtain much more revenue per student than others while taxing themselves at similar or lower tax rates.

Policymakers also came to understand that the way they were distributing state aid, primarily through "flat grants", did little to overcome the advantages of wealth that were associated with some districts. Much of the effort that has been made to change school finance systems in the past 30 years has been to make the allocation of state aid more sensitive to the wealth of school districts – to "equalize" state aid – so that the total revenues of districts would be more similar (or so that the primary determinant of differences in revenue would be the tax effort of school districts).

Many states have had to defend their school finance systems in court against plaintiffs who claimed that variations in school district wealth led to variations in per student expenditures, which violated the education clauses found in most state constitutions. As a result, many states changed the way they allocated state aid to school districts. While significant improvements have been made, many people remain concerned about differences in spending across school districts and the role that state aid can play to alleviate such differences.

It is possible to measure such "inter-district fiscal equity" using statistics. To be effective, the statistic needs to: 1) measure the variation in spending among all, or most, districts; 2) be simple to calculate; and 3) be easy for policymakers to understand. In our experience, the best statistic to use in measuring inter-district

equity is the “coefficient of variation,” which is the standard deviation of a distribution of figures divided by the average of such figures. For example, if a state had 200 school districts, the average spending per student was $5,000 and the standard deviation was $1,000, then the coefficient of variation would be .200. Sometimes this figure is interpreted as meaning that about two-thirds of the districts have per student spending between $4,000 and $6,000 (one standard deviation above and below the average).

The coefficient can also be calculated in a more complex way, taking into consideration the enrollment of each district, so that larger districts have a greater impact on the resulting coefficient than smaller ones. The coefficient of variation typically ranges from .000 to .900 or so, with the lowest number indicating that there is literally no variation among the cases.

An Equity Analysis of Nevada’s Funding System

In school finance it is generally considered “good” if the coefficient of variation for per student spending across all school districts is less than .150. However, while many state courts have used the coefficient of variation in examining the equity of a school finance system, no court has ever specified the level of the coefficient above which the variation would be so great as to violate state constitutional requirements.

APA calculated the coefficient of variation for the 2003-04 per student spending of the 17 school districts in Nevada. As shown in Column 1 of Table VIII-1, using all districts, the coefficient of variation was .473. This figure is a result of using data for all 17 districts, which range in spending per student from $5,825 to $21,250 (excluding capital spending and transportation spending), producing a range of $15,425 (the difference between the maximum and minimum) and a range ratio of 3.648 (dividing the maximum by the minimum). The range and range ratio are sometimes used as indicators of fiscal equity but since they exclude all but two districts in the calculation, we do not find them to be of much value.

While the .473 coefficient of variation appears to be relatively high (and much greater than the .150 figure described above), it overstates the level of inequity because it weighs a Nevada district with 100 students the same as it weighs a district with 300,000 students. In fact, <u>if a student weighted figure were calculated, the variation would be very close to zero</u> because one district in Nevada has about 70 percent of all students, and two districts have about 85 percent of all students.

Our experience suggests that, if possible, it is important to take two factors into consideration in examining the per student spending of districts: 1) student-based cost pressures facing school districts – such as those associated with special education, students from low income families, and ELL students; and 2) district-

based cost pressures such as those associated with size and geographic cost differences. The purpose of considering these cost pressures is to account for spending differences that simply reflect factors that are beyond district control. That is, a district may appear to be spending more than another district because it has a higher proportion of students in special education programs (which are more expensive than regular programs) or because it is small and cannot obtain the economies of scale available to a larger district.

The way to account for such factors is to add student cost weights to reflect costs that are beyond district control. APA therefore waited to conduct its equity analysis until we had completed the work necessary to quantify the cost impacts of special education, students from low income families, and ELL students as well as district size and regional costs. Having developed formulas that quantify these factors (as described in previous chapters of this report) we combined the weights for student needs with the district size adjustment formula. We then applied the regional cost factor (using the Location Cost Metric, or LCM discussed in Chapter IV) separately to per student spending and to per weighted student spending.

Column 2 of Table VIII-1 shows equity figures for LCM-adjusted spending per student; Column 3 of Table VIII-1 shows equity figures for spending per weighted student (weighted for student needs and district size); and Column 4 shows equity figures for LCM-adjusted spending per weighted student.

Clearly, adjusting spending to reflect the cost of serving students with special needs and taking size into consideration reduces the coefficient of variation (see Column 3, all districts, of table VIII-1). At the same time, the range of spending (per weighted student) and the range ratio decrease also. But adjusting spending for geographic cost differences, using the LCM, raises the coefficient of variation slightly. This indicates that the state aid system is not sensitive to the cost differences estimated by the LCM. Again, the coefficient of variation would be close to zero if the enrollment of each district were factored into consideration of the per-student (or weighted student) spending figures for the 17 districts.

TABLE VIII-1

INDICATORS OF INTER-DISTRICT FISCAL EQUITY USING 2003-04 SPENDING DATA FOR NEVADA SCHOOL DISTRICTS

Spending is for Current Operations Excluding Transportation

Raw Spending and Spending Adjusted by the Location Cost Metric (LCM) and Shown in per Student and per Weighted Student Terms

	Spending per Student		Spending per Weighted* Student	
	(1)	(2)	(3)	(4)
	Actual Spending per Student	LCM-Adjusted** Spending per Student	Actual Spending per Weighted Student	LCM-Adjusted** Spending per Weighted Student
All Districts				
Number of Districts	17	17	17	17
Minimum	$5,825	$5,725	$4,073	$4,284
Maximum	$21,250	$25,207	$8,111	$9,622
Range	$15,425	$19,482	$4,038	$5,338
Range Ratio	3.648	4.403	1.991	2.246
Simple Average	$9,236	$10,324	$4,916	$5,421
Simple Standard Deviation	$4,373	$5,518	$1,154	$1,535
Simple Coefficient of Variation	0.473	0.534	0.235	0.283
*Federal Range of Districts****				
Number of Districts	6	7	9	10
Minimum	$5,825	$5,725	$4,386	$4,284
Maximum	$7,199	$8,008	$4,826	$4,904
Range	$1,374	$2,283	$440	$620
Range Ratio	1.236	1.399	1.100	1.145
Simple Average	$6,547	$6,821	$4,526	$4,655
Simple Standard Deviation	$576	$910	$139	$219
Simple Coefficient of Variation	0.088	0.133	0.031	0.047

* Students are weighted for district size and for special education, eligibility for free or reduced-price lunch, English-language learner, and vocational education

** The Location Cost Metric (LCM) is a factor designed to estimate inter-district differences in the cost of living.

*** The federal range of districts excludes those highest and lowest spending districts with five percent of all students -- it may only exclude the highest or lowest five percent depending on where Clark County and Washoe County stand in the distribution of districts.

Figures in the lower half of Table VIII-1 show the results of making the same calculations for districts that enrolled 90-95 percent of all students in Nevada. Years ago, the federal government developed inter-district fiscal equity tests in order to determine whether states could count federal Impact Aid as local revenue.[13] Those tests allow states to exclude from statistical consideration those districts enrolling up to five percent of all students in the highest spending districts and five percent of all students in the lowest spending districts. The equity tests that exclude such districts are called the federal range and federal range ratio and a coefficient of variation can also be calculated for such districts.

The coefficient of variation of per student spending (unadjusted by the LCM) for the six districts with at least 90 percent of Nevada's students is .088, a very low level (as shown in Column 1). The coefficient drops even lower, to .031, when it is calculated for spending per weighted student (again, unadjusted by the LCM). In both cases, the coefficient of variation rises a bit when spending figures are adjusted by the LCM because state aid is not sensitive to geographic cost differences. While we discount the use of the federal range or range ratio statistics, it is interesting to note that both drop to extremely low levels when looking at spending per weighted student (columns 3 and 4) even though only a small proportion of students have been eliminated from the calculation.

Ultimately, APA believes Nevada's school finance system is highly equitable in terms of inter-district spending. Almost by definition, the system would be equitable given the low number of districts and the distribution of students across those districts. Calculating traditional statistics and weighing district data for enrollment would also produce highly equitable results. We used traditional statistics and calculated them using a conservative approach, without weighing districts by enrollment. Even under those circumstances, the system is fairly equitable once spending has been adjusted to reflect the impact of cost pressures beyond the control of districts (coefficient of variation is .235). Eliminating districts with only 5-10 percent of the students, as permitted under federal definitions of fiscal equity, makes the system appear to be almost perfect (coefficient of variation is .031).

Incorporating APA's Analyses into Nevada's School Finance System

Previously, we have discussed both the general nature of school finance formulas and the specific structure of Nevada's system (the Nevada Plan). We have also examined the inter-district fiscal equity achieved by the system and found that it was very high. Our analysis leads us to conclude that the general structure of the Nevada Plan should be maintained. The Plan operates as a

[13] Impact Aid, given to school districts with large Native American populations and serving students whose parents work on military bases, is highly focused and completely fungible – in order for states to consider it local revenue, thereby reducing state aid, the state has to pass one of the equity tests devised by the federal government.

foundation program under which the state specifies the fiscal needs of each district and pays as state aid the difference between the fiscal needs and the yield of sales and property taxes that are set by the state (and which the districts cannot exceed).

The weakness of the Nevada Plan is that the parameters that drive the estimate of fiscal need are not tied to expected student performance levels. The analyses we have presented in Chapters II-VI allow those parameters to be set in a rational way so that there is a link to student performance. Setting the parameters in this way would complete the logical connection between the state's student performance expectations, the accountability system that identifies the extent of progress being made toward achieving those expectations, and the allocation of state support.

There are several issues that arise in using the parameters and formulas APA has developed, which are discussed below. These issues are presented as being independent of each other and we do not combine them. However, policymakers should understand that they would need to be dealt with together in order to construct a state aid formula.

Rectifying Two Base Cost Figures

As discussed in Chapter V, we calculated two base cost figures, one using the successful school approach and the other based on the professional judgment approach. One way to interpret these figures is that the successful school base represents a starting point in 2003-04 and the professional judgment figure represents an ending point in 2013-14. Assuming that the student and district cost weights that modify the base remain constant over time and apply to the base as it increases, the state would need to figure out how to increase the revenues of school districts to match their anticipated cost, including inflation, which could be done in two different ways:

(1) The increase could be based on the annual percentage change needed to move from the lower costs to the higher costs; or

(2) The increase could be based on the annual constant amount that would be needed to move from the lower costs to the higher costs.

The figures shown below indicate alternative approaches to dealing with rising costs between 2003-04 and 2013-14. These figures assume that student population remains constant (which is unlikely) and that annual inflation is 2.3 percent per year (a figure provided by Nevada legislative staff). The figures start with the actual spending in 2003-04 (where spending is for current operations and excludes transportation and food services).

As discussed previously in Chapter VI, total Nevada district spending in 2003-04 was $2,231.3 million. According to Table VI-1A, data shows that 12 districts would have needed a total of $79.6 million, or $231 per student (excluding the adjustment for the Location Cost Metric) on average, to bring them up to the successful schools adequacy level. We add this $79.6 million and increase the total by 2.3 percent to get to the 2004-05 figure of $2,364.1 million, which becomes the adequacy starting point. The PJ-produced ending point is $4,457.6, which is the total cost in 2003-04 (including the LCM, as shown in Table VI-1D) adjusted by inflation of 2.3 percent over ten years (which raises 2003-04 costs by 25.5 percent).

As discussed above, there are two ways which Nevada could use to increase the revenues of school districts to match their anticipated costs. These alternatives result in two different modes of revenue increase:

(1) Using the first approach to get from $2,364.1 million to $4,457.6 million in nine years would require an annual increase of 7.3 percent (including the 2.3 percent assumed for inflation) and would result in a cost of $2,759.8 million in 2006-07.

(2) Using the second approach would require an annual increase of $222.7 million each year for nine years (again, including inflation), which would result in a cost of $2,829.3 million in 2006-07.

Table VIII-2 illustrates the above two ways to increase revenue. The table also shows that, had current spending been inflated by 2.3 percent per year from 2003-04 its value in 2013-14 would be $2,801.0; that means that in 2013-14 the PJ amount would be 59.1 percent higher than the actual amount spent in 2003-04 inflated to 2013-14.

Adjusting Weights Due to the Availability of Federal Funds

As we have discussed previously, our work was designed to estimate the costs of achieving certain levels of student performance – and the costs we have shown are current operating costs less transportation. The federal government distributed support for education that can be used to pay for those costs and such revenue can be taken into consideration before thinking about state and local revenue. In general, most federal support is provided for students with special needs – while more federal aid is described as being fungible, the history of federal support, and the spirit in which it has been given, is based on providing supplemental revenue for students with special needs or for special programs and services.

One way to account for federal support is to deduct the amount a district receives from the estimated cost before determining state and local support. Unfortunately, this approach may violate federal “supplement not supplant”

requirements. We believe it would be possible to adjust the student weights we have described previously for special education, students from low income families, ELL, and career-technical education by reducing the cost associated with each weight by federal funding and recalculating the weights. In 2003-04, the federal government provided $229.1 million to school districts in Nevada, of which $46.5 million was for special education, $48.2 million was for students from low income families (Title 1), $4.8 million was for Impact Aid, and $129.5 million was for other purposes (including $63.5 million for at-risk students, $56.5 million for ELL students, and $9.6 million for vocational education). After accounting for students in charter schools, we estimate that $46.2 million of federal revenue was for special education, $110.7 million was for students from low income families (or at-risk students), $56.0 million was for ELL, and $9.5 million was for vocational education. Subtracting those funds from the funds attributable to the corresponding student weights (based on the proportion of students in mild, moderate, and severe special education programs in the case of special education), would allow those weights to be reduced as follows: at-risk by 53 percent; ELL by 42 percent, mild special education by 25 percent; moderate special education by 17 percent; severe special education by nine percent; and career-technical education by 57 percent. These adjustments apply to weights driven by the successful school base figure – the adjustments would be lower percentages if applied against the professional judgment base cost; this means that the adjustments would have to be modified a bit each year as progress was made in moving from the successful school to the professional judgment base.

Applying Weights to Students Who Qualify for Multiple Weights

As calculated, the weights we have shown previously are based on characteristics of individual students. That means that it would be possible for multiple weights to be associated with a single student so that if a student were from a low income family, enrolled in a moderate-cost special education program, and be an English language learner, a very high weight would be produced that would overstate the cost of the services that could be provided. One way to deal with that situation is to apply the highest single weight to a student eligible for multiple weights.

Using the LCM

Earlier we discussed the Location Cost Metric (LCM), which is designed to reflect differences in the regional cost of providing services in Nevada, which is mostly attributable to the variation in housing costs across the state. Our assumption is that the LCM should be applied against the base cost before applying any other weights to it. In effect, the LCM modifies the district size-adjusted base cost figure to which student weights then apply. For example, if the district size-adjusted base cost were $8,000 and the LCM was .90, then the base used for student weights would be $7,200 ($8,000 X .90) and a weight of.15 would add $1,080 to the cost ($7,200 X .15).

Modifying the Base in Future Years

Previously we described a way to estimate the annual inflation rate for Nevada based on adjusting the national rate of inflation by annual changes in costs in Nevada communities. Regardless of what approach is used to estimate the cost of inflation in Nevada, we would recommend modifying the base each year by that factor plus whatever approach is used to move the figure from the successful school level to the professional judgment level. Our view is that there is no need to restudy the cost of adequacy for several years, particularly if the state's accountability system (including its standards, tests of student performance, and expectations for performance) does not change.

Applying the Base and the Weights to Schools

As discussed previously, it would be possible to determine the fiscal needs of school district based on aggregating the needs of individual schools in each district. The model we described for determining the needs of schools is sensitive to their size, which can be controlled by school districts to some extent. The state may not want to provide incentives to school districts to operate small schools (although there certainly is a push across the country to decrease the size of schools, particularly high schools), which would generate more fiscal need than larger ones. One way to deal with that issue is to define the concept of "necessarily small" schools – those that are small because there is no way to make them larger. In other states, this concept tends to focus on distance from other schools and/or the time it takes for students to travel to schools. Before applying the formulas APA developed to estimate the fiscal needs of schools, it would make sense to be able to distinguish necessarily small schools from those that are small by choice and to only apply the formula that benefits small schools to those that are necessarily small.

TABLE VIII-2

TOTAL COST OF MOVING FROM CURRENT FUNDING IN 2003-04 TO ADEQUATE FUNDING (PJ) IN 2013-14 USING THREE ALTERNATIVE APPROACHES TO DETERMINE ANNUAL COST CHANGES

Assuming an inflation rate of 2.3% for each year between 2003-04 and 2013-14

Year	Total Cost (Millions)	Basis of Total Cost
2003-04	$2,231.3	Actual
2004-05	$2,364.1	Actual in 2003-04 plus $79.6 million, multiplied by 1.023
2006-07		Impact of Alternative Approaches in 2006-07
	$2,759.8	(1) Using a 7.3% annual increase (including 2.3% inflation)
	$2,829.3	(2) Using an annual increase of $222.7 million
2013-14	$4,457.6	Using the Professional Judgment figures (which are 25.5% above 2003-04 given 2.3% inflation/year)
	$2,801.0	Actual Inflated to 2013-14
	1.591	2013-14 PJ figures in comparison to Actual, inflated to 2013-14

APPENDIX A

PROFESSIONAL JUDGMENT PANELISTS

First Round Panels: March 29-30

Brian Frazier
Dan Fox
George Worden
Jean Jackson
Jeanne Ohl
Jim Rickley
Jose Loya
Judy Pratt
Kathy Foster
Ken Higbee
Laurie Spark
Mary Ann Robinson
Nancy Sanger
Pete Peterson
Rick Hardy
Robert Slaby

Second Round Panels: April 25-26

Andrea Awerbach
Betty Fobes
Bill Langs
Bob Anderson
Derild Parsons
Dotty Merrill
Jeff Zander
Jim Hill
Juanita Jeanney
Keith Bradford
Leighann Pemelton
Leslie Zimmerman
Linda Enteles
Linda Fields
Loretta Asay
Nat Lommori
Sandra Reed
Sharla Hales
Sheila Jones Mosely
Steve Hansen

In-state Panel: May 17

Michael Alastuey
Rick Kester
Mary Pierczynski

APPENDIX B

SUMMARY OF NEVADA'S ACADEMIC STANDARDS

Student Assessment

Nevada's system for assessing students, the Nevada Proficiency Examination Program (NPEP), consists of different tests taken by students enrolled in public and charter schools in specific grades and specific programs.

As required by the No Child Left Behind Act of 2001, all students who are identified as "Limited English Proficient" must be assessed annually for English proficiency in the five domains of speaking, listening, reading, writing, and comprehension. This language assessment does not replace the State English Language Arts Criterion Referenced Tests (CRTs) or the Norm Referenced Tests (NRTs) as required by state law. All LEP students must participate in the state assessments as well as the assessment of English Language proficiency.

Similarly, as required by IDEA, all students who are identified as needing special education services must participate in the state assessments. The State Board is required to prescribe modifications and accommodations as necessary in order to ensure participation of all students, regardless of need, in the state assessments.

NPEP includes the following assessments: criterion-referenced tests (CRT), norm-referenced tests (NRT), performance-writing tests, high school proficiency examination (HSPE). The items that are in *italics* are the tests used in the AYP determination process.

Type of Tests (by Grade) that are Required

	2005-2006
Grade 3	*CRT-Reading, Math*
Grade 4	NRT-ELA, Math, Science *CRT-Reading, Math* *Perf-Writing*
Grade 5	*CRT-Reading, Math*, Science
Grade 6	*CRT-Reading, Math*
Grade 7	NRT-ELA, Math, Science CRT-Reading, Math
Grade 8	*CRT-Reading, Math*, Science *Perf—Writing*
Grades 9-12	NRT-ELA, Math, Science *HSPE-ELA, Math*

Proficiency/Graduation Requirements

If a pupil fails to demonstrate at least adequate achievement on the state tests administered before the completion of grades 4, 7 or 10, he may be promoted to the next higher grade, but the results of his examination must be evaluated to determine what remedial study is appropriate. If such a pupil is enrolled at a school that has failed to make adequate yearly progress or in which less than 60 percent of the pupils enrolled in grade 4, 7 or 10 in the school who took the examinations administered pursuant to this section received an average score on those examinations that is at least equal to the 26th percentile of the national reference group of pupils to which the examinations were compared, the pupil must complete remedial study that is determined to be appropriate for the pupil. As such, schools need to anticipate their resource needs for remediation.

If a pupil fails to pass the proficiency examination administered before the completion of grade 11, he must not be graduated until he is able, through remedial study, to pass the proficiency examination, but he may be given a certificate of attendance, in place of a diploma, if he has reached the age of 17 years.

Instructional Program Requirements

Nevada has developed standards in the following areas that guide the type of instruction schools must provide:

Arts

- Standards necessitate instruction in music, visual arts, and theater for grades 3 & 5, all other grades instruction is not required; however, if instruction is provided (and students elect to take such courses), standards specify the type of knowledge students should walk away from those course having.

Career & Tech Ed. *(elective—no requirement to provide)*

- If schools choose to provide, intent is to integrate career and technical education with core academic standards
- high school (primarily)

Computers & Technology

- ½ credit course in computers required to graduate high school
- Require integration of technology with core content standards across all grades
- Have specific outcomes for students in grades 3, 5, 8, & 12.

English Language Arts

- Specific criteria for subject matter and outcomes for students in grades K-8 and by the end of grade 12. As such, all schools must provide instruction in ELA for these grades.

Foreign Language (not mandated)

- If schools choose to implement, specific criteria for subject matter and outcomes for students in grades K, 3, 5, 8, 9, 10, &12 are provided.

Health & PE

- Specific outcomes for students in grades 2, 3, 5, 8, & by the end of 12. As such, all schools must provide health and P.E. instruction for students in these grades.

Math

- Specific criteria for subject matter and outcomes for students at grades K-8 and by the end of grade 12 meaning that all schools must provide math instruction across these grades.

PreK

- Not mandatory (except for children who have Individual Education Plans), but for those schools that choose to offer PreK, specific standards exist for these programs.

Science

- Specific criteria for subject matter and outcomes for students in clusters of grades (K-2, 3-5, 6-8, and 9-12).

Social Studies

- Schools must provide instruction in geography, economics, civics, and history in grades 2, 3, 5, 8, & by the end of grade 12
- Each year, schools must recognize and provide programs related to constitution day

Information Literacy

- Specific standards have been developed to ensure that students across all grades (K-12) are information literate. As such, schools are required to weave these standards into their instructional programs.

Student-Instructor Ratio Requirements

- The ratio in each school district of pupils per class in kindergarten and grades 1, 2 and 3 per licensed teacher designated to teach those classes full time must not exceed 15 to 1 in classes where core curriculum is taught. In determining this ratio, all licensed educational personnel who teach kindergarten or grade 1, 2 or 3 must be counted except teachers of art, music, physical education or special education, counselors, librarians, administrators, deans and specialists.[1]

[1] Nevada currently funds a 16:1 ratio in grades 1 and 2 and a 19:1 ratio in grade 3.

Minimum # of Days of Instruction

- Boards of trustees of school districts shall schedule and provide a minimum of 180 days of free school in the districts under their charge

Graduation Requirements

1. The total number of credits required to graduate from high school is at least 22.5. Each district has the option of adding to the credit requirements.
2. There are 15 units of core courses that everyone must take. (For students who started high school in or before1998 there are only 14 units of core courses required.) The core courses are: American Government —1, American History —1, Arts & Humanities —1, English —4, Health — _, Math —3 (2 if you started high school in or before 1998), PE —2, Computers* — _, Science —2. The remaining credits needed to graduate from high school are considered elective credits and are not specifically identified by content area. [* If a student passed a course of study in computers in 6th, 7th, or 8th grade, they don't have to take a course in computers in high school.]
3. In addition to passing the core courses to get the credits you need, every student must pass the Nevada High School Proficiency Exam (HSPE) in reading, math, and writing in order to receive a standard diploma.
4. Students who started 9th grade in or after 1999, need to achieve passing scores for the HSPE in Reading, Mathematics, Writing, and Science. The content of these tests will be based on the Nevada State Content and Performance Standards, approved by the State Board of Education in August, 1998. The passing scores for the new, standards based HSPE will be set in the fall of 2001. All of the content and performance standards are available on the NDE web site.
5. If a student achieves a passing score on any portion of the HSPE they don't have to retake that portion. However, if a student doesn't receive a passing score the first time, they may retake the test again until they receive a passing score. Currently, students have multiple opportunities to take the different portions of the test. For example, a student who took the HSPE reading and math tests for the first time in October of 1999 would be able to take them again in February, April, June/July, and October of 2000, and February, April, and June/July of 2001.

High School Dropout Rates

The dropout rate published in the Nevada Report Card is an *annual student dropout rate* and measures the percentage of students who dropout of high school in a given year. The calculation method is as follows: total dropouts plus total non-returns divided by total enrollment plus total non-returns, multiplied by one hundred. Consequently, a comparison to corresponding ninth grade student numbers cannot be made.

Over a five-year period, from the 1999-2000 school year to the 2003-2004 school year, the Nevada high school dropout rate decreased slightly from 6.1% to 5.8%. A look at the major ethnic groups indicates that the American Indian dropout rate had a slight increase over this five-year period, having one of the highest rates (7.4%) of the subgroups (same as the African American rate) in 2003-2004. The African American and Hispanic dropout rates had a slight decrease over the five years, from 8.0% to 7.4% and from 9.2% to 8.2% respectively. The Asian dropout rate was the lowest of the subgroups in 1999-2000 (4.6%) with a slight increase in five years to 4.9%. The White dropout rate fluctuated over the five years and had the lowest rate (4.5%) in 2003-2004. For the state rate and all subgroups (except Asian) the 2000-2001 dropout rates seem an anomaly with noticeable change from the year before and the year after.

High School Completion Indicators

The Nevada Report Card reports the number of students completing high school who receive standard diplomas, advanced diplomas, adjusted diplomas, adult diplomas, and certificates of attendance. Table 4 shows the state results of diplomas and certificates of attendance for the 2003-2004 school year. Of the 18,705 Nevada seniors, 17,311 (93%) received a diploma or certificate of attendance. The majority of students received a Standard Diploma.

Table 4: State results of diploma/certificate acquisition (2003-2004)

Standard Diploma (22 1/2 credits & proficient scores on HSPE)		**Advanced Diploma** (24 credits, 3.0 + GPA & proficient scores on HSPE)		***Adult Diploma*** (Requirements of adult education or alternative education program met)		***Adjusted Diploma*** (Special requirements or adjusted standards met by student with disability)		Certificate of Attendance (Met all requirements except proficient score on HSPE)	
10,931	63.1%	4,042	23.3%	192	1.1%	1,195	6.9%	951	5.5%

No Child Left Behind Federal Requirements

Participation Indicators

- Schools are required to have at least 95% of all students participate on the state AYP tests to meet the AYP requirements. Participation rates on English language arts and mathematics tests are considered separately.

"Other" Indicators

- In addition to subject area proficiency and test participation, schools must be judged with respect to at least one "other" indicator. At the high school level, the NCLB Act requires that graduation rate be used. The Act gives states flexibility in the use of other indicators at the elementary and middle school levels. State statute now requires that elementary and middle schools in Nevada be judged relative to average daily student attendance.

Crosswalk of Nevada and Federal Achievement Level Categories

Nevada Achievement Levels	Federal Achievement Levels
Developing/Emergent	
Approaching Standard	Basic
Meets Standard	Proficient
Exceeds Standard	Advanced

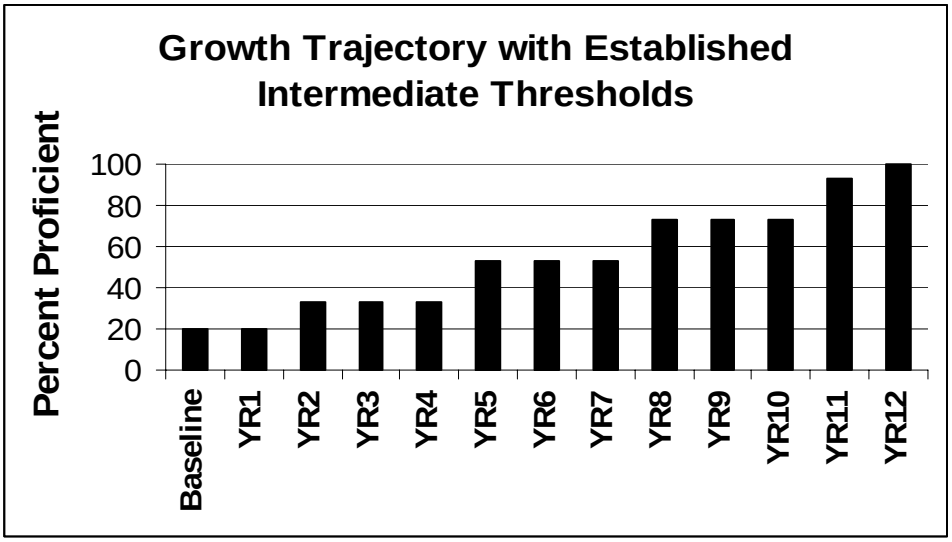
Adequate Yearly Progress Performance Targets

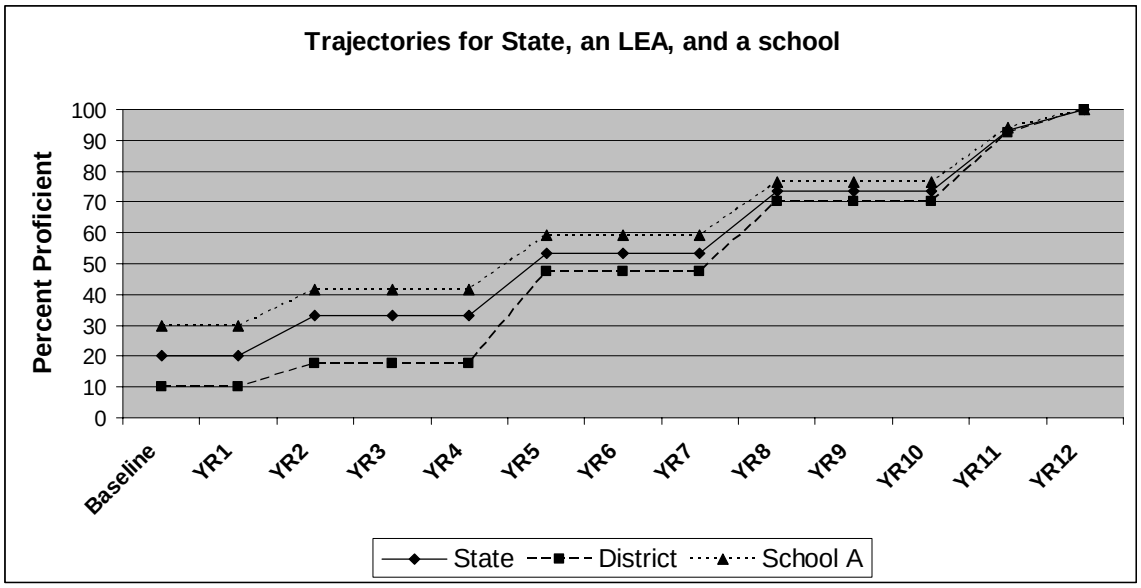
School year	Elementary School		Middle School		High School	
	ELA	Math	ELA	Math	ELA	Math
2003-04	27.5%	34.5%	37%	32%	73.5	42.8
2004-05, 2005-06, 2006-07	39.6%	45.4%	47.5%	43.3%	77.9%	52.3%
2007-08, 2008-09	51.7%	56.3%	58%	54.6%	82.3%	61.8%
2009-10, 2010-11	63.8%	67.2%	68.5%	65.9%	86.7%	71.3%
2011-12	75.9%	78.1%	79%	77.2%	91.1%	80.8%
2012-13	88%	89%	89.5%	88.5%	95.5%	90.3%
2013-14	100%	100%	100%	100%	100%	100%

2004 CRT Results (percentage of students meeting or exceeding proficiency levels in reading, math, science)

	3rd Grade	5th Grade	8th Grade
Reading	44%	43%	49%
Math	45%	50%	48%
Science		52%	59%

AYP Growth Trajectories





APPENDIX C

REFERENCES USED BY APA's NATIONAL EXPERT GROUP TO SET INITIAL RESEARCH-BASED RESOURCE LEVELS FOR PJ PANEL WORK

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APPENDIX III

NEVADA SCHOOL FINANCE STUDY (2018)

Nevada School Finance Study

By

Augenblick, Palaich and Associates

Education Commission of the States

Picus Odden and Associates

Final, October 22, 2018

Contents

I. Overview of Study and Report, Review of Current System

Overview of Study and Report

This is the draft report of Augenblick, Palaich, and Associates' (APA) "Nevada School Finance Study" for the Nevada Department of Education (NDE). In late 2017, APA along with the Education Commission of the States (ECS) and Picus, Odden, and Associates (POA) responded to a request for proposal (RFP) from Nevada for a school finance study. The state's RFP called for an update of the American Institute of Research's (AIR) 2012 *Study of a New Method of Funding for Public Schools in Nevada*,[1] with a focus on the resources needed for students with special needs, including at-risk, English learners (ELs), special education, and gifted students.

The 2012 AIR study included five components:

- Overview and Analysis of the Nevada Plan
- Inventory of State Finance Systems
- Identifying Adjustments Used to Address Cost Factors
- Simulation of Alternative Practices in Nevada
- Recommendations

The report examined how other state's finance formulas worked and used that information, along with statistical analysis, to create a set of recommendations on how Nevada's current school finance formula might be updated to better serve students. APA's proposal included updating the information contained in the first four components of the AIR report, engaging in stakeholder feedback, implementing two adequacy approaches- the professional judgment and evidence-based approaches- to developing cost factors, and providing an updated set of recommendations to the state.

Further, during early meetings of the Working Committee for the study, it became clear that no conversation about the additional resources for special needs students could be had without an understanding of the resources needed at the base level for all students. This study identifies one possible base figure through the evidence-based approach. The study team also incorporated results of prior adequacy work conducted in Nevada by APA in 2006 and 2015 to allow for a robust discussion of an appropriate base amount using multiple approaches.

Report Structure

The remainder of this chapter highlights changes to the state's funding system since the 2012 study. It also includes the initial feedback from stakeholders gained through a statewide survey focused on impressions of the current school finance system.

[1] Jay Chambers et al, *Study of a New Method of Funding for Public Schools in Nevada* (San Mateo, California: American Institutes for Research, 2012). Retrieved at: https://www.air.org/sites/default/files/downloads/report/AIR_NV_Funding_Study_Sept2012_0.pdf

Chapter 2 updates the review of how other states' finance systems function. In the 2012 study, the AIR team used a survey to collect the data. For this updated data collection, led by ECS, the study team collected information about state funding formulas, funding for high-need students, and funding adjustments for small/isolated schools through a review of state legislation, rules, and regulations. When necessary, the study team made use of state reports and studies to confirm our understanding of state policies. In some cases, the study team contacted departments of education staff in states to further clarify certain pieces of information. The study team used verified third-party studies for information about vocational/career/technical programs, state grade weighting, and regional cost adjustment policies.

Chapter 3 reviews the analyses AIR conducted to examine potential adjustments based on the cost factors in a set of comparable states. The study team first examined if there have been changes in the ways the comparable states fund schools since the 2012 study that would indicate a need to redo the AIR analysis. In this report, the study team identifies where updated analysis was needed.

To supplement the information gained on how best to serve special needs populations identified in chapters 2 and 3, the study team utilized two different adequacy approaches—the professional judgment (PJ) approach and the evidence-based (EB) approach—to examine the resources that might be needed for Nevada students to meet state standards. These adequacy approaches require a different investigative lens than simply reviewing and analyzing how other states' fund these students. Adequacy approaches utilize a state's specific education standards to estimate the resources needed for each student population to meet state standards. These types of approaches have been used across the country to makes such estimates. Chapter 4 examines the implementation of the PJ approach. The PJ approach brought together educators from across Nevada to identify the resources needed for special education, at-risk, and English learners (ELs). The PJ approach was implemented in a targeted way to address resources for these student groups and built upon a 2015 APA study for the Lincy Institute at UNLV.[2] The PJ results identify new figures for the special needs categories and an updated base cost figure using the findings of the 2015 study. Chapter 5 examines the implementation of the EB approach, led by POA, which relies on research from across the country to identify the types of resources that are being shown to have significant impact on student performance. The approach provides a base cost and the adjustments needed for special needs students.

Chapter 6 brings together the information from the prior five chapters to develop the draft recommendations first presented in the August 1st draft report. The chapter compares the information from the national funding model review, the updated comparison state analyses, and the results of this study and prior adequacy studies in Nevada. The chapter then presents options for: (1) a base amount, (2) adjustments for student need, and (3) adjustments for school/ district characteristics that might be included in an updated Nevada state school funding system. It does not include the fiscal impact of any

[2] Silverstein, J., Brown, A., Piscatelli, J., Shen, Y. (2015). *Professional Judgement Study Report* for the Lincy Institute at UNLV. Denver, CO: Augenblick, Palaich & Associates. Retrieved at: http://apaconsulting.net/wp-content/uploads/2018/08/NV-Professional-Judgment-Report-.pdf

one or number of alternatives at this time. In this final version of the report, a review of stakeholder feedback about the draft recommendations has been added to Chapter 6.

Finally, Chapter 7 presents a number of revisions to the draft recommendations in Chapter 6 and models the fiscal impact of the recommended funding approach and compares it against current approach.

Review of Current Funding System

Overview of the Nevada Plan[3]

Nevada's current school funding system, the Nevada Plan (Plan), was first established in 1967. Though there have been changes over time, the basics of the Plan remain similar to when it was first established. The Plan is an equalization formula that generates a guaranteed funding amount, the basic support amount, for each of the state's school districts. Once the funding amount is set, each districts' local capacity to raise funds is measured, this amount is subtracted from the guaranteed amount, and the state backfills or equalizes the remaining dollars.

Each district's guaranteed funding amount under the Plan is generated based on district-specific characteristics, not student characteristics. A separate basic support per pupil figure for each school district is calculated by NDE using a formula that considers a district's relative differences in terms of cost of living, size, and the cost per pupil of administration and support services compared to the statewide average in each area. A wealth adjustment, based on each district's ability to generate revenue in addition to the guaranteed level of funding, is also included to equalize the system.

While the Nevada Plan does not differentiate for student-specific differences, other funding streams (referred to as categorical streams) do provide funding for such students. Categorical funding streams include dollars for class-size reduction, career and technical education, English learners, and other programs.

Special education funding is also funded outside of the basic support amount. Funding for special education was a unit-based allocation prior to the 2016-17 school year when funds were distributed on a proportional basis to school districts and charter schools. Funding is capped at 13 percent of total pupil enrollment. Additionally, the state adopted a Special Education Contingency Fund to help provide resources for students with significant disabilities.

Other changes to the state's funding system since the 2012 AIR report include:

- 2015 – The legislature permanently increased the Local School Support Tax (LSST) to 2.60 percent from 2.25 percent.
- 2015 – Increased funding for kindergarten students from .60 to a full 1.0.
- 2016 – Ballot Question 2 approved the sale of recreational marijuana, with the net proceeds of the excise tax being deposited into the DSA budget.

[3] Legislative Counsel Bureau, Fiscal Analysis Division (2017). *The Nevada Plan for School Finance, an Overview.* Retrieved at https://www.leg.state.nv.us/Division/Fiscal/NevadaPlan/Nevada_Plan.pdf.

National Rankings

There are at least three long-running and well-regarded state-by-state assessments of the quality of state education finance systems. Perhaps the best known of the three is the annual *Quality Counts* report issued by Editorial Projects in Education, the publisher of *Education Week*. The 2018 *Quality Counts* is the 22nd year of the report. The Education Law Center at Rutgers has published the report *Is Funding Fair? A National Report Card* for the past nine years. The third report, the National Education Association's *Rankings of the States* report has been issued for the past 70 years.

All three reports show Nevada ranking near the bottom among states in most measures. They also show that Nevada's ranking, in most cases, has not improved or gotten worse over the past one or two decades.

Education Week's *Quality Counts* annual report rates each states' and the District of Columbia's education finance systems on two dimensions – equity and spending. In the 2003 *Quality Counts* report, Nevada received a grade of B for funding equity. Its coefficient of variation at the time was 0.087, well under even the more stringent 0.10 benchmark, and its correlation coefficient was -0.104, also well below the standard of 0.1. By 2018 these two measures were 0.152 and 0.166, respectively, both above the generally accepted benchmarks. The later report no longer assigns a grade for each of the two dimensions, but only an overall grade.

Nevada did not perform quite as well on the spending dimension as on the equity dimension in 2003. It received a grade of C-, with a score of 71 out of a possible 100. In one of the primary measures, per-student expenditures, Nevada ranked 44th. Its per-student expenditure amount was 85.6 percent of the national average at the time. By 2018 Nevada ranked 47th in per-student expenditures and its per-student expenditure amount was equal to only 70.3 percent of the national average per-student expenditure amount.

The Quality Counts analysis assigned an overall grade of C+ for the state's school finance system in 2003. By 2018 the Nevada's overall grade had fallen to a D-.

The Education Law Center at Rutgers released an update of its *Is School Funding Fair: A National Report Card* report in February 2018.[4] This edition of the report uses data from 2015 to rate the 50 states and the District of Columbia on the following factors of each state's school finance system: 1) how well it distributes funding across its school districts; 2) the level of fiscal effort made by the state to fund public education; 3) the amount of funding; and 4) coverage, or the proportion of all students enrolled in public schools. Each factor is summarized below.

1. **Funding Level.** Funding level is the average per-student state and local funding provided by each state. To provide a more equitable comparison these per-pupil amounts were adjusted for regional cost differences, poverty, population density, and economies of scale. In the 2009

[4] Baker, et al., (2018).

report, Nevada was ranked 38th. In 2018 Nevada was ranked 42nd, ahead of Tennessee, Mississippi, Oklahoma, Utah, North Carolina, Arizona, and Idaho.

2. **Funding Distribution.** Funding distribution refers to how per-student funding varies in relation to districts' concentrations of poverty. States that provide more funding as poverty rises are ranked higher than those that do not increase funding with poverty or spend less per student as poverty increases. In the 2009 report, Nevada received a grade of "F" along with four other states. In the latest report Nevada is ranked last, providing higher poverty districts with only 57 percent of the funding allocated to districts with low-poverty levels. Nevada is one of nine states to receive a grade of "F" in this category.

3. **Effort.** Effort is a measure of the proportion of state resources, measured by per-capita gross state product (GSP), dedicated to funding public schools. In 2009 Nevada was one of 14 states receiving an "F" in this category. In the 2018 report, Nevada again received an "F," one of 17 states to receive this grade. Only four states, Delaware, North Carolina, Arizona, and Hawaii ranked lower than Nevada. The 2018 edition of the report also ranked fiscal effort using the proportion of per-capita personal income as the measure. Nevada again received an "F" on this measure, along with 13 other states. Colorado, Idaho, Florida, Arizona, and Hawaii were the states ranked below Nevada.

4. **Coverage.** Coverage represents the proportion of school-age children attending public schools compared to children attending private schools. Nevada ranked 17th in the 2009 report. In 2018 Nevada ranked 13th, the only category of rankings in which Nevada improved over the 2009 report.

The National Education Association's annual *Rankings of the States*[5] provides state-by-state comparisons of a wide range of data on students, district and school staff, and education finances. Nevada does not rank very highly on most items related to finances. At $9,258, Nevada ranked 48th in 2017 in per-pupil revenues. The national average was $13,900 and the state with the highest per-student revenues, $25,576, was New York. Idaho had the lowest per-student revenues at $8,144. The state's low level of per-student revenues led to low rankings on several expenditure-related measures. At 25.86 students per teacher, Nevada had the highest number of enrolled students per teacher in the country. The national average was 15.96 students per teacher. At $8,165, Nevada ranked 47th in per-student current expenditures compared to the national average of $11,642. Nevada ranked higher (18th) in average classroom teachers' salaries, with an average salary of $57,376. However, this ranking is offset to a certain extent by the large number of students per teacher noted above. In essence, the state is trading larger class sizes for higher salaries.

A review of the *2008 Rankings of States* shows that little changed in most of these measures in Nevada over the past decade. The 2008 report ranked Nevada 50th in per-pupil revenues and 48th in per-pupil current expenditures. At fourth highest, Nevada was ranked slightly better in students per teacher in

[5] NEA Research. (2018). *Rankings of the States 2017 and Estimates of School Statistics 2018*. Washington, D.C.: National Education Association.

2008. One area of significant improvement since 2008 was in average classroom teacher salaries. In 2008 the average teacher salary was ranked 29th compared to 18th in 2017.

Equity Assessment

In school finance terms, "equity" is concerned with how resources are allocated across school districts and, ultimately, across schools and students. The most common notion of equity assumes a school finance system that distributes resources equally is equitable. This definition of equity, known as horizontal equity, is true when thinking about the median student, that is, a student with no special needs (e.g. at-risk students, EL students, or special education students). School finance researchers may also be interested in equity from other perspectives, such as the relationship between local wealth and per-pupil spending levels (also known as fiscal neutrality) or the relationship between student need and spending (known as vertical equity). In its 2012 report, AIR examined the equity of Nevada's funding system for the period 2000 through 2012. It reported that the equity of Nevada's system appeared to be decreasing over time. It found that the coefficient of variation[6] (CV) in Nevada was 0.0103 in 1991, which is well under the benchmark of 0.150 used by AIR, and very near the benchmark of 0.100 established by other school finance researchers.[7] The most recent Quality Counts[8] study published by *Education Week* reports a CV for Nevada (based on 2015 data) of 0.152. This value is considerably higher than the 1991 CV and the more stringent 0.100 benchmark, but is slightly less than the national average CV reported by Quality Counts of 0.157 and just exceeds the higher benchmark of 0.150. These data suggest Nevada's finance system is becoming less equitable over time but is still reasonably equitable by at least some benchmarks.

Fiscal neutrality was also measured in the Quality Counts report. This measure consists of the correlation coefficient between local wealth, usually comprising the local property tax base, and per-pupil spending. Stronger correlation between the two suggests the school finance system is too dependent on local resources, giving wealthier communities with larger local tax bases a funding advantage. The correlation coefficient ranges from -1.0 to 1.0, with 0.0 representing no relationship, -1.0 a perfect negative relationship, and 1.0 a perfect positive relationship. A generally accepted benchmark is that an equitable system should have a correlation coefficient of no more than 0.1. The Quality Counts report found that Nevada had a correlation coefficient of 0.166, higher than the benchmark and also higher than the national average for all states of 0.138. This finding suggests Nevada's funding system tends to provide more resources to wealthier communities than to poorer communities.

[6] The coefficient of variation is a measure of the distribution of values around the mean. It is calculated by dividing the standard deviation by the mean, with a range of possible values from 0 to 1.0. A low coefficient of variation indicates a more equitable system.

[7] See, for example, Odden, A. R. & Picus, L. O. (2014). *School Finance: A Policy Perspective* (5th Ed.). New York:McGraw-Hill.

[8] Education Week. (2018). *2018 Quality Counts School Finance Report and Ranking.* Retrieved from https://www.edweek.org/ew/collections/quality-counts-2018-state-finance/index.html.

In its report *Is School Funding Fair*[9] the Education Law Center examined vertical equity, the relationship between spending levels and student need, by estimating the difference in per-student funding for districts with 0, 10, 20, and 30 percent of students in poverty. In a state that is vertically equitable, districts with a 30 percent poverty rate will have higher per-student revenues than those with lower poverty rates. The study found that Nevada's "fairness ratio," the ratio of per-student funding at 30 percent poverty to funding at 0 percent poverty was 57 percent, meaning the higher poverty district received just over half of the per-student funding of the district with no poverty. Nevada's fairness ratio was the lowest among the 50 states (Utah, at 141 percent, had the highest fairness ratio). This analysis is also used in Chapter 3 to update the list of states with the most progressive school finance systems.

Comparison against School Finance Principles

In the 2012 AIR report, the state's funding system was compared to a set of principles of a good school finance system including:

- Sufficiently funded
- Equitable on both horizontal/vertical dimensions
- Transparent, understandable, and accessible
- Cost based
- Capable of minimizing incentives
- Reasonable in its administrative costs
- Predictable, stable, and timely
- Accountable for learning outcomes and spending
- Politically acceptable

The study team agreed with AIR's assessment of the current system, particularly the concerns related to cost basis, equity, adequacy, transparency, and predictability. This chapter expands upon this comparison with some additional elements from APA's list of principles/characteristics based upon the firm's over thirty years of working with policymakers to develop school finance systems. The full list of these 12 characteristics can be found in Appendix A. Many of the characteristics can only be measured with a full equity study, not done as part of this work. This section will focus on those characteristics that can be evaluated as part of this study. Each characteristic(s) is described and then a brief summary of how well Nevada's funding system meets the characteristic is provided.

The allocation of state support is positively related to the needs of school systems, where needs reflect the uncontrollable demographic characteristics of students and school systems.

The Nevada Plan does not adjust for student characteristics but has a strong focus on the differential costs of school systems (districts). Those differentials in costs are based upon historical expenditure data and may not reflect the current best practice thinking of how to measure/adjust for such costs. While

[9] Baker, B. D., Farrie, D., & Sciarra, D. (2018). *Is School Funding Fair? A National Report Card* (7th Ed.). Newark, NJ: Rutgers, Graduate School of Education, Education Law Center. Retrieved from https://drive.google.com/file/d/1BTAjZuqOs8pEGWW6oUBotb6omVw1hUJI/view.

there are funding streams outside of the Nevada Plan that target student characteristics, they are a smaller piece of the overall funding system.

The allocation of state support is inversely related to the wealth of school systems, where wealth reflects the ability of school systems to generate revenue for elementary and secondary education. The Nevada Plan is an equalization formula that measures wealth as part of the distribution formula. Since the Plan only provides differential funding for district characteristics, resources for student needs are not part of the wealth equalized funding stream.

Related to adequacy: (1) the amount of state support allocated to school systems reflects the costs they are likely to incur in order to meet state education standards and student academic performance expectations; (2) all school systems are spending at adequate levels, and variations in spending among school systems can be explained primarily by differences in the needs of school systems and the tax effort of districts and are not related to differences in school district wealth, and (3) the state has a procedure to define and measure the adequacy of revenues school systems obtain for elementary and secondary education and periodically determines whether adequate revenues are available in all school systems.

All three characteristics examine a state's funding system against the expected costs of meeting state standards. Though Nevada has in the past examined what these cost levels might be,[10] the state's current funding system is not adequacy-based. Later in this report, two adequacy approaches are discussed and funding levels to meet this target are identified. If Nevada were to move towards an adequacy-based system, a procedure to periodically update funding figures should be put in place.

The school finance system covers current operating expenditures as well as capital outlay and debt service expenditures.

The Nevada Plan along with the outside funding streams attempts to address the current operating expenditures of districts, but the state does not provide a comprehensive system to support district capital needs. Districts raise funds for capital outlay locally.

Overall, Nevada's system directly accounts for district characteristics within the Nevada Plan and provides some adjustments for student characteristics with dollars outside the plan. The state equalizes much of the funding system but few dollars are related to student need. Nevada's funding system is not cost-based and capital needs are systemically supported by the state.

School systems have a reasonable amount of flexibility to spend the revenues they obtain as they want, provided they are meeting, or making acceptable progress toward meeting, state education standards and student academic performance expectations.

Districts have a reasonable amount of flexibility in how they use funding through the Nevada Plan. However, resources through categorical funding streams are limited in their use.

[10] Augenblick, et al. (2006). *Estimating the Cost of an Adequate Education in Nevada.*

Stakeholder Feedback

Stakeholder feedback was primarily collected through an online survey conducted in July. The survey was open to all educators, parents, students, and community members. District superintendents were sent a notice to share with their staff and communities. The Department of Education also promoted the survey through communications and social media channels. In at least one district, local media provided coverage of the survey. Details in the participation section give more information on the survey respondent pool.

Survey questions were focused on gauging stakeholder perceptions about how well the current funding system met a number of the principles discussed in the prior section including equity, responsiveness (to student need and district characteristics), transparency, flexibility, and adequacy. Through an open response question, stakeholders were then asked what changes, if any, they would make to the current system to ensure that it best served students.

Participation

About 6,900 responses were received from the online survey. Respondents were first asked if they were an educator, parent or community member, and they could select multiple choices. Of those responses, 56 percent were from educators (including teachers, school administrators, other school employees, district administrators, and other district employees). An additional 40 percent were parents (who were not also educators and counted in the percentages above), and the remaining 4 percent were students and other community members.

Responses were received from all school districts and the percentage of total responses by district was as follows: Clark County, 49 percent; Washoe, 37 percent; Carson City, 7 percent; Lyon County, 3 percent; and Churchill, 2 percent. About three percent of responses were from the other 13 districts or state sponsored charter schools.

Results are presented for all responders. Any noticeable variations in responses of educators and the combined pool of (non-educator) parents, students and community members are highlighted.[11] Table 1.1 first presents stakeholder ratings of the current funding system against several key principles of school finance.

Table 1.1: Stakeholder Ratings of Nevada's Current Education Funding System Against Key School Finance Principles

	Poor	Average	Good	Excellent	Unsure	Number of Responses
Equitably distributes resources to school districts	54.99%	24.13%	8.93%	1.56%	10.39%	6,805
Responds to student need (differentiates funding based on at-risk, EL, or special education students)	41.07%	33.70%	14.10%	3.39%	7.75%	6,789

[11] The educator pool includes educators who are also parents/community members. The parent and community member pool then includes parents who did not also indicate they were an educator.

Responds to district characteristics (differentiates funding based on district size, location, etc.)	52.60%	26.23%	8.46%	1.49%	11.22%	6,783
Allocates resources in clear and understandable manner	62.72%	21.95%	6.61%	1.48%	7.23%	6,773
Allows flexibility in how resources are used	51.63%	27.54%	8.54%	1.64%	10.65%	6,771
Provides adequate resources	65.30%	21.37%	7.74%	1.69%	3.90%	6,743

Over half of survey participants rated the current system as poor in terms of equity, responsiveness to district characteristics, transparency (being clear and understandable), flexibility, and adequacy. The adequacy of the system was the area that received the highest percentage of "poor" ratings at nearly two-thirds of respondents (65 percent) holding this opinion. Perceptions of the responsiveness of the system to student needs were more mixed (41 percent rated the system as "poor," 34 percent as "average," and 17 percent as "good" or "excellent"). Between four and 11 percent were unsure how to rate the different aspects of the system. Table 1.2 examines variation in the percentage of respondents that rated the system as "poor" between educators and the public.

Table 1.2: Educator vs. Public Ratings, Percentage of Respondents who rated the Current System as "Poor"

	Educators	Public
Equitably distributes resources to school districts	59.72%	48.89%
Responds to student need (i.e. differentiates funding based upon students' being at-risk, English learners, or in special education)	44.71%	36.36%
Responds to district characteristics (such as differentiating funding based upon district size, location, etc.)	59.08%	44.43%
Allocates resources in a manner that is clear and understandable	68.33%	55.45%
Allows flexibility in how resources can be used	54.42%	48.45%
Provides adequate resources	70.98%	57.91%

Educators were more likely than the rest of the community to rate the current funding system as "poor" by a difference of about 10 percentage points in most of the categories.

Respondents were then asked to indicate the degree to which they agreed or disagreed with several statements that further explored how well they felt the system did in terms of equity, transparency, flexibility, and adequacy (specifically the adequacy of salaries and benefits), as well as if resources were being used efficiently by schools and districts.

Table 1.4 on the next page presents this information.

Table 1.4: Survey Responses to Statements Probing Equity, Transparency, Flexibility, Adequacy of Salaries/Benefits and Resource Use Efficiency

	Strongly Disagree or Disagree	Strongly Agree or Agree	Unsure	Number of Responses
Similar districts are funded fairly in relationship to one another.	46.87%	18.50%	34.63%	6,774
Taxpayers are treated equally across the state.	63.48%	17.46%	19.07%	6,776
Where a student lives does NOT determine the quality of their education.	75.13%	21.34%	3.53%	6,779
It is easy to understand how funding is determined and allocated.	84.43%	7.87%	7.69%	6,778
The current funding system is flexible enough to allow schools and districts to decide how resources should be used to serve students.	70.26%	14.58%	15.16%	6,762
Schools spend resources efficiently.	50.44%	38.72%	10.84%	6,772
Districts spend resources efficiently.	78.40%	12.26%	9.35%	6,759
Salaries and benefits are at appropriate levels to attract and retain qualified staff.	84.60%	9.79%	5.60%	6,762

In terms of equity, most respondents disagreed that taxpayers were treated equally across the state or that where a student lived did not determine the quality of their education; less than 20% felt similar districts were funded fairly and over a third were unsure how to answer that question. Respondents continued to report that it was not easy to understand how funding was allocated (85 percent disagreed that it was easy to understand) and that the system did not have the necessary flexibility to allow for schools and districts to decide how resources should be used (70 percent disagreed that this was possible). About 85 percent of respondents said they did not believe salaries and benefits were at appropriate levels to attract and retain qualified staff.

Respondents were also asked if schools and districts spend resources efficiently. About 50 percent of respondents felt schools did not spend resources efficiently, while nearly 80 percent felt districts did not spend resources efficiently. District resource use was the one area of variance between educator and community responses, with 85 percent of educators reporting they disagreed that districts use resources efficiently vs. 71 percent of the public feeling this way.

Finally, survey participants were given the opportunity to provide suggestions for changes they would make to the funding system. The study team did not want to constrain the types of suggestions received, so this question was asked as an open-ended response via text entry. About 4,200 participants submitted a wide range of suggestions. The study team reviewed each response and attempted to categorize them by type in broad categories. Table 1.5 presents the percentage of the open responses that suggested a given category of change.

Table 1.5: Key Suggestions for Changes to Nevada's Current Funding System

General response category	Number of responses	Percentage of total responses
Higher teacher salaries	1,158	28%
More/adequate funding	905	22%
Less district administration staffing/ lower district administration salaries	591	14%
More resources for specific group or program	415	9%
More transparency	386	9%
Use specific revenue stream, either existing or new	375	9%
More resources in the classroom, class supplies	361	9%
Increase equity/fairness	396	8%
Lower class sizes	304	7%
Funding following student/going directly to school	216	5%
Distrust/dislike of district leadership	146	3%
Buildings/capital	134	3%
More flexibility in use of funds	127	3%
The entire system should be replaced	102	2%
Accountability for use of funds/audit	72	2%
Spend less money, either overall or on specific group/program	57	1%
Higher salaries for non-teacher positions	38	1%
Larger districts should be split up into smaller districts	22	1%

Most frequently, participants suggested that higher salaries for teachers were needed (28 percent), followed by the need for more or adequate funding overall (22 percent), and that spending at the district level should be lower through having fewer positions and lower salaries (14 percent). Between five and ten percent of open-ended responses recommended: more resources for a specific student group or program (preschool, CTE, English Learners, special education and interventions were most often noted), more funding transparency, using existing revenue streams (like marijuana taxes) or creating new revenue streams, providing more resources in the classroom, lowering class sizes, and having funding follow the student/be sent directly to schools so they can set their own budgets.

II. State Public School Funding System

The American Institutes for Research (AIR) 2012 study of the Nevada school funding system included a component summarizing how states fund their public K-12 school systems, including the funding formula used by each state, funding adjustments for small and/or isolated school districts, and also funding (if any) provided for high-need student groups:

- At-risk or poverty students,
- English Learners (ELs),
- Gifted and talented students, and
- Students with disabilities.

The majority of the information from the AIR report was derived from a survey that was sent to each state for the 2010-11 fiscal year.

Building on this study, the study team was tasked with providing updated information about how states currently fund their primary and secondary public education systems.

Updated and Revised Data

For this study, the study team also collected information about state funding formulas, funding for high-need students, and funding adjustments for small/isolated schools, but did so through a review of state legislation, rules, and regulations. When necessary, the study team made use of state reports and studies to confirm our understanding of state policies. In some cases, the study team contacted staff from the different state departments of education to further clarify certain pieces of information. The study team used verified third-party studies for information about vocational/career/technical programs, state grade weighting, and regional cost adjustment policies. Unless otherwise listed, the information contained in this chapter is updated for the 2018-19 school year.

The chapter is divided into three sections: 1) the funding system used to distribute aid for public K-12 schools is reviewed across states to provide a context for discussion of student needs, 2) mechanisms used to pay for high-need students are discussed, and 3) state factors for distributing additional funding to small/remote schools is examined, along with state policies toward career/technical programs.

State Funding Formulas

The cost of educating public K-12 students is divided between local, state, and federal resources. The only exceptions to this are Hawaii and the District of Columbia, which both operate as single school districts. The remaining 49 states distribute their state-level education funding to school districts or charter schools. While no two states distribute their funding in the exact same manner, the majority of states use two basic forms of school funding (Table 2.1):

- **Foundation Formulas** (33 states) – A foundation formula begins with a per-pupil funding amount that is theoretically sufficient to educate a general education student to state standards (also known as the “foundation” or “base” funding amount). Many states choose to supply districts with additional funding for high-need student populations through the use of additional

weights in the funding formula. For example, if a state determines that it would cost districts 20 percent more to educate an ELL student, the formula would provide these students with an additional weight of 0.2.

- **Resource Allocation Systems** (eight states) – This type of system is sometimes known as the "position allocation" or "teacher allocation" system because it guarantees that school districts and charter schools have a certain number of teaching positions. This type of formula determines the number of teachers and other educational staff that schools are entitled to based on their enrollment. States then provide some form of operational funding for maintenance, technology, and utility costs based either on a per-pupil amount or a teaching position amount. Under these types of systems, school districts are often locked into how they can expend their funding based on the state formula.

Three states (Georgia, Maine, and Virginia) have funding systems that contain elements of both foundation formulas and position allocation systems. For example, Georgia makes use of a foundation-type formula that determines the foundation amount based on a type of resource allocation system. The state determines the per-student foundation amount by calculating the minimum cost of providing one teaching position for every 23 students in a school district. An amount is then added to this base funding level that includes the cost for teacher specialists, counselors, operational costs, additional teaching days, indirect costs, staff time development, and media room costs. Compared to funding using a resource allocation system, districts have much greater freedom in how they expend state funds.

Several states have funding systems that do not fit neatly into any specific category. Massachusetts and Wyoming have systems that provide funding to districts that varies based on certain education inputs. It is similar to the foundation method in that students with different education needs receive different amounts of funding. However, this type of system is based on educational inputs and does not utilize a single base or foundation amount. Michigan uses a system where the state controls almost all of the education funding decisions. Districts are required to send most of their local property tax collections to the state. These local tax dollars are combined with state funds and then distributed back to districts. This leaves most funding-level decisions up to state policymakers. Vermont's system allows districts a great deal of flexibility to determine their own funding levels. The state then provides equalization payments to districts based on the difference between their proposed education budget and their local ability to raise funding.

Table 2.1: State Funding Formulas (2018-19)

Funding Formulas	States
Foundation Formulas (33)	AK, AR, AZ, CA, CO, CT, FL, IA, IL, IN, KS, KY, LA, MD, MN, MT, MO, NV, NH, NJ, NM, NY, ND, NE, NV, OH, OK, OR, RI, SC, TX, UT, WA
Position Allocation Systems (8)	AL, DE, ID, NC, SD, TN, WA, WV
Hybrid Systems (3)	GA, ME, VA
State Operates as a Single District (2)	DC, HI
State Specific Systems (5)	MA, MI, VT, WI, WY

Determining the Foundation Amount

In the 33 states that currently use a foundation formula, 27 establish a single foundation amount for all districts annually through the state's budget process (Table 2.2). Two states (California and Montana) have different foundation amounts based on grade levels. Illinois and New Jersey have foundation amounts that vary by district. Nevada and Nebraska are the only two states that determine a district's foundation funding amount based on previous year expenses. In the case of Nebraska, the foundation funding amount for each district is based on per-pupil expenditures from the previous school year for the 10 districts closest in size (five larger and five smaller). For additional information about state funding formulas see Appendix B.

Table 2.2: State Approaches to Determining the Foundation Formula (2018-19)

How Foundation Amount Is Determined	States
Single Foundation Amount (27)	AK, AR, AZ, CO, CT, FL, IA, IN, KS, KY, LA, MD, MN, MO, NV, NH, NM, NY, ND, OH, OK, OR, RI, SC, TX, UT, WA
Foundation Varies Based on Grade (2)	CA, MT
Foundation Based on Previous Year Expenditures (2)	NE, NV
Varies by District (2)	IL, NJ

Funding for High-Need Student Populations

This section addresses individual student needs and characteristics, including: (1) students with disabilities, (2) English Learners (EL), (3) at-risk students, and (4) gifted and talented students. The section also describes states that incorporate the needs and challenges of school districts in remote areas and small schools in their methods for financing public schools.

Note, that the study team discusses weights, where applicable, in terms of the additional amount above base per student funding. For example, if a state provided 20 percent more funding for at-risk students, the weight would be .20. This differs from the AIR report that would have said the weight was 1.20, including the base funding amount (the "1.0").

Special Education Funding

Under the Individuals with Disabilities Education Act (IDEA), the federal government provides some funding and guidelines on how states should fund services for students requiring special education. Each state distributes this funding, combined with all other sources of education funding, through various funding mechanisms. Based on our categorization of special education funding mechanisms, there are seven distinct categories:

1. Single student weight or dollar amount
2. Multiple student weights
3. Census-based allocation
4. Resource-based allocation
5. Reimbursement
6. Categorical grant
7. State funding for high-cost students

The following information was retrieved from state statutes and regulations and, where appropriate, the citation is provided.

Some states have a hybrid system that fall into more than one category; however, states were sorted into the category with which they most closely align. Table 2.3 shows which states use which mechanism to fund special education students.

Table 2.3: State Funding for Special Education Students (2018-19)

Mechanism	States
Single student weight or dollar amount (11)	AK, LA, MD, MO, NV, NH, NY, NC, ND, OR, WA
Multiple student weights (16)	AZ, CO, FL, GA, IN, IA, KY, ME, MN, NM, OH, OK, PA, SC, SD, TX
Census-based allocation (5)	AL, CA, ID, MA, NJ
Resource-based allocation (8)	DE, HI, IL, MS, TN, VT, VA, WV
Reimbursement (5)	MI, NE, RI, WI, WY
Categorical grant (2)	MT, UT
State funding for high-cost students (2)	AR, CT
Other (1)	KS

Appendix C provides a brief description and citation for each state's special education funding mechanism.

Single student weight or dollar amount

There are 11 states that use a single weight or dollar amount to fund special education students. Under this method, all special education students are treated the same, regardless of the actual cost or resources required. Weights vary between states. For example, in New York, any student who requires special education receives an additional weight of 1.41 (McKinney's Education Law § 3602). Similarly, in North Dakota, special education students receive an additional weight of 0.082 (NDCC, 15.1-27-03.1).

Multiple student weights

Instead of providing a single weight for all special education students, 16 states provide multiple student weights, based on the severity of disability, resources required, or specific disability. For example, New Mexico provides four weights, ranging from an additional 0.7 to 2.0, based on the severity (N.M.S.A. 1978, § 22-8-21). Texas provides additional weights, ranging from 0.1 to 4.0, based on where the student is educated and the resources required (V.T.C.A., Education Code § 42.151). South Carolina provides 10 different weights based on the student's disability (Code 1976 § 59-20-40).

Census-based allocation

States who use a statewide, census-based number for special education funding assume all districts in the state, regardless of their actual student composition, have the same percentage of special education students. For example, Alabama assumes five percent of students receive special education services and provides that five percent with additional teaching resources (Ala.Code 1975 § 16-13-232). In Idaho,

districts receive special education funding at a rate of six percent of a district's total enrollment in kindergarten through sixth grade and 5.5 percent of a district's total enrollment in seventh through 12th grades. Idaho then uses a resource-based allocation to distribute resources to districts (I.C. § 33-1002).

Resource-based allocation

There are eight states that primarily use a resource-based allocation to fund students in special education. Under a resource-allocation model, states distribute resources (e.g. teachers, aids, specialists, and technology) instead of dollars, based on the number of students identified as special education. For example, Delaware has a higher teacher-to-student ratio for special education students (8.4) than it does for general education students (20) (14 Del.C. § 1703). Similarly, Illinois distributes teachers, aids, and psychologists based on the number of identified special education students (105 ILCS 5/18-8.15).

Reimbursement

Five states use cost reimbursement methods to support special education. The state generally defines eligible cost categories and the percentage of these costs that will be reimbursed by the state. Wyoming is the only state that reimburses 100 percent of the cost of educating special education students (W.S.1977 § 21-13-321). The state of Michigan also reimburses districts for qualified special education expenses, but caps the reimbursement at 75 percent of the cost (M.C.L.A. 388.1652).

Categorical grant

Block grant distributions are based on state allocations and can vary based on availability of funds. Utah uses a block grant distribution funding mechanism where the amount allocated is based on averages of the prior five years, with a growth factor (U.C.A. 1953 § 53A-17a-111).

Funding for high-cost students

Because of the range in costs of educating students who require special education, states will often step in to lessen the burden on districts by providing additional funding for very high-cost students. This funding mechanism is often layered on top of other funding mechanisms (e.g. New Hampshire, Massachusetts, and Maine). However, in Connecticut and Arkansas state funding is exclusively for very high-cost students.

Funding for Poverty/At-Risk Students

Although there are more than 20 methods that states use to define at-risk status, students most often defined as at-risk are students who qualify for free or reduced priced lunches through the National School Lunch Program, meaning their family income falls below 130 percent or 185 percent of the federal income poverty line, respectively. Studies have found a connection between providing additional funding for these low-income, at-risk students and increased academic success. The second most common identification method is students who do not maintain satisfactory academic progress.

Three states (Alaska, Delaware, and South Dakota) do not provide additional state funding for at-risk students. The remaining 47 states can be divided into four categories. Descriptions of the categories are

provided below in Table 2.4 and an explanation of each state's funding mechanism for at-risk students can be found in Appendix D.

Table 2.4: State Funding for At-Risk Students (2018-19)

Mechanism	States
Single student weight or dollar amount (31)	AL, AZ, CA, CT, HI, IN, IA, KY, LA, ME, MO, MA, MI, MN, MS, MO, NH, NM, NV, NY, ND, OH, OK, OR, RI, SC, TX, VT, WA, WV, WY
Multiple student weights (8)	AR, CO, IL, KS, NE, NJ, PA, VA
Categorical grant (4)	FL, MT, UT, WI
Resource-based allocation (4)	GA, ID, NC, TN

Single Weight or Dollar Amount

There are 31 states that use a flat weight or dollar amount per student to provide additional funding for at-risk students. For example, West Virginia provides an additional $18 per student for the total number of students enrolled in a district (W. Va. Code, § 18-9A-21). In contrast, Maine identifies students who are eligible for free or reduced price meals as at-risk and provides an additional weight of 0.15 just for those students (20-A M.R.S.A. § 15675).

Multiple Weights or Dollar Amounts

When states fund at-risk students through multiple weights or dollar amounts, it is usually a sliding scale based on the concentration of at-risk students in a district. There are eight states that use this funding mechanism. Pennsylvania uses two different additional weights (either 0.3 or 0.6), based on the concentration of at-risk students in a district (24 P.S. § 25-2502.53). Similarly, Nebraska uses seven different weights, ranging from an additional 0.0375 to 0.225, where the weight increases as the percentage of at-risk students increases (Neb.Rev.St. § 79-1007.06).

Categorical Grant

Four states provide funding for at-risk student through a categorical grant based on state appropriations. For example, Florida provided $712,207,631 for the 2017-18 fiscal year for its Supplemental Academic Instruction program. Districts can submit a plan to the state to receive funding through this program.

Resource-Based Allocation

There are four states that use a resource-based allocation for at-risk students. Under this model, states allocate resources, like teachers and aids, based on the number of at-risk students. For example, Tennessee uses class-size reduction to provide additional resources to at-risk students. The teacher-to-student ratio increases to 1:15 class size reduction for grades K-12, which is estimated to be the equivalent of $542.27 per identified at-risk student (T. C. A. § 49-3-361).

Funding for English Learners

All but two states – Mississippi and Montana – provide additional funding for EL students. Table 2.5 divides all 50 states into categories based on the funding mechanism used to fund EL students in that state.

Table 2.5: State Funding for English Learners (2018-19)

Mechanism	States
Single weight or dollar amount (25)	AK, AZ, AR, CA, FL, GA, IA, KS, KY, LA, MD, MO, NE, NH, NJ, NM, OK, OR, PA, RI, SC, SD, TX, VT, WY
Multiple student weights (10)	CO, HI, IN, ME, MA, MI, MN, NY, ND, OH
Categorical Grant (6)	AL, CT, ID, NV, UT, WV
Resource-based allocation (5)	DE, NC, TN, VA, WA
Reimbursement (2)	IL, WI

Additional information about how each state provides funding for EL students can be found in Appendix E. Descriptions of the categories and state examples are below.

Single Weight or Dollar Amount

Half of the states use a flat weight or dollar amount to fund EL students. Under this model, districts receive the same amount of funding per student, regardless of the concentration or student's ability. For example, Arkansas provides an additional $338 per identified EL student (A.C.A. § 6-20-2305) and California provides an additional 20 percent through a student weight of 0.2 (West's Ann.Cal.Educ.Code § 42238.02).

Multiple Student Weights

Of the 10 states that use multiple student weights to fund EL students, some states determine weights based on the amount of time a student has been classified as an EL (e.g. Ohio [R.C. § 3317.016]), based on the proficiency of the students (e.g. North Dakota [NDCC, 15.1-27-03.1]), or based on the concentration of students in a district (e.g. Maine [20-A M.R.S.A. § 15675]). Under this model, additional funding can be provided to students with additional need.

Categorical Grants

There are six states that use categorical grants, based on state appropriations, to fund EL students. For example, Idaho appropriated $3.82 million for the 2017-18 school year to serve all EL students in the state (2017 Idaho House Bill No. 287, Idaho Sixty-Fourth Idaho Legislature, First Regular Session – 2017). In West Virginia, a county board must apply to the state superintendent to receive EL funding (W. Va. Code, § 18-9A-22).

Resource-Based Allocation

Five states distribute monies for EL students through resources instead of through dollars or weights. In North Carolina, there is a minimum threshold districts must meet in order to receive funding. Eligible

Local Education Agencies (LEAs) or charter schools must have at least 20 students with limited English proficiency (based on a three-year weighted average headcount), or at least 2.5 percent of the students classified as limited English proficiency to receive funding. There is also a cap of 10.6 percent. Similarly, the state funding formula in Tennessee provides districts with funding for an additional teaching position for every 20 EL students and an additional interpreter position for every 200 EL students (T. C. A. § 49-3-307).

Reimbursement

Illinois and Wisconsin provide state reimbursement to districts for the additional cost of educating EL students. In Illinois, each school district is reimbursed for the amount by which such costs exceed the average per-pupil expenditure by a school district for the education of children of comparable age who are not in any special education program (105 ILCS 5/14C-12).

Funding for Gifted and Talented Students

There are thirteen states that have no state-level program for gifted and talented students in statute. Additionally, two states (Illinois and Maryland) have programs in statute, but are only funded if there is money available. The remaining 35 states have funding mechanisms for gifted and talented students that can be sorted into six categories (Table 6).

Table 2.6: State Funding for Gifted and Talented Students (2018-19)

Mechanism	States
Categorical Grants (11)	AR, CO, FL, ID, IN, ME, MT, NE, OR, UT, WI
Single weight or dollar amount (10)	AK, GA, IA, LA, MN, NV, OK, SC, TX, WY
Resource-based allocation (5)	DE, MS, OH, TN, VA
Census-based allocation (4)	AZ, HI, NC, WA
Reimbursement (3)	CT, ND, PA
Multiple student weights (2)	KY, NM

A unique challenge that states face is how to identify gifted and talented students. Parental identification generally leads to over-identification; whereas identification from a standardized test is expensive and time-consuming. Similarly, states must decide whether to define gifted and talented as high intelligence or high ability. More detailed descriptions of each state's funding mechanism for gifted and talented student can be found in Appendix F.

Categorical Grants

There are 11 states that provide funding for gifted and talented students based on categorical funding and state appropriations. In Indiana, for example, the state appropriated $12.5 million for the 2016-17 school year. Schools can then apply to the state to receive some of that funding under the High Ability Program (IC 20-36-2-1). In contrast, there is no application process in Utah for the $5 million under the Enhancement for Accelerated Students (U.C.A. 1953 § 53A-17a-165).

Single Weight or Dollar Amount

Eleven states provide a flat weight or dollar amount per student identified as gifted and talented. South Carolina uses this model and provides an additional 15 percent per student. There is also a district minimum of $15,000, regardless of the gifted and talented student count (S.C. Code of Regulations R. 43-220). Louisiana only provides funding for gifted and talented students who have an Individualized Education Program (IEP). Louisiana provides an additional weight of 0.6 for gifted and talented students (2017 La. Sess. Law Serv. Hs. Conc. Res. 7 [WEST]).

Resource-Based Allocation

When funding gifted and talented students, five states primarily use a resource-based allocation system. Under a resource-allocation model, states distribute resources (teachers, aids, specialists, and technology) instead of dollars, based on the number of students identified. For example, Virginia provides one additional teacher for 1,000 students identified as gifted and talented (2016 Virginia House Bill No. 29, Virginia 2017 Regular Session). Similarly, Mississippi provides one teacher for 20 identified and participating students, and a second teacher for every 40 students (Miss. Admin. Code 7-96).

Census-Based Allocation

Under this funding model, four states assume a flat percentage of gifted and talented students in a district, regardless of the actual demographics. For example, Arizona provides $75 per pupil for four percent of the district's student count, or $2,000, whichever is more (A.R.S. § 15-779.03). Hawaii assumes that three percent of each school is gifted and talented and provides an additional weight of 0.265.

Reimbursement

Three states reimburse the district for part of the expenses incurred from educating gifted and talented students. In Connecticut, for example, the state only reimburses if the cost exceeds 4.5 times the average per-pupil expenditure (C.G.S.A. § 10-76a and C.G.S.A. § 10-76g).

Multiple Student Weights

Two states – Kentucky (KRS § 157.200) and New Mexico (N.M. Admin. Code 6.29.1) – provide funding for gifted and talented education based on the degree of modification a student needs and the cost of providing those modifications.

Funding for Remote and Small Schools

Some states have adjusted their school funding formulas to consider district size. States have made these adjustments to their funding formulas based on research showing that small schools/districts tend to face higher costs. Data from the United States Census shows that small districts (those with under 3,000 students) have per-pupil expenditures that are $1,901 (16.6 percent) above the national average.[12] There are several reasons why small districts tend to face higher per-pupil costs, but most

[12] Griffith, Michael. *In Education Funding Size Does Matter*. 2017. https://www.ecs.org/in-education-funding-size-does-matter/

center on the fact that larger districts can take advantage of economies of scale and small districts cannot. Some states provide additional funding to all of their small districts; for example, Oklahoma provides any district with 529 or few students with additional funding.[13] However, a number of states only provide additional funding to their small districts that are geographically isolated. These geographically isolated, small schools are often referred to as "necessarily small" schools to acknowledge that some schools, though small, must exist to serve students in certain communities. The study team found that 11 states provide small schools or districts with additional funding regardless of their location, 10 states only provide additional funding to small schools or districts that are also geographically isolated, and eight states provide additional funding for both small schools and districts and schools that are isolated (Table 2.7).

Table 2.7: Stand Funding for Remote and Small Schools (2018-19)

Mechanism	States
Small School Funding (11)	AK, CO, KA, LA, MO, NE, NM, NC, SD, VT, WY
Isolated School Funding (10)	AR, CA, FL, GA, MA, MN, MT, OR, UT, WI
Funding for Both Isolated & Small (8)	AZ, ID, MI, NY, OK, TX, WA, WV

Other Individual Student Needs and Characteristics

The 2012 AIR report also examined other state policies that could impact a district's school funding. One issue that districts have to address are the additional costs involved in providing students with additional career and technical educational (CTE) opportunities. A 2017 study found that 47 states provide their districts with some form of additional funding to address the additional cost of CTE programs.[14] The only states that do not provide additional CTE funding are Kansas, Nebraska, and New Mexico. Some states provide additional funding through a weight for each student enrolled in a CTE program; for example, Florida provides districts with 100.1 percent additional funding for each CTE student. Some states, such as Connecticut, provide funding but only to designated CTE centers. Other states, such as Kentucky, provide funding to both CTE centers and to school districts that opt to provide their own CTE programs.

There can be a different level in cost to deliver educational services based on the grade a student is enrolled in. This is due to the fact that many states have smaller class size requirements for kindergarten to third grade, thus producing a higher cost for these grades. In addition, increases in course offerings can create increased costs for high schools. The majority of states (32) provide some additional funding to districts based on the grades their students are enrolled in.[15] The states that do not provide any additional grade weighting are: Alaska, Colorado, Indiana, Iowa, Kansas, Kentucky, Maryland, Mississippi, Missouri, Nebraska, New Hampshire, New York, Oregon, Pennsylvania, Rhode Island, South Dakota, West Virginia, and Wyoming.

[13] Oklahoma Statutes: Section 70-18-201.1(B)(3)(a)
[14] EdBuild, FundEd: Career and Technical Education data base, http://funded.edbuild.org/reports/issue/cte/in-depth
[15] EdBuild, FundEd: Grade Level Funding, http://funded.edbuild.org/reports/issue/grade/in-depth

The cost of providing educational services in a state can vary based on a district's geographic location. Some states adjust their school funding formulas to address these differences in costs. These adjustments are commonly referred to as "Regional Cost Adjustments." A 2015 study found that 11 different states provide some form of regional cost adjustment in their school funding formula.[16] In some cases these adjustments are based on the cost of incurred in regional markets (Maine), in others they are based on the cost of wages in a community (Massachusetts), while in others they are based on a cost-of-living index (Wyoming).

[16] Taylor, Lori L., Options for Updating Wyoming's Regional Cost Adjustment, October 2015. http://www.wyoleg.gov/InterimCommittee/2015/SSRRpt1001AppendixC-1.pdf

III. Updating 2012 AIR Study Analyses

Local school districts may vary in their costs of providing an education to students for two basic reasons. The first is choices made by district policymakers that may increase per-student costs. These may include policies for offering smaller class sizes or a wide range of course offerings. The second reason includes factors impacting costs that are beyond the control of local policymakers, such as the number of special need students enrolled in the district (such as at-risk, EL, or special education students); the size of a district's student enrollment; or the cost of input prices for providing education services (e.g. the level of wages and benefits needed to attract and retain staff, the costs of instructional materials and technology, and the cost of energy). The American Institutes for Research (AIR) report referred to these three uncontrollable cost areas as: 1) student needs, 2) scale of operations, and 3) geographic differences in resource prices.

In order to provide a set of options for Nevada policymakers to consider, the AIR initially attempted to identify a set of peer states with similar student and geographic characteristics to Nevada's school districts from which to draw best practices for adjusting funding to address the three uncontrollable cost areas. However, due to the unique circumstances found in Nevada (e.g. a small number of school districts and the existence of one district that is much larger than the state's other districts), AIR was unable to identify any states that were similar to Nevada across all of its selection criteria. Instead, it found subsets of states that were similar to Nevada in one or two areas. As a result, AIR instead identified the states with the largest funding adjustments in each of the three cost areas. On the following page, Table 3.1 on the following page shows how AIR ultimately identified states that were similar to Nevada by the various selection criteria organized under the larger categories of student need, scale, and revenue sources.

Following a similar analysis, the study team also found there is not a subset of states reasonably similar to Nevada across all relevant dimensions. As a result, the basic analytical approach used by AIR is followed here. The starting point for the study team consisted of the states identified by AIR as providing robust funding adjustments for each of the cost factor areas (student need, scale, and geographic cost differences). The study team reviewed the latest information for the funding adjustments (e.g. adjustments for students in poverty, EL students; adjustments for district size and population density; and adjustments for geographic cost differences) for each of the states listed. There were no substantive changes to these adjustments in any of the states identified by AIR.

Table 3.1: States with Similar Characteristics Identified by AIR

Student Needs			Scale of District Operations					Revenue Sources		
Percent Poverty or FARM Eligible	Percent English Learners	Percent Special Education	Student Density	Herfindahl Index[17]	Percent of Districts by Locale[18]	Percent of Statewide Enrollment by Locale	District Enrollment Size	Percent of Revenue from Local Sources	Percent of Revenue from State Sources	Percent of Revenue from Federal Sources
CO	AZ	CT	AK	SC	FL	FL	FL	CA	AL	AL
DE	CA	IA	FL	UT	MA	GA	GA	GA	KY	IN
KS	CO	LA	ID	WV	MD	MD	KY	KS	SC	KY
MT	KS	MO	MT		NJ	UT	LA	KY	WV	MT
SD	OR		ND		RI	VA	MD	LA		SD
WY	TX		NM		UT		NM	MI		TN
	UT		WY				TN	OK		TX
							UT	OR		WA
							VA	SC		WV
								TN		
								WV		

Source: AIR

[17]The Herfindahl Index is used to measure the distribution of students in schools within a district. The index ranges from 0 to 1. Lower values indicate a more even distribution of enrollment across a district's schools, while higher values a more uneven distribution of enrollment across schools.

[18] Locale refers to the locale categories used by the National Center for Education Statistics of U. S. Department of Education to classify school districts by geographical designations: city, suburban, town, and rural.

The following sections identify the implicit funding weights for each student group. Note, that the study team discusses weights in terms of the additional amount above base per student funding. For example, if a state provided 20 percent more funding for at-risk students, the weight would be .20. This differs from the AIR report that would have said the weight was 1.20, including the base funding amount (the "1.0").

At-Risk/ Poverty

Table 3.2 presents the 10 states the AIR report identified as having the highest "implicit" poverty funding weights. These implicit weights were determined using a regression analysis to measure the relationship between student free and reduced lunch (FRL) concentration and state and local per-student funding. While these 10 states showed the highest rate of increase in state and local funding as FRL concentrations increased, they were not necessarily the highest spending states in terms of overall per-pupil state and local funding. The state and local revenues in six of the 10 states (Arkansas, Colorado, Georgia, Kentucky, South Dakota, and Utah) were well below the 2010 national average of $10,870.[19] Weights are shown as the additional funding amount.

Table 3.2 Implicit Poverty Weights

State	Implicit Poverty Weight
Minnesota	.34
South Dakota	.28
New Jersey	.27
Arkansas	.25
Ohio	.25
Massachusetts	.18
Indiana	.17
Kentucky	.17
Utah	.16
Connecticut	.13
Average	**.22**

Table 3.3 provides an update to FY 2018 of the at-risk funding mechanisms for these 10 states. None of the states significantly changed the method by which they provided additional funding to poverty or at-risk students from the FY 2011 information presented in the AIR report.[20] Of the five states with specific poverty weights or per poverty student dollar amounts, three made relatively modest changes to the weight or amount, while two (Connecticut and Kentucky) were unchanged.[21] Other changes since 2011

[19] Cornman, S.Q., Young, J., Herrell, K.C. (2012). *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2009–10* (Fiscal Year 2010) (NCES 2013-305). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

[20] State funding formula information used in the AIR report was largely taken from the 2011 edition of Verstegen's *Quick Glance at School Finance: A 50 State Survey of School Finance Policies and Programs, Volume I*. Retrieved from https://schoolfinancesdav.wordpress.com/a-50-state-survey-of-school-finance-policies-2011/

[21] The at-risk equalization weights in New Jersey were reduced from 1.47 for districts with concentrations less than 20 percent and 1.57 for districts with concentrations greater than 60 percent to 1.41 for concentrations less than 20 percent and 1.46 for concentrations greater than 40 percent. Arkansas' per eligible student amounts for its National School Lunch Categorical grant program increased from $1,488 for concentrations greater than 90 percent, $992 for concentrations ranging from 70 percent to

include a change in the student count used in Indiana's Complexity Index calculation from students eligible for FRL to those eligible for the Temporary Assistance for the Needy Families (TANF) program, the Supplemental Nutrition Assistance Program (SNAP), or those in foster care. Utah consolidated annual appropriations for several programs targeted to at-risk students into the Enhancement for At-Risk Students Program Grant at about the same level of funding.

Because the changes in these states' poverty student funding programs were relatively minor since publication of the AIR report, APA did not see a need to update the implicit poverty weight analysis.

Table 3.3: Funding Mechanisms for Poverty Students for Top 10 States Identified in AIR Report

	FY 2018 Poverty Funding Mechanisms
Arkansas	National School Lunch Categorical grants, equaling: greater than 90% FRL: $1,576 per eligible student; 70%–90% FRL: $1,051 per eligible student; Less than 70% FRL: $526 per eligible student. State also provides Alternative Learning Environment (ALE) funding of $4,640 per FTE per ALE student.
Connecticut	Weight of 1.33 based on Title I eligible student count. In FY 2019 the formula will change to FRL, 1.3 weight + another 5% per FRL student > 75%
Indiana	Provides funding via Complexity Grant formula, based on count of students eligible for TANF, SNAP, or in foster care. Complexity grant: $3,539 (FY 2017) X complexity index (percentage of district students eligible for TANF, SNAP, or in foster care).
Kentucky	Weight of 1.15 applied to count of students eligible for free lunch
Massachusetts	Provides additional amount per eligible, poverty student based on concentration deciles. Per-student amounts range from $3,816.89 to $4,180.91. Poverty students are defined as being eligible for SNAP, Transitional Assistance for Families with Dependent Children, Medicaid, or are in foster care.
Minnesota	Provides Compensatory Revenue equal to: (Basic Formula Allowance – $415) x .6 x Compensatory Pupil Units (1.0 free lunch + 0.5 reduced-price lunch)
New Jersey	Provides At-Risk Equalization Aid using sliding scale of weights from 1.41 for districts with less than 20% FRL up to 1.46 for districts with greater than 40% FRL (FY 2017)
Ohio	Calculates an index based on the percent of economically disadvantaged students in a district compared to the state average percentage. The formula is: $272 X ((number at-risk students in district/number at-risk students in state)^2 X number of at-risk students in district)
South Dakota	No funding program targeted to at-risk or poverty students other than federal Title I
Utah	Provides annual appropriation for the Enhancement for At-Risk Students Program. Funds are distributed based on count of low-performing, poverty, high-mobility, and EL students

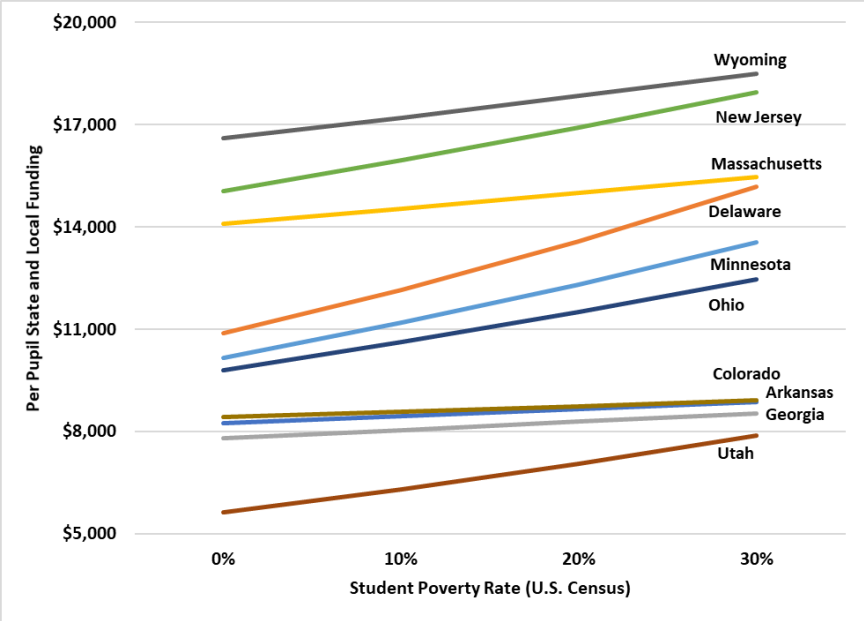
However, a more recent analysis of state funding for poverty students is available from the Education Law Center (ELC) at Rutgers University. In their most recent report, *Is School Funding Fair*,[22] ELC provides a similar comparison of how state and local per-pupil funding changes as poverty concentrations in

90 percent, and $496 for concentrations less than 70 percent to $1,576, $1,051, and $526, respectively. The per eligible student poverty adjustment used in Massachusetts increased from a range of $2,561 to $3,167 in 2011 to $3,817 to $4,181 in 2018.

[22] Baker, et al. (2018).

school districts increase using FY 2015 data (the AIR report uses FY 2010 data). This analysis plots total state and local per-pupil funding for districts with poverty concentration levels of 0 percent, 10 percent, 20 percent, and 30 percent. Those states in which funding increases with poverty levels are labeled "progressive," while those in which funding stays flat or decreases with poverty are labeled "regressive." Six of the top 10 states in this analysis overlap with the states identified by AIR. The top 10 states from this analysis consist of Arkansas, Colorado, Delaware, Georgia, Massachusetts, Minnesota, New Jersey, Ohio, Utah, and Wyoming. Dropped from the AIR list are Connecticut, Indiana, Kentucky, and South Dakota. The states not found on the AIR list are Colorado, Delaware, Georgia, and Wyoming. Figure 3.1 shows graphically the trajectory of state and local funding in these states as concentration of poverty increases. Although Utah has the lowest overall level of state and local per-pupil funding, its finance system provides the greatest rate of per-pupil funding increase based on concentrations of poverty. The two states with the highest per-pupil state and local funding, Wyoming and New Jersey, rank sixth and fifth, respectively, in the rate of increased funding by poverty level.

Figure 3.1: State Education System Funding Progressivity



Source: Education Law Center, Rutgers.

Table 3.4 summarizes the funding mechanism for students in poverty or who are at-risk in the four states not included in the AIR poverty analysis.

Table 3.4: Funding Mechanisms for Poverty Students in States Not Included in the AIR Report

State	FY 2018 Poverty Funding Mechanisms
Colorado	At-risk count includes FL eligibility and students excluded from state assessments due to limited English proficiency. Weights range from 1.12 to 1.30 depending on at-risk %.
Delaware	Provides 1 unit (teacher FTE) per 250 students.
Georgia	Provides funding through three different programs: • Early Intervention Program, uses following weights to provide extra teachers at 11:1 student/teacher ratio: 2.0348 Kindergarten; 1.7931 Grades 1-3; 1.7867 Grades 4-5 • Remedial Education Program, uses weight of 1.3087 to provide extra teachers at 15:1 student/teacher ratio for grades 6-12 • Alternative Education Program, used weight of 1.4711 to provide extra teachers at 15:1 student/teacher ratio for grades 6-12 Based on counts of students performing below grade level, in danger of academic failure or eligible for Title I.
Wyoming	Provides teacher tutors, additional student support staff, and extended learning time based on free and reduced-price lunch counts. Also offers Economically Disadvantaged Youth program: $500/ECY if school's FRL > 150% of state average per school type.

English Learners (ELs)

Table 3.5 shows the states with the largest explicit (statutory) weights presented in the AIR report along with an update to the weights in effect for FY 2018. The majority of the weights have not changed between 2011 and 2018. However, the weight in several states did change, with the largest difference occurring in Georgia, where the EL weight increased from .53 in 2011 to 1.56 in 2018. The weight in Florida increased slightly from .15 to .21, while the weights in New Mexico and New Jersey were reduced slightly, from .50 to .35 in New Mexico and from .50 to .47 in New Jersey.

Table 3.5: States with Largest Explicit EL Weights from AIR Report

State	AIR Report (2011)	2018 Weights
Maryland	.99	.99
Missouri[1]	.60	.60
Georgia	.53	1.56
Maine[2]	.53	.53
Oregon	.50	.50
New Mexico	.50	.35
New Jersey	.50	.47
Kansas[3]	.40	.40
Oklahoma	.25	.25
Hawaii[4]	.23	.23
Iowa	.22	.22
Vermont	.20	.20
Florida	.15	.21
Arizona,	.12	.12
Texas	.10	.10
Average	**.39**	**.44**

[1] In districts where EL population exceeds 1.94% or ADA

[2] Weight of 1.70 if < 15 EL students, 1.50 if 15–251 EL students, and 1.53 if >251 EL students

[3] Greater of 1.40 times EL FTE enrollment or 1.185 times all EL enrollment

[4] Weights from 1.06 if fully English proficient, to 1.39 if limited proficiency, to 1.94 if non-English proficient.

Special Education

The 2012 AIR report took a different approach to reviewing the methods used in state education funding formulas to provide additional resources for serving students eligible for special education services. Rather than reviewing the various adjustments currently used by the states, it instead described a range of student weights based on the findings of the most recent special education cost study conducted by AIR for the Office of Special Education Programs (OSEP) of the U.S. Department of Education.[23] This study examined the pattern of spending for special education over a 30-year period from 1969 to 2000. Based on these findings, it developed a series of per-pupil expenditure estimates by disability type along with cost ratios in comparison to the cost of educating regular education students. However, this study was published in 2005 using data that ends with the 1999-00 school year. As a result, these data fail to capture the impact on costs of more recent advances in services for students with disabilities, such as response to intervention (RTI). However, the research team does concur with AIR that the complexities of funding special education programs limits the utility of comparing the approaches used in states' education funding formulas. Instead, this report relies on the recommendations of education practitioners and education research, as determined through the professional judgment and evidence-based analyses presented in later chapters.

Size (Scale) and Isolation Cost Adjustments

Twenty-nine states provide some sort of an explicit or implicit funding adjustment for differences in the scale of operations of districts or schools (typically determined by student enrollment that falls below a specified threshold), for low population densities within a district, for geographically isolated schools, or for some combination of two or more of these factors. The mechanisms by which states make these adjustments are also varied, ranging from additional student weights, to more complex regression formulas that account for multiple factors, to simple categorical flat grants.

The AIR report listed the 10 states that its analysis found to have the largest "implicit" student weights for scale and/or density. AIR used a regression model similar to the one used to estimate implicit poverty funding weights to calculate its scale/density weight adjustments. The 10 states identified by AIR were, ranked from the highest to lowest implicit weights were:

1. New York;
2. New Mexico;
3. Colorado;
4. Arizona;
5. Texas;
6. Nebraska;
7. Massachusetts;
8. Oregon;
9. Kansas; and
10. California

[23] Chambers, J. G., Pérez, M., Harr, J. J., & Shkolnik, J. (2005). Special education spending estimates from 1969–2000. *Journal of Special Education Leadership, 18*(1), 5–13.

The implicit weights calculated for these states ranged from about 1.80 in California to 3.25 in New York for districts with total enrollment of fewer than 100 students.

Because the AIR report is relatively recent, rather than recalculating the implicit weights from its report, the study team reviewed the funding formulas of all 50 states, relying primarily on Verstegen's 2015 school finance policies survey,[24] to determine if there were any significant changes in their scale/density adjustments that may have affected AIR's rankings. This review found that in nearly all states, including all 10 of the states identified by AIR, only minor changes have occurred since that report. In most of these cases the changes involved adjustments to dollar amounts, indices, or other factors to account for inflation or changes in states' per pupil base funding amounts. One state (Ohio) repealed its small district adjustment along with the rest of its school funding formula in 2011. North Dakota moved from a formula adjustment based on small and isolated schools to one based on school district density. Based on the results of the study team's state policy review, we conclude that no significant changes to the AIR rankings occurred in the time since their report was published.

Geographic Cost of Education Adjustments[25]

Studies of the costs of providing educational services have documented that educating students does not cost the same across school districts. These costs may vary for a number of reasons, some of which are under the control of local school officials (such as decisions about the size of classes or about curricular offerings), but other factors impacting costs cannot be controlled by local school districts. For example, local district officials cannot control the effects of operating in geographical locations that may lack certain desirable amenities (for example, access to the arts or athletic events) or are affected by extreme weather conditions. When distributing funds through a state finance formula, it is appropriate for policy makers to adjust district resources to account for differences in these uncontrollable costs.

The primary way in which geographic location impacts costs is through the price school districts pay for various inputs needed to provide educational services. These may include the price districts must pay to buy materials (e.g. books and technology); to pay for physical inputs, such as utilities and building maintenance; and, most importantly, the price of personnel, such as teachers, administrators, aides, support staff, etc. The importance of personnel costs is reflected in the fact that the bulk of any district's budget is spent on employee salaries and benefits.[26] While all districts purchase these inputs, the specific amount and mix of inputs needed in any individual district depends on the characteristics of that district. For example, a district located in a very warm (or very cold) area will need to spend more on energy than a district located in a more temperate area. Similarly, a district's geographic location may also influence its specific input prices. For example, a district in an area with a high cost of living will need to offer higher wages to attract and retain employees.

[24] Verstegen. (2015).

[25] Much of this section is taken from an analysis prepared by Jennifer Imazeki in Imazeki, J. (2016, June). *A Comparable Wage Index for Maryland*. Denver, CO: APA Consulting.

[26] Odden, A.R. & Picus, L.O. (2014). *School Finance: A Policy Perspective 5th Edition*. New York, NY: McGraw-Hill Education.

Over time, a number of states have adopted some form of adjusting for geographical variation in these costs. Table 3.6 lists states which currently include a geographic cost-of-education adjustment in their state school funding formulas.

Table 3.6: Types of Geographic Cost of Education Adjustments

State	Type of Adjustment
Alaska	Cost-of-Education Adjustments
Colorado	Cost-of-Living Adjustments
Florida	Cost-of-Living Adjustments
Massachusetts	Cost-of-Living Adjustments
Maryland	Cost-of-Education Adjustments
Missouri	Cost-of-Living Adjustments
New York	Cost-of-Living Adjustments
Virginia	Cost-of-Living Adjustments
Texas	Cost-of-Education Adjustments

Three of the most common geographic cost-of-education adjustments are: (1) cost-of-living adjustments, (2) comparable wage indices, or (3) hedonic wage indices. A description of each approach and its advantages and disadvantages is presented below.

Housing-Based Cost-of-Living Adjustment

The first option is to adjust for the cost of living by computing the price of a basket of goods associated with each location (similar to how the Consumer Price Index (CPI) is calculated across time). Typically, that local basket of goods is dominated by housing costs, although the prices of other goods are also usually included.[27] This approach has the advantage of being straightforward to calculate and update over time, as long as data on housing costs and other items in the basket are available. The major disadvantage of a housing-based, cost-of-living adjustment is that it does not include any information about area amenities that may also impact the wages needed to attract and retain workers. Workers will generally accept lower wages to work in locations with pleasant amenities, such as desirable weather or vibrant cultural life. Thus, even though housing costs are higher in such locations, wages may not need to be equally high. A cost-of-living adjustment based primarily on housing and other consumer costs will tend to overestimate the wage differential needed to attract and retain school employees in locations with high costs of living and underestimate it in locations with low costs of living.

Comparable Wage Index

A Comparable Wage Index (CWI) is calculated by measuring the variation in non-teacher wages across localities. A CWI therefore can account for the impacts of both cost of living and area amenities. The assumption is that workers who are similar to teachers in terms of their levels of education, training,

[27] McMahon, W.W. (1996). Intrastate Cost Adjustments. In W.J. Fowler, Jr., (Ed.), *Selected Papers in School Finance, 1994* (NCES 96–068) (pp. 89–114). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

and job responsibilities will have similar preferences as teachers. For example, if non-teacher workers in municipality A are paid, on average, 10 percent more than non-teacher workers in municipality B, then the CWI would suggest that district employees in municipality A should receive 10 percent more revenue for salaries than in municipality B. By examining the regional wage differentials of a large sample of workers who have characteristics similar to teachers, the CWI implicitly accounts for a wide range of factors that influence the salary levels necessary to attract teachers to live and work in particular districts or regions. These include factors, such as cost of living and desirability of place, including climate, cultural amenities, safety, commute times, and recreational opportunities. In comparison, with a hedonic index, the analyst must identify each appropriate variable to be included in the regression equation along with a data source (if one exists). If the analyst miss-specifies the equation or is unable to obtain valid data for one or more of the identified factors, the result of the analysis will be biased, resulting in the cost index over- or under-adjusting school system revenues. Further, by relying on data external to school districts, the CWI specifically excludes cost differences among districts that are under the control of boards of education, such as actual district wages and working conditions, as the economic literature suggests.[28]

Specifically, following Taylor and Fowler (2006), a CWI is created by estimating the following equation:

$$LnAnnualSalary_i = \beta_W W_i + \beta_O O_i + \beta_I I_i + \beta_R R_i + \varepsilon_i$$

In this equation:

- The dependent variable is the natural log of annual salary;
- W_i is a vector of characteristics of worker *i*;
- O_i is an indicator variable for worker *i*'s occupation;
- I_i is an indicator variable for worker *i*'s industry;
- R_i is an indicator variable for the region that worker *i* lives in; and
- ε_i is an idiosyncratic error term.

The resulting coefficients are then used to predict a wage in each region for a worker with average characteristics (i.e. average values of all worker characteristics).

Estimation of this model requires data on individual worker characteristics as well as industry, occupation, wages, and location. These variables are all available in the American Community Survey, which is administered annually.[29] The American Community Survey (ACS) is an ongoing national survey administered by the U.S. Census Bureau, sent to 3.5 million people each year, collecting information on

[28] See Fowler, W. J. Jr. & Monk D. H. (2001). *A Primer for Making Cost Adjustments in Education*. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement and Taylor, L. L., & Fowler Jr, W. J. (2006). *A Comparable Wage Approach to Geographic Cost Adjustment*. Research and Development Report. NCES-2006-321. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.

[29] In 2000 and earlier, the relevant variables were collected on the long form of the decennial census. Taylor and Fowler (2006) discuss how to use Occupational Employment Statistics data from the Bureau of Labor Statistics to update a CWI in the years between censuses; thus, annual adjustments can still be made between census years prior to 2005 when the relevant variables became available annually as part of the American Community Survey.

income, housing, education, and migration, as well as the employment variables already mentioned. The ACS replaced the long form of the decennial census and thus, is the only national source of this type of information. Data with the individual responses necessary to compute a CWI are available in the ACS Public Use Microdata Sample for areas with at least 100,000 residents (called PUMAs or Public Use Microdata Areas). A CWI for any PUMA is therefore relatively straightforward to create and can easily be updated on an annual basis. A CWI also has the advantage of being clearly beyond the control of local districts; it does not use any school-generated data. It can also be used, or easily adjusted for use, for all labor costs (e.g. certified staff, non-certified staff, teachers, administrators, or classified staff).

In contrast, a CWI assumes comparability of workers. The CWI captures average preferences for a location among all non-teacher workers, so using a CWI to adjust for district wage costs assumes teachers have similar preferences as other workers and therefore require similar wage adjustments. This assumption could be strengthened by estimating the CWI with a sample of workers more closely aligned with teachers (e.g. workers with college degrees or workers in industries that require education levels and/or job responsibilities similar to teaching). However, if teacher preferences are systematically different than other worker preferences—an unlikely possibility—then a CWI may not be appropriate.

A CWI is also intended to capture variation across labor markets, generally measured at a broad geographical level (e.g. across a metropolitan area). The smallest area for which a CWI value can be calculated using the ACS data is a PUMA (areas with at least 100,000 residents). In densely populated regions, a PUMA may represent one part of a city or county, but in sparsely populated regions, a PUMA may span multiple counties. A CWI cannot measure cost variations across districts within the measured geographical area, so all districts within that area would necessarily have the same index value.[30] This drawback is related to another potential concern about CWIs: a CWI does not measure variation in wages across districts due to school-specific working conditions. As discussed in the previous section, it is not clear that the state *should* make adjustments for the impact of student characteristics on wages. That said, if a state decided to make such adjustments anyway, a CWI measure would not include variation in wages because of school-specific conditions.

Hedonic Wage Index

Hedonic wage indices are calculated by breaking down variation in current wages due to a number of different identifiable variables. Thus, hedonic wage indices can capture variation due to both geographic location characteristics and student characteristics. Following Chambers (1998), a hedonic wage index for teachers is created by estimating the following equation:

$$LnTeacherSalary_i = \beta_T T_i + \beta_D D_S + \beta_C C_S + \beta_G G_i + \varepsilon_i$$

In this equation,

- The dependent variable is the natural log of a teacher's annual salary;

[30] This is likely to be less important in states with geographically large districts and/or districts that line up with established municipal boundaries, such as Maryland where school district boundaries coincide with county lines.

- T_i is a vector of characteristics of teacher *i* (the most commonly included are gender, race, education, certifications, experience, and any other available measures of teacher quality, such as measures of effectiveness or test scores);
- D_S is a vector of discretionary cost/working condition variables in district *S* (such as class size);
- C_S is a vector of uncontrollable cost/working condition variables in district *S* (the most commonly included are the percentages of high-need or at-risk students);
- G_S is a vector of characteristics for the region that teacher *i* lives and works in (such as housing prices and area amenities like weather, crime or population density); and
- ε_i is an idiosyncratic error term.

The resulting coefficients are then used to predict a wage for an average teacher (with state average values of the variables in T_i) in each district, holding constant the discretionary cost variables.

The data required to estimate this model will depend on the specific variables included. Though the most commonly included variables have been noted above, it is important to recognize that the specific choice of variables to include is ultimately up to the analyst. This can have some benefits, as the model can generate estimates of the impact of specific variables that may be of particular interest to the state. For example, the hedonic method can reveal how much of the locational variation is coming from housing costs, versus how much locational variation is coming from preferences for area amenities (e.g. low crime or desirable weather). Additionally, the hedonic approach explicitly captures and controls for the impact of student characteristics on teacher wages, and thus can generate a distinct value for each district.

In contrast, there may be some variables (e.g. measures of teacher quality or area amenities) that should theoretically be included (because theory and previous research suggest they impact teacher wage costs), but that are excluded in practice due to lack of data. This creates a potential concern: because the model uses directly observed teacher salaries, which are subject to district control, any variation in teacher salaries due to variables that are not specifically included in the model will either (1) be relegated to the error term (and thus left out of the resulting index values), or (2) create bias (potentially of unknown direction and size) in the coefficients of included variables. In both cases, the resulting index will provide a potentially biased measure of true cost variations. Of particular concern is that, to the extent that unobserved/excluded variables are correlated with included cost factors, the hedonic index may overestimate or underestimate true costs. For example, if districts with more special needs students are also less efficient than districts with fewer special need students, then the coefficients on student variables may be biased upward, rewarding districts with extra revenue for their inefficiency.

It is tempting to try to make up for missing data by including as many specific cost and control variables as possible. However, doing this creates some issues. Including additional variables can reduce the precision with which all the coefficients are estimated; this is particularly salient in states with relatively few districts, such as Nevada. (i.e. smaller samples restrict the number of variables that can be included in the model.) It is also particularly salient when the additional variables are correlated with other

variables already in the model. Furthermore, a larger and more complex model becomes increasingly difficult to update over time. That last point is perhaps the largest drawback of the hedonic approach in general, especially for generating a measure to be used in state policy. The data requirements and statistical complexity of the hedonic approach make calculating and updating even a relatively simple hedonic wage index significantly more difficult and time-consuming than either of the alternative approaches.

Comparable Wage Index versus Hedonic Wage Index

Economic theory clearly suggests that the cost-of-living approach is inferior to the other two approaches. Although all three methods can account for the impact of housing and other costs on wages, the cost-of-living approach fails to capture the impact of area amenities that affect wages. With that in mind, this analysis focuses on the relative merits of a comparable wage index and a hedonic wage index.

When attempting to capture variation in the impact of geographic location on district salaries, the comparable wage approach has multiple benefits over the hedonic approach. First, unlike a hedonic model, a comparable wage model does not require an analyst to decide which specific area costs and amenities to include. With the comparable wage approach, the overall impact of all relevant variables is simply captured by the regional indicator variables. This decreases the chance that the results will be systematically biased and reduces the "noise" in the estimates. Second, the data needed to estimate a comparable wage model are easily accessible on public government websites maintained by federal agencies. By contrast, the hedonic approach requires data on all the specific variables an analyst chooses to include. Generally, these data must be gathered from multiple sources. Sometimes, they can only be gathered through individual data requests, making updates to the index much more cumbersome. There is also a higher chance that data will either stop being collected or that specific variables will change or be defined differently by the collecting agency. Finally, because the comparable wage approach relies on data that are completely outside the control of local school districts, it cuts out any possibility of districts manipulating the system to receive additional revenue (e.g. offering inefficiently high salaries).

One aspect of the hedonic model that may seem advantageous is that it specifically includes student characteristics. Research shows that student characteristics (as variables) do have an influence on teacher salaries. However, if the intention is to use the resulting model to generate a funding adjustment, then the inclusion of student characteristics may provide little benefit. As discussed above, it is unclear whether it is appropriate to compensate districts for the higher wage costs associated with factors, such as the share of special needs students, because there are many ways for districts to address teacher preferences about student characteristics other than offering higher salaries. Although these variables need to be included as controls in any model using actual teacher salaries as the dependent variable, it may not be appropriate to incorporate variation in those variables when calculating the aid adjustment for wage costs. But if that variation is not going to be included anyway, then the comparable wage approach is preferable for the reasons stated above.

If for some reason a state wants to include student characteristics, it is important to recognize that an index based on a hedonic model is no longer a clean measure of the impact of geographic location. Instead, an index based on a hedonic model conflates the impact of both geographic location and district characteristics on wages. Although there are situations where this might be desirable (such as analyses investigating the relative impacts of different variables), it is likely to be problematic in the context of school funding formula adjustments because most states have separate adjustments for those same district characteristics. Typically, analysts estimate the costs of a student characteristic, such as poverty, by looking at the characteristic's impact on *total* expenditures, since student characteristics are likely to require districts to hire more teachers, or buy higher levels of other inputs, in addition to offering higher wages. These costs are then included in state aid formulas separately from adjustments for geographic location, which primarily impact wages. If a state has these separate adjustments for student characteristics, then it may be problematic to include the same student characteristics in an adjustment primarily intended to capture the impact of geographic location on wages. Including student characteristics in such an adjustment may lead to overall revenue adjustments that are larger than necessary for districts with higher concentrations of special needs students.

Finally, one potential benefit of the hedonic approach relative to a CWI is that a hedonic model includes individual area variables. This means a distinct value can be calculated for each individual district, even if student characteristics are held constant. In contrast, a CWI generates the same value for all districts in the same labor market or population center. In practice, this is likely to have relatively little impact because many area variables will have similar values within labor markets. Still, the identical values generated under the CWI could be more difficult to explain politically.

Summary

To summarize, there are three commonly accepted methods used by analysts to capture the geographic variation in the costs of providing education services. These are cost-of-living, CWI, and hedonic wage models. Because of the importance of the geographic variation in wage costs on school district budgets, the focus of this analysis has been primarily on variation in educator wages. While each of these approaches has strengths and weaknesses, the CWI approach has become commonly used in state policy because of the relative simplicity of the model and the availability of data. A CWI is relatively straightforward to create and update on an annual basis; it also has the advantage of being clearly beyond the control of local districts, as there are no data used that are generated by schools. In contrast, the data requirements and statistical complexity of the hedonic approach make calculating and updating even a fairly simple hedonic wage index more difficult than either of the alternative approaches. A hedonic model also conflates variation due to geographic location with costs associated with student characteristics, such as poverty. This may be particularly problematic when those costs are already accounted for elsewhere in the funding system.

IV. Professional Judgement Approach

Introduction and Overview

This chapter presents the results of the professional judgment (PJ) approach. The PJ approach utilizes educator experience and expertise to specify the resources representative schools and school districts need to meet state standards and requirements. These resources can then be "costed out" by applying salary and benefit information and the prices of other resources (such as for technology) to determine the level of funding needed at a per-student level.

For this 2018 study, the PJ approach was implemented in a targeted manner through a limited number of panels. These panels discussed the resources needed to serve students with identified needs—at-risk students (often based on qualification for free and reduced lunch), English Learners (ELs), special education students, and gifted students—above and beyond what might be needed at a "base" level to serve all students. These additional resources are then represented as a series of adjustments, or "weights," relative to the base cost.

PJ Panel Design

APA conducted three professional judgement panels, one to address the resources needed to serve at-risk students, one for EL resources, and one for special education and gifted resources. Each panel included 7–10 Nevada educators, including a combination of classroom teachers, principals, instructional administrators, district administrators, and school business officials. To identify panel participants, APA worked with the Nevada Department of Education (NDE), who reached out to district superintendents across the state to recruit participants based on different roles (teachers, school administrators, district staff) and to provide geographic representation. A total of 23 panelists participated in the three PJ panels. A list of panel members is provided in Appendix G of this report.

Panels were held in April 2018 in Las Vegas. Panelists did not receive monetary compensation for their participation, though meals were provided.

Resources discussed by the panels included: school-level personnel, non-personnel costs, additional supports and services, and district-level resources. Given that resources for each of the targeted student groups is above a base set of resources, but that developing a new 2018 PJ base cost was outside of the scope of the study, each panel reviewed the resources identified as needed at the base level during a 2015 PJ study conducted by APA.

Creating Representative Schools

The PJ panels identified resources for a set of representative schools, which were designed using statewide average characteristics (including size and grade configuration) to represent schools across the state. The school sizes and configurations were determined as a part of the 2015 PJ study. By creating representative schools based on state averages, it allowed panelists from different schools and districts from around the state to "meet in the middle," meaning that the schools might not look like their home schools specifically, but were not so large or so small that they could not envision them and

what resources would be needed. The approach also develops per-student figures that could be applied in each unique district in Nevada, based on the district's actual enrollment figures and demographics. Each panel then addressed three different levels of need for a given student group:

- **At-risk panel**: discussed resources needed at three different concentration levels (if a school had 25 percent, 50 percent, or 75 percent of its students qualifying as at-risk).
- **EL panel**: identified resources for EL students based on three different language acquisition levels on a continuum from entering to monitoring, using World-Class Instructional Design and Assessment (WIDA) language proficiency standards (L1/L2, L3/L4, and L5/L6). The total percentage of EL students was 25 percent, with the proportion in each category varying by school level.
- **Special education panel**: determined resources for three different levels of need—mild, moderate, and severe—related to the percentage of time that a student is in the general education classroom (80 percent or more, 40–79 percent, and less than 40 percent, respectively). Using the statewide average of 12 percent, that translated to seven percent in the mild category, three percent in the moderate category, and two percent in the severe category.

The representative schools used in the panel are shown in Table 4.1.

Table 4.1: Representative Schools

	Elementary School (K-5)	Middle School (6-8)	High School (9-12)
Enrollment	450	750	1,300
Identified Need Populations			
At-risk			
25% concentration	113	188	325
50% concentration	225	375	650
75% concentration	338	563	975
EL (25%)			
L1, L2	32 (7%)	30 (4%)	52 (4%)
L3, L4	68 (15%)	113 (15%)	95 (7%)
L5, L6	14 (3%)	45 (6%)	78 (6%)
Special Education (12%)			
Mild (7%)	32	53	91
Moderate (3%)	14	23	39
Severe (2%)	9	15	26

Summarizing Nevada State Standards

Prior to the commencement of any PJ panel discussions, all panelists reviewed a specific, APA-prepared set of background materials and instructions. In particular, panelists were instructed to identify the resources needed to meet all Nevada standards and requirements (Appendix H). APA prepared a brief

summary document of all of the expectations that the state has for students, schools, and districts, which was then shared with panelists. The document was not meant to be exhaustive, as all panel participants were experienced educators in Nevada; instead, the document was meant to highlight key or recently revised expectations, such as Nevada's new assessments and content standards. This document was reviewed by Nevada Department of Education staff to ensure accuracy.

Professional Judgment Panel Procedures

Once panelists were provided with instructions and background information to guide their efforts, the PJ panels convened. Two APA staff members were present at each panel meeting to facilitate the discussion and take notes about the level of resources needed and the rationale for participant decisions. Panelists were frequently reminded that they should be identifying the resources needed to meet state standards in the most efficient way possible without sacrificing quality.

Each panel first reviewed the resources identified at the base level during the 2015 study. After that review, they discussed the additional resources needed in addition to the base to serve the given student group. Resources reviewed and discussed included:

1. Personnel, including classroom teachers, other teachers, psychologists, counselors, librarians, teacher aides, administrators, nurses, etc.
2. Other personnel costs, including days for substitute teachers and professional development
3. Non-personnel costs, such as supplies, materials and equipment costs (including textbook replacement and consumables), and the cost of offering extracurricular activities
4. Non-traditional programs and services, including before- and after-school, preschool, and summer school programs
5. Technology, including hardware, software, and licensing fees
6. District-level supports, such as administration and resources for maintenance and operations, centralized purchasing or licensing, legal, school board, insurance, data systems, and contracted services

It is important to note that capital, transportation, food services, adult education, and community services were *excluded* from consideration as they were outside the scope of this study.

For each panel, the figures APA recorded represented a consensus among members. At the time of the meetings, no participant (either panel members or APA staff) had a precise idea of the costs of the identified resources. Instead, APA's actual calculations and costing of resources took place at a later date. This is not to say that panel members were unaware that higher levels of resources would produce higher base cost figures or weights; however, without specific price information and knowledge of how other panels were proceeding, it would have been difficult for any individual or panel to suggest resource levels that would have led to a specific base cost figure or weight, much less a cost that was relatively higher or lower than another.

Base Resources Identified in the 2015 PJ Study

This section summarizes the results from the 2015 PJ study, including the resources identified and the resulting base cost figure. For additional detail, please refer to APA's 2015 *Professional Judgment Study Report*.[31]

Key resources recommended for all students during the prior study:

- Small class sizes: 15:1 for K-3rd grade, 25:1 for fourth through 12th grades;
- Professional development and instructional coaches for teachers;
- Student support (counselors, social workers);
- Technology-rich learning environments, including one-to-one student devices and needed information technology (IT) support; and
- Preschool, recommended for all four-year-olds.

It should be noted that the resources identified by all PJ panels, including the 2015 study panels and the most recent panels, are examples of how funds might be used to organize programs and services in representative situations. APA cannot emphasize strongly enough that the identified resources do not represent the only possible way to organize programs and services to meet state standards. Instead, the identification is meant to estimate the overall cost of adequacy—not to determine the one "best" way to organize schools and districts.

Base School-Level: Personnel

Staffing recommended by the 2015 study PJ panels included:

- Instructional staff, including teachers, instructional aides, instructional coaches, interventionists, librarian/media specialists, and technology specialists;
- Pupil support staff, including counselors, nurses, and social workers;
- Administrative staff, including principals, assistant principals, bookkeepers, attendance monitors, registrars, and clerical/secretarial staff; and
- Other staff members, including school resource officers, in-school suspension teachers, aides for duty and monitoring, and media aides.

Tables 4.2 through 4.4 first identify the school size and the panel-recommended average class size/teaching schedule. The tables then identify the personnel on a full-time equivalent (FTE) basis needed to serve all students regardless of need at the elementary, middle, and high school levels (base education). Teacher FTEs are calculated by dividing the number of students in a school by the average class size, and then at the secondary level by multiplying that figure by the number of classes students are taking compared to the average number of classes a teacher is teaching.

[31] Silverstein, J., Brown, A., Piscatelli, J., Shen, Y. (2015). *Professional Judgement Study Report* for the Lincy Institute at UNLV. Denver, CO: Augenblick, Palaich & Associates. Retrieved at: http://apaconsulting.net/wp-content/uploads/2018/08/NV-Professional-Judgment-Report-.pdf

Table 4.2: Elementary School Personnel as Recommended by 2015 Study PJ Panels, Base Education

School Size and Configuration	K-5, 450 students
Recommended Average Class Size	Grades K-3: 15 to 1 Grades 4-5: 25 to 1
Instructional Staff	
Teachers (Classroom)	26.0
Teachers (Specials)	4.0
Instructional Facilitator (Coach)	2.0
Librarians/Media Specialists	1.0
Technology Specialists	0.5
Pupil Support Staff	
Counselors	1.0
Nurses	1.0
Psychologists	0.2
Social Worker	0.25
Family Liaison	0.25
Administrative Staff	
Principal	1.0
Assistant Principal	1.0
Office Manager	1.0
Clerical/Data Entry	1.0
Other Staff	
School Resource Officer (SRO)	0.25
In-School Suspension	1.0
Aides – Duty, Monitoring	2.0
IT Technician	0.5

Panelists that participated in the 2015 study recommended class sizes of 15:1 in grades K-3 and 25:1 in grades 4-5. They also identified specials teachers for art, music, PE, technology, world language or another enrichment area. Instructional coaching staff was identified to support teachers, as was a full-time librarian, counselor and nurse. Additional student support was provided by a part-time psychologist, social worker and family liaison. An administrative team with a principal and assistant principal, supported by an office manager and a secretarial position (clerical/data entry) was also identified. Finally, panelists recommended a part-time SRO, IT technician and aides for duty, monitoring and in-school suspension (or alternative to suspension and behavioral support).

Table 4.3: Middle School Personnel as Recommended by 2015 Study PJ Panels, Base Education

School Configuration and Size	6-8, 750 students
Recommended Average Class Size	25 to 1
Schedule	6 period day; teachers teaching 5 periods
Instructional Staff	
Teachers (Classroom)	36.0
Instructional Facilitator (Coach)	3.0
Teacher Tutor/Interventionist	1.0
Librarians/Media Specialists	1.0
Technology Specialists	1.0
Instructional Aides	
Pupil Support Staff	
Counselors	3.0
Nurses	1.0
Psychologists	
Social Worker	0.25
Family Liaison	0.25
Administrative Staff	
Principal	1.0
Assistant Principal	2.0
Office Manager	1.0
Attendance/Registrar	1.0
Clerical/Data Entry	2.0
Other Staff	
School Resource Officer (SRO)	0.25
In-School Suspension	1.0
Aides – Duty, Monitoring	2.0
IT Technician	1.0

2015 Panelists also recommended 25:1 for grades 6-8, with teachers teaching 5 out of 6 classes. Similar to elementary school, instructional coaching staff, a full-time librarian, a full-time technology specialist and a full-time nurse were recommended. Counselors were staffed at a ratio 250:1, and additional student support was provided by a quarter-time social worker and family liaison. An interventionist was also recommended for instructional support. The school's administration included a principal, two assistant principals, an office manager, a registrar and two secretarial positions. Finally, the other staff positions were similarly staffed as compared to the elementary school.

Table 4.4: High School Personnel as Recommended by 2015 Study PJ Panels, Base Education

School Configuration and Size	9-12, 1,300 students
Recommended Average Class Size	25 to 1
Schedule	6 period day; teachers teaching 5 periods
Instructional Staff	
Teachers (Classroom)	62.4
Instructional Facilitator (Coach)	4.0
Teacher Tutor/Interventionist	
Librarians/Media Specialists	1.0
Technology Specialists	1.0
Instructional Aides	
Pupil Support Staff	
Counselors	5.2
Nurses	1.0
Psychologists	
Social Worker	0.5
Family Liaison	0.5
Administrative Staff	
Principal	1.0
Assistant Principal	3.0
Office Manager	1.0
Attendance/Registrar	1.0
Clerical/Data Entry	5.0
Other Staff	
School Resource Officer (SRO)	1.0
Behavior Interventionist	1.0
Aides – Duty, Monitoring	2.0
IT Technician	1.0

The panelists kept the same schedule and the same average class size of 25 for the representative high school as the middle school. The panelists also identified additional pupil support staff, administrative staff, and other staff at similar levels to the middle school. Differences included not recommending an interventionist as differentiation could be provided through robust course offerings, having an additional assistant principal and additional secretarial staff due to the larger school size, as well as having a full-time SRO.

Base School-Level: Non-Personnel Costs

The figures in Table 4.5 show other resources needed in schools, including needs for instructional supplies and materials, equipment, assessment, student activities (sports, extracurricular activities, field trips, etc.) professional development, and assessment.

Table 4.5: School-Level, Non-Personnel Costs

	Base Education
Professional Development	
Additional days per teacher	6 days
PD supplies/training costs	$100/student
Substitutes–days per teacher	10 days
Supplies, Materials, and Equipment (incl. textbooks)	Elem: $165/student Middle: $175/student HS: $350/student
Student Activities	Elem: $35/student Middle: $125/student HS: $250/student

Base School-Level: Additional Resources

Additional Programs

In addition to the personnel and non-personnel costs identified above, the panels also recommended the following additional programs at the base level:

- Full-day preschool for all four-year-olds at an 18:2 ratio (one teacher and one instructional aide per 18 students);
- After-school programs at middle and high school level;
- Bridge program for entering high school students; and
- Credit enrichment at the high school level.

It is important to note that while our study did not include transportation, panelists felt that sufficient transportation was necessary for extended day and summer school programs to be possible.

Technology Hardware

Panels in 2015 also addressed the technology set up at representative schools, recommending: 1:1 student devices, laptops, and mobile devices for staff; classroom technology set ups (smartboards, document cameras, audio systems, and a printer); one or more fixed labs; computers in the media center; and infrastructure maintenance (switches, routers, etc.). Assuming a four-year replacement cycle, this amounted to an about $250 per-student annual cost for all school technology hardware.

Base District-Level Resources

Due to study scope constraints in the 2015 study, APA did not address base district-level resources, but instead relied on the 2006 adequacy work to identify additional district-level costs beyond the identified

school-level resources. District-level costs—including costs for administration, building maintenance and operation (M&O), insurance, legal expenditures, school board expenses, and other central office purchases—were also identified as part of the base cost. In the 2006 study, district-level resources identified by PJ panels were 25 percent of school-level costs. APA used the same proportions to estimate the district-level costs for the 2015 study.

Resources for At-Risk, English Learners, Special Education, and Gifted Students Identified by 2018 PJ Panels

As noted, for this 2018 study three PJ panels were convened to identify the resources needed above the base to serve at-risk, EL, special education, and gifted students. This section presents the resources recommended for each group of students.

At-Risk Resources

The PJ panel identified resources to serve at-risk students (using free and reduced lunch as a proxy) in each of the representative schools for three different concentration levels of need: 25 percent of students being at-risk, then 50 percent, and 75 percent. This was done to determine if resource needs varied in total amount or intensity depending on the proportion of at-risk students in the school.

Approaches at each grade level and for each concentration level varied, but in general, resources recommended included:

- Interventionists to provide Tier 2 response-to-intervention (RTI) support at the elementary and middle school level.
- At the high school level, the approach for intervention shifted to increased differentiation through course offerings, so additional teachers and instructional coaches were recommended.
- Additional pupil support staff (counselors, psychologists, social workers and family liaisons) to address social-emotional needs.
- Increased safety and security personnel at the secondary level.
- Attendance and administration staff support when the concentration of at-risk students was higher.
- Professional development for all teachers to support differentiation (an additional four days above the six days identified in the base).
- Additional resources for supplies and materials, as well as student activities.
- Extended learning time, such as through before- and after-school programs and summer school (or intersession).

Personnel

Tables 4.6 through 4.8 present the additional personnel to support at-risk students in elementary, middle, and high schools.

Table 4.6: Elementary School Personnel to Support At-Risk Students

Elementary School			
Concentration	25%	50%	75%
# of At-Risk Students	113 students	225 students	338 students
Instructional Staff			
Interventionists	1.0	1.0	2.0
Pupil Support Staff			
Counselors		0.3	0.5
Psychologists	0.1	0.3	0.8
Social Workers	0.3	0.8	1.1
Family Liaisons	0.3	0.8	1.1
Administrative Staff			
Attendance/ Registrar		1.0	1.5

Given the small classes sizes recommended by the 2015 PJ study at the elementary level (15:1 K-3, 25:1 4-5), panelists did not recommend additional teachers but instead focused their support strategies through additional interventionists, pupil support, and attendance support at the 50 percent concentration level or higher.

Table 4.7: Middle School Personnel to Support At-Risk Students

Middle School			
Concentration	25%	50%	75%
# of At-Risk Students	188 students	375 students	563 students
Instructional Staff			
Interventionists	2.0	3.0	5.0
Pupil Support Staff			
Psychologists		0.3	0.7
Social Workers	0.8	1.8	2.8
Family Liaisons	0.8	1.8	2.8
Other Staff			
School Resource Officer (SRO)	0.1	0.25	0.75

Panelists recommended interventionists to provide instructional support at the middle school level. They felt the counselor staffing in the base was sufficient, but recommended additional student support from psychologists, social workers and family liaisons. Increased SRO staffing was also identified as needed.

Table 4.8: High School Personnel to Support At-Risk Students

High School			
Concentration	25%	50%	75%
# of At-Risk Students	325 students	650 students	975 students
Instructional Staff			
Teachers	1.6	3.6	5.6
Instructional Facilitator (Coach)		2.0	4.0
Pupil Support Staff			
Counselors	0.3	0.8	1.8
Social Workers	0.3	0.5	1.5
Family Liaisons	0.3	0.5	0.5
Behavior Interventionist (Alternative to/ In School Suspension)	0.5	1.0	1.0
Administrative Staff			
Assistant Principal			1.0
Attendance/ Registrar	0.25	0.5	1.0
Clerical/Data Entry			1.0
Other Staff			
School Resource Officer	0.5	1.0	1.0
Security/ Duty Aides			1.0

The panelists recommended a different approach at the high school level. Instead of separate interventionists, they thought that differentiated instruction could be done through course offerings. They recommended additional teachers to offer more sections and instructional coaches to support all teachers. Similar to the resources at the elementary and middle school level, the panelists recommended additional student support, attendance support, and safety personnel. At the highest concentration level, they also recommended an additional assistant principal.

Non-Personnel Costs

In addition to the personnel identified, the panel recommended resources for professional development, supplies and materials, and student activities.

Professional Development

The panels strongly felt all teachers should be able to support success of at-risk students through effective and differentiated instruction. To ensure that was possible, all staff needed to receive meaningful professional development, and the panel recommended the equivalent of an additional four days of professional development for all teachers identified either in the base or specifically for those working with at-risk students. These days could be used at any time—during the summer, during breaks, during in-service days, or split up into shorter half-day or hour segments.

Supplies and Materials

The panels recommended an additional $125 per at-risk elementary and middle school student, and $200 per at-risk high school student for supplies and materials, including intervention program licensing.

Student Activities

To support student enrichment, the panels also felt $25 per at-risk student was needed above the resources in the base.

Additional Programs

Panelists indicated that at-risk students needed extended learning time opportunities as well as the quality instruction and intervention they should be receiving during the regular school hours.

Before and After School

Panelists recommended that before- or after-school programs should be offered for two hours a day, four days a week at the elementary, middle, and high school level. These programs would be staffed by certified teachers at a ratio of 20:1, assuming 50 percent of at-risk students would participate.

Summer School/Intersession

Summer school was also recommended for middle (half day) and high school students (full day). This was also staffed with certified teachers at a ratio of 20:1, assuming 50 percent of at-risk students would participate. At the high school level, intersession boot camps, or catch-up sessions, were also recommended for 10 percent of at-risk students to keep them on track (also staffed at 20 students per certified teacher).

District-level Resources

Administration

At the district level, the panels identified a number of staff positions that would be needed to support schools. Table 4.9 shows the district staff needed in a district of 50,000, if 50 percent of students were at-risk.

Table 4.10: District Personnel to Support At-Risk Students

District Staff	FTE
Assistant/Associate Superintendent	1.0
Director	1.0
Coordinator	2.0
Clerical/Data Entry	4.5

Panelists also recommended $25 per student for administrative costs.

Alternative School

The final resource area addressed by the at-risk panel was an alternative school setting. The panelists identified resources for a school of 100 students and discussed how many schools of this size would be needed, based on district size. For a district of 50,000, they felt five alternative schools would be needed. Table 4.11 shows the alternative school personnel and other associated costs.

Table 4.11: Alternative School Personnel

School Size	100 students
Recommended Average Class Size	10 to 1
Schedule	6 period day; teachers teaching 5 periods
Instructional Staff	
Teachers	14.0
Instructional Facilitator (Coach)	2.0
Librarians/Media Specialists	0.5
Technology Specialists	0.5
Pupil Support Staff	
Counselors	1.0
Nurses	1.0
Psychologist	0.5
Social Worker	0.5
Family Liaison	0.25
Administrative Staff	
Principal	1.0
Clerical/Data Entry	1.0
Other Staff	
Security/ Duty Aides	1.0
Behavior Interventionist (Alternative to/ In School Suspension	0.25
Other Costs	
Professional Development	10 days per teacher and $100 per student
Substitutes	8 days per teacher
Supplies and materials	$500
Technology Hardware	$248
Student Activities	$250

Small class sizes (10:1) were a key resource component of the recommended alternative school model. Panelists also recommended a high level of student support, a full-time librarian/technology specialist (.5 in each role), a principal, a secretarial staff member, and a security aide. Other costs included: 10 days of professional days per teacher and $100 per student for PD materials, eight substitute days per teacher, $500 per student for supplies and materials, and finally $248 for technology hardware and $250 per student for student activities, both of which are the same amount as the regular high school.

EL Resources

The EL panel reviewed both the base resources named in the 2015 PJ study as well as the resources identified by the at-risk panel. Frequently, there is overlap between students who qualify as at-risk and students needing language acquisition services, so EL panels considered what resources would already be available to students both at the base and through the at-risk adjustment in order to avoid double counting of resources as best they could.

Panelists were asked to identify resources in representative schools with 25 percent of students being EL overall, disaggregating resource needs by the WIDA level of students split into three groups: L1/L2, (highest level of support needed), L3/L4, and L5/L6 (lowest level of support needed). Panelists determined the percentage of students that would fall into each category based on school level.

In general, panelists recommended more resources for L1/L2 students compared to the other groups, and for secondary students compared to elementary students. They recommended:

- Fewer resources in elementary schools since language acquisition is a key component of instruction for all students in lower grades.
- Sheltered instruction for L1/L2 secondary students.
- Co-teaching for L3/L4 students.
- Additional resources for supplies and materials, and student activities.
- Extended learning time, through before- and after-school programs and summer school (or intersession).

Personnel

The specific personnel recommended to serve ELs are found in Tables 4.12 through 4.14.

Table 4.12: Elementary School Personnel to Support English Learners

Elementary School			
WIDA level	L1/L2	L3/L4	L5/L6
# of English Learners	32 students	68 students	14 students
Instructional Staff			
Teachers	0.28	0.60	0.12
Instructional Facilitator (Coach)	0.28	0.60	0.12
Instructional Aides	0.56	1.19	0.25

Panelists recommended 1.0 teacher, 1.0 instructional coach, and 2.0 instructional aides to support elementary ELs with their time split proportionately across the three language levels.

Table 4.13: Middle School Personnel to Support English Learners

Middle School			
WIDA level	L1/L2	L3/L4	L5/L6
# of English Learners	30 students	113 students	45 students
Instructional Staff			
Teachers	3.0	5.0	1.7
Instructional Aides	2.0		

At the secondary level, panelists shifted their approach and differentiated the service model by language level. For L1/L2s, they recommended a sheltered instruction model with teachers at a 10:1 ratio and supported by 2.0 instructional aides. For L3/L4 and L5/L6, they recommended co-teaching in the general education classroom at ratios of 22:1 for L1/L2 and 26:1 for L5/L6.

Table 4.14: High School Personnel to Support English Learners

High School			
WIDA level	L1/L2	L3/L4	L5/L6
# of English Learners	52 students	195 students	78 students
Instructional Staff			
Teachers	5.2	8.86	3.0
Instructional Aides	2.0		
Pupil Support Staff			
Social Worker	0.1	0.3	0.1
Family Liaison	0.1	0.3	0.1

The instructional model was the same for the representative high school as the middle school. Additionally, panelists recommended a half-time social worker and a half-time family liaison to support the three language groups.

Non-Personnel Costs

In addition to the personnel identified, the panel recommended resources for supplies and materials, and for assessment.

Supplies and Materials

The EL panel recommended an additional $150 per EL student for supplemental supplies and materials.

Assessment

Another $200 per EL student was identified to address the cost of specific EL assessing, including administration costs.

Additional Programs

Panelists indicated that EL students should also receive similar extended learning time opportunities (such as before- and after-school programs and summer school) as were identified for at-risk students and described in the prior section.

District-level Resources

Administration

At the district-level, the panel identified staff positions to support schools, including intake services. Table 4.15 presents the resources identified for a district of 50,000 students, if 25 percent were EL students.

Table 4.15: District Personnel to Support English Learners

District Staff	FTE
Director	1.0
Coordinator	1.0
Teachers	18.0
Clerical/Data Entry	2.0
Translator	2.0
Data Specialist	1.0
Instructional Aides	3.0
Student Support (Counselor/ Social Worker)	1.0

Staff listed above included personnel to manage new student intake, including student support and staff for assessment. Panelists also recommended $5 per student for interpretation contracted services.

Special Education and Gifted Resources

The third PJ panel addressed resources needed to serve special education students, as well as gifted students, since gifted falls under the special education umbrella in Nevada.

Panelists felt that no additional resources were needed to serve gifted students if schools had the class sizes and resources identified in the base.

For mild, moderate, and severe special education students, the panel recommended:

- 1.0 teacher per 16 mild students, per nine moderate students, and per six severe students, with instructional aide support.
- Student support by psychologists, social workers, speech pathologists, and other therapists, like occupational or physical therapy.
- Additional resources for supplies and materials, including adaptive technology.
- Extended School Year (ESY) for a percentage of moderate and severe students.

- Additional district administration and resources, such as contracted services, legal, and other placements.

Personnel

Tables 4.16 through 4.18 present the school-level special education personnel recommended by the PJ panel, including teachers at the ratios noted above.

Table 4.16: Elementary School Personnel to Support Special Education Students

Elementary School			
Need Level	Mild (7%)	Moderate (3%)	Severe (2%)
# of Special Education Students	32 students	14 students	9 students
Instructional Staff			
Teachers	2.0	1.5	1.5
Instructional Aides		0.5	3.0
Pupil Support Staff			
Psychologist	0.2	0.1	0.1
Social Worker			
Speech Pathologist	0.4	0.2	0.2
Therapists (OT/PT, Behavior, etc.)	0.2	0.2	0.3

Table 4.17: Middle School Personnel to Support Special Education Students

Middle School			
Need Level	Mild (7%)	Moderate (3%)	Severe (2%)
# of Special Education Students	53 students	23 students	15 students
Instructional Staff			
Teachers	3.3	2.5	2.5
Instructional Aides		0.8	5.0
Pupil Support Staff			
Psychologist	0.3	0.2	0.2
Social Worker	0.1	0.1	0.1
Speech Pathologist	0.2	0.3	0.3
Therapists (OT/PT, Behavior, etc.)	0.2	0.2	0.3

Table 4.18: High School Personnel to Support Special Education Students

High School			
Need Level	Mild (7%)	Moderate (3%)	Severe (2%)
# of Special Education Students	91 students	39 students	26 students
Instructional Staff			
Teachers	5.7	4.2	4.3
Instructional Aides		1.0	9.0
Pupil Support Staff			
Psychologist	0.6	0.3	0.3
Social Worker	0.1	0.2	0.2
Speech Pathologist		0.2	0.3
Therapists (OT/PT, Behavior, etc.)	0.3	0.3	0.4
Transition Coordinator		0.5	0.5

Non-Personnel Costs

All non-personnel costs were identified at the district level.

Additional Programs

Panelists identified the resources for an Extended School Year (ESY) program to serve a limited number of special education students (severe and high need moderate) whose individualized education programs (IEPs) required service. This program was staffed at one teacher and one instructional aide per 10 students, with support from speech and other therapists.

District-level Resources

Administration

At the district level, the special education panel identified needed staff and other resources. Below are the resources for a district of 50,000 with 12 percent of students in special education.

Table 4.19: District Personnel to Support Special Education Students

District Staff	FTE
Director	3.0
Coordinator	8.0
Teachers	7.0
Clerical/Data Entry	3.0
Nurses	3.0
Other Therapists	1.0
Psychologist	1.0
Job/Transitions Coach	1.0
Other Professionals	13.0

In addition to staff above, the panelists recommended $560 per special education student to provide supplies and materials, including adaptive technology, contracted services, legal, homebound, and other placements.

Base Costs and Adjustments

Updating the 2015 PJ Study Base

The 2015 PJ study base cost was determined by applying 2012-13 Nevada salary and benefit information (provided by the NDE) to the resources identified. This process produced a base cost of $8,577. To update this to the most recent year of data availability (2016-17), APA applied the following annual inflation rate using data from the Bureau of Labor Statistics for the western region: 2.3 percent increase in 2013-14, 1.3 percent in 2014-15, 1.4 percent in 2015-16, and 2.5 percent in 2016-17. This produced an inflation-adjusted PJ base cost of $9,238.

Adjustments for At-Risk, EL, and Special Education Students

Applying Resource Prices to Resources

To determine the adjustment, or weight, for each student group, APA used 2016-17 statewide average salary and benefit information provided by the Nevada Department of Education (Appendix I).

Dollar Amounts and Weights

Table 4.20 shows the resulting adjustments for at-risk, EL, and special education students.

Table 4.20: Amounts and Weights for At-Risk, EL, and Special Education in Relation to PJ Base

	Elementary School		Middle School		High School	
	Amount	**Weight**	**Amount**	**Weight**	**Amount**	**Weight**
At-risk						
25% concentration	$2,450	0.27	$2,287	0.25	$1,885	0.20
50% concentration	$2,450	0.27	$2,161	0.23	$2,099	0.23
75% concentration	$2,645	0.29	$2,319	0.25	$2,419	0.26
EL (25%)						
L1, L2	$3,451	0.37	$11,098	1.20	$10,402	1.13
L3, L4	$3,451	0.37	$4,454	0.48	$4,812	0.52
L5, L6	$2,633	0.29	$3,531	0.38	$3,806	0.41
Special Education (12%)						
Mild (7%)	$8,060	0.87	$7,279	0.79	$6,968	0.75
Moderate (3%)	$13,751	1.49	$13,904	1.51	$13,914	1.51
Severe (2%)	$31,464	3.41	$30,555	3.31	$31,803	3.44

Applying salaries and benefits to the identified resources, produced an amount ranging from $1,885 to $2,645 per at-risk student, resulting in at-risk weights from 0.20 to 0.29. There was minimal relationship

to concentration level, meaning that while additional staff was needed as the concentration of students increased, on a per-student level the resources were similar.

Dollar amounts and weights for EL students varied both by school level and by language level. Elementary weights ranged from 0.29 to 0.37 ($2,633 to $3,451) with less variation by language level, while at the secondary level weights for L1/L2 students were between 1.13 and 1.20 ($10,402 to $11,098), the weights for L3/L4 students were around 0.50 (or about $4,600) and the weights for L5/L6 were around 0.40 (or $3,700).

Weights for special education varied by need level. The weight for mild students was between 0.75 and 0.87 (about $7,500), around a 1.50 for moderate students (or about $13,850), and between 3.31 and 3.44 for severe students ($30,555 to $31,803).

V. Evidence-Based Approach

Introduction and Overview

Using the Evidence-Based (EB) Model, this chapter provides a set of recommendations Nevada can use to determine how the state can provide a level of funding to all school districts that would give every student in the state—particularly at-risk students, EL students, and students with disabilities—an equal opportunity to achieve to the state's college and career-ready standards.

For the past 18 years, Picus Odden & Associates (known as Lawrence O. Picus and Associates prior to 2013) has worked across the country, primarily with state legislatures and other state agencies, to help determine how to adequately fund all students, including at-risk students, EL students, and students with disabilities. Adequate funding has been defined as providing a level of resources that would enable all districts and schools to give every student an equal opportunity to learn to high-performance standards. Over time, as both curriculum and performance standards have increased and as states have adopted college and career-ready standards for reading/language arts, mathematics, and science, the EB model has been updated to meet the changing and more rigorous expectations of PreK-12 schools.

The next section describes the school improvement framework that undergirds the EB funding model. This section draws from research that Picus, Odden, and others have conducted on schools that have dramatically moved the student achievement needle. Such schools exist across the country and vary by location (urban, suburban and rural) and by school size (large, medium, and small) and with high, medium, and low percentages of at-risk and EL students, as well as students with disabilities.

The subsequent section then "unpacks" the elements of an effective school and includes specific recommendations for every element of the model, including a list of all EB model elements and their values, representing the core of the EB model, as it is formulated in mid-2018. These elements include class size, extra help for struggling students (at-risk and EL students particularly), professional development, student support services (including guidance counselors and nurses), and systems for organizing instruction and teachers to reinforce effectiveness in increasing student performance and reducing achievement gaps linked to student demographics.

The last section provides the final estimated EB costs, drawing from an Excel-based computer simulation developed to translate the model elements into per-pupil figures and weights for special needs students. Please note that the resulting figures do not include resources for transportation, food services, or capital construction costs.

The Evidence Based School Improvement Model

The primary intent of this section is to identify in detail the array of educational goods that would allow Nevada districts and schools to provide each student an equal opportunity to meet the state's student performance standards and to identify the per-pupil costs of that basket of education goods. This section describes the elements of the school improvement strategy embedded within the EB funding model. Although we cannot claim a direct linkage between funding and student performance, the Evidence-Based (EB) model is designed to identify a level of resources that would enable all students,

schools and districts to meet state standards and requirements, and be successful in today's global, knowledge-based economy.

This section provides a more general description of the school improvement strategies that undergird the EB Model and describes how the key resource elements are used to increase student performance.

The High-Performance School Model Embedded in the EB Model

The EB Model is derived from research and best practices that identify programs and strategies that boost student learning, including learning for EL and at-risk students. The formulas and ratios for school resources developed from that research have been reviewed by dozens of educator panels in multiple states over the past decade. The EB Model relies on two major types of research:

1. Reviews of research on the student achievement effects of each of the individual major elements of the EB Model, with a focus on randomized controlled trials, the "gold standard" of evidence on "what works." These analyses can be found in the fifth edition of our school finance text (Odden & Picus, 2014) and in the most recent adequacy studies conducted for Michigan (Odden & Picus, 2018).
2. Studies of schools and districts that have dramatically improved student performance over a four- to six-year period, which is sometimes labeled "a doubling of student performance" on state assessments.

The current EB approach is more explicit in identifying the components of the school improvement strategies that deploy the resources in the funding model, and it articulates how all elements of the EB Model are linked at the school level to strategies that, when fully implemented, produce notable improvements in student achievement (Odden & Picus, 2014).

High-performing and improving schools have clear and specific, as well as ambitious and rigorous, student achievement goals, including goals to reduce achievement gaps linked to poverty and English proficiency status. The goals are nearly always specified in terms of performance on state assessments.

Compared to traditional schools where teachers work in isolated classrooms, improving schools organize instruction differently. Regardless of the context (urban, suburban, or rural; rich or poor; large or small), improving and high-performing schools organize teachers into collaborative teams: grade-level teams in elementary schools and subject or course teams in secondary schools. With the guidance and support of instructional coaches, the teacher teams work with student data (usually short-cycle or formative assessment data) to:

- Plan standards-based curriculum units;
- Teach those units simultaneously;
- Debrief on how successful the units were; and
- Make changes when student performance does not meet expectations.

This collaborative teamwork makes instruction "public" over time by identifying a set of instructional strategies that work in the teachers' school. Over time, all teachers are expected to use the instructional strategies that have been demonstrated to improve student learning and achievement.

High-performing and improving schools also provide an array of "extra help" programs for students struggling to achieve to standards. This is critical as more rigorous programs are implemented to support the increasing number of struggling students prepare for college and careers. These "extra help" strategies may include individual tutoring, small group tutoring, after-school academic help, and summer school focused on reading and mathematics for younger students, and courses needed for high school graduation for older students. These strategies are particularly key for students from poverty and EL backgrounds. The school approach is to hold standards constant and vary instructional time.

These schools exhibit multiple forms of leadership. Teachers lead by coordinating collaborative teams and through instructional coaching. Principals lead by structuring the school to foster instructional improvement. The district leads by ensuring schools have the resources to deploy the strategies outlined above with a focus on producing aggressive student performance goals, improving instructional practice, and taking responsibility for student achievement results. Further, successful and improving schools seek out top talent. They know that the challenge to prepare students for the competitive and knowledge-based global economy is difficult, and even more challenging for students from poverty and EL backgrounds. It requires smart and capable teachers and administrators to effectively get the educational job done.

The study team recently studied dramatically improving schools in Maryland, Vermont, and Maine as part of school finance studies completed in those states and found the theory of improvement embodied in the EB Model reflected in nearly all the successful schools studied (Picus, Odden, et al., 2012; Picus, Odden, et al., 2013; Odden & Picus, 2015). In addition, other researchers and analysts have found similar features in schools that significantly improve student performance and reduce achievement gaps (e.g., Blankstein, 2010, 2011; Chenoweth, 2007, 2009, 2017). After a comprehensive set of studies and analyses, Duncan and Murnane (2014) reached conclusions that support the element of the EB Model. They note that if all students in a school are to have a chance at success in the emerging global economy, they will need high-quality preschool programs followed by effective elementary and secondary schools. The key features needed in each school include:

- Leadership focused on improving instructional practice;
- Within-school organization of teachers into teams that over time create a set of effective instructional practices and then deploy them systematically in all classrooms;
- A culture of assistance (e.g., instructional coaches and ongoing professional development) and accountability (e.g. adults taking responsibility for the impact of their school actions on student performance); and
- An array of extra help strategies to extend learning time for any student who needs more time to achieve to standards.

Although the details of studies of improving and high-performing schools vary and different authors highlight somewhat different elements of the process, the overall findings are more similar than different. This suggests schools can improve the performance of all students if they have adequate resources and deploy those adequate resources in the most effective ways.

The EB Model offers a framework for the use of resources by districts and schools to help focus those resources on programs and strategies that would allow them to produce substantial gains in student academic performance. To provide further detail to the global description of the EB effective schools, the key elements of the school improvement model embedded in the EB Model have been organized into 10 areas.

In general, schools and districts that produce large gains in student performance follow ten similar strategies (see Chapter 4 and 5 of Odden & Picus, 2014; Odden, 2009), resources for each of which are included in the EB Model. The ten strategies employed by improving schools are:

1. Analyze student data to become deeply knowledgeable about performance issues and to understand the nature of the achievement gap. The test score analysis usually first includes review of state test results and then, over time, analysis of formative/short cycle (e.g. Renaissance Learning Star Enterprise) as well as benchmark assessments (e.g. Northwest Evaluation Association MAP) to help tailor instruction to precise student needs; to progress monitor students with an Individual Education Plan (IEP) to determine whether interventions are working; and to follow the performance of students, classroom, and the school over the course of the academic year. Improving schools are performance data hungry.

2. Set high goals such as aiming to educate at least 95 percent of all students in the school to proficiency or higher on state reading and math tests; working to ensure a significant portion of the school's students reach advanced achievement levels; having more high school students take and pass AP classes; and making significant progress in closing the achievement gap between the average student and students from poverty and EL backgrounds. The goals tend to be explicit and far beyond just producing improvement or making adequate yearly progress. Further, because the goals are ambitious, even when not fully attained, they help the school produce large gains in student performance.

3. Review evidence on good instruction and effective curriculum. Successful schools throw out the old curriculum, replace it with a different and more rigorous curriculum, and over time create their specific view of good instructional practice to deliver that curriculum. Changing curriculum is a must for schools implementing more rigorous college and career-ready standards and such new curriculum requires changes in instructional practice. Successful schools also want *all* teachers to learn and deploy new content-based, instructional strategies in their classrooms and seek to make good instructional practice systemic to the school and not idiosyncratic to teachers' individual classrooms.

4. Invest heavily in teacher training that includes intensive summer institutes and longer teacher work years, resources for trainers, and, most importantly, funding for instructional coaches in all schools. Time is provided during the regular school day for teacher collaboration focused on improving instruction. Nearly all improving schools have found resources to provide instructional coaches to work with school-based, teacher data teams; model effective instructional practices; observe teachers, and give helpful but direct feedback. This focus has

intensified now that schools are delivering a more rigorous curriculum focused on educating all students to college and career-proficiency levels. Further, professional development is viewed as an ongoing and not a once and done activity.

5. Provide extra help for struggling students and, with a combination of state funds and federal Title 1 funds, provide some combination of tutoring in a 1:1, 1:3, or 1:5 teacher-to-student format. In some cases, this also includes extended days, summer school, and English language development for all EL students. These Tier 2 interventions in the response to intervention (RTI) approach to helping struggling students achieve to standards are absolutely critical. For many students, one dose of even high-quality instruction is not enough—many students need multiple extra help services in order to achieve to their potential. No school producing large gains in student learning ignored extra help strategies altogether or argued that small classes or preschool were substitutes.

6. Restructure the school day to provide more effective ways to deliver instruction. This can include multi-age classrooms in elementary schools, block schedules and double periods of mathematics and reading in secondary schools, and intervention periods at all school levels. Schools also protect instructional time for core subjects, especially reading and mathematics. Further, most improving schools today organize teachers into collaborative teams: grade-level teams in elementary schools and subject/course teams in secondary schools. These teams meet during the regular school day, often daily, and collaboratively develop curriculum units, lesson plans to teach them, and common assessments to measure student learning that results from them. Further, teams debrief on the impact of each curriculum unit, reviewing student learning overall and across individual classrooms.

7. Provide strong leadership and support for data-based decision-making and improving the instructional program, usually through the superintendent, the principal, and teacher leaders. Instructional leadership is “dense” and “distributed” in successful schools; leadership derives from the teachers coordinating collaborative teacher teams, from instructional coaches, the principal and even district leaders. Both teachers and administrators provided an array of complementary instructional leadership.

8. Create professional school cultures characterized by ongoing discussion of good instruction, with teachers and administrators taking responsibility for the student performance results of their actions. Over time, the collaborative teams that deliver instruction produce a school culture characterized by: 1) high expectations of performance on the part of both students and teachers, 2) a systemic and school-wide approach to effective instructional practice, 3) a belief that instruction is public and that good instructional practices are expected to be deployed by every individual teacher, and 4) an expectation that the adults in the school are responsible for the achievement gains made or not made by students. Professionals in these schools accept responsibility for student achievement results.

9. Bring external professional knowledge into the school; for example, hiring experts to provide training, adopting new research-based curricula, discussing research on good instruction, and working with regional education service agencies as well as the state department of education. Successful schools do not attain their goals by pulling themselves up by their own boot straps. Faculty in successful schools aggressively seek outside knowledge, find similar schools that produce results and benchmark their practices to them, and operate in ways that typify professionals.

10. Finally, talent matters. Many improving schools today consciously seek to recruit and retain the best talent, from effective principal leaders to knowledgeable, committed, and effective teachers. They seek individuals who are mission-driven to boost student learning particularly students from poverty and EL backgrounds, willing to work in a collaborative environment where all teachers are expected to acquire and deliver the school's view of effective instructional practice, and who are accountability focused.

Such successful schools also create a learning atmosphere inside the schools. They also have a school-wide approach to discipline and classroom management, which requires that every student be accountable to any adult for his/her behavior and that all adults take interest in all students and hold them accountable for the behavioral practices in the school. In addition, these effective schools reach out to parents, ensure parents know the expectations of the school and help their children with homework, and welcome all parents into the school.

In sum, the schools that have boosted student performance are strongly aligned with those embedded in the EB Model. These practices bolster the study team's claim that if such funds are provided and used to implement these effective and research-based strategies, then significant student performance gains should follow.

Three Tier Approach

It should be clear that the design of the EB Model reflects the RTI model. RTI is a three-tier approach to meeting student needs. Tier 1 refers to core instruction for all students. The EB Model seeks to make core instruction as effective as possible with its modest class sizes, provisions for collaborative time, and robust professional development resources, including school-based, instructional coaches. Effective core instruction is the foundation on which all other educational strategies depend. Tier 2 services are provided to students struggling to achieve to standards before being given an IEP and labeled as a student with a disability. The EB Model's current Tier 2 resources, which are provided to every at-risk and EL student, include one core tutor for every prototypical school and then additional resources, triggered by at-risk and EL student counts, for tutoring, extended day, summer school, and additional pupil support. To that is added even more language resources for EL students. The robust levels of Tier 2 resources allow schools to provide a range of extra help services that often are funded only by special education programs that get many modestly struggling students back on track, and thus reduce the levels of special education students. Tier 3 includes all special education services.

Case Studies

As part of the study, several school level case studies were undertaken. The case studies provide the study team an opportunity to understand how successful Nevada schools utilize resources and to compare that resource utilization to the principles in the evidence-based approaches noted in this chapter. In this section, we describe the school selection process, detail the protocols used with the schools, and provide a summary of the common elements found between the schools. Summaries for each of the seven case study schools are included in Appendix J.

School Selection

Since this study's emphasis is on the resources needed for special needs students, the study team focused its case study school selection on those schools outperforming other Nevada schools with at-risk and EL students. The study team did not identify schools based on special education performance, as interventions and resources for these students are IEP specific and lessons learned are likely less transferrable across schools.

To identify schools that are successful serving at-risk and EL students, the study team analyzed two years of available 3rd-8th grade state assessment data to create a single composite proficiency percentage across both years, both subjects (math & reading), and all grades for every school in the state. Results were disaggregated for EL and FRL students. Based upon this data, the study team identified a pool of top-performing schools that were both performing at or above the statewide average overall and performing at the 90th percentile or higher for a given subpopulation. For FRL students, that meant schools had at least 55 percent of FRL students achieving proficiency based upon the composite score. For EL students, this benchmark was set at 40 percent. From the pool of top-performing schools, the study team attempted to select schools from different districts and of different sizes where possible. The study team also considered the 2015 results of the school performance framework system as confirmatory data point.

Two schools were selected because they had higher FRL concentrations, and were performing well with both EL and FRL students:

- Bracken Elementary, Clark County School District (CCSD) (5 out of 5 stars on 2015 SPF)
- Mackey Elementary, CCSD (4 out of 5 stars on 2015 SPF)

Three schools were selected as performing well with FRL students (though they had smaller concentrations of these students), highly rated (all 5-star schools), where of various school sizes, and provided geographic diversity.

- Hunter Lake Elementary, Washoe (5 out of 5 stars on 2015 SPF)
- Pahranagat Valley Elementary, Lincoln (5 out of 5 stars on 2015 SPF)
- Pleasant Valley Elementary, Washoe (5 out of 5 stars on 2015 SPF)

The study team also selected Vegas Verdes Elementary, which while not a highly rated school on the performance framework, has a high ELs concentration and is performing well with ELs comparatively:

- Vegas Verdes Elementary, CCSD (2 out of 5 stars on 2015 SPF)

Finally, the study team selected the one middle school that met the 55 percent or high-performance threshold with FRL students:

- Indian Springs Middle, CCSD (5 out of 5 stars on 2015 SPF)

The study team was limited in the number of schools that could be visited during the study and the seven schools identified above were selected to represent schools that were performing well with special needs populations; they are not the only schools that met the performance criteria.

Interview Protocol

The study team visited each school with the goal of understanding the structures the schools were using to achieve the student performance identified during the case study school selection process. An interview protocol was developed, which can be seen in Appendix J. The study team had two individuals visit each school site when possible. The day was structured with an initial meeting with the school principal and other leadership staff, where applicable, to discuss the protocol in its entirety. The remainder of the day was spent in one-on-one or small group teacher and staff interviews. For two schools, the interviews were conducted via phone. The interview protocol was used with both groups and was broken into nine areas:

- **General Background –** The study team asked about the community the school was in and any recent changes in student demographic changes.
- **School Staffing** – The study team asked about teacher turnover and acquired a detailed list of all staff in the building.
- **Student Achievement –** The study team asked about how student successes have been achieved with a focus on the types of specific improvement goals that had been set by the school.
- **Class Schedule -** The study team asked to understand the class schedule and where interventions and teacher professional development fit into the schedule.
- **Curriculum and Instruction –** The study team asked what instructional arrangements had been put in place to improve achievement, if the school had instructional coaches, what types of grouping practices where used, and if there were any specific instructional strategies in place for the special need populations. The study team also asked about the specific curriculum being used by the school.
- **Instructional Interventions** – The study team asked about specific interventions for struggling students including how those students were identified and monitored over time.
- **Assessments -** The study team asked for a list of the types of assessments used by the school and for which students each assessment was used.
- **Professional Development** – The study team discussed what professional development looked like in the school, including how it was developed and who implemented the professional development in the school.
- **School Culture –** The study team asked about school culture, including the positives and areas where there might be challenges.

The interviewers worked to have free flowing discussions with all participants. The goal was to cover each subject area, but not necessarily in the order identified in the protocol.

Summary Findings

Though the seven schools are in different districts and serve different student populations, several common themes came out of site visits. Not every school was found to have each of the characteristics listed below but, in each case, the clear majority of schools did have the characteristic.

- **Smaller class sizes (25 or below) -** Schools had smaller class sizes, especially in kindergarten through third grade. Some schools had larger class sizes in 4th and 5th grade due to budget constraints.
- **Leaders who trust and give autonomy to their teachers –** Though every school had its unique structure, a common theme of leadership was trust of teachers. This included strong grade level teams and teachers in leadership positions in the school.
- **A collaborative culture –** Schools discussed the importance of collaboration at all levels of the school. Schools discussed setting aside time for grade level collaboration and teams set up to implement the RTI system. Schools also saw parents and the greater community as important partners in the school.
- **A relatively stable teaching staff –** Many of the schools reported having very low teacher turnover rates, which contributed to consistency from year to year, and enabled a greater focus on continuous improvement.
- **Extended learning time –** Some of the schools offer extended learning time opportunities to the extent their budgets and staff allowed. Examples included computer lab and library availability before school; afterschool tutoring, often targeted to those students needing extra help; and summer school programs.
- **Data-driven decision making –** Schools discussed the importance of using student level data to drive instruction and in the implementation of RTI. Many teachers were able to produce student level data reports for their classes during interviews. Some schools had large data walls where students could track performance over time. Some schools had staff members dedicated to pulling student data reports and working with teachers to identify groupings and students needing additional support.
- **Strong RTI systems for struggling students –** Each school was implementing RTI to support students. Examples of RTI practices included a schoolwide RTI team that met each Wednesday morning examining the needs of all students by grade level. Schools had different levels of additional RTI support with most schools having some additional RTI support staff. One school fully embedding the RTI in the classroom, lacking any additional resources for RTI.
- **Preschool Programs –** Most of the schools had some form of preschool. For schools that offered preschool, programs ranged from universal to targeted based on student need.

The study team found that these schools are implementing the strategies in the EB model to varying degrees, supporting the use of the model to cost out an adequate level of resources for Nevada schools.

Using the EB Model to Identify Adequacy for Nevada Schools

This section provides the formulas and funding levels of every element in the EB Funding Model. The elements of the EB Funding Model are divided into five sections:

1. Staffing for core programs, which include preschool, full-day kindergarten, core teachers, elective/specialist teachers, substitute teachers, instructional facilitators/coaches, core tutors, core guidance counselors and nurses, supervisory aides, librarians, school computer technicians, principals/assistant principals, and school secretarial and clerical staff.
2. Dollar-per-student resources for gifted and talented students, professional development, instructional materials and supplies, formative/short cycle assessments, computers and other technology, career and technical education equipment and materials, and extra duty/student activities.
3. Central functions, which include maintenance and operations, central office personnel and non-personnel resources.
4. Resources for struggling students including at-risk tutors, at-risk pupil support, extended day personnel, summer school personnel, EL personnel, alternative school personnel and special education.
5. Personnel compensation resources including salary levels, health insurance, benefits for workers' compensation, unemployment insurance, retirement, and social security.

Before providing the summary of the EB formulas and elements, this section summarizes two more general issues necessary to understand how the study team proceeded from school- and district-level resources to per-pupil funding figures: student counts and prototypical schools and districts.

Student Counts

The EB model recommends that states use an average daily membership student count to distribute general aid. The model also needs a measure of the number of students from poverty backgrounds to trigger specific resources. In the past, this usually has been the number of students eligible for the federal free and reduced-price lunch program. Since districts can now provide free lunches to all students if they have a large number of poverty students, the count of free and reduced lunch students may not be available in some districts, often the largest districts in the state. So, the issue is whether to use a different indicator. One state, Illinois, provides a good example of the latter and uses the non-duplicated count of children receiving services through the programs of Medicaid, the Supplemental Nutrition Assistance Program, the Children's Health Insurance Program, or Temporary Assistance for Needy Families. EL and special education students will be counted as currently defined by the state.

There is one more important nuance on student counts. Previously the EB model defined at-risk students as the non-duplicated count of poverty students and EL students. The model then provided additional resources for all these students, including tutoring, extended day, summer school, and additional pupil support. In addition, all EL students also received an additional allocation for English as a Second Language (ESL) services. This definition confused most people who concluded that the model provided EL students just the ESL resources (see for example, Jimenez-Castellanos & Topper, 2012). Consequently, the EB model has changed its approach. For the purposes of the EB approach, and the

resultant per-pupil figures and weights, all EL students receive tutoring, extended day, summer school, ESL, and additional pupil support resources. Then, all non-EL at-risk students also receive resources for tutoring, extended day, summer school and additional pupil support resources.

Prototypical Schools

A key component of the EB model is the use of prototypical schools and districts to indicate the general level of resources in schools and districts and to serve as a heuristic to calculate the base per-pupil amount and the student weights. The EB model identifies resources for prototypical elementary, middle, and high schools, as well as a prototypical district. The model needs to use specific sizes in order for the prototypes to indicate the relative level of resources in the schools. Although modeling is based on these prototypes, this does not imply Nevada or any other state should adopt new policies on district size.

Prototypical School Sizes in the Evidence-Based Model

The EB approach starts by identifying resources for prototypical elementary, middle, and high schools with enrollments of 450, 450, and 600 respectively, drawing from research on effective school size (see Odden & Picus, 2014). It uses this approach and these prototypes to indicate the relative level of resources in schools, as well as to calculate a base per-pupil cost. These prototypical school sizes reflect research on the most effective school sizes, although few schools are exactly the size of the prototypes. Although many schools in Nevada and other states are larger or smaller than these prototypical school sizes, these prototypical sizes can still be used to determine a new base per-pupil figure, as the new base per-pupil figure would be provided for all students in a school or district, whatever the actual size. States such as Arkansas, New Jersey, and North Dakota have taken this approach.

Additionally, the EB model begins with a prototypical district size of 3,900, which comprises four 450-student elementary schools, two 450-student middle schools, and two 600-student high schools. This configuration is then used to estimate a district-level central office cost per student. Several states, including Arkansas, New Jersey, and North Dakota have used the micro-EB formulas and ratios to estimate a base per-pupil cost estimate for their foundation school finance formula structure. Although actual school sizes vary, the prototypes provide good estimates of a base cost per pupil in the context of each of those states. The Wisconsin Study (Odden et al., 2007) estimated a base per-pupil cost using prototypical schools and a prototypical district, then compared that to a district-specific figure created by adapting the ratios and formulas to every school and district size. That study found that the difference between the two methods was about $50 per pupil, a small amount in a base spending level of approximately $10,000 per pupil. The EB prototypes should not be construed to imply Nevada needs to replace all school sites with smaller or larger buildings or break school districts into smaller units; they are used as heuristics to determine the estimated base cost per student.

2018 Core EB Nevada Recommendations

Table 5.1 provides a detailed summary of the core 2018 EB Nevada model resources:

Table 5.1 Summary of 2017 Nevada Adjusted Evidence-Based Model Recommendations

Model Element	2016 Evidence-Based Recommendation
Staffing for Core Programs	
1a. Preschool	Full day preschool for children aged 3 and 4. One teacher and one aide in classes of 15.
1b. Full-Day Kindergarten	Full-day kindergarten program. Each K student counts as 1.0 pupil in the funding system.
2. Elementary Core Teachers/ Class Size	Grades K-3: 15 Grades 4-5/6: 25. (Average class size of 17.3)
3. Secondary Core Teachers/ Class Size	Grades 6-12: 25. Average class size of 25
4. Elective/Specialist Teachers	Elementary Schools: 20% of core elementary teachers Middle Schools: 20% of core middle school teachers High Schools: 33 1/3% of core high school teachers
5. Instructional Facilitators/Coaches	1.0 Instructional coach position for every 200 students
6. Core Tutors/Tier 2 Intervention	One tutor position in each prototypical school (Additional tutors are enabled through at-risk and EL pupil counts in Elements 22 and 26)
7. Substitute Teachers	5% of core and elective teachers, instructional coaches, tutors (and teacher positions in additional tutoring, extended day, summer school, EL, and special education)
8. Core Pupil Support Staff, Core Guidance Counselors, and Nurses	1 guidance counselor for every 450 grade K-5 students 1 guidance counselor for every 250 grade 6-12 students 1 nurse for every 750 K-12 students, which supports a half time nurse in each prototypical elementary and middle school and a full-time nurse in each prototypical high school. (Additional student support resources are provided on the basis of at-risk and EL students in Element 23)
9. Supervisory and Instructional Aides	2 for each prototypical 450-student elementary and middle school 3 for each prototypical 600-student high school
10. Library Media Specialist	1.0 library media specialist position for each prototypical school
11. Principals and Assistant Principals	1.0 principal for the 450-student prototypical elementary school 1.0 principal for the 450-student prototypical middle school 1.0 principal and 1.0 assistant principal for the 600-student prototypical high school
12. School Secretarial and Clerical Staff	2.0 secretary positions for the 450-student prototypical elementary school 2.0 secretary positions for the 450-student prototypical middle school 3.0 secretary positions for the 600-student prototypical high school
13. Gifted and Talented Students	$40 per pupil
14. Intensive Professional Development	10 days of student-free time for training built into teacher contract year, by adding five days to the average teacher salary $125 per pupil for trainers (In addition, PD resources include instructional coaches [Element 5] and time for collaborative work [Element 4])
Dollar-Per-Student Resources	
15. Instructional Materials	$190 per pupil for instructional and library materials

	$50 per pupil for each extra help program triggered by at-risk and EL students as well as special education
16. Short Cycle/Interim Assessments	$25 per pupil for short cycle, interim and formative assessments
17. Technology and Equipment	$250 per pupil for school computer and technology equipment
18. CTE Equipment/ Materials	$10,000 per CTE teacher for specialized equipment
19. Extra Duty Funds/ Student Activities	$300 per student for co-curricular activities including sports and clubs for grades K-12 $50 per preschool student
Central Office Functions	
20. Operations and Maintenance	Separate computations for custodians, maintenance workers and groundskeepers, and $305 per pupil for utilities
21. Central Office Personnel/Non-Personnel Resources	A dollar per student figure for a prototypical 3,900 student central office based on the number of FTE positions generated – 8 professional and 15 classified positions – and the salary and benefit levels for those positions. The per-pupil figure also includes $300 per pupil for misc. items such as Board support, insurance, legal services, etc.
Resources for Struggling Students	
22. Tutors	1.0 tutor position for every 100 EL students and one tutor position for every 100 non-EL, at-risk students.
23. Additional Pupil Support Staff	1.0 pupil support position for every 125 EL students and one tutor position for every 125 non-EL, at-risk students.
24. Extended Day	1.0 teacher position for every 120 EL and for every 120 non-EL, at-risk students.
25. Summer School	1.0 teacher position for every 120 EL and for every 120 non-EL, at-risk students.
26. Staff for English Learner (EL) Students	As described above: 1.0 tutor position for every 100 EL students; 1.0 pupil support position for every 125 EL students; 1.0 extended day position for every 120 EL students; and 1.0 summer teacher position for every 120 EL students. In addition, 1.0 ESL teacher position for every 100 EL students.
27. Alternative Schools	One assistant principal position and one teacher position for every 7 students in an alternative program. One teacher position for every 7 Welcome Center eligible EL students.
28. Special Education	8.1 teacher positions per 1,000 students, which includes: 7.1 teacher positions per 1,000 students for services for students with mild and moderate disabilities and the related services of speech/hearing pathologies and/or OT PT. This allocation equals approximately 1 position for every 141 students. **Plus** 1.0 psychologist per 1,000 students to oversee IEP development and ongoing review, included in the central office calculation. This provides 3.9 psychologist positions in the central office. **In addition** Full-state funding for students with severe disabilities, and state-placed students, and Federal Title VIB, with a cap on the number covered at 2% of all students.

Calculating the Base Per-Pupil Cost and Pupil Weights

To estimate adequacy costs based on the model described in Table 5.1, the study team developed an Excel-based simulation that provides the evidence-based core or foundational cost per pupil as well as computes pupil weights for special education, at-risk students, and EL students. Critical to these estimates are the costs of personnel. Salary and benefit data used in included in Appendix I.

With these compensation estimates, the per-pupil EB base expenditure is estimated to be $9,983, with extra weights of 0.31 for at-risk students and 0.40 for EL students. The per-pupil EB preschool cost estimate is $13,628, which computes to an extra weight of 0.37 relative to the base per-pupil expenditure estimate of $9,983. The cost estimate for alternative schools and the EL Welcome Center program for refugee EL students is $16,219 per pupil, which computes to an extra weight of 0.62 relative to the base per-pupil figure of $9,983.

We note that the EL per-pupil weight is a combination of extra tutoring ($902), extended day ($760) and summer school ($760) programming, additional pupil support ($691), and additional English language service ($902)—a total extra of $4,015, which equates to an extra weight of 0.40 relative to the base of $9,983. In calculating the extended day and summer school portions, however, the model assumes only half the EL students would attend the programs, drawing from research on attendance for these programs. If the model assumed a larger percentage of EL students would attend the extended day and summer school programs, the weight would increase. At 100 percent attendance, the total extra cost would be doubled for each of extended day and summer school, or $1,520. That would bring the total extra resources for EL to $5,535 ($4,015 plus $1,520). The EL weight would then be 0.55. Thus, the model predicts the *EL extra weight could range from 0.40 to 0.55*, depending on the assumed percentage of attendance for extended day and summer school programs, with the lower weight based on the traditional 50 percent assumed attendance.

The EB model includes an EL Welcome Center program for EL students entering schools after experiencing refugee status, violence in their home countries, no previous formal education, or other forms of trauma, who need a program to more slowly acculturate them into a regular Nevada school. The estimated per-pupil figure for the *EL Welcome Center program* for refugee EL students is $16,219 per pupil, which computes to an *extra weight of 0.62.*

The non-EL, per-pupil, at-risk weight could also vary depending on assumed attendance. The total extra for non-EL, at-risk students is a combination of extra tutoring ($902), extended day ($760), and summer school ($760) programming, additional pupil support ($691) or a total of $3,113, which equates to an extra weight of 0.31. The model would add $1,520 to that if it assumed 100 percent attendance for extended day and summer school programs, which would bring the total for non-EL, at-risk students to $4,633, which equates to an extra weight of 0.46. Thus, we could conclude that the *non-EL, at-risk weight could range from 0.31 to 0.46*, depending on the assumed percentage of attendance for extended day and summer school programs, with the lower weight based on the traditional 50 percent assumed attendance.

The EB model assumes the state funds 100 percent of the excess costs of programs for students with severe and profound disabilities. To estimate costs for students with mild and moderate disabilities, the EB model uses a "census" approach and computes an additional amount based on the count of *all* students in a district—not on a count of the special education students in each district. The EB estimate for the cost of special education for students with mild and moderate disabilities is $654 per pupil for ***all*** students. This equates to a weight of 0.07 applied to the total number of students in a district (or state). The effect is that the total revenue generated through the EB Model for special education for children with *mild and moderate disabilities* is equal to the base EB cost estimate (in this model $9,983) times 0.07 for all students in the district (or state).

If a census approach was not used and a weight was instead applied to just mild and moderate students- about 10 percent of total enrollment- the weight would be .70, generating $6,988 per mild and moderate special education student.

VI. Draft Recommendations and Additional Stakeholder Feedback

The following chapter presents the draft recommendations from the study team's August 1st report, then feedback from stakeholders gathered in September. Chapter VII will present the finalized recommendations and fiscal impact.

Draft Recommendations

The 2012 AIR report made a number of recommendations focused on modifying Nevada's existing funding system. The current study team's recommendations center on an approach to replace the existing funding system with a weighted student formula. Many of the recommendations made in this report could be applied to the existing system but the study team believes an overhaul of the system, likely phased in over time, would provide the state an equitable and student-oriented funding system that meets the characteristics of a good state-level funding formula described in Chapter 1. The study team recommends Nevada implement a new funding formula that will be:

Cost-based, with a base amount and adjustments for student and district characteristics determined by the resources needed to meet state standards and requirements.

Responsive to student need, through the use of adjustments, or weights, the system should provide additional resources to students based on need, such as being an at-risk, EL, or special education student. Currently, the system provides resources through categorical funding streams for these students. A weighted formula would instead ensure all students that have these needs receive the same resources regardless of the availability of categorical funds for their school.

Responsive to district characteristics, through three separate adjustments: (1) a district size adjustment, (2) a comparative wage index (CWI), and 3) a necessarily small schools adjustment. Currently, the state applies a basic support ratio that accounts for size, density, and cost differences by creating a relative cost factor, meaning the sum of these district characteristics in relation to the state average. The study team believes the funding system's treatment of these characteristics should be: (1) unpackaged into separate adjustments, and (2) not measured in relative terms. For example, currently if a district experienced increased cost-of-living pressures, the funding system would only make an adjustment to its funding in relationship to the experience of other districts. So, if all the districts experienced the same increase in cost pressures—therefore increasing the statewide average—the relative change would be zero, even though it would be more costly to operate in all districts. The new approach would treat each adjustment for each district individually allowing for the recognition of all changing needs.

Transparent and flexible. By providing resources through a straightforward base and weights applied to generate resources for all students, not just those in schools that receive targeted funding streams, the formula should ensure the funding system is easy to understand and provides greater flexibility in how resources can be used to serve students. This increased transparency might also make it easier for districts to design student-weighted systems for their school-level funding.

Equitable. While a full equity analysis was outside of the scope of this study, the study team puts forth the following consideration: the resources inside the system meet equity criteria, but the combination of a low level of state support and unlimited use of outside local resources may be creating inequities in actual expenditures between districts. Increasing the level of state support that is equalized through the use of a cost-based funding model should begin to address this issue. As analysis in chapter 3 showed, the state's current system has been measured as more inequitable overtime by national publications.

Recommended Base Costs and Adjustments

To determine the appropriate base amount and adjustments for a new weighted student formula, the study team considered all available data about current practices in the state and nationally, as well as adequacy findings from the current study and prior studies conducted in Nevada. This included:

- The current study's professional judgment and evidence-based approach findings.
- The results of the 2012 AIR study and the study team's updated analysis of current student need adjustments in comparison states. Since the updated comparison state analyses were focused on current practice in comparison states, and were not necessarily adequacy or cost-based adjustments, the study team also used results of adequacy studies conducted nationally over the past 10 years as another contextual comparison point.
- The 2006 study conducted by APA for the legislature, which used two approaches to set both a "current" funding target (successful schools approach) and a "goal" funding target (professional judgment approach). The successful schools approach developed a base cost by examining the spending of schools that successfully meet academic performance standards at the time as a starting point for phasing in an adequate funding system tied to increased funding as performance expectations increased.
- The professional judgment findings from the 2015 APA PJ study for the Lincy Institute at UNLV.

Base

Table 6.1 presents possible base amounts from the results of this current study, compared to the state's FY17 Basic Support Guarantee and the results of prior adequacy study work done by APA in Nevada.

Table 6.1: Base Amount Alternatives

	Basic Support Guarantee (16-17)	2006 Study Successful Schools	2006 Study PJ	2015 PJ/ 2018 PJ	2018 EB
Prior Study Figure	-	$4,660	$7,229	$8,577	-
Data Year	FY17	FY04	FY04	FY13	FY17
Inflation Factor	-	1.29	1.29	1.08	-
2016-17 Figure (Inflated)	$5,387[32]	$5,988	$9,289	$9,238	$9,983

To make the figures comparable, the study team inflated the results of the 2006 and 2015 studies into FY2017 dollars. The resulting base amounts present three different methods of determining a base:

[32] Nevada's 2016-17 BSG in statute is $5,774. The figure shown is that amount less $387 for transportation.

- The state's FY2017 Basic Support Guarantee (BSG)- excluding transportation- which is not cost-based, and is instead based on available resources;
- The 2006 Successful Schools base amount, which is cost-based and represents the resources needed (at that time) to perform at the level of the most successful schools in the state. This is a relative performance level and did not represent what it takes to meet all state standards and requirements.
- The 2006 PJ base, 2015 PJ/2018 PJ base, and the 2018 EB base are also cost-based and reflect the resources needed to ensure all students can meet all state standards and requirements.

In FY17, the Basic Support Guarantee once transportation dollars were excluded was $5,387 per student. This amount does not include "outside" local revenues for districts so reported differences between recommendations and actual would be lower if those resources were included.

The inflation-adjusted 2006 successful schools base cost is $601 more per student than the FY17 BSG, at $5,988. While this does not represent a full adequacy base amount, it is at least a cost-based amount for consideration as a starting point for a new system. The study team recommends an update to the successful schools data analysis to ensure the amount is similar once the pool of schools is updated to reflect the current spending of schools performing at the highest levels in the state.

The 2006 PJ, 2015 PJ, and 2018 EB base amounts would be considered the cost of full adequacy at the base level, or the resources needed to meet all standards and requirements. The figures range from $9,238 to $9,983. To be conservative, the state could use the lower of the two figures as the base amount, or choose to implement another amount within this range.

Student Need Adjustments

To determine student needs adjustments, the study team compared the results of all adequacy studies (2006, 2015, and 2018) against the results of the AIR study/updated analysis and results of other adequacy studies nationally for the past 10 years.[33] Weights are presented in two ways, against the full adequacy base of each study, or against the starting base amount recommended ($5,988 derived from the 2006 successful schools approach). For results from other states, the weight shown is against that state's base amount (current or adequacy recommendation).

At-Risk

Table 6.2 looks at possible adjustments for at-risk students from each of the data sources.

[33] Aportela, A., Picus, L., Odden, A. & Fermanich, M. (2014). *A Comprehensive Review of State Adequacy Studies Since 2003*. Augenblick, Palaich and Associates (2018). *Alternative Approaches to Recalibration and Reconciliation of Study Results to Provide Final Recommendations.*

Table 6.2: At-Risk Adjustment Alternatives

Nevada Studies				
	2006 Study PJ	**2015 PJ**	**2018 PJ**	**2018 EB**
Applied to Each Study's Adequacy Base	.35	.35	.20-.29	.31-.46
Scaled to Apply to Base of $5,988	.54	.54	.31-.45	.52-.77
Comparison to Other States/Studies				
AIR Study/Updated Analysis, Weight in Each State Against their Base: .22 (average)				
National Adequacy Comparison, Weight Against Adequate Base: .35 (average)				

At-risk weights compared to an adequacy base ranged from 0.20 (lowest point in the 2018 PJ results) to .46 (highest point for the 2018 EB results). Within that range is the .35 weight that was recommended in 2006 and 2015 in Nevada, and is the average weight seen in other adequacy studies across the country. Each of these weights represent the total resource need from all available funding sources- state, local and federal. To determine the weight to be included in a new funding system in Nevada, the weight would need to be adjusted to represent the resource level needed from state and local sources, knowing that federal funding would be available separately.

In comparison states, the imputed at-risk weight was .22 on average based on the updated AIR analysis which is similar to the low end of the Nevada adequacy study range. The .22 weight represents the resources currently allocated to at-risk students in each of the comparison states, and is not necessarily representative of the resources needed for students to be successful ("what is" vs. "what should be") so it is not surprising that the figure is lower than most of the adequacy study findings.

Using this information, the study team's recommendation is an at-risk weight of .30. The study team believes that this weight, while higher than seen on average in the comparison states, is a more accurate representation of the level of state and local resources needed to serve at-risk students. Federal resources through Title I would be a separate funding stream. A weight of .30 would generate $2,771 per at-risk student when applied to the full adequacy base of $9,238, or $1,796 when applied to the lower base of $5,988. To generate the $2,771 dollar amount on the lower base would require a scaled weight of .46.

English Learners

The study team considered the range of alternatives for EL weights, as shown in Table 6.3.

Table 6.3: English Learners Adjustment Alternatives

Nevada Studies				
	2006 Study PJ	**2015 PJ**	**2018 PJ**	**2018 EB**
Applied to Each Study's Adequacy Base	0.47	0.41	.57 (average)	.40-.55
Scaled to Apply to Base of $5,988	0.73	0.63	.88	.67-.92
Comparison to Other States/Studies				
AIR Study/Updated Analysis, Weight in Each State Against their Base: .44 (average)				
National Adequacy Comparison, Weight Against Adequate Base: .49 (average)				

Results of all adequacy studies ranged from .40–.57 (single EL weight). Both the comparison states and national adequacy recommendations were in the same range at .44 and .49 respectively. The study team recommends the state use a weight of .50 for ELs. Applied against the full adequacy base, the weight would generate $4,619 and a scaled weight would be .77 against the $5,988 base.

The single EL weight could also be disaggregated into a three-tier weight based on student language acquisition level based up their WIDA results. Using the relationship seen in the 2018 PJ study, weights of .78 for L1/L2s, .40 for L3/L4s, and .32 for L5/L6s could be used. The state could also consider whether a student that is eligible for an at-risk weight and an EL weight should receive both weights, the higher of the two weights or a lower combined weight.

Special Education

Table 6.4 next looks at alternatives for a special education adjustment; figures are shown as the combined weight for all special education need levels unless otherwise noted.

Table 6.4: Special Education Adjustment Alternatives

Nevada Studies				
	2006 Study PJ	**2015 PJ**	**2018 PJ**	**2018 EB**
Applied to Each Study's Adequacy Base	1.2	1.1	1.4	.70 (mild and mod)
Scaled to Apply to Base of $5,988	1.9	1.7	2.16	1.17 (mild and mod)
Comparison to Other States/Studies				
AIR Study/ Updated Analysis, Weight in Each State Against their Base: .9 (average)				
National Adequacy Comparison, Weight Against Adequate Base: 1.1 (average)				

The 2018 EB results include a single weight for mild and moderate special education (.70) and suggest all higher cost students be paid for directly by the state. The three PJ data points are intended to provide the resources needed for all special education students, including higher need/cost students, and range between 1.1 (2015 PJ)–1.4 (2018 PJ). This range is at or above the results of national adequacy recommendations, on average. Again, these weights represent total need from all available funding sources and often a weight for a state funding system would be lower, recognizing that federal resources are available. From the AIR study, a .9 weight, on average, was seen in practice in other state funding systems.

The study team would recommend that the state consider a 1.1 full adequacy weight (representing state and local share) applied to all special education students, which would generate $10,162 per special education student applied to the adequacy base and $6,587 per student applied to the lower base. The scaled weight would need to be 1.9 to generate the $10,162 adequacy dollar level on the lower base. If the state would like to develop a three-tier funding model for special education and provide differentiated weights by student need, the proportionate relationship from the 2018 study could be applied to the combined full adequacy weight of 1.1, which would result in weights of .63 for mild students in the general education 80 percent or more of the day), 1.18 for moderate students (in the general education classroom 40 to 79 percent of the day), and 2.70 for severe students (in the general

education less than 40 percent of the day). The scaled weight would result in tiered weights of 1.08, 2.03, and 4.60.

The state could also consider the model recommended by the 2018 evidence-based approach providing a weight for mild and moderate special education students (either applied to actual student counts or on a census basis), then continue to fund higher need students separately.

Gifted and Talented

Information about a possible gifted and talented adjustment was more limited, as shown in Table 6.5.

Table 6.5: Gifted and Talented Adjustment Alternatives

Nevada Studies				
	2006 Study PJ	**2015 PJ**	**2018 PJ**	**2018 EB**
Applied to Each Study's Adequacy Base	**–**	**–**	**–**	Less than 0.01
Scaled to Apply to Base of $5,988	**–**	**--**	**–**	0.01
Comparison to Other States/Studies				
AIR Study/Updated Analysis, Weight in Each State Against their Base: weights range from .02 to .60 (if the student has an IEP).				
National Adequacy Comparison: not available				

Neither the 2006 or the 2015 PJ study addressed gifted and talented student funding. The 2018 PJ panelists believed that with an adequate base no additional resources would be needed to serve gifted and talented, and the resources identified by the EB approach were minimal. Looking nationally, resources provided tended to be less than $200 a student. Higher weights, such as the .60 noted as the highest of the range were seen when a student had an IEP and would therefore be eligible for a special education adjustment. As such, the study team would not necessarily recommend an additional weight for gifted and talented if an adequate base is implemented. However, if a lower base amount is used, the study team would recommend a 0.05 weight.

Summary of Base Cost and Student Need Adjustment Alternatives

The study team recognizes the implementing the full adequacy base amount of $9,238 is significantly higher than the current Basic Support Guarantee (BSG), and further, the state does not currently provide funds for at-risk and EL students outside of categorical funding streams. Therefore, in this section we present three alternative scenarios for implementing the above recommendations:

1. Full adequacy base and weights
2. Lower base and scaled weights
3. Lower base and relative weights

Full Adequacy

This alternative would represent the cost of fully implementing adequacy recommendations using a base cost derived from the 2018 EB/2015 PJ ($9,238) and the full adequacy weights recommended in

each section above. Single weights or tiered weights for EL and for special education could be used, in this scenario and the two that follow.

Table 6.6: Base and Weights in Full Adequacy Scenario

Full Adequacy Scenario	
Base	$9,238
Student Need Weights	
At-Risk	.30 ($2,771)
English Learners	.50 ($4,619)
Special Education	1.1 ($10,162)

Scaled Weights

The second alternative would use the inflated 2006 successful schools base of $5,988 and then use a set of scaled weights to generate the same dollar figure per at-risk, EL, or special education student, as was generated in the full adequacy scenario. The study team would also recommend implementing a weight for gifted and talented, if the full adequacy base was not used. This approach would target additional resources towards at-risk, EL, special education, and gifted students first.

Table 6.7: Base and Weights in Current Base and Scaled Weights Scenario

Scaled Adjustments Scenario	
Base	$5,988
Student Need Weights	
At-Risk	.46 ($2,771)
English Learners	.77 ($4,619)
Special Education	1.70 ($10,162)
Gifted and Talented	.05 ($299)

Relative Adjustments

The final alternative would also use the inflated 2006 successful schools base ($5,988) and then apply the full adequacy weights to that amount, which would result in a lower level of resource generated, but at the same relative level in terms of the base. Though this change is below adequacy level for the special need students, it would be a dramatic shift towards a more student-centered funding approach, providing targeted dollars to all eligible students, and allow resources to grow similarly between the base and special needs funding over time.

Table 6.8: Base and Weights in Current Base and Relative Weights Scenario

Relative Weights Scenario	
Base	$5,988
Student Need Weights	
At-Risk	0.30 ($1,794)
English Learners	0.50 ($2,994)
Special Education	1.1 ($6,587)
Gifted and Talented	0.05 ($299)

Prior to implementing a relative weight for special education, a comparison against current expenditures were need to be made to ensure that funding does not drop below current funding and violate federal maintenance of effort and fiscal support requirements.

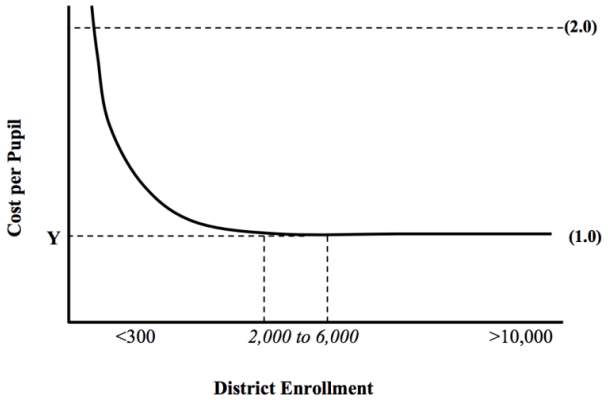
Adjustments for School/District Characteristics

In any scenario above, the study team also recommends providing three additional adjustments to address school/district characteristics: district size, cost of living through a comparable wage index (CWI), and necessarily small schools.

District Size

Given the more limited scope of the 2018 study, district size was not addressed. However, the study team believes that the state funding system needs to include an adjustment that accounts for the different costs experienced in districts due to having differing economies of scale. The 2012 AIR report also highlighted that such an adjustment would be necessary and provided the following depiction of such a relationship between size and cost (creating a J curve) as seen in school finance research:

Figure 6.1: J Curve



This relationship is consistent with the results of the 2018 EB and PJ studies, that while based on two different district sizes (3,900 for EB, and 50,000 for PJ) were similar in terms of per-pupil costs. The $9,238 figure from the PJ would be the floor figure where the size adjustment would be 1.0 and the higher EB figure of $9,983 supports the concept that costs increase slightly as size decreases to a certain point and then increase exponentially.

The study team looked to the findings of the 2006 study- including both a minimum data point at 50 students and a smaller data point at 780 students- to update a size adjustment for Nevada. An updated formula was developed to generate the different base amounts needed at each of the size data points that is as follows:

*For districts above 3,900 students: size adjustment factor = (-.000001735*enrollment) + 1.0868*

*For districts below 3900 students: size adjustment factor = (-0.281*ln(enrollment)) + 3.4*

Table 6.9 presents the size adjustment factor for districts at different size points. The study team recommends that these size adjustment factors be applied to the base separately from any other adjustments for district characteristics or student need.

Table 6.9: Possible District Size Adjustment

District Enrollment	Size Adjustment Factor
50	2.30
100	2.11
250	1.85
500	1.65
1,000	1.46
2,000	1.26
3,000	1.15
4,000	1.08
7,500	1.00
10,000	1.00
50,000	1.00
300,000	1.00

Comparable Wage Index

As describe in chapter 3, APA believes the CWI is the best metric to use in looking at the differential in costs facing school districts related to personnel, as long as other district characteristics, such as size, are being taken into account elsewhere. The most recent national data on CWI comes from Lori Taylor of Texas A&M University[34] and has been updated through 2013. Every district in the country and each state has an identified CWI figure. The figures can be used to compare districts to one another, but adjustments need to be made, which will be described below. Table 6.10 shows the raw CWI figures for each Nevada district along with the statewide average for each year.

Table 6.10: Raw CWI Figures for Nevada Districts

	2011	2012	2013
Clark	1.557	1.573	1.590
Churchill	1.349	1.358	1.374
Elko	1.349	1.358	1.374
Esmeralda	1.349	1.358	1.374
Eureka	1.349	1.358	1.374
Humboldt	1.349	1.358	1.374
Lander	1.349	1.358	1.374
Lincoln	1.349	1.358	1.374
Mineral	1.349	1.358	1.374
Nye	1.349	1.358	1.374
Pershing	1.349	1.358	1.374
White Pine	1.349	1.358	1.374

[34] http://bush.tamu.edu/research/faculty/Taylor_CWI/

	2011	2012	2013
Douglas	1.419	1.428	1.445
Lyon	1.419	1.428	1.445
Carson City	1.419	1.428	1.445
Storey	1.453	1.453	1.463
Washoe	1.453	1.453	1.463
State	**1.520**	**1.531**	**1.547**

The table above also shows one of the issues with using the CWI figure. Detailed data is not always available for each specific district; the limited data means there are only four different CWI figures generated for Nevada, with Clark County the only district with its own CWI figure. The other figures can be looked at as regional adjustments. Table 6.10 data shows CWI figures increasing for each year, based on the increased cost of staff.

To use the figures to compare cost differences between districts in Nevada, one of two adjustments can be used. Table 6.11 shows an adjustment that uses the lowest CWI figure as the baseline for the state. This would ensure that no district loses funding as the CWI is applied. The lowest CWI figure is divided into all other CWI figures to create this adjustment. Applying the CWI in this manner ensures no loss of funding but might overestimate the total funding needed in the state if the CWI is being applied to a cost-based funding figure that was derived using statewide average cost salaries.

Table 6.11: CWI Indexed to Lowest Cost Counties

	2011	2012	2013	Three Year Average
Clark	1.154	1.158	1.157	1.156
Churchill	1.000	1.000	1.000	1.000
Elko	1.000	1.000	1.000	1.000
Esmeralda	1.000	1.000	1.000	1.000
Eureka	1.000	1.000	1.000	1.000
Humboldt	1.000	1.000	1.000	1.000
Lander	1.000	1.000	1.000	1.000
Lincoln	1.000	1.000	1.000	1.000
Mineral	1.000	1.000	1.000	1.000
Nye	1.000	1.000	1.000	1.000
Pershing	1.000	1.000	1.000	1.000
White Pine	1.000	1.000	1.000	1.000
Douglas	1.051	1.051	1.051	1.051
Lyon	1.051	1.051	1.051	1.051
Carson City	1.051	1.051	1.051	1.051
Storey	1.077	1.069	1.064	1.070
Washoe	1.077	1.069	1.064	1.070

The CWI figure above was indexed using a 1.000 baseline range from 1.000 to 1.157 in 2013. This means the highest CWI district, Clark County, needs to pay an estimated 15.7 percent more than the lowest

CWI districts to attract the same personnel. The table also shows a three-year average for each district. It is often suggested that use of a multiyear average can smooth out any fluctuations in the figures over time. The three-year average CWI figures range from 1.000 to 1.156. Though the minimum and maximum figures do not show much change with the averaging from the 2013 figures, Washoe and Storey receive a .006 percentage point increase using the averaging.

The other adjustment option is to index each district against the statewide average CWI figure. This adjustment does mean some districts would have resources adjusted down when the CWI is applied but may be more appropriate when applied to a statewide average cost-based funding figure. Table 6.12 shows the CWI figures when adjusting to the statewide average. The 2013 CWI ranges from a low of .888 to a high of 1.028. This means the lowest CWI districts would receive 88.8 percent of the funding that the CWI is applied to and the highest would receive 2.8 percent more. The relative difference between the lowest and highest CWI figures remains similar to the 1.000 figure. Again, a three-year average would smooth the CWI differences and would result in a range of .888 to 1.026.

Table 6.12: CWI Indexed to Statewide Average

	2011	2012	2013	Three-Year Average
Clark	1.025	1.028	1.028	1.027
Churchill	0.888	0.887	0.888	0.888
Elko	0.888	0.887	0.888	0.888
Esmeralda	0.888	0.887	0.888	0.888
Eureka	0.888	0.887	0.888	0.888
Humboldt	0.888	0.887	0.888	0.888
Lander	0.888	0.887	0.888	0.888
Lincoln	0.888	0.887	0.888	0.888
Mineral	0.888	0.887	0.888	0.888
Nye	0.888	0.887	0.888	0.888
Pershing	0.888	0.887	0.888	0.888
White Pine	0.888	0.887	0.888	0.888
Douglas	0.934	0.933	0.934	0.934
Lyon	0.934	0.933	0.934	0.934
Carson City	0.934	0.933	0.934	0.934
Storey	0.956	0.949	0.946	0.950
Washoe	0.956	0.949	0.946	0.950

Regardless of the CWI chosen, it should only be applied to a portion of the funding dollars since it is a wage adjustment. Often a factor around .90 is used to adjust for the portion of funding that is non-personnel related. Another way this sort of factor could be implemented is to adjust this cap by the percentage of operating budget that is related to salaries, which is often a smaller percentage in rural communities; Colorado is an example of this sliding scale application.

Necessarily Small Schools

If Nevada elects to adopt a foundation formula model, the study team recommends adopting one of several approaches for compensating for small and/or isolated schools that is better aligned with the foundation concept than the current grouping of districts within the DSA. Each of these approaches is currently used in one or more states and could be adapted for use in Nevada. The three approaches described here include 1) student weights; 2) student count adjustments; and 3) minimum staffing/funding.

Student Weights

Arizona provides the best example of using student weights for generating additional revenues specifically for small and/or isolated schools. Under Arizona's formula, schools in districts with fewer than 600 students qualify for small school student weights. A qualifying district receives two sets of weights, one for elementary students (defined as students in grades K-8) and another for secondary students (defined as students in grades 9-12). The size of the weights decrease as district enrollment increases, with the highest weights for districts under 100 students, the next highest for districts between 100 and 499 students, and the lowest weight for districts between 500 and 600 students.

Districts that are eligible for small schools funding may also qualify for isolation funding if they meet certain criteria (a small isolated school district must contain no school that is fewer than thirty miles, or fifteen miles if road conditions and terrain cause driving to be slow or hazardous, from another in-state school serving similar grade ranges). Like the small school weighting, there are two sets of student weights, one each for elementary and secondary students, and the weights decrease as district enrollment increases up to the 600-student threshold.

Although the Arizona model is applied at the district level, a similar weighting scheme could be used for individual schools meeting specific size and isolation criteria that are appropriate to Nevada.

Adjusted Student Counts

A second approach to providing additional funding for small and/or isolated schools is to adjust its enrollment up to generate more formula funding. Minnesota uses this type of approach. Under this approach, a formula is used to increase the enrollment of schools that meet specific enrollment and isolation criteria. Minnesota applies two different formulas, one for elementary school sparsity and a second for secondary school sparsity. Both sparsity formulas are calculated at the school level.

Under the Minnesota example, schools qualifying for sparsity revenue must be both small (elementary schools with fewer than 20 students per grade and high schools with fewer than 400 students) and isolated (elementary schools at least 19 miles from the next nearest elementary school and high schools with an isolation index – a function of attendance area geographical size and miles to the nearest high school – greater than 23). Similar to a student weight, both formulas effectively increase enrollment in proportion to the maximum qualifying enrollment (140 students for elementary schools and 400 students for high schools) and multiply the foundation base amount by the additional enrollment count.

Minimum Staffing/Funding

The third approach provides either 1) a minimum number of staff, or 2) a minimum school funding amount, for schools whose enrollment falls below a certain enrollment threshold. Wyoming and California provide examples of these two methods.

In Wyoming, any school with 49 or fewer students is guaranteed staffing of a 1.0 FTE assistant principal plus 1.0 FTE teachers for every seven students. These schools also receive per-pupil funding allocations for instructional materials and supplies, technology, gifted and talented programs, professional development, assessments, and student activities. This formula applies to both elementary and secondary schools.

California's formula, which was modeled as an alternative in the AIR report, guarantees a minimum amount of funding to qualifying "necessarily small" schools based on enrollment and the number of teachers employed at the school. Qualifying elementary schools must serve fewer than 101 students and be situated such that students would have to travel more than 10 to 15 miles one way, depending on the school's enrollment, to the next nearest school. Qualifying high schools must serve fewer than 287 students and be located such that students would have to travel at least 7.5 to 30 miles round trip, depending on the school's enrollment size, to attend the next closest high school.

Minimum funding under California's formula in 2017-18 for necessarily small elementary schools ranged from $153,050 for a school with 24 or fewer students and one teacher, to $612,200 for a school with between 73 and 96 students and four teachers. For high schools, necessarily small school funding ranged from $124,250 for schools with 19 or fewer students and one teacher, to $2,043,300 for a school with between 249 and 286 students and 15 teachers.

The study team is not recommending any one of the three approaches described above at this time, but it does recommend the state further consider which of the three options may best meet the context and needs of the state's necessarily small schools.

Stakeholder Feedback on Draft Recommendations and Implementation

Following the release of the draft report on August 1, a second round of stakeholder feedback was collected via regional educator listening sessions and another online survey. Information about each was distributed to each district's superintendent through NDE. Superintendents then shared provided meeting and survey notices with staff and their communities.

The week of September 17, the study team conducted a series of seven educator listening sessions in five different cities around the state. The listening sessions were open to any interested education practitioners, including school leaders, teachers, other instructional staff, central office administrators and staff, and board members. Each session included a short introduction of the study, then provided educators the opportunity to give their feedback on the study's draft recommendations and how the finance system should be revised to best address the needs of students, schools and districts.

Listening sessions were held on the following dates, at the given locations:

Date	Location
Monday, September 17, 2018 5:30-7:30 p.m.	Library at White Pine High School 1800 Bobcat Drive, Ely, NV 89301
Tuesday, September 18, 2018 5:30-7:30 p.m.	Auditorium at Tonopah High School 1 Tennant Drive, Tonopah, NV 89049
	Hart Theater at Earl Wooster High School 1331 East Plumb Lane, Reno, NV 89502
	Vegas PBS 3050 East Flamingo Road, Las Vegas, NV 89121
Wednesday, September 19, 2018 5:30-7:30 p.m.	Auditorium at District Office Building 690 South Maine Street, Fallon, NV 89406
	Cafeteria at Damonte Ranch High School 10500 Rio Wrangler Parkway, Reno, NV 89521
	Vegas PBS 3050 East Flamingo Road, Las Vegas, NV 89121

An online survey was also be open from September 17-28 to gather feedback on the draft recommendations from educators, parents, and community members who could not attend a session in person.

About 800 individuals participated in the listening sessions and online survey, with participation roughly equally split between educators and the general public. About 80 percent of participants were from Clark County, with another 15 percent from Washoe and the remaining five percent from other districts in the state (primarily Churchill and White Pine). Participation in the listening sessions was relatively low — less than 100 individuals. The study team believes this is in part due to the availability of the online survey, which was less of a time commitment during the busy school year, and some skepticism the study would result in any change in how the state funds schools, a point that was highlighted during multiple listening sessions.

Survey Results

In the online survey, participants were asked questions in the following areas:

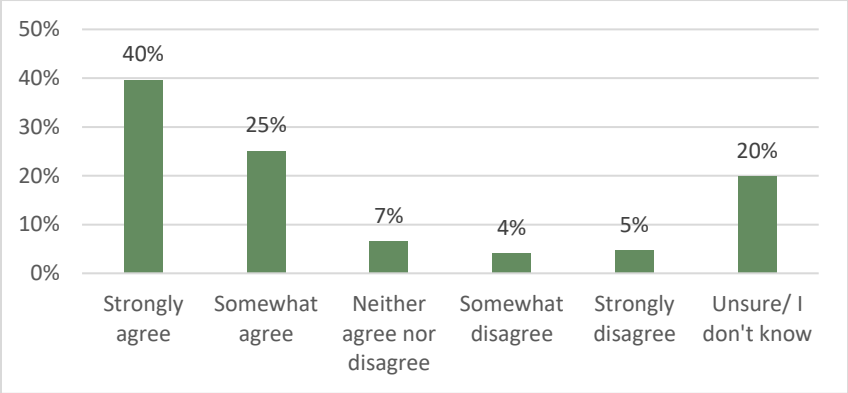
1. Should the state increase funding for all students, certain student groups, or not at all?
2. Should the state change the way it allocates funding to schools and districts?
3. Should the state implement the study's recommended funding approach? If not, what should the state do instead?
4. If the state adopted a new funding approach, what student need and district characteristic adjustments should be included? Should it include a hold harmless provision?
5. Should resources be allocated at the district level, with or without restrictions, or at the school level?
6. Would they support implementing additional resources over time?
7. Would they support the state setting guidelines or requirements related to how resources are used?

Feedback on Draft Recommendations

Overall, 90 percent of participants thought the state should increase funding for all students and six percent thought that funding should only be increased for certain student groups. Similarly, 89 percent of participants believe the state should change the way it allocates funding to schools and districts, and eight percent were unsure.

Participants were then asked if the state should adopt the funding approach recommended by the study (Figure 6.1).

Figure 6.1: Should the State Implement the Study's Recommended Funding Approach?



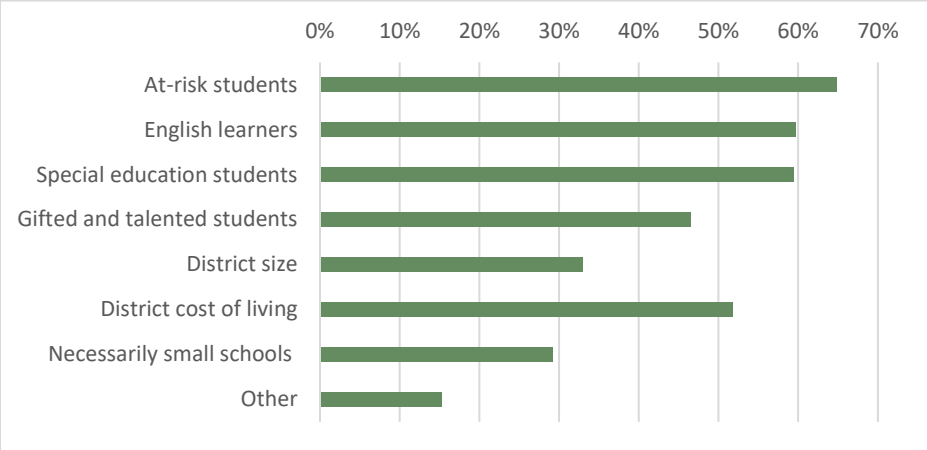
Sixty-five percent of participants either "somewhat" or "strongly" agreed the state should implement the recommended funding approach; 20 percent were unsure. Table 6.13 shows what participants that did not agree thought the state should do instead.

Table 6.13: What Should the State Do Instead of the Recommended Funding Approach?

Response	Percent
Keep the current funding system	4%
Make changes to the current funding system, but not replace it entirely	36%
Implement a different type of funding approach other than the one recommended by the study	23%
Unsure/I don't know	38%

If the state were to adopt a new funding approach, participants were asked if adjustments or additional resources should be provided for the following student need and district characteristics (Figure 6.2).

Figure 6.2: What Adjustments for Student Need and District Characteristics Should be Included in the State's Funding Approach?



The majority of participants thought additional resources should be provided for at-risk, EL, and special education students, as well as for district cost of living. Around 30 percent of participants thought the funding approach should adjust for district or school size (providing additional resources for smaller settings); however, it is important to remember that nearly all survey participants were from the two largest districts in the state. Salaries and class sizes were the two primary "other" areas that participants felt should be addressed in the funding approach.

The study team's recommendation was to implement a district-level funding approach, but there are different ways that funding could be allocated. As such, the survey asked participants to indicate how they thought funding should be allocated, including at the district level, with or without restrictions, or more directly to schools (Table 6.14).

Table 6.14: How Should School Funding be Allocated to Schools and Districts?

Response	Percent
To districts to allocate to their schools	9%
Directly to schools	41%
To districts with a set percentage required to go directly to schools	19%
To districts but require that targeted funding for student need go directly to schools	24%
Other method for allocating	3%
Unsure/I don't know	4%

Forty-one percent of participants would prefer funding was allocated directly to schools. Another 43 percent of participants wanted a mixed approach, with requirements placed on how resources allocated to districts were the distributed to schools, either though requiring a set percentage of funding to go

directly to schools (19 percent), or through targeted funding for certain student groups that went directly to schools (24 percent).

Feedback on Implementation

Knowing that immediate implementation of full adequacy recommendations was unlikely, the survey also asked participants for feedback on implementation, including a possible phase in. Sixty-five percent of participants would support phasing in resources over time, with the remainder of responses split between "would not support" and "unsure."

If new resources were phased in over time, 60 percent would recommend distributing resources equally to all students, which would suggest targeting resources first towards the base and relative weights used (given earlier support of adjustments for those students in a prior question). About 35 percent would instead recommend targeting resources first to specific student groups (the scaled weight scenario).

Three-quarters of participants also indicated the state should implement a hold harmless provision during the transition to a new funding formula (meaning a district would not be harmed by the funding formula change and would not receive less funding than it received in the prior year). Responses for how long the hold harmless provision should be in place varied: 1-2 years ((27 percent); 3-4 years ((18 percent), 5 or more years, but not permanently (11 percent); and permanently (21 percent). Six percent of participants felt a hold harmless should not be included, and the remaining 17 percent were unsure.

The last question in this area was how supportive participants would be of the state setting guidelines or requirements related to how additional resources should be used (Table 6.15). A range of options were presented and participants were asked the degree to which they would support a given option.

Table 6.15: Support for State Setting Guidelines or Requirements for Resource Use

Option	Would not support	Would consider supporting	Would support
Requiring targeted resources for specific student group are used to serve those students	14%	34%	52%
Requiring development and submission of a plan the state for how resources will be used	12%	39%	49%
Requiring that resources be used to implement an option from a menu of choices	22%	53%	25%
Requiring implementation of specific programs	36%	43%	21%
Requiring specific staffing ratios	8%	30%	61%

Sixty-one percent of participants would support the state requiring specific staffing ratios. About half would also support: 1) requiring targeted resources for a given student group are used to serve those students (52 percent), and 2) requiring development and submission of a plan to the state for how resources will be used (49 percent)). Participants were least supportive of the state requiring implementation of specific programs (21 percent)).

Other Areas of Concern

Finally, survey participants were asked if there were any other areas of concern that were not specifically addressed by the study (Table 6.16). These areas included raising teacher salaries, transparency in how resources should be used, the use of revenue streams, and lowering district administration staffing levels and salaries. In the "Other" response category, responses primarily focused on class sizes and increasing salaries of other non-teacher school-level positions. Raising teacher salaries had the most support of all the additional areas of concern (24 percent).

Table 6.16: Other Areas of Concern Not Specifically Addressed by the Study

Response	Percent
Raising teacher salaries	24%
Transparency in how resources should be used	19%
What new or existing revenue streams are needed to fund education	17%
Lowering district administration staffing levels/ salaries	16%
Preschool	8%
Governance	7%
Other	7%
Resources for specific group or program not mentioned	3%

Listening Session Feedback

During the educator listening sessions, study team members provided an overview of draft recommendations from both the study and the team. Following the overview, the study team invited comments from attendees. Several key themes emerged across the listening sessions.

Support for Additional Funding for Schools. Attendees were generally supportive of additional funding for Nevada schools. In several listening sessions, attendees mentioned recently released national rankings that put Nevada among the lowest-spending states for education funding, and supported increasing the overall amount of education funding available to schools and districts. Several attendees noted that the base amount allocated to every student should be at a level sufficient to run a school, without considering any categorical or additional funding. Attendees were also concerned about identifying potential sources of additional revenue, and expressed skepticism that an increase in education funding was likely.

Categorical Funding. The state's current practice of using categorical funding was a topic of conversation across the state. The study team heard frustration with the extent of categorical funding in the state. The administrative and reporting requirements that come along with multiple revenue streams was identified as one perceived problem with categorical funding. Several attendees noted that every student with an identified need should receive additional funding, not just those students who attend certain schools selected for categorical funds. Attendees also suggested that schools and districts should not have to compete with others for basic funding opportunities. Other attendees mentioned the

fear of losing awarded categorical funding after making gains in student achievement as another drawback to categorical funding, and noted that resources are still required to maintain student growth.

At the same time, some attendees were concerned that if categorical funding were eliminated and simply included in a district's allocation, those funds might not be spent on the intended students (i.e. funds generated by EL students should be spent on EL students). Some attendees were also concerned that a benefit of categorical funds is their "protection" from negotiations, and that protection could be lost if categorical funding were eliminated.

Flexibility at the Local Level. Listening session attendees were generally supportive of additional flexibility for districts and schools to decide how funds should best be spent to serve their students, both in regard to base funding and categorical or additional weighted funding. Multiple attendees suggested more site-based decision making, with community input, would better serve students. Several attendees noted that the restrictive nature of some current categorical funding requires implementing programs that might work in some districts, but aren't necessarily the best fit statewide. Other attendees noted that interventions designated for certain student groups could also benefit other struggling students in the same schools.

Requirements for Ensuring Funding is Used as Intended. As previously noted, a concern about moving from categorical funding to a weighted student formula is how to ensure the additional funds generated by at-risk, EL, and special education weights are used to serve those students. Attendee suggestions to address this concern included requiring districts to create a plan for use of the targeted funds; enacting a simple reporting requirement showing how funds were expended; creating a state requirement that special needs funding be spent on the student populations that generated the funds; and enacting state- or district-level expectations around expenditure of those funds.

Adjustments for Rural and Small Schools. Across the listening sessions held in rural Nevada there was concern that rural districts and small schools will continue to receive additional funds to support schools in areas where it costs more to educate students due to geography or size. Rural attendees were generally supportive of the adjustments suggested in the recommendations, although the study team heard a concern about the cost--of-living adjustment and how that may impact small schools and districts. For example, purchasing some items in remote rural districts is more expensive because of transportation costs and fewer suppliers. Likewise, costs to attend trainings or bring a trainer into the district can cost significantly more due to travel time/transportation issues.

Transportation Funding. Although outside the scope of this study, transportation funding was consistently mentioned as a concern at educator listening sessions across the state. Attendee suggestions included a recommendation that transportation should be funded based on actual transportation costs, taking into consideration density, miles driven, etc., and that the state should revisit the practice of providing transportation funding to all schools, including those that don't transport students.

Stability in Education Funding. Attendees across the state noted the difficulty of running districts without consistency in the expected level of education funding. Identified issues included not knowing

the amount of funding a district will receive until after the legislative session ends, and sometimes until after school has started; and the budgeting challenges associated with monthly allocation of funds from the state. This was also noted as a challenge for strategic planning, particularly related to categorical funds.

Transitioning to a New System. Attendees noted that it is unlikely the state would be able to raise the revenue needed to implement the full adequacy recommendation in a single year. Attendees suggested the state should phase in annual or biannual increases over a period of years – some attendees suggested focusing initial phase-ins to the base amount – and attendees suggested hold harmless provisions should be included to ensure no school receives less funding than they currently receive.

VII. Revised Recommendations and Fiscal Impact

This chapter presents the study team's revisions to the draft recommendations, and also models the fiscal impact of the new funding approach as compared to current funding.

Revised Recommendations

The study team revised a number of the draft recommendations based on additional information and stakeholder feedback.

Use the 2017 Successful Schools Base Cost Developed by NDE

The study team recommended using a base cost figure ($5,988) identified through the 2006 successful schools approach as a starting point for implementing a new funding approach with a longer-term target of reaching the full adequacy base cost level ($9,238) in the future. The study team also recommended that the successful schools base cost figure be updated using the most recent available financial and performance information. Since the release of the draft report, NDE with support from the study team has developed an updated 2018 successful schools base cost figure using the methodology detailed in the 2006 APA study, "Estimating Cost of an Adequate Education in Nevada."

The selection of "successful schools" was intended to identify schools that were on their way to meeting future state student performance standards. In other words, the selection criteria was not just schools that were outperforming their peers against current expectations, but were also showing rates of performance improvement needed to meet the escalating future standards. The strength of this approach is that it does not simply identify schools that are doing well today and who may enroll students who are already likely to meet performance expectations. Instead, the approach identifies schools that either consistently attained performance levels called for in the future, or show an improvement in performance that trended toward meeting those future goals.

The elementary and middle schools had sufficiency of longitudinal data to exactly replicate the methodology from 2006. The high schools also had sufficient data but it was required that the currently adopted ACT cuts be applied retroactively in order to determine longitudinal trend in terms of proficiency on the ACT. Also, the school code change and subsequent split of the state charter schools eliminated the possibility of a longitudinal analysis for SPCSA schools. This impacted only the achievement prediction aspect of the analysis. As a proxy, charter schools achieving in the highest quartile in both math and ELA in 2018 were identified as meeting the all students performance prediction. The 2018 subgroup analysis for these schools was performed using the same method as for the non-charter schools. Finally, it should be noted that n-size filters were applied to this analysis. No measure was considered with fewer than 10 records. This did not eliminate schools from consideration, only certain subgroup measures.

Using the selection criteria and methods described above, NDE identified 55 schools (Appendix K). The next step to replicate the 2006 successful schools approach was to identify the base spending amount for each successful school using the In$ite data collection system. This provides data for every school in the state and breaks down such data by different types of spending. The study team supported NDE to

analyze this data, to isolate "base" spending by excluding spending for at-risk students, special education students, ELL students, transportation, food service, adult education, and capital.

Based upon this updated school selection process and expenditure data analysis, the 2018 successful schools base cost figure identified is $6,197. The study team recommends using this new figure as the basis of a new funding approach since it reflects the most up-to-date and accurate estimation of what it takes, at the base level, for schools to be successful as measured by the state's current standards. The state should still consider the full adequacy base figure of $9,238 as a future funding target as state performance expectations increase over time.

It should also be noted that this figure does not include federal funds, transportation, food service, adult education and capital which should continue to be funded at the level each is at currently.

Apply the Relative Weights for Student Need

In the draft recommendations chapter, the study team presented two different approaches for generating additional resources for students with identified needs (at-risk, EL, special education, and gifted and talented). The first approach was to set weights at a level high enough to generate the full adequacy amount (scaled weights), the second was to keep the same weights identified by the adequacy approaches and apply them to the lower base amount, generating a lower dollar amount (relative weights). Based upon stakeholder feedback, it appears the best approach for Nevada would be to implement the relative weights which would distribute additional resources more equally to all students instead of targeting resources to a greater degree towards students in certain need categories. The table below summarizes these weights and dollars generated.

Table 7.1: Recommended Base and Weights

2017 Successful Schools Base	**$6,197**
Student Need Weights	
At-Risk	0.30 ($1,859)
English Learners	0.50 ($3,099)
Special Education	1.1 ($6,817)
Gifted and Talented	0.05 ($310)

Apply a District Size Adjustment and Necessarily Small Schools Adjustment as Previously Recommended

The study team continues to recommend an adjustment for district size and has modeled the specific formulas identified in the draft recommendations section. The study team has also modeled Wyoming's approach to funding necessarily small schools for illustrative purposes.

Further Explore the Inclusion of a Comparable Wage Index (CWI) Adjustment

The draft recommendations included a few different ways that a CWI could be applied, using raw figures, indexed to the lowest cost counties or indexed to the statewide average. In the next section, the study team will model the impact of the third option- indexed to statewide average- with a caveat for

implementation, and discuss additional considerations and updated analysis needed for the state to explore the inclusion of a CWI.

Include a Hold Harmless Provision and an External Cost Adjustment

Two funding formula elements not addressed in the prior recommendations were a hold harmless provision and an external cost adjustment.

A hold harmless provision is intended to ensure districts are not negatively impacted by a change in funding approach. This could mean the difference between prior year funding and the recommended funding from the new approach would be calculated, then any district that would have received a higher level for funding in the prior year would receive an adjustment equal to the difference so that they are not "harmed" by the change. This could continue for a limited number of years and be scaled down over time. The study team would not recommend that a hold harmless provision be a permanent inclusion in the funding system and would suggest a limited implementation.

The state should also adjust for at least inflation each year. Adjusting for inflation ensures that the base cost figure, which drives the entire funding system, increases in pace with the costs districts face. The state could also consider a broader external cost adjustment. Such an adjustment would consider changes over time in other cost pressures districts face such as for materials, utilities or health care. Wyoming is a good example of a state that has such an external cost adjustment.

Consider Guidelines and Requirements for Funding Use

Based upon stakeholder feedback, there appears to be support for the state setting guidelines or requirements for how resources allocated through this funding approach can be used, such as:

- Requiring districts to submit plans to the state for how resources will be used.
- Requiring that targeted funding for identified student groups be used to serve those students.
- Requiring that specific staffing ratios be implemented.
- Allocating a portion of funding (a percentage or specific targeted funding for student need) directly to schools.

As this is a governance issue, the study team is not making a specific recommendation but offering this as a consideration for the state to decide.

Fiscal Impact

The following section identifies the recommended per student funding in each district based on the recommended funding approach, and compares those amounts to current available funding in Nevada.

Student Counts

For modeling the fiscal impact of the recommended funding approach, the study team used current student counts available from NDE to model the results of the study. Alternative decisions could be used for a number of these counts. A brief description of the student count used and considerations/ alternatives for each count are provided below.

Enrollment: The study team used the Nevada's current enrollment counts to model the results. States use a variety of student counts including average daily membership, average daily attendance, and single day counts. Even when using similar terminology, no to states tend to count students in exactly the same way. Considerations when determining which enrollment figure to use include the use of membership versus attendance. Membership measures all the students a district must serve while attendance measures the average number of students served each day. Attendance counts often more heavily impact districts with higher student needs.

At-Risk: The study team used free and reduced-price lunch (FRL) counts as a proxy of at-risk. It is important to remember that as the Community Eligibility Provision (CEP) of the school lunch count becomes more prevalent this count will likely become less reliable. With this in mind a number of states are looking at using, or are currently including, direct certification counts in the proxy. This means using eligibility for federal programs such as Medicaid as part of the count. Additionally, the state could look to use actual performance data, such as it uses for 178 funding, as part of the proxy.

EL: The study team used data from NDE on EL student counts for modeling. EL counts are generally based on testing data such as those related to the WIDA standards. EL counts may become more important in the future as federal policies may deter families from accessing other federal programs. In this case, EL eligibility could also be used as qualified factor to be included in the at-risk count.

Special Education: The study team used special education figures for all LEAs provided by NDE. During implementation of a weighted formula the state would need to decide if they want to utilize a cap on the percentage of special education students that could be funded.

Gifted and Talented: The study team utilized a common percentage across LEAs for modeling purposes. This approach assumes an equal distribution of students across districts.

Recommended Funding

Tables 7.2a and 7.2b on the following three pages provide district- and /charter-level calculation of the recommended funding based on the 2018 successful schools base figure, relative weights, district and school size adjustments, prior to applying a CWI. The figures do not include either transportation, food service, adult education, or capital. The study team recommends the state continue to fund these items at their present level until further review (if the state so desires).

Table 7.2a: Additional Funding for Student Need and District Characteristics, School Districts

Additional Funding for Student Need and District Characteristics: School Districts								
District	**Base Resources**	**At-Risk Funding**	**Special Education Funding**	**EL Funding**	**Gifted Funding**	**District Size**	**Necessarily Small Schools**	**Total Funding Before CWI**
Churchill	$20,883,890	$2,946,674	$3,272,016	$765,330	$52,210	$2,464,299	$0	$30,384,418
Clark	$2,035,980,971	$408,477,734	$265,728,599	$195,936,746	$5,089,952	$0	$2,687,180	$2,913,901,182
Douglas	$35,886,827	$3,253,425	$5,541,977	$1,106,165	$89,717	$2,763,286	$623,599	$49,264,996
Elko	$61,443,255	$7,213,308	$8,595,859	$3,259,622	$153,608	$4,301,028	$1,466,015	$86,432,695
Esmeralda	$452,381	$72,505	$57,737	$43,379	$1,131	$540,143	$163,591	$1,330,867
Eureka	$1,803,327	$126,419	$224,951	$30,985	$4,508	$1,453,482	$113,247	$3,756,918
Humboldt	$22,129,487	$3,156,752	$3,653,751	$1,316,863	$55,324	$2,235,078	$1,646,708	$34,193,962
Lander	$6,345,728	$546,575	$899,804	$244,782	$15,864	$2,868,269	$154,653	$11,075,675
Lincoln	$6,550,229	$974,168	$1,158,839	$46,478	$16,376	$2,901,751	$338,569	$11,986,410
Lyon	$55,215,270	$9,827,203	$8,180,040	$1,490,379	$138,038	$3,920,284	$162,974	$78,934,188
Mineral	$3,488,911	$554,012	$524,886	$176,615	$8,722	$2,163,125	$138,367	$7,054,638
Nye	$33,023,813	$7,598,142	$5,248,859	$1,245,597	$82,560	$2,575,857	$1,521,285	$51,296,113
Carson	$49,991,199	$6,804,306	$7,689,238	$4,139,596	$124,978	$3,649,358	$0	$72,398,674
Pershing	$4,133,399	$676,712	$743,020	$136,334	$10,333	$2,368,438	$293,919	$8,362,156
Storey	$2,745,271	$273,288	$490,802	$144,452	$6,863	$1,888,746	$143,971	$5,693,394
Washoe	$414,957,317	$55,120,456	$62,781,807	$34,538,980	$1,037,393	$0	$911,606	$569,347,559
White Pine	$12,115,135	$963,014	$1,833,692	$105,349	$30,288	$3,283,202	$690,130	$19,020,810

Table 7.2b: Additional Funding for Student Need and District Characteristics, Charter LEAs

Additional Funding for Student Need and District Characteristics: Charter LEAs								
Charter LEA	**Base Resources**	**At-Risk Funding**	**Special Education Funding**	**EL Funding**	**Gifted Funding**	**District Size**	**Necessarily Small Schools**	**Total Funding Before CWI**
University	$1,065,884	$128,966	$136,061	$56,083	$2,665	$0	$0	$1,389,659
American Leadership Academy	$6,240,379	$755,092	$545,336	$328,379	$15,601	$0	$0	$7,884,787
Legacy Traditional School	$7,795,826	$442,466	$722,570	$523,647	$19,490	$0	$0	$9,503,998
Futuro Academy	$681,670	$163,601	$86,981	$120,842	$1,704	$0	$0	$1,054,798
Mater Academy Northern Nevada	$1,047,293	$239,824	$88,617	$179,713	$2,618	$0	$0	$1,558,065
Democracy Prep	$6,903,458	$1,394,325	$627,136	$347,032	$17,259	$0	$0	$9,289,210
Sports Leadership and Management Academy	$4,573,386	$448,043	$429,452	$167,319	$11,433	$0	$0	$5,629,634
Equipo Academy	$4,703,523	$1,411,057	$327,202	$384,214	$11,759	$0	$0	$6,837,754
Mater Academy	$10,881,932	$2,297,848	$920,255	$2,692,597	$27,205	$0	$0	$16,819,835
American Preparatory Academy	$9,630,138	$1,165,247	$552,153	$151,827	$24,075	$0	$0	$11,523,439
Founders Academy of Nevada	$3,829,746	$213,797	$340,835	$49,576	$9,574	$0	$0	$4,443,528
Leadership Academy of Nevada	$1,753,751	$59,491	$115,884	$92,304	$4,384	$0	$0	$2,025,815
Learning Bridge	$1,109,263	$134,227	$163,601	$58,376	$2,773	$0	$0	$1,468,240
Doral Academy	$32,057,081	$351,370	$2,883,464	$529,844	$80,143	$0	$0	$35,901,901
Honors Academy of Literature	$1,332,355	$161,221	$265,851	$70,119	$3,331	$0	$0	$1,832,877
Pinecrest Academy of Nevada	$25,568,822	$916,536	$2,801,664	$272,668	$63,922	$0	$0	$29,623,612
Somerset Academy	$41,451,733	$1,838,650	$5,535,160	$1,251,794	$103,629	$0	$0	$50,180,967
Discovery Charter	$2,404,436	$139,433	$156,784	$126,543	$6,011	$0	$0	$2,833,206
Oasis Academy	$3,544,684	$150,587	$381,735	$40,281	$8,862	$0	$0	$4,126,149

Additional Funding for Student Need and District Characteristics: Charter LEAs								
Charter LEA	**Base Resources**	**At-Risk Funding**	**Special Education Funding**	**EL Funding**	**Gifted Funding**	**District Size**	**Necessarily Small Schools**	**Total Funding Before CWI**
Doral Academy Northern Nevada	$997,717	$120,730	$68,167	$52,489	$2,494	$0	$0	$1,241,597
Elko Institute for Academic Achievement	$1,072,081	$129,728	$122,701	$56,424	$2,680	$0	$0	$1,383,613
Quest Academy	$4,573,386	$728,767	$463,536	$257,176	$11,433	$0	$0	$6,034,298
Imagine School Mountain View	$4,244,945	$269,570	$347,652	$250,979	$10,612	$0	$0	$5,123,757
Alpine Academy	$824,201	$57,632	$224,951	$43,379	$2,061	$0	$0	$1,152,224
Silver Sands Montessori	$1,976,843	$113,405	$115,884	$104,017	$4,942	$0	$0	$2,315,091
Nevada State High School	$3,048,924	$250,979	$389,097	$34,084	$7,622	$0	$0	$3,730,706
Argent Preparatory Academy	$824,201	$96,673	$252,218	$43,379	$2,061	$0	$0	$1,218,532
Nevada Connections Academy	$19,824,203	$2,089,628	$1,833,692	$92,955	$49,561	$0	$0	$23,890,039
Nevada Virtual Academy	$12,995,109	$1,829,354	$1,670,092	$96,054	$32,488	$0	$0	$16,623,096
Coral Academy of Science Las Vegas	$18,603,394	$721,331	$1,090,672	$350,131	$46,508	$0	$0	$20,812,036
Beacon Academy of Nevada	$2,379,648	$409,002	$477,169	$117,743	$5,949	$0	$0	$3,389,511
Total – All Districts and Charter LEAs	**$3,005,086,422**	**$527,813,270**	**$400,762,450**	**$253,669,609**	**$7,512,716**	**$39,376,345**	**$11,055,815**	**$4,245,276,627**

The prior tables, 7.2a and 7.2b, show the funding levels for the each of the student- and district-level adjustments recommended in the study other than CWI. Looking at the final row of Table 7.2b, the total recommended base funding for the state using the 2018 successful schools base would be just over $3.0 billion. Additional funding for at-risk students is $527 million, for special education students $400 million, EL students $253 million, and gifted $7.5 million. The district size adjustment generates about $40 million in funding. These results show that the focus of the recommended formula is heavily weighted towards student needs.

Tables 7.3a and b show the total funding and the impact of the CWI adjustment, with each district benchmarked to the statewide average CWI.

Table 7.3a: District Funding, Adjusted for CWI

District LEA Funding, Adjusted for CWI			
District	**Total Funding Before CWI**	**Adjusted for CWI**	**Adjusted for CWI, per student**
Churchill	$30,384,418	$26,981,363	$8,006
Clark	$2,913,901,182	$2,992,576,514	$9,109
Douglas	$49,264,996	$46,013,506	$7,946
Elko	$86,432,695	$76,752,233	$7,741
Esmeralda	$1,330,867	$1,181,810	$16,189
Eureka	$3,756,918	$3,336,144	$11,464
Humboldt	$34,193,962	$30,364,239	$8,503
Lander	$11,075,675	$9,835,200	$9,605
Lincoln	$11,986,410	$10,643,932	$10,070
Lyon	$78,934,188	$73,724,531	$8,274
Mineral	$7,054,638	$6,264,518	$11,127
Nye	$51,296,113	$45,550,948	$8,548
Carson	$72,398,674	$67,620,362	$8,382
Pershing	$8,362,156	$7,425,594	$11,133
Storey	$5,693,394	$5,408,725	$12,209
Washoe	$569,347,559	$540,880,181	$8,078
White Pine	$19,020,810	$16,890,479	$8,640

Table 7.3b: Charter LEA Funding, Adjusted for CWI

Charter LEA Funding, Adjusted for CWI			
Charter LEA	**Total Funding Before CWI**	**Adjusted for CWI**	**Adjusted for CWI, per student**
University	$1,389,659	$1,234,017	$7,175
American Leadership Academy	$7,884,787	$7,001,691	$6,953
Legacy Traditional School	$9,503,998	$8,439,550	$6,709
Futuro Academy	$1,054,798	$936,660	$8,515
Mater Academy Northern Nevada	$1,558,065	$1,383,562	$8,187
Democracy Prep	$9,289,210	$8,248,819	$7,405
Sports Leadership and Management Academy	$5,629,634	$4,999,115	$6,774
Equipo Academy	$6,837,754	$6,071,926	$8,000
Mater Academy	$16,819,835	$14,936,014	$8,506
American Preparatory Academy	$11,523,439	$10,232,814	$6,585
Founders Academy of Nevada	$4,443,528	$3,945,853	$6,385
Leadership Academy of Nevada	$2,025,815	$1,798,924	$6,357
Learning Bridge	$1,468,240	$1,303,797	$7,284
Doral Academy	$35,901,901	$31,880,888	$6,163
Honors Academy of Literature	$1,832,877	$1,627,595	$7,570
Pinecrest Academy of Nevada	$29,623,612	$26,305,768	$6,376
Somerset Academy	$50,180,967	$44,560,698	$6,662
Discovery Charter	$2,833,206	$2,515,887	$6,484
Oasis Academy	$4,126,149	$3,664,020	$6,406
Doral Academy Northern Nevada	$1,241,597	$1,102,538	$6,848
Elko Institute for Academic Achievement	$1,383,613	$1,228,649	$7,102
Quest Academy	$6,034,298	$5,358,456	$7,261
Imagine School Mountain View	$5,123,757	$4,549,896	$6,642
Alpine Academy	$1,152,224	$1,023,175	$7,693
Silver Sands Montessori	$2,315,091	$2,055,801	$6,445
Nevada State High School	$3,730,706	$3,312,867	$6,733
Argent Preparatory Academy	$1,218,532	$1,082,056	$8,136
Nevada Connections Academy	$23,890,039	$21,214,355	$6,632
Nevada Virtual Academy	$16,623,096	$14,761,309	$7,039
Coral Academy of Science Las Vegas	$20,812,036	$18,481,088	$6,156
Beacon Academy of Nevada	$3,389,511	$3,009,886	$7,838
Total – All Districts and Charter LEAs	**$4,245,276,627**	**$4,219,717,950**	**$8,702**

Since the CWI was indexed to the statewide average, most districts see a reduction in revenue when the CWI is applied. Total funding without the CWI adjustment is $4.425 billion and that would be reduced to $4,219 billion with the CWI. District per-pupil funding amounts range across districts and charters from $6,156 to $16,189. In many cases, the impact of the CWI was significant enough to offset the benefit of the district size adjustment, for a district which is concerning to the study team. However, at the same time, the study team would not recommend going to the lowest cost-based CWI figure. The study team feels that applying the lowest cost-based adjustment adds costs to the system that are not representative of actual cost faced by districts. The state could instead explore creating Nevada-specific CWI figures. The figures used in this report are based on a nationally generated CWI figure that uses specific personnel positions. A Nevada-specific CWI to account for the unique industries in the state and use the most recent data available (the figures referred to in this report were from 2013). The national database used in CWI creation would allow for this Nevada CWI to be created and easily updated each year.

In the interim, the state could use the statewide average figures but only apply them to districts with a number above 1.0, currently only Clark County.

Comparison to Current

The study team worked closely with NDE to create a comparison of current funding to the study recommendations. The best data for comparison purposes was district-level funding data. Since charter school students are required to receive the same funding as students from the home district, the study team felt that going with the most reliable data at the district level was the correct approach. Due to differences in student count methods between the district/charter funding calculation model and the current funding information, comparisons to current funding levels focus on per-pupil figures only. The study team believes the per-pupil lens provides the best comparative figures for this work.

A determination of how wealth is measured and included in the state's funding formula was outside of the scope of this study. With this in mind, the study team has chosen to include information on the state DSA funding amounts with and without the wealth adjustment along with identifying the additional revenues available to each district beyond the DSA calculation through categorical funding.

In this comparison section, the study team takes the CWI approach of only applying the factor for those districts with a factor above 1.0. Table 7.4 compares the per-pupil funding figures using the 2018 successful schools base figure, relative weights, district and school size adjustments with the statewide average CWI figure applied for those with a factor above 1.0. It is important to remember that the successful schools recommendation is a starting point recommendation and meant to be used as the beginning of a phase in of funding towards a more adequate system.

Table 7.4: Per- Pupil Comparison with Successful Schools Base, Relative Weights, District Size Adjustment, and Statewide CWI* Above 1.0 Only

(1)	(2)	(3)	(4)	(5)	(6)	(7)
District Code	District	Recommended Funding	DSA Basic Support w/o Wealth Adjustment plus Categoricals	DSA Basic Support w/ Wealth Adjustment plus Categoricals	Local Outside Revenue less Federal	Total Currently Available (5+6)
01	Churchill	$9,016	$7,283	$7,022	$1,217	$8,239
02	Clark	$9,109	$6,461	$6,531	$1,052	$7,582
03	Douglas	$8,507	$7,665	$6,419	$2,744	$9,163
04	Elko	$8,717	$8,729	$8,883	$1,378	$10,260
05	Esmeralda	$18,231	$23,083	$21,758	$8,794	$30,552
06	Eureka	$12,910	$18,455	$12,422	$22,669	$35,090
07	Humboldt	$9,575	$8,204	$7,561	$2,289	$9,850
08	Lander	$10,816	$9,202	$6,992	$6,301	$13,293
09	Lincoln	$11,340	$10,957	$11,290	$1,443	$12,733
10	Lyon	$8,859	$7,471	$7,800	$993	$8,793
11	Mineral	$12,530	$10,944	$10,735	$1,770	$12,505
12	Nye	$9,626	$8,450	$8,349	$1,545	$9,894
13	Carson	$8,975	$7,902	$8,025	$1,110	$9,135
14	Pershing	$12,537	$10,625	$9,871	$3,213	$13,085
15	Storey	$12,852	$10,665	$7,872	$6,658	$14,530
16	Washoe	$8,503	$6,746	$6,609	$1,275	$7,885
17	White Pine	$9,729	$10,193	$9,871	$1,650	$11,521
	State	**$8,917**	**$6,700**	**$6,708**	**$1,164**	**$7,872**

** The figures above exclude federal funds, transportation, food service, adult education, and capital. Funding for these areas would need to be continued at its current level.*

The recommended per-pupil funding (column 3) for each district ranges from $8,503 to $18,231, with a statewide average of $8,917. The DSA Basic Support funding plus categorical funding prior to the wealth calculation (column 4) ranges from $6,641 to $23,083, with a statewide average of $6,700. Thirteen districts have higher recommended funding then the current non-wealth adjusted funding. The DSA Basic Support funding plus categorical funding after the wealth calculation (column 5) ranges from $6,419 to $21,758, with a statewide average of $6,708. (The statewide averages are slightly off due to a rounding error.) Fourteen districts have higher recommended funding then the current wealth-adjusted funding.

The table also shows outside local funding available to each district (column 6). As with all other figures, these amounts do not include any federal funding. Districts range from $993 to $22,669 in additional local available funding available outside of the Nevada Plan, with a statewide average of $1,164 of outside funding. Combining the wealth-adjusted DSA funding with the other local available funding

(column 7) provides insight into the total amount of funding currently available to serve students. Districts range from $7,582 to $35,090 per pupil, with a statewide average of $7,872. The study team recognizes that local funding is used for many purposes and that not all dollars are necessarily available to pay for the study recommendations.

With that important caveat in mind, the Total Currently Available (column 7) shows that five districts are not currently funded at a level to meet or exceed funding recommendations using the 2018 successful schools base figure. However, since one of those districts is also the largest, it is also true that the statewide total resources are below what is necessary.

Table 7.5 shows the same information but utilizes the full adequacy target.

Table 7.5: Per- Pupil Comparison with Full Adequacy Base, Relative Weights, District Size Adjustment, and Statewide CWI* Above 1.0 Only

(1)	(2)	(3)	(4)	(5)	(6)	(7)
District Code	**District**	**Recommended Funding**	**DSA Basic Support w/o Wealth Adjustment plus Categoricals**	**DSA Basic Support w/ Wealth Adjustment plus Categoricals**	**Local Outside Revenue less Federal**	**Total Currently Available (5+6)**
01	Churchill	$13,441	$7,283	$7,022	$1,217	$8,239
02	Clark	$13,572	$6,461	$6,531	$1,052	$7,582
03	Douglas	$12,593	$7,665	$6,419	$2,744	$9,163
04	Elko	$12,874	$8,729	$8,883	$1,378	$10,260
05	Esmeralda	$24,636	$23,083	$21,758	$8,794	$30,552
06	Eureka	$18,666	$18,455	$12,422	$22,669	$35,090
07	Humboldt	$13,889	$8,204	$7,561	$2,289	$9,850
08	Lander	$15,968	$9,202	$6,992	$6,301	$13,293
09	Lincoln	$16,540	$10,957	$11,290	$1,443	$12,733
10	Lyon	$13,193	$7,471	$7,800	$993	$8,793
11	Mineral	$18,366	$10,944	$10,735	$1,770	$12,505
12	Nye	$14,140	$8,450	$8,349	$1,545	$9,894
13	Carson	$13,379	$7,902	$8,025	$1,110	$9,135
14	Pershing	$18,136	$10,625	$9,871	$3,213	$13,085
15	Storey	$18,674	$10,665	$7,872	$6,658	$14,530
16	Washoe	$12,664	$6,746	$6,609	$1,275	$7,885
17	White Pine	$14,255	$10,193	$9,871	$1,650	$11,521
	State	**$13,273**	**$6,700**	**$6,708**	**$1,164**	**$7,872**

** The figures above exclude federal funds, transportation, food service, adult education, and capital. Funding for these areas would need to be continued at its current level.*

Using the full adequacy base figure, no districts have higher DSA and categorical funding without or with wealth adjustment than the recommended amount. Only two districts have total current available funding higher than the recommended full adequacy amount.

Phase-In

Based on feedback from across the state, the study team has recommended changing the state's funding formula starting with the successful schools as the base figure. It is important that as the new system is implemented a phase-in plan is put in place at the same time. The public feedback was that providing new funding across the new funding model equally was the best plan and the study team has included this in our recommendation. With this structure, as the base amount is increased funding for all student and district adjustments will also increase. This allows the phase-in process to focus on just the base figure. If a ten-year phase-in is identified, a straight approach is to simply increase the base, with an inflation adjustment, by 1/10th each year. This means increasing from the $6,197 2018 successful schools base to the full adequacy base of $9,238 over that time.

For context, based upon information for the National Education Association's annual *Rankings of the States,*[35] Nevada ranked 47th nationally in per-student current expenditures. If the state started by increasing funding to the recommended level using the 2018 successful schools base, it would move up to 37th, then over time move up to 15th if it fully implemented the adequacy recommendations.[36]

[35] NEA Research. (2018). *Rankings of the States 2017 and Estimates of School Statistics 2018*. Washington, D.C.: National Education Association.

[36] In the *Ranking of the States*, Nevada's reported total expenditures per student were $8,156. The study team added the difference between recommended funding and total available for successful schools and for full adequacy ($1,045 and $5,401, respectively) to that reported amount (which includes transportation and federal funds), then compared the new totals for Nevada against the ranked per student expenditures of the other states.

Appendix A: Basic Characteristics of a Strong School Finance System

Basic Characteristics of a Strong School Finance System

1. The allocation of state support is positively related to the needs of school systems, where needs reflect the uncontrollable demographic characteristics of students and school systems.

2. The allocation of state support is inversely related to the wealth of school systems, where wealth reflects the ability of school systems to generate revenue for elementary and secondary education.

3. The allocation of state support is sensitive to the tax effort made by school districts to support elementary and secondary education, which might consider some, but not all, local tax efforts made on behalf of schools.

4. The amount of state support allocated to school systems reflects the costs they are likely to incur in order to meet state education standards and student academic performance expectations.

5. All school systems are spending at adequate levels, and the variation in spending among school systems can be explained primarily by differences in the needs of school systems and the tax effort of districts and is not only related to differences in school district wealth.

6. School systems have similar opportunities to generate revenues to reach those adequate spending levels.

7. School systems have a reasonable amount of flexibility to spend the revenues they obtain as they want, provided they are meeting, or making acceptable progress toward meeting, state education standards and student academic performance expectations.

8. The school finance system covers current operating expenditures as well as capital outlay and debt service expenditures.

9. State aid that is not sensitive to the needs of school systems and is not wealth-equalized, such as incentive grants or hold harmless funds, are limited relative to state support that is need-based and wealth-equalized.

10. Property taxpayers are treated equitably. Property is assessed uniformly within different classes of property and low income taxpayers are relieved of some of the obligation to pay property taxes.

11. The state has a procedure to define and measure school finance equity for students and taxpayers and periodically assesses the equity of the school finance system.

12. The state has a procedure to define and measure the adequacy of revenues school systems obtain for elementary and secondary education and periodically determines whether adequate revenues are available in all school systems.

Appendix B: State Funding Formulas

State	Formula	Base Per Pupil Funding (FY 2017 18)	Legislation
Alabama	Resource Allocation	Teaching Units	Ala Code: 16-13-230.
Alaska	Foundation Formula	$5,930.0	AS §: 14.17.010.
Arizona	Foundation Formula	$3,683.3	ARS 15-901.B.2:
Arkansas	Foundation Formula	$6,713.0	A.C.A. § 6-20-2305:
California	Foundation Formula	(K-3: $7,941), (4-6: $7,301), (7-8: $7,518), (9-12: $8,939)	California Education Code 42238.02(d):
Colorado	Foundation Formula	$6,546.2	C.R.S.A. 22-54-104(5)(a)(XXIV)
Connecticut	Foundation Formula	$11,525.0	https://www.cga.ct.gov/2017/SUM/2017SUM00002-R01SB-01502-SUM.htm#P1684_217091
Delaware	Resource Allocation	Teaching Units	Title 14, Section 1703:
Florida	Foundation Formula	$4,204.0	Florida Statutes Title XLVII, Chapter 1011, Section 62
Georgia	Hybrid system - Foundation & P.A.	$2,541.6	Georgia Statute: Section 20-2-161
Hawaii	Single District		

Idaho	Resource Allocation	Teaching Units	Idaho Statutes: Chapter 33-1002.
Illinois	Foundation Formula	Differs per district	Public Act 100-0465
Indiana	Foundation Formula	$5,352.0	Indiana Code: Title 20, Article 43
Iowa	Foundation Formula	$6,664.0	Iowa Code: Chapter 257
Kansas	Foundation Formula	$4,006.0	Senate Bill 19 (2017)
Kentucky	Foundation Formula	$3,981.0	
Louisiana	Foundation Formula	$3,961.0	RS 17:15.1, but the Louisiana Board of Elementary & Secondary Education is responsible for actually implementing (Section 1107 of state rules)
Maine	Hybrid system - Foundation & P.A.	Varies by district	Title 20, Part 7, Chapter 606-B
Maryland	Foundation Formula	$7,012.0	Maryland State Code § 5-202:
Massachusetts	Other	Varies by district	Title VII, Chapter 70
Michigan	Other	Varies by district - based off of expenditures in 1994	Michigan - State School Act of 1979 (Section 388.1620):
Minnesota	Foundation Formula	$6,188.0	Minnesota Statutes: 126C.10;
Mississippi	Foundation Formula	$5,382.0	Mississippi Statute: Section 37-151-7

Missouri	Foundation Formula	$6,241.0	https://law.justia.com/codes/missouri/2005/t11/1630000011.html
Montana	Foundation Formula	Elementary: $5,471; High School: $7,005	Montana Legislation: 20-9-306
Nebraska	Foundation Formula - Based on Expenditures	Based on expenditures from comparable districts	Nebraska Revised Statute: 79-1007.16:
Nevada	Foundation Formula - Based on Expenditures	Based on district's pervious year expenditures - averages $5,897	Nevada Revised Statutes: Chapter 387
New Hampshire	Foundation Formula	$3,636.1	Title XV, Chapter 198:
New Jersey	Foundation Formula	Varies by district	Section: 18a:7
New Mexico	Foundation Formula	$4,053.6	Chapter 22, Article 8
New York	Foundation Formula	$6,422.0	Title V, Article 73:
North Carolina	Resource Allocation	Teaching Units	Senate Bill 257 (2017)
North Dakota	Foundation Formula	$9,646.0	Section 15.1-27-04.1(3)(a)(1)(a)
Ohio	Foundation Formula	$6,010.0	Ohio Revised Code 3317.022
Oklahoma	Foundation Formula	$3,031.8	Title 70, Chapter I, Article XVIII-B, Section 18-200.1
Oregon	Foundation Formula	$4,500.0	ORS 327.013(1)(b)(A)

Pennsylvania	Other	$151.9	Article 24, Section 2502.53
Rhode Island	Foundation Formula	$9,163.0	Section 16-7.2-3
South Carolina	Foundation Formula	$2,425.0	Section 59-20-10
South Dakota	Resource Allocation	Teaching Units	Section 13-13-10.1
Tennessee	Resource Allocation	Teaching Units	Section 49-3-307
Texas	Foundation Formula	$5,140.0	Texas Education Code: 42.101
Utah	Foundation Formula	$3,311.0	Title 53F-2
Vermont	Other	NA	Title 16, Chapter 133
Virginia	Hybrid system - Foundation & P.A.	Varies by district	2016-18 budget bill: https://budget.lis.virginia.gov/item/2018/2/HB5001/Introduced/1/139/. Standards of Quality - Chapter 13.2: https://law.lis.virginia.gov/vacode/title22.1/chapter13.2/
Washington	Resource Allocation	Teaching Units	House Bill 2242 (2018)
West Virginia	Resource Allocation	Teaching Units	WV Code Chapter 18, Article 9A
Wisconsin	Other	NA	Section 115.437
Wyoming	Other	Varies by district	Title 21, Chapter 13, Article 3

Appendix C: Funding Mechanisms for Special Education

State	System	Description	Amount (Dollar Amount or Weight)	Citation
Alabama	Census-Based System	The adjustment for special education reflects 5% ADM, weighted 2.50	2.5 for 5% of the ADM	Ala.Code 1975 § 16-13-232
Alaska	Single Student Weight or Dollar Amount and High-Cost Adjustment	Special needs funding factor: 1.20 Intensive Services Funding: intensive student count multiplied by 13	1.2 + (intensive student count) X 13	AS § 14.17.420
Arizona	Multiple Student Weights System	Fourteen different categories based on the student's specific disability	Ranging from 1.003 to 8.947	A.R.S. § 15-943
Arkansas	Only High-Cost	Special education-catastrophic occurrences funding: Arkansas only provides funding for very high-cost students		A.C.A. § 6-20-2305
California	Census-Based System	Based on the total number of students enrolled, regardless of students' disability status	Not less than 10 percent	West's Ann.Cal.Educ.Code § 56836.145
Colorado	Single Student Weight or Dollar Amount and High-Cost Adjustment	Districts receive $1,250 for each student with a disability. An additional $6,000 for children with certain disabilities may be provided	$167,017,698 for budget year 2017-18.	C.R.S.A. § 22-20-103
Connecticut	Only High-Cost	District is responsible for cost, up to four and one-half times average per-pupil educational costs. Above that threshold, the state provides assistance.		C.G.S.A. § 10-76g

Delaware	Resource-Based System	Resource allocation model using increased teacher-student ratios	Preschool: 12.8 K-3: 16.2 4-12 Regular Education: 20 4-12 Basic Special Education (Basic): 8.4 Pre K-12 Intensive Special Education (Intensive): 6 Pre K-12 Complex Special Education (Complex): 2.6	14 Del.C. § 1703
Florida	Multiple Student Weights System and High-Cost Adjustment	Fixed funding for special education students not receiving level 4 or 5 services is provided through an Exceptional Student Education guaranteed allocation.	Kindergarten and Grades 1, 2 and 3 with ESE Services: 1.107 Grades 4, 5, 6, 7 and 8 with ESE Services: 1.000 Grades 9, 10, 11 and 12 with ESE Services: 1.001 Support Level 4: 3.619 Support Level 5: 5.526	West's F.S.A. § 1011.62
Georgia	Multiple Student Weights System	Five categories based on individual disabilities	2.37989 to 5.7509	Ga. Code Ann., § 20-2-161
Hawaii	Resource-Based System	Based on state appropriations for a single school district	$409,869,091 FY2019	http://www.hawaiipublicschools.org/DOE%20Forms/budget/Act49OpBudget.pdf
Idaho	Census-Based System and Resource Allocation Model	Districts receive special education funding at a rate of 6.0% of a district's total K–6 enrollment and 5.5% of a district's total 7–12 enrollment for additional support units. The percentage of a district's total enrollment eligible for exceptional child funding is divided by the exceptional child support unit divisor of 14.5 to determine the number of exceptional child support units generated by the district.	K-6: 6.0% 7-12: 5.5%	I.C. § 33-1002

Illinois	Resource-Based System and Census-Based System	Resource-based: One FTE teacher position for every 141 special ed students One FTE instructional assistant for every 141 special ed students One FTE psychologist for every 1,000 special ed students Census-based: Annually, the State Superintendent shall calculate and report to each Organizational Unit the amount the unit must expend on special education and bilingual education pursuant to the unit's Base Funding Minimum, Special Education Allocation, and Bilingual Education Allocation.		105 ILCS 5/18-8.15
Indiana	Multiple Student Weights System	Dollar amounts based on severity and disability	(1) Severe disabilities: $9,156 (2) Mild and moderate disabilities: $2,300 (3) Communication disorders: $500 (4) Homebound programs: $500 (5) Special preschool education programs: $2,750	IC 20-43-7-6
Iowa	Multiple Student Weights System	Three different weights based on where the student is educated	Regular classroom: 1.8 Little integration in regular classroom: 2.2 Severe/multiple disabilities: 4.4	I.C.A. § 256B.9
Kansas		The Kansas Supreme Court ruled the state's education funding formula unconstitutional on October 2, 2017 and reiterated this finding on June 25, 2018. The Court has set a deadline of June 30, 2019 for the creation of a constitutional funding system.		

Kentucky	Multiple Student Weights System	Three weights	Each category is given an additional weighting of 2.35, 1.17, and 0.24	KRS § 157.200
Louisiana	Single Student Weight or Dollar Amount	Flat weight for all students with disabilities	2.5	LSA-R.S. 17:7
Maine	Multiple Student Weights System and High-Cost Adjustment	Students are assigned to three different categories based on the concentrations of students with disabilities in their districts.	Up to 15%: 2.277 More than 15%: 1.38 Fewer than 20 students: 1.29 Additional funding for very high cost students	20-A M.R.S.A. § 15681-A
Maryland	Single Student Weight System	Flat weight for all students with disabilities	1.74	MD Code, Education, § 5-209
Massachusetts	Census-Based System and High-Cost Adjustment	Census-based system	Assumed in-district special education enrollment: 3.75 percent Vocational enrollment: 4.75. Reimbursement for very high cost students	M.G.L.A. 71B § 5A
Michigan	Reimbursement System	Not to exceed 75% of the total approved costs of operating special education programs	$956,246,100 for 2017-2018 from state sources and all available federal funding	M.C.L.A. 388.1652
Minnesota	Reimbursement System and Multiple Student Weights	Minnesota funds special education using a hybrid system incorporating multiple student weights and partial reimbursement.	56% reimbursement of a formula (reimbursement) plus additional funding based on students slotted into three categories	M.S.A. § 125A.76
Mississippi	Resource-Based Allocation	One teacher unit is provided for each approved class of exceptional students. The funding allocated is based on the teacher's certification and experience.		Miss. Code Ann. § 37-23-35

Missouri	Single Student Weight System	Flat weight for all students with disabilities, if the count exceeds the special education threshold	1.75	V.A.M.S. 163.011
Montana	Block Grant	The superintendent of public instruction shall determine the total special education payment to a school district through a block grant formula.	(i) 52.5% through instructional block grants; (ii) 17.5% through related services block grants; (iii) 25% to reimbursement of local districts; and (iv) 5% to special education cooperatives and joint boards for administration and travel	MCA 20-9-321
Nebraska	Reimbursement System	For special education and support services provided in each school fiscal year, the State Department of Education shall reimburse each school district in the following school fiscal year a pro rata amount determined by the department.		Neb.Rev.St. § 79-1142
Nevada	Single Student Weight Or Dollar Amount	It is the intent of the Legislature, commencing with Fiscal Year 2016-2017, to provide additional resources to the Nevada Plan expressed as a multiplier of the basic support guarantee to meet the unique needs of certain categories of pupils, including, without limitation, pupils with disabilities, pupils who are English Language Learners, pupils who are at risk and gifted and talented pupils.		N.R.S. 387.121
New Hampshire	Single Student Weight or Dollar Amount and High-Cost Adjustment	Additional dollar amount in the formula	Additional $1,956.09 for a special education student who has an individualized educational plan (FY18 and FY19). Extra funding for very high cost students.	N.H. Rev. Stat. § 186-C:18

New Jersey	Census-Based System	Census-based system	SE = (RE x SEACR x AEC x ⅓) x GCA where RE is the resident enrollment of the school district or county vocational school district; SEACR is the State average classification rate for general special education services pupils; AEC is the excess cost for general special education services pupils; GCA is the geographic cost adjustment as developed by the commissioner.	N.J.S.A. 18A:7F-55
New Mexico	Multiple Student Weights System	Students are assigned to four different categories based on the services they receive.	Class A and Class B: 1.7 Class C: 2.0 Class D: 3.0	N. M. S. A. 1978, § 22-8-21
New York	Single Student Weight System	Flat weight for all students with disabilities	2.41	McKinney's Education Law § 3602
North Carolina	Single Student Weight System	Flat weight for all students with disabilities, which depends on state allocations	Depends on state allocations with a 12.5% cap	N.C.G.S.A. § 115C-107.1
North Dakota	Single Student Weight System	Flat weight for all students with disabilities	1.082	NDCC, 15.1-27-03.1
Ohio	Multiple Student Weights System	Students are assigned to six different categories based on their specific disabilities.	Category 1: $1,578 Category 2: $4,005 Category 3: $9,622 Category 4: $12,841 Category 5: $17,390 Category 6: $25,637	R.C. § 3317.013

Oklahoma	Multiple Student Weights System	Students are assigned to ten different categories based on their specific disabilities.	Vision Impaired: 4.8 Learning Disabilities: 1.4 Deaf or Hard-of-Hearing: 3.9 Deaf and Blind: 4.8 Educable Mentally Handicapped: 2.3 Emotionally Disturbed: 3.5 Multiple Handicapped: 3.4 Physically Handicapped: 2.2 Speech Impaired: 1.05 Trainable Mentally Handicapped: 2.3	70 Okl.St.Ann. § 18-201.1
Oregon	Single Student Weight System	Flat weight for all students with disabilities	2.0 with an 11% cap	O.R.S. § 327.013
Pennsylvania	Multiple Student Weights System	Multiple student weights based on cost	Three categories based on student costs • Category 1: < $25,000/year • Category 2: $25,000 - $49,999/year • Category 3: $50,000 and up/year Weights are assigned to each cost category • Category 1: 2.51% • Category 2: 4.77% • Category 3: 8.46%	24 P.S. § 25-2509.5
Rhode Island	Reimbursement and High-Cost Adjustment	Reimbursement capped at 110% of the state average Categorical for very high-cost students		Gen.Laws 1956, § 16-24-6 Gen.Laws 1956, § 16-7.2-6
South Carolina	Multiple Student Weights System	Different weights based on disability	Ten categories ranging from 1.114 to 3.57	Code 1976 § 59-20-40

South Dakota	Multiple Student Weights System	Six levels of disability based on individual disability	Additional dollar amounts ranging from $5,527.09 to $28,161.22	SDCL § 13-37-35.1
Tennessee	Resource-Based System	Resource allocation model where teachers, assistants, and supervisors are allocated based on the number of students with disabilities	Teachers: 10 options based on disability and severity Supervisors: 750:1 Assessment Personnel: 600:1 Assistants: 60:1 Materials: $36.50 Equipment: $17.25 Travel: $17.25	Tenn. Comp. R. & Regs. 0520-01-09-.02
Texas	Multiple Student Weights System	Different weights based on where the student is educated and the resources provided	Ranging from 1.1 to 5.0	V.T.C.A., Education Code § 42.151
Utah	Block Grant	Block grant based on prior 5 years ofof allocations with a growth factor	Capped at 12.18%	U.C.A. 1953 § 53A-17a-111
Vermont	Resource-Based Allocation and High-Cost Adjustment		Resource-based allocation: Teacher salary weighted 1.6 for special education. 9.75 special education teaching positions per 1000 students. Reimbursement for very high cost (one child costs over $50,000)	16 V.S.A. § 2961
Virginia	Resource-Based System	Resource-based system	Based on the cost of staff positions in a district	West's Ann.Cal.Educ.Code § 56836.10
Washington	Single Student Weight System	Flat weight for all students with disabilities	1.9309 with a cap of 13.5%	West's RCWA 28A.150.390
West Virginia	Only High-cost	Hybrid resource-allocation and reimbursement for only high-cost students	FTE calculated for teacher, therapist, aides, and bus drivers	http://wvde.state.wv.us/osp/fiscalmonitoring.html

Wisconsin	Reimbursement System and High-Cost Adjustment	Partial reimbursement	Additional funding for students costing over $30,000	W.S.A. 115.881
Wyoming	Reimbursement System	The amount provided for special education shall be equal to 100% of the amount actually expended by the district during the previous school year for special education programs and services.		W.S.1977 § 21-13-321

Appendix D: Funding Mechanisms for At-Risk Students

State	Mechanism	Description	Program Name	Amount	Citation
Alabama	Single weight or dollar amount	$100 per student defined as “at risk.” These funds are required to be spent on tutorial assistance programs for students one or more grade levels below the national norm.	Assistance program for at-risk students	$100 per student	Ala.Code 1975 § 16-6B-3
Alaska	None				
Arizona	Single weight or dollar amount	Each school district and charter school shall submit to the state board of education a plan for improving the reading proficiency of its pupils in kindergarten programs and grades one, two and three.	K-3 Reading Program	1.040 Weight	A.R.S. § 15-211
Arkansas	Multiple weights or dollar amounts	Sliding scale based on the percentage of students in the national school lunch program.	National School Lunch State Categorical Funding	FY2018: >90%: $1,576 70%-90%: $1,051 <70%: $526	A.C.A. § 6-20-2305
California	Single weight or dollar amount	Supplemental Grant: English Language Learners (ELL), eligible for free or reduced-price meal (FRPM), foster youth, or any combination of these factors (unduplicated count).	Supplemental Grant	1.2	West's Ann.Cal.Educ.Code § 42238.02
	Single weight or dollar amount	Concentration Grant: Additional 50 percent of the adjusted base grant multiplied by ADA and the percentage of targeted pupils exceeding 55 percent of a local educational agency’s (LEAs) enrollment.	Concentration Grant	1.5 for the percentage of at-risk students exceeding 55%	West's Ann.Cal.Educ.Code § 42238.02

Colorado	Multiple Weights	Eligibility for participation in the federal free lunch program is used as a proxy of each school district's at-risk pupil population.	At-Risk Funding	Range: 1.12 to 1.30 depending on at-risk percentage	C.R.S.A. § 22-54-136
Connecticut	Single weight or dollar amount	Eligibility for federal assistance under Title I of the Elementary and Secondary Education Act as of each October 1 counts an extra 33%.	Poverty Count	1.33	C.G.S.A. § 10-262f
Delaware	None				
Florida	Categorical	Each school district receiving funds from the Supplemental Academic Instruction Categorical Fund shall submit to the Department of Education a plan that identifies the students to be served and the scope of supplemental academic instruction to be provided.	Supplemental Academic Instruction Funds	$712,207,631 for the 2017-18 fiscal year	http://www.fldoe.org/core/fileparse.php/7507/urlt/Fefpdist.pdf
Georgia	Resource-Allocation Model	Additional funding for remedial students, defined as students identified as not reaching or not maintaining adequate academic achievement relative to grade level.	Remedial Program	Sufficient funds to pay the beginning salaries for instructors needed to provide 20 additional days of instruction for 10 percent of the full-time equivalent count.	Ga. Code Ann., § 20-2-184.1
Hawaii	Single weight or dollar amount	"Economically disadvantaged," which is defined as qualifying for free and reduced price lunch.	Economically Disadvantaged Count	1.1	https://www.hawaiipublicschools.org/Reports/FY18WSFOECweights.pdf
Idaho	Resource-Allocation Model	12 students in grade 6-12 at an alternative school generate an alternative support unit.	Alternative Support Units		I.C. § 33-1002

Illinois	Multiple Weights	Count of children receiving services through the programs of Medicaid, the Supplemental Nutrition Assistance Program, the Children's Health Insurance Program, or Temporary Assistance for Needy Families.	GSA Grant	<15%: $355 15%-100%: [294.25 + (2,700 (Low-Income Percentage)^2)] X low-income pupils	105 ILCS 5/18-8.05
Indiana	Single weight or dollar amount	Complexity grants are used to help school corporations serving high poverty children.	Complexity Grant	$4,587 for FY2015	IC 20-43-13-4
Iowa	Single weight or dollar amount	Only for grades 1-6, eligibility for free and reduced price meals	At-Risk Programs	0.048 times the percentage of pupils in a school district, grades 1-6 who are eligible for free and reduced price meals, multiplied by the enrollment in the school district, plus 0.156 times the enrollment of the school district.	I.C.A. § 257.11
Kansas	Multiple Weights	The Kansas Supreme Court ruled the state's education funding formula unconstitutional on October 2, 2017 and reiterated this finding on June 25, 2018. The Court has set a deadline of June 30, 2019 for the creation of a constitutional funding system.	High-Density At-Risk Student Weighting	If >10%: 1.484 If<10%: assume 10% is at-risk If 35-50%: Subtract 35% and multiply by 1.7 if >50%: 1.105	K.S.A. 72-5151
Kentucky	Single weight or dollar amount	Average daily membership of students approved for free meals the prior fiscal year and the number of state agency children.	At-Risk Student Amount	1.15	702 Ky. Admin. Regs. 3:270
Louisiana	Single weight or dollar amount	Eligibility for free or reduced lunches and students identified as English Language Learners (non-duplicated count).	At-Risk Students	1.22 times the base amount	LSA-Const. Art. 8, § 13

Maine	Single weight or dollar amount	Eligibility for free or reduced-price meals	Economically Disadvantaged Students	1.15	20-A M.R.S.A. § 15675
Maryland	Single weight or dollar amount	"Compensatory education enrollment count" means the number of students eligible for free or reduced price meals for the prior fiscal year.	Compensatory education enrollment count	1.97	MD Code, Education, § 5-207
Massachusetts	Single weight or dollar amount	Low-income status is reported on the basis of eligibility for free and reduced lunch programs.	Low-income status	FY16: $2,809	M.G.L.A. 70 § 2
Michigan	Single weight or dollar amount	One of the following criteria: did not achieve proficiency on the ELA, math, science, or social studies content areas of the state summative assessment; is at risk of not meeting the district's core academic curricular objectives in ELA or math; is a victim of child abuse or neglect; is a pregnant teenager or teenage parent; has a family history of school failure, incarceration, or substance abuse; or is enrolled in a priority or priority successor school. Or two of the following: eligible for free or reduced price breakfast, lunch, or milk; absent more than 10 percent of enrolled days or 10 school days during the school year; homeless; migrant; an English language learner; an immigrant who has immigrated within the immediately preceding three years; did not complete high school in four years and is continuing in school.	At-risk	1.115	M.C.L.A. 388.1631a

Minnesota	Single weight or dollar amount	Eligibility for free or Reduced Price Lunch	Compensatory Pupil Units	Compensatory Revenue = (Basic Formula Allowance – $415) x .6 x Compensatory Pupil Units	M.S.A. § 126C.05
Mississippi	Single weight or dollar amount	Eligibility for free Lunch	At-risk component	1.05	Miss. Code Ann. § 37-151-7
Missouri	Single weight or dollar amount	Eligibility for free and reduced price lunch if the district meets a minimum threshold	Free and reduced price lunch weighting	1.25	V.A.M.S. 163.011
Montana	Categorical	The At-Risk Student payment is intended to address the needs of at-risk students; money is distributed in the same manner as Title I monies are distributed to schools.	At-risk student payment		MCA 20-9-328
Nebraska	Multiple Weights	Poverty students are determined by Free and reduced Lunch status.	Poverty student count	• 1.0000 for the first 5% • 1.0375 for 5 - 10% • 1.0750 for 10 - 15% • 1.1125 for 15 - 20% • 1.1500 for 20 - 25% • 1.1875 for 25 - 30% • 1.2250 for more than 30% of formula students	Neb.Rev.St. § 79-1007.06
Nevada	Single weight or dollar amount	It is the intent of the Legislature, commencing with Fiscal Year 2016-2017, to provide additional resources to the Nevada Plan expressed as a multiplier of the basic support guarantee to meet the unique needs of certain categories of pupils, including, without limitation, pupils with disabilities, pupils who are English learners, pupils who are at risk and gifted and talented pupils.			N.R.S. 387.121

New Hampshire	Single weight or dollar amount	Eligibility for free and reduced-price meals	Differentiated aid for free and reduced-price meal eligible students	Additional $1,780.63	N.H. Rev. Stat. § 198:40-a
New Jersey	Multiple Weights	Free and reduced price lunches	At-risk pupil weight	FY2017: <20%: 1.41 >40%: 1.46 Sliding scale in between	N.J.S.A. 18A:7F-51
New Mexico	Single weight or dollar amount	Units calculated based on a factor or index determined by establishing a three-year average of the following: 1) percentage of membership used for Title I allocation; 2) percentage of membership classified as English language learners (using the Office of Civil Rights (OCR), and, 3) percentage of student mobility.	At-risk units	Three-Year Average Total Rate x 0.106 = At-Risk Index	N. M. S. A. 1978, § 22-8-23.3
New York	Single weight or dollar amount	Three-year average percentage of students in grades K-6 who are eligible for the free and reduced price lunch program and the census count of students in poverty.	Extraordinary needs pupil count	(National School Lunch Program and Poverty) X 0.65 + (ELL) X 0.5 + (Sparsity Count)	McKinney's Education Law § 3602
North Carolina	Resource-Allocation Model	Every LEA receives the following: 1. Funding equivalent to School Safety Officer salary ($37,838) per high school 2. Remaining funds allocated based 50% on Federal Title I headcount ($329.77/pupil) and 50% on allotted ADM ($88.37/pupil) NOTE: Each LEA must receive at least the equivalent of two teachers and two instructional support personnel ($249,288).	At-risk student services		http://www.ncpublicschools.org/docs/fbs/allotments/general/2014-15policymanual.pdf

	Resource-Allocation Model	Disadvantaged students supplemental funding: Step 1: Use the average statewide (K-12) teacher-to-student classroom teacher allotment for the Fundable Disadvantaged Population, which is 1:21. Step 2: The targeted allotment ratios for the Fundable Disadvantaged Population are: • If low wealth % is > 90%, one teacher per 19.9 students • If low wealth % is > = 80% but < = 90%, one teacher per 19.4 students. • If low wealth % is < 80%, one teacher per 19.1 students. Step 3: Convert the teaching positions to dollars by using the state average teacher salary (including benefits).	Disadvantaged students supplemental funding		http://www.ncleg.net/documentsites/committees/JLSCPSFF/2007-12-13%20Meeting/2007.12.13%20Pt.6_DSSF.pdf
North Dakota	Single weight or dollar amount	The three-year average percentage of students in grades three through eight who are eligible for free or reduced lunches.	Weighted ADM for students eligible for free or reduced lunches	1.025	NDCC, 15.1-27-03.1
Ohio	Single weight or dollar amount	The square of the quotient of that district's percentage of students in its total ADM who are identified as economically disadvantaged as defined by the department of education, divided by the percentage of students in the statewide total ADM identified as economically disadvantaged. Eligibility for Free or Reduced-Price Lunch, recipient of public assistance, or title 1 application.	Economically disadvantaged index for a school district	$272 X ((# at-risk students in district/# at-risk students in state)^2 X # at-risk in district)	R.C. § 3317.022

Oklahoma	Single weight or dollar amount	Eligibility for free/reduced meal status. Note: starting in 2015, free and reduced meals no longer used as proxy for economic disadvantage for some types of schools (http://sde.ok.gov/sde/sites/ok.gov.sde/files/Econ.%20Disadv.%20Memo%20Final.pdf).	Economically disadvantaged weight	1.25	70 Okl.St.Ann. § 18-201.1
Oregon	Single weight or dollar amount	The number of children in poverty families, as determined by the Department of Education based on rules adopted by the State Board of Education; and the number of children in foster homes in the district; and the number of children in the district in state-recognized facilities for neglected and delinquent children.	Poverty weight	1.25	O.R.S. § 327.013
Pennsylvania	Multiple Weights	Various weights based on concentration	Poverty average daily membership	1.3 or 1.6	24 P.S. § 25-2502.53
Rhode Island	Single weight or dollar amount	PK-12 students eligible for free and reduced lunch	Student success factor	1.4	Gen.Laws 1956, § 16-7.2-3
South Carolina	Single weight or dollar amount	(1) District poverty index as detailed on the most recent district report card, which measures student eligibility for the free or reduced price lunch program and Medicaid; and (2) Number of students not in poverty or eligible for Medicaid but who fail to meet state standards in either reading or math.	Students at risk of school failure	1.2	http://ed.sc.gov/finance/financial-services/manual-handbooks-and-guidelines/funding-manuals/fy-2014-2015-funding-manual/
South Dakota	None	None			

Tennessee	Resource-Allocation Model	Based on 1:15 class size reduction for grades K-12, estimated at $542.27 per identified at-risk ADM by eligibility for free and reduced price lunch	K-12 At-risk class size reduction		T. C. A. § 49-3-361
Texas	Single weight or dollar amount	Educationally disadvantaged student, determined by averaging the highest six months of student enrollment in the National School Lunch Program for free or reduced-price lunches for the prior federal fiscal year.	State compensatory education	1.2	V.T.C.A., Education Code § 42.152
Utah	Categorical	One or more of the following risk factors: (1) Low performance on U-PASS tests; (2) Poverty; (3) Limited English Proficiency; and (4) Mobility. "Mobility" means the number of students enrolled less than 160 days or its equivalent in one school within one school year. "Poverty" means the total number of students eligible for free or reduced-priced lunch.	Enhancement for At-Risk Students Program	Annual appropriation	U.A.C. R277-708
Vermont	Single weight or dollar amount	Additional 25% for students, ages 6-17, from families receiving food stamps.	Poverty ratio	1.25	16 V.S.A. § 4010
Virginia	Multiple Weights	1) A minimum 1.0 percent add-on for each child who qualifies for the federal Free Lunch Program; and 2) An addition to the add-on, based on the concentration of children qualifying for the federal Free Lunch Program. Based on its percentage of Free Lunch participants, each school division will receive between 1.0 and	Remedial Education Payments for federal free lunch participants	Rage: 1.01 to 1.13 based on the percentage of at-risk students	https://budget.lis.virginia.gov/get/budget/3279/

		13.0 percent in additional basic aid per Free Lunch participant.			
Washington	Single Student weight or dollar amount	Districts receive LAP allocations based on the number of students in poverty, as measured by eligibility for free or reduced-price lunch.	Learning Assistance Program	2014-2015: Additional $463	http://leg.wa.gov/Senate/Committees/WM/Documents/K-12%20Booklet_2015%202-10-15.pdf
West Virginia	Single weight or dollar amount	The total funds are distributed proportionally to each district on the basis of net enrollment, regardless of at-risk status.	Allowance for Alternative Education Programs	$18 per student	W. Va. Code, § 18-9A-21
Wisconsin	Categorical	A school district is eligible for aid if at least 50 percent of the district's student enrollment is eligible for free or reduced-price lunch.	Aid to High Poverty Districts	$16,830,000 in 2017-18 and 2018-19	W.S.A. 121.136
Wyoming	Single weight or dollar amount	Eligibility for the federal free and reduced lunch program. A district receives an EDY adjustment if the percentage of eligible children within any of its schools exceeds 150% of the statewide average concentration level for each school type.	Economically disadvantaged youth	If >150% of state average, additional $500 per at-risk student	W.S.1977 § 21-13-309

Appendix E: Funding Mechanisms for English Language Learners

State	Mechanism	Description	Amount (Dollar Amount or Weight)	Citation
Alabama	Categorical Grant	The amount is appropriated on a per student basis based on total state appropriations	$2,755,334 for FY 18	2017 Alabama House Bill No. 171, Alabama 2017 Regular Session
Alaska	Flat Student Weight/Dollar Amount	Special needs funding is available to a district to assist the district in providing special education, gifted and talented education, vocational education, and bilingual education services to its students	1.2	AS § 14.17.420
Arizona	Flat Student Weight/Dollar Amount	English Learner Classroom Personnel Bonus Fund	1.115	A.R.S. § 15-943
Arkansas	Flat Student Weight/Dollar Amount		$338 per identified student in FY2018	A.C.A. § 6-20-2305
California	Flat Student Weight/Dollar Amount		1.2	West's Ann.Cal.Educ.Code § 42238.02
Colorado	Multiple Weights and categorical	Formula: 1.2 weight in the formula, plus a bonus for districts with a high concentration of ELLs	If ELL < state average: 1.2 If ELL > state average, then districts get additional funding	C.R.S.A. § 22-54.5-201 C.R.S.A. § 22-24-104
Connecticut	Categorical Grant	Districts shall annually receive, within available appropriations, a grant in an amount equal to the product obtained by multiplying 1,916,130 by the ratio which the number of eligible children in the school district bears to the total number of such eligible children state-wide	1,916,130 X Ratio of ELL students to statewide average	2017 Connecticut Senate Bill No. 1502, Connecticut General Assembly - June Special Session, 2017
Delaware	Resource-Allocation Model	The unit for academic excellence may be used to provide educational services for limited English proficient pupils		14 Del.C. § 1716
Florida	Flat Student Weight/Dollar Amount		1.212	West's F.S.A. § 1011.62

Georgia	Flat Student Weight/Dollar Amount	English for Speakers of Other Languages (ESOL) program	2.5558	Ga. Code Ann., § 20-2-161
Hawaii	Multiple Weights	Different weights depending on English language proficiency	Fully English Proficient: 1.0648 Limited English Proficient: 1.1944 Non-English Proficient: 1.3888 Aggregate: 1.2341	https://www.hawaiipublicschools.org/Reports/FY18WSFOECweights.pdf
Idaho	Categorical Grant	Based on total state appropriations	$3,820,000 in 2017-2018	2017 Idaho House Bill No. 287, Idaho Sixty-Fourth Idaho Legislature, First Regular Session - 2017
Illinois	Reimbursement	Each school district shall be reimbursed for the amount by which such costs exceed the average per pupil expenditure by such school district for the education of children of comparable age who are not in any special education program	Reimbursement	105 ILCS 5/14C-12
Indiana	Multiple Weights	Non-English-Speaking Program (NESP)	For 2017-2018: -$250 base per-pupil allocation -$131.50 additional per-pupil allocation for LEAs with an EL population in excess of 5% but less than 18% -$165.16 additional per-pupil for LEAs with an EL population greater than 18%	IC 20-30-9-5
Iowa	Flat Student Weight/Dollar Amount	0.22, may be weighted for up to five years, beginning with the budget year for which the student was first determined to be limited English proficient	1.22	I.C.A. § 280.4

Kansas	Multiple Weights	Included in at-risk definition	Multiple weights based on concentration	K.S.A. 72-5151
Kentucky	Flat Student Weight/Dollar Amount		1.096	KRS § 157.200
Louisiana	Flat Student Weight/Dollar Amount		1.22	LSA-Const. Art. 8, § 13
Maine	Multiple Weights	Additional weight in formula depends on density of ELL students	A. Fewer than 15 ELL students: weight of 1.7 B. > 15 ELL students and < 251: weight of 1.5 C. 251 or more ELL students: weight of 1.525	20-A M.R.S.A. § 15675
Maryland	Flat Student Weight/Dollar Amount		1.99	MD Code, Education, § 5-208
Massachusetts	Multiple Weights	Additional weight in formula varies depending on grade level		I MA ST T. XII, Ch. 71A
Michigan	Multiple Weights		$6,000,000 total: $620 or $410 per FTE depending on proficiency	M.C.L.A. 388.1641
Minnesota	Multiple Weights	There are two parts to the EL portion of basic skills revenue: the first part or basic formula is a set amount per EL pupil; the second part of the EL formula is a concentration formula	Flat allocation: $704 for each ELL Second allocation: varies based on concentration (FY18)	M.S.A. § 124D.65
Mississippi	None			
Missouri	Flat Student Weight/Dollar Amount		If ELL > 1.94% of ADA, then weighted at 1.60 (FY18)	V.A.M.S. 163.031
Montana	None			
Nebraska	Flat Student Weight/Dollar Amount	Must be less than a district maximum and adjustments are made after the calculation	LEP allowance: 25% of the statewide average general fund operating expenditures per formula student X ELL	Neb.Rev.St. § 79-1007.08

Nevada	Categorical Grant	Zoom Schools Program in Clark and Washoe counties (plus 1,500 students in other counties) extended through 2019		2017 Nevada Senate Bill No. 504, Nevada Seventy-Ninth Regular Session
New Hampshire	Flat Student Weight/Dollar Amount		$711.40 (FY18 and FY19)	N.H. Rev. Stat. § 198:40-a
New Jersey	Flat Student Weight/Dollar Amount	For the 2008-2009 through 2010-2011 school years, the LEP weight shall be 0.5. For subsequent school years, the LEP weight shall be established in the Educational Adequacy Report	0.47 (FY17)	N.J.S.A. 18A:7F-51
New Mexico	Flat Student Weight/Dollar Amount		1.35	N. M. S. A. 1978, § 22-8-22
New York	Multiple Weights	Included in Extraordinary Needs (EN) count	EN = Poverty Count + (English Language Learner Count × 0.5) + Sparsity Count	McKinney's Education Law § 3602
North Carolina	Resource-Allocation Model	Eligible LEAs/charter schools must have at least 20 students with limited English proficiency (based on a 3-year weighted average headcount), or at least 2.5% of the ADM of the LEA/charter school. Funding is provided for up to 10.6% of ADM	Each school receives the minimum of 1 teacher assistant position. 1. 50% of the funds (after calculating the base) will be distributed based on the concentration of limited English proficient students within the LEA. 2. 50% of the funds (after calculating the base) will be distributed based on the weighted 3-year average headcount.	http://www.ncpublicschools.org/docs/fbs/allotments/general/newpolicies17-18.pdf
North Dakota	Multiple Weights	Weight varies based on level of proficiency	1.40 categories 1-6 1.28 categories 7-12 1.07 categories 13-18	NDCC, 15.1-27-03.1

Ohio	Multiple Weights	Funding depends on duration of enrollment:	(A) $1,515 per student enrolled for 180 school days or less (B) $1,136 per student enrolled for more than 180 school days (C) $758 per student who does not qualify for inclusion under division (A) or (B) and is in a trial-mainstream period	R.C. § 3317.016
Oklahoma	Flat Student Weight/Dollar Amount		1.25	70 Okl.St.Ann. § 18-201.1
Oregon	Flat Student Weight/Dollar Amount		1.5	O.R.S. § 327.013
Pennsylvania	Flat Student Weight/Dollar Amount		1.6	24 P.S. § 25-2502.53
Rhode Island	Flat Student Weight/Dollar Amount		1.1	Gen.Laws 1956, § 16-7.2-6
South Carolina	Flat Student Weight/Dollar Amount		1.2	2017 South Carolina House Bill No. 3720, South Carolina One Hundred Twenty-Second Session General Assembly - First Regular Session
South Dakota	Flat Student Weight/Dollar Amount		1.25	SDCL § 13-13-10.1
Tennessee	Resource-Allocation Model	The state's funding formula provides districts with funding for an additional teaching position for every 20 ELL students and an additional interpreter position for every 200 students		T. C. A. § 49-3-307

Texas	Flat Student Weight/Dollar Amount		1.1	V.T.C.A., Education Code § 42.153
Utah	Categorical Grant	ELLS are included in At-Risk Students Program	20% of at-risk funding goes to high-poverty districts 76% distributed based on districts' at-risk student enrollment. 4% to all districts	U.A.C. R277-708
Vermont	Flat Student Weight/Dollar Amount		1.2	16 V.S.A. § 4010
Virginia	Resource-Allocation Model	State funding shall be provided to support 17 full-time equivalent instructional positions for each 1,000 students identified as having limited English proficiency.	17 teachers per 1000 ELLs	VA Code Ann. § 22.1-253.13:2
Washington	Resource-Allocation Model	The formula provides 4.7780 hours of bilingual instruction per week. The formula translates to additional 11 funding of approximately $923 per eligible student in the 2014-15 school year		West's RCWA 28A.180.080
West Virginia	Categorical Grant	In order to receive the funding, a county board must apply to the state superintendent	Any appropriation made pursuant to this section shall be distributed to the county boards in a manner that takes into account the varying proficiency levels of the students and the capacity of the county board to deliver the needed programs	W. Va. Code, § 18-9A-22
Wisconsin	Reimbursement	It is the policy of this state to reimburse school districts for the added costs of providing special programs		W.S.A. 115.95
Wyoming	Flat Student Weight/Dollar Amount	A district receives an EDY adjustment if the percentage of eligible children within any of its schools exceeds 150% of the statewide average concentration level for each school type	If >150% of state average, additional $500 per at-risk student	W.S.1977 § 21-13-309

Appendix F: Funding Mechanisms for Gifted/Talented Students

State	Mechanism	Description	Amount (Dollar Amount or Weight)	Citation
Alabama	None			
Alaska	Flat Weight		1.2	AS § 14.17.420
Arizona	Census-Based and Flat Weight	4.0 percent assumed for all districts	$75 per pupil for four per cent of the district's student count, or two thousand dollars, whichever is more	A.R.S. § 15-779.03
Arkansas	Categorical	Funds are appropriated to provide financial assistance to school districts operating programs for gifted and talented students.		A.C.A. § 6-42-106
California	None			
Colorado	Categorical		$12.1 million plus an additional $33 million from local and other resources.	C.R.S.A. § 22-20-205
Connecticut	Reimbursement	"Extraordinary learning ability" and "outstanding creative talent" shall be defined by the commissioner.	LEA is responsible for costs up to 4.5 times the average per-pupil educational costs. State reimburses the rest.	C.G.S.A. § 10-76a C.G.S.A. § 10-76g
Delaware	Resource Allocation Model	The unit for academic excellence may be used to provide educational services for gifted and talented pupils.		14 Del.C. § 1716

Florida	Categorical	The Exceptional Student Education (ESE) Guaranteed Allocation provides supplemental funding for students who have low to moderate handicapping conditions and/or are gifted students.	The guaranteed allocation is a fixed amount provided each district.	West's F.S.A. § 1003.57
Georgia	Flat Weight	Category VI of Special Education Funding - intellectually gifted	1.6589 for FY 2018 (adjusted annually)	Ga. Code Ann., § 20-2-161
Hawaii	Census-Based	The count used to determine the G/T enrollment at a school is based on a flat 3% assumption for each school.	1.265	https://www.hawaiipublicschools.org/DOE%20Forms/WSF/COWFICreport081815.pdf
Idaho	Categorical	"Gifted/talented children" means those students who are identified as possessing demonstrated or potential abilities that give evidence of high performing capabilities in intellectual, creative, specific academic or leadership areas, or ability in the performing or visual arts and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities.	$1,000,000 in 2017-2018	2017 Idaho House Bill No. 287, Idaho Sixty-Fourth Idaho Legislature, First Regular Session - 2017
Illinois	Only if funding is available	When sufficientstate funding is expected to be available to support local programs of gifted education, the State Superintendent of Education shall issue a Request for Proposals (RFP). To be considered for funding, an eligible entity shall submit for approval by the State Superintendent a plan for its program.		105 ILCS 5/14A-30
Indiana	Categorical	A school corporation may submit a grant proposal for planning or continuation of services. Proposals are reviewed to verify compliance with the High Ability Program Rule.	2016-2017: $12,548,096	IC 20-36-2-1

Iowa	Flat Weight		$82.67 per-pupil for 2017-2018	I.C.A. § 257.46
Kansas	None			
Kentucky	Multiple Weights	Funded under "Special Education Programs"		KRS § 157.200
Louisiana	Flat Weight	Funding for gifted and talented students with an IEP	1.6	2017 La. Sess. Law Serv. Hs. Conc. Res. 7 (WEST)
Maine	Categorical	The Gifted and Talented Allocation uses the most recent financial data for approved programs, or the approved budget amount, whichever is less, and multiplies that amount by an inflation adjustment.		20-A M.R.S.A. § 15672
Maryland	Only if funding is available	To the extent funds are provided in thestate budget or are available from other sources, the State Board shall provide guidance, consultative and technical assistance, and fiscal support for programs that include.		MD Code, Education, § 8-204
Massachusetts	None			
Michigan	None			
Minnesota	Flat Weight	For fiscal year 2015 and later, the formula allowance is $13 per pupil. The revenue must be reserved and spent only to: (1) identify gifted and talented students; (2) provide education programs for gifted and talented students; or (3) provide staff development	$13 per pupil $12,235,000 for 2018	M.S.A. § 126C.10

Mississippi	Resource Allocation Model	The gifted education program is an add-on program funded by the state legislature through the Mississippi Adequate Education Program.	1. The first teacher unit shall be funded on the basis of a minimum of 20 identified and participating students. 2. The second gifted teacher unit shall be funded when there are 41 identified and participating students. 3. Additional gifted teacher units shall be funded based on the 40 + 1 formula.	Miss. Admin. Code 7-96
Missouri	None			
Montana	Categorical	District must apply to the state for funding. State funds must be matched with local funds.		MCA 20-7-903 Mont.Admin.R. 10.55.804
Nebraska	Categorical	Local systems may apply to the department for base funds and matching funds	Each eligible local system shall receive 11/10 of 11% of the appropriation as base funds plus a pro rata share of the remainder of the appropriation based on identified students, up to 10 percent of the prior year's fall membership	Neb. Admin. R. & Regs. Tit. 92, Ch. 3, § 007
Nevada	Flat Weight	Funds will be distributed on a per pupil basis based on a count day(s) reporting mechanism to be established by the Department.		N.R.S. 388.5267
New Hampshire	None			
New Jersey	None			

New Mexico	Multiple Weights	Apply multipliers to the base per-pupil amount for gifted students; these multipliers vary depending on the degree of modification the students require to the general education program.	Varies by need	N.M. Admin. Code 6.29.1
New York	None			
North Carolina	Census-Based	All LEAs receive these funds regardless of the number of identified AIG students.	4% of ADM at $1310.82 per pupil	N.C.G.S.A. § 115C-150.5
North Dakota	Reimbursement	Funds must be distributed to reimburse school districts or special education units for gifted and talented programs upon the submission of an application that is approved in accordance with guidelines adopted by the superintendent of public instruction.	$800,000 in 2017	2017 North Dakota House Bill No. 1013, North Dakota Sixty-Fifth Legislative Assembly
Ohio	Flat Weight and Resource Allocation	The funding is distributed through 3 streams.	Identification Funding = (Formula ADM) X $5.05 Coordinator Funding = [(Formula ADM – Community School ADM) / 3,300] x $37,370 Specialist Funding = [(Formula ADM – Community School ADM) / 1,100] x $37,370	OAC 3301-51-15
Oklahoma	Flat Weight		1.34	70 Okl.St.Ann. § 18-201.1
Oregon	Categorical	Any school district may apply for state funds for services for talented and gifted children identified in the district.		O.R.S. § 343.399

Pennsylvania	Reimbursement	The term “children with exceptionalities” shall mean children of school age who have a disability or who are gifted and who, by reason thereof, need specially designed instruction. The state reimburses at different rates based on total cost.	Category 1: <$25k Category 2: $25k-$50k Category 3a: $50k-$75k Category 3b: >$75k	24 P.S. § 13-1373
Rhode Island	None			
South Carolina	Flat Weight	The SCDE will annually calculate each district's allocation based on the number of gifted and talented students projected to be served in each district as it relates to the total of all such students in the state.	1.15 District minimum: $15,000	S.C. Code of Regulations R. 43-220
South Dakota	None			
Tennessee	Resource Allocation Model	Part of special education funding. "'Child with disabilities' means the intellectually gifted."	Tiered teacher allocation system based on location of instruction and amount of specialized contact.	T. C. A. § 49-10-102 and T. C. A. § 49-10-113
Texas	Flat weight		1.12 with a 5% cap	V.T.C.A., Education Code § 42.156
Utah	Categorical	Enhancement for Accelerated Students	$5,032,400 in FY 18	U.C.A. 1953 § 53A-17a-165
Vermont	None			
Virginia	Resource Allocation Model	An additional payment shall be disbursed by the Department of Education to local school divisions to support the state share of one full-time equivalent instructional position per 1,000 students	$34,425,282 for FY 18	2016 Virginia House Bill No. 29, Virginia 2017 Regular Session

Washington	Census-based and Resource Allocation	5.0 percent of each school district's population	Provides 2.1590 hours per week in extra instruction with fifteen highly capable program students per teacher.	West's RCWA 28A.185.020
West Virginia	None			
Wisconsin	Categorical	The department shall award grants to nonprofit organizations, cooperative educational service agencies, institutions within the University of Wisconsin System, and school districts for the purpose of providing to gifted and talented pupils those services and activities not ordinarily provided in a regular school.	Maximum is $30,000 per grant. Total is $237,200 for FY18	W.S.A. 118.35
Wyoming	Flat Weight		$40.29/ADM	2017 Wyoming House Bill No. 236, Wyoming Sixty-Fourth Legislature - 2017 General Session

Appendix G: Professional Judgment Panel Participants

Name	District	Panel
AJ Feuling	Carson	Special Education Panel
Becky Kaatz	CCSD	At-Risk Panel
Betsy Sexton	Washoe	Special Education Panel
Brian Prewett	Washoe	At-Risk Panel
Bruce Williams	Eureka	EL Panel
Deanna McHenry	CCSD	Special Education Panel
Derild Parson	Churchill	Special Education Panel
Ignacio Ruiz	CCSD	EL Panel
Janeen Kelly	Washoe	EL Panel
Jason Goudie	CCSD	At-Risk Panel
Jeana Curtis	Washoe	At-Risk Panel
Kimberly Ivanick	CCSD	At-Risk Panel
Laura Austin	Carson	EL Panel
Lisa Bliss	Churchill	At-Risk Panel
Mike Schroeder	Washoe	EL Panel
Pilar Muana	Washoe	Special Education Panel
Ramona Esparza	CCSD	EL Panel
Ron Coombs	Washoe	At-Risk Panel
Stacey Ting	Washoe	EL Panel
Trish Lozano	Washoe	Special Education Panel
Troy Parks	Washoe	EL Panel
Trudy Nunn	Washoe	EL Panel

Appendix H: Summary of Nevada Standards and Requirements and Instructions to Professional Judgment Panel Members

Summary of Nevada Standards and Requirements

April 2018

Compulsory Education

Any person having under his or her control or charge a child who is between the ages of 7 and 18 years shall send the child to a public school during the time school is in session in the school district of residence. A child must be five on or before September 30 to be admitted into kindergarten and a child must be six on or before September 30 to be admitted into first grade. Further, kindergarten is required before a student can go on to grade 1. If a child does not complete kindergarten in a public school program, a licensed private school, an exempt private school, or have on file with the school district a notification of intent to provide home instruction, then the child must pass a developmental screening test for grade 1 readiness.[37] If the district determines that the child is not prepared for grade 1, he or she must be admitted to kindergarten.The boards of trustees of each school district is required to provide at least 180 days of free school to their students.[38]

Student-Instructor Ratio Requirements[39]

NRS 388.700-NRS 388.725 requires the following statutory class-size ratios: kindergarten, grades 1 and 2, 16:1; and grade 3, 18:1. In grades 1 through 3, the flexibility allowing school districts to increase class size by up to two students was discontinued. The 2015 Legislature also passed A.B. 278 (Chapter 499, Statutes of Nevada), requiring the Department of Education to establish methods to monitor school district plans for class-size reduction, monitor the content and accuracy of quarterly reports concerning pupil-to-teacher ratios and average daily attendance, review and verify the accuracy of program variance requests, and provide documentation relating to the distribution and use of program funds as well as advising school district boards of trustees concerning its expectations for the use of funds.

Nevada's Read by Grade 3 Act[40]

SB 391, Nevada's Read by Grade 3 Act, became effective on July 1, 2015. This statute was designed to dramatically improve student achievement by ensuring that all students will be able to read proficiently by the end of the 3rd grade. SB 391 requires all public school districts and charter schools to develop local K-3 literacy plans aligned to the Nevada State Literacy Plan and are aimed at improving the literacy of all K-3 grade level students. This statute also requires every elementary school in Nevada to designate a reading "learning strategist" to provide literacy-based professional learning, coaching, and guidance for all K-4 teachers at the site. SB 391 emphasizes the implementation of early intervention measures in reading achievement for all K-3 students who are determined to be struggling in reading as determined

[37] NRS 392.040
[38] NRS 388.090
[39] https://www.leg.state.nv.us/Division/Research/Publications/Factsheets/Class-SizeReduction.pdf
[40] http://www.doe.nv.gov/RBG3/Home/

by the Brigance, MAP, and Smarter Balanced assessments, which are detailed in the following section, "**Student Assessments**."**Nevada Academic Content Standards**[41]

The Nevada State Board of Education adopted the Common Core State Standards (CCSS) for English Language Arts and Mathematics in 2010 and Next Generation Science Standards in 2014. The goal is to ensure all students are ready for college and careers. The Nevada Academic Content Standards are in place for all K-12 grades. The state defines standards in the following areas:

- ELA and mathematics (informed by the CCSS)
- Computer sciencescience
- Digital learning/distance education
- Fine artsarts
- World languagelanguage
- Health andand physical eucationeducation
- Pre-K
- Science (informed by the Next Generation Science Standards)
- Social studiesstudies

Career and technical education**Student Assessments**[42]

The following assessments are required by grade:

Grades Pre-K-K: Brigance Early Childhood Screens III:: all students are required to be assessed upon entrance tokindergarten to identify individual student needs and track progress, specifically regarding a student's literacy level. The Brigance is a collection of quick, reliable, and highly accurate early childhood education assessments and data-gathering tools that are nationally standardized.

Grades K-3: Measures of Academic Progress (MAP): MAP was officially adopted by the State Board of Education to assess Nevada students as a part of the Read by Grade Three (RBG3) program and is a computer-adaptive assessment utilized to monitor student growth to inform and personalize instruction. With the implementation of MAP in school year 2017-18, Nevada will, for the first time, have aligned standards, professional development, assessments, and expectations in kindergarten through thirdthird grade.

Grades 3-8: Smarter Balanced Assessment (SBAC): Nevada uses the Smarter Balanced assessments aligned to new Common Core State Standards, in English language arts and mathematics statewide in third through eighth grades. The computer-adaptive format and online administration of the assessments provides meaningful feedback that teachers and parents can use to help students succeed. This assessment allows Nevada to measure itself with 15 other states that also administer the Smarter Balanced assessment.

Grades: 5, 8, and 10: Science: Science is federally required in fifth grade,eighth grade, and high school; the high school science assessment was developed as the End of Course (EOC) sscience exam that students will need to pass to fulfill high school graduation requirements (starting with the graduating

[41] http://www.doe.nv.gov/Curriculum_Standards/
[42] http://www.doe.nv.gov/Assessments/

class of 2020). Thescience assessments are a computer-based test administered at schools once a year in the spring.

Grades 7-13: End of Course Examinations (EOC): In 2017 State Board of Education approved recommendations related to the transition from EOC examinations to EOCEOC finals, as required by Assembly Bill 7 (AB 7) from the 2017 legislative session. The EOC final is administered in the following courses (or equivalent, state-approved courses): Math 1–Algebra 1, Math II–Geometry, Integrated Math I, Integrated Math II, and ELA–English 10. The State Board adopted a phased implementation of the EOC final: starting in 2018-19 the EOC final will count at 10 percent of the student's final grade and increase 5 percentage points each year until reaching 20 percent of the grade in 2020-21.

Grade 11: College and Career Readiness Assessments (ACT):): To be eligible for graduation, all students, free of charge, must participate in Nevada's College and Career Readiness (CCR) assessment during their junior year of high school. The State Board of Education chose the ACT as Nevada's CCR assessment.*Grades 3-13: Nevada Alternate Assessment (NAA)*: The NAA is the state assessment of alternate achievement standards. The assessment is administered to less than 1 percent of all students in Nevada who meet the strict criteria required in order to be assessed with the NAA. The NAA assesses student academic performance on Nevada Content Standards through direct observation of specific tasks.

Grades K-13: English Language Proficiency Assessment (WIDA): The ESSA of 2015 requiresstudents identified as Limited English Proficient (LEP) are annually assessed for English proficiency in the four domains of speaking, listening, reading, and writing on English Language Proficiency Assessment. The WIDA Consortium provides Nevada's English Proficiency Examination.

Grades 4 and 8: National Assessment of Educational Progress (NAEP): The NAEP is a continuing and nationally representative assessment of student performance in several content areas including, but not limited to reading, mathematics, science, writing, and U.S. history. Assessment is done via student/school sampling and reported for the state.

Grades 9-13: Career & Technical Education (CTE:): There are two types of career and technical education (CTE) assessmentsassessments. The Workplace Readiness Skills Assessment measures student proficiency in the Employability Skills for Career Readiness state standards. The end-of-program technical assessments are program specific and measure the skill attainment of students who have completed a program course sequence. These assessments are aligned to the state standards.**Course and Graduation Requirements**

Students must complete required course work, take the ACT in Grade 11, and earn 22.5 credits in certain subjects.

High school pupils must enroll in four credits of English; four credits of mathematics, including Algebra I and geometry; three credits of science, including two laboratory courses; and three credits of social

studies, including American government, American history, and world history or geography.[43] This default curriculum includes more credits than are required for a diploma, but a pupil may request a modified course of study as long as it satisfies the requirements for a standard high school diploma or an adjusted diploma, as applicable.

There are currently six types of high school diplomas granted in Nevada: (1) standard; (2) advanced; (3) adult; (4) adjusted; (5) alternate; and (6) College and Career Ready. A standard diploma is awarded upon successful completion of 22.5 units (15 credits for required courses and 7.5 elective credits) and taking the ACT. An advanced diploma requires completion of a minimum of 24 credits, including all requirements for a standard diploma plus one additional credit each of mathematics, science, and social studies. In addition, the advanced diploma requires a minimum 3.25 Grade Point Average (GPA), which includes all credits applicable toward graduation. An adult diploma may be granted to a student who withdrew from high school before graduation, but has completed 20.5 units in a program of adult education or an alternative program for the education of pupils at risk of dropping out of high school. The alternate diploma as established in Assembly Bill 64 (2017) provides that a pupil with a disability may receive a standard high school diploma if he or she demonstrates through a portfolio of work, proficiency in the standards of content and performance established by the Council to Establish Academic Standards for Public Schools and satisfies the requirements set forth in his or her individualized education program (IEP). Assembly Bill 64 also provides that a pupil who has a significant cognitive disability may receive an alternative diploma if he or she passes an alternate assessment prescribed by the State Board. The College and Career Ready diploma is built on the foundation of an Advanced Diploma and requires a total of 24 units including 18 units of credit for the required courses, six units of credit for elective courses, a minimum 3.25 Grade Point Average (GPA) on a 4.0 grading scale, weighted or unweighted, must demonstrate proficiency in speaking not less than two languages, or have earned not less than two (2) units of credit used to complete the aforementioned requirements in the following: Advanced Placement (AP) courses, International Baccalaureate (IB) courses, dualdual-credit/dual-enrollment (DC) courses, career and technical education (CTE) courses, work-based learning courses, or a world language course. Finally, students earning a College and Career Ready diploma must obtain one or both of the College-Ready or Career-Ready Endorsements.[44]

Individuals with Disabilities Education Act (IDEA)[45]

The Individuals with Disabilities Education Act (IDEA) requires that students with disabilities receive services that are included in their Individualized Education Program (IEP), and they receive free appropriate public education in the least restrictive environment.[46] The law requires linking records of migratory children with disabilities among states, developing alternate assessments aligned with the

[43]Legislative Counsel Bureau, Policy and Program Report, April 2014. http://www.leg.state.nv.us/division/research/publications/pandpreport/10-ese.pdf

[44] https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Bill/4745/Text

[45] http://www.ncld.org/disability-advocacy/learn-ld-laws/idea/what-is-idea

[46] http://www.ncld.org/disability-advocacy/learn-ld-laws/idea/what-is-idea

state's content standards, reporting, specific performance goals and indicators, and special education teacher qualifications.

School Accountability/School Performance Framework[47]

The Nevada School Performance Framework (NSPF) is Nevada's school accountability system that was revised in September 2017. The NSPF classifies schools within a five-star performance rating system. The Elementary and Middle School NSPF rating incorporates measures of student proficiency, student growth, English language proficiency, closure of achievement gaps, and attendance as a measure of student engagement. The High School NSPF rating is similar to the Elementary and Middle School NSPF rating but includes graduation rate and college and career readiness assessment results in lieu of student growth and closure of achievement gaps.

Educator Preparation and Effectiveness

A new educator evaluation system was implemented in the 2015-16 school year[48] to support and evaluate teachers' and school administrators' ability to teach the more rigorous Nevada Academic Content Standards. Assembly Bill 222 in 2011 and Senate Bill 407 in 2013 required the statewide educator performance evaluation and support models for teachers and school administrators.[49] For the 2017-2018 school year, the evaluation system requires 20 percent of the evaluation of an individual teacher or administrator to be based upon the academic achievement of pupils as measured with a Student Learning Goal. For the 2018-2019 school year and thereafter the percentage of the evaluation of an individual teacher or administrator to be based upon the academic achievement of pupils increases to 40 percent.[50] In addition, the measure provides that an evaluation of a probationary teacher or a post-probationary teacher must include an evaluation of whether the teacher employs practices and strategies to involve and engage the parents and families of pupils in the classroom. Finally, the evaluation system shall require that an employee's overall performance be determined to be "highly effective," "effective," "developing," or "ineffective."

Every Student Succeeds Act (ESSA) and Nevada's Consolidated Plan[51]

The Every Student Succeeds Act (ESSA) replaces the No Child Left Behind (NCLB) Act and reauthorizes the Elementary and Secondary Education Act of 1965, returning much of the state's authority and flexibility to set policies, creates timelines for progress, and develops school improvement plans that meet the needs of its students. NDE engaged stakeholders — parents, educators, civil rights organizations, the business community, and others — to develop its Consolidated State Plan, which was approved in April 2017. Nevada's plan is focused on implementing strategies related to: 1) develop school leaders, 2) use data to inform decisions impacting schools, and 3) identify and improve our lowest-performing schools.

[47] 2018 STIP State Improvement Plan, which was updated in March 2018
[48] http://www.reviewjournal.com/news/education/test-scores-could-matter-less-teacher-evaluations
[49] http://www.doe.nv.gov/NDE_Offices/Educator_Effectiveness/NEPF_Module_I-System_Overview/
[50] https://www.leg.state.nv.us/NRS/NRS-388.html#NRS388Sec090
[51] http://www.doe.nv.gov/uploadedFiles/ndedoenvgov/content/Boards_Commissions_Councils/ESSA_Adv_Group/NevadaSubmittedConsolidatedPlanFinal.pdf

INSTRUCTIONS TO PROFESSIONAL JUDGMENT PANEL MEMBERS

Augenblick, Palaich and Associates

April 2018

Augenblick, Palaich and Associates (APA) is currently conducting a school funding study as required by Senate Bill 178 that includes identifying the resources needed to serve at-risk students, English language learners (ELLs), special education and gifted students. One approach the study team is using is the professional judgment (PJ) approach which relies on the experience and expertise of Nevada educators to identify the resources needed to ensure that students can meet state standards. Today, you will be serving on a PJ panel as a part of this approach.

Below you will find a number of instructions to help you in this process. It is important to remember that you are not being tasked to build your "Dream School." Instead, you are being asked to identify the resources needed to meet the specific standards and requirements that the state expects students, schools and districts to fulfill. You should allocate resources as efficiently as possible without sacrificing quality.

1. You are a member of a panel that is being asked to design how programs and services will be delivered in representative school settings. These panels are being used to identify the resources that schools with a particular set of demographic characteristics should have in order to meet a specific set of "input" requirements and "output" objectives.

2. As a group, you will first review the resources allocated at the "base level" by prior PJ panels convened in 2014 for the Lincy Institute at UNLV, then you will address the addition resources needed for at-risk, English Language Learners (ELL), or special education and gifted students.

3. The characteristics of the representative school(s) are identified for each, including: (1) grade span; (2) enrollment; and (3) the proportion of students in the given student group.

4. The "input" requirements and "outcome" objectives that need to be accomplished by the representative school(s) are those required by the state. These requirements or objectives can be described broadly as education opportunities, programs, services or as levels of education performance. You will be provided a short summary of state expectations and performance standards; it is not meant to be exhaustive of all requirements that the state requires schools and districts to fulfill, but instead should be considered a refresher or reminder.

5. In designing the representative school(s), we need you to provide some very specific information so that we can calculate the cost of the resources that are needed to fulfill the

indicated requirements or objectives. The fact that we need that information should not constrain you in any way in designing the program of the representative school(s). Your job is to create a set of programs, curriculums, or services designed to serve students with particular needs in such a way that the indicated requirements/objectives can be fulfilled. Use your experience and expertise to organize personnel, supplies and materials, and technology in an efficient way you feel confident will produce the desired outcomes.

6. For this process, the following statements are true about the representative school(s) and the conditions in which they exist:

   Teachers: You should assume that you can attract and retain qualified personnel and that you can employ people on a part-time basis if needed (based on tenths of a full-time equivalent person).

   Facilities: You should assume that the representative school has sufficient space and the technology infrastructure to meet the requirements of the program you design.

   Revenues: You should not be concerned about where revenues will come from to pay for the program you design. Do not worry about federal or state requirements that may be associated with certain types of funding. You should not think about whatever revenues might be available in the school or district in which you now work or about any of the revenue constraints that might exist on those revenues.

   Programs: You may create new programs or services that do not presently exist that you believe address the challenges that arise in schools. You should assume that such programs or services are in place and that no additional time is needed for them to produce the results you expect of them. For example, if you create after-school programs or pre-school programs to serve some students, you should assume that such programs will achieve their intended results, possibly reducing the need for other programs or services that might have otherwise been needed.

Appendix I: Salaries and Benefits Used for Costing Out EB and PJ

	Benefit Amount/Rate
Health/Dental Amount per Eligible Employee	$6,614
Retirement	28.00%
Workers Compensation	1.95%
Unemployment	1.69%
Position Title	**Salary**
Instructional Staff	
Teachers	$54,555
Specials Teachers	$54,555
Instructional Facilitator (Coach)	$62,466
Teacher Tutor/ Interventionist	$54,555
Librarians/Media Specialists	$68,204
Technology Specialists	$68,204
Media Aide	$22,132
Instructional Aides	$20,860
504 Aide	$20,860
Pupil Support Staff	
Counselors	$62,285
Nurses	$57,341
Psychologist	$68,798
Social Worker	$68,798
Family Liaison	$30,294
Behavior Interventionist (Alternative to/ In School Suspension)	$58,300
Health Aide	$20,526
Speech Pathologist	$57,583
Therapists (OT/PT, Behavior, etc.)	$57,583
Transition Coordinator	$54,555
Job/Transitions Coach	$20,860
Administrative Staff	
Principal	$101,711
Assistant Principal	$80,614
Attendance/ Registrar	$33,351
Clerical/Data Entry	$33,351
Bookkeeping	$33,351
Athletic Director	$80,614
Other Staff	
IT Technician	$46,696
Substitute	$61,875
Duty Aides	$20,860
Security/ Duty Aides	$20,860
School Resource Officer	$54,555

District	
Superintendent	$130,836
Assistant/Associate Superintendent	$122,905
Director	$103,145
Supervisor	$83,752
Coordinator	$75,527
Manager	$71,061
Administrative Assistant	$33,351
AP/AR Clerks	$33,351
Payroll Clerks	$33,351
Other Professionals	$54,555
Data Specialist	$54,555
Translator	$33,351
Custodians	$35,461
Groundskeepers	$46,917

Appendix J: School Case Study Protocol and Summaries

Nevada School Case Study Interview Protocol

Can you tell me a little about the community in which your school is located? Who are your students? Their parents? Major employers?

How has your school changed in recent years?
Declining enrollment? Increased enrollment? Changes in demographic (SES, race/ethnicity, ELL)?

STUDENTS

What is student mobility like in this school?

What is student attendance like in this school?
How are students assigned to classrooms/courses?

What are the average class sizes in each grade?

PreK	KG	1	2	3	4	5	6	7	8	9	10	11	12

Demographic	Percent	Notes
FRL		
Special education		
ESL		

STAFFING FTEs

What is teacher turnover like in this school?

From a list of people working in the school, fill in the following FTEs.

Category	FTE	Notes
Licensed Staff		
Core Teachers		
Elective Teachers		
Instructional Coaches		
Special education self-contained		
Other Special education teachers		
ESL teachers		
Tutors/Tier 2 interventionists		
Librarian		
Career and Technical		
Gifted		
Non licensed staff		
Aides		
Instructional Aides (techs)		
Special Education Aides		
Supervisory/Duty Aides		
Library Techs		
Administration		
Principal		
Assistant Principal		
Athletic Director		
Secretary/Clerical		
Pupil Support		
Guidance Counselor		
Nurse		
Social Worker		
Other		

STUDENT ACHIEVEMENT

Tell me how the school accomplished the achievement levels/gains we identified.

Does the school have specific school or improvement goals that contributed to these achievement gains in the school? *OR:* Which school or improvement goals were most helpful in advancing student learning?

Probes: achievement gap goals, goals for ELL, free and reduced price kids, minority kids, etc.

How are these goals set (e.g., district, school administrators, or school personnel)?

Class Schedule

(Interviewer should attempt to obtain a copy of the school's class schedule prior to the school visit in order to ask clarification questions during the visit.)

Please tell me about how the school day is organized? Does it vary by grade levels? Total instructional minutes, how much time for interventions, for specials, for teacher PD. (This information will flesh itself out in the later questions, but it's best to have an overview to start.)

Curriculum and Instruction

Instruction:

What particular instructional arrangements have been particularly useful for improving student learning?

How are <u>teachers organized for instruction</u>?
How are teachers assigned to classrooms? In high school, to courses?

Probe: Are teachers assigned to their own classrooms or in collaborative teams? What kinds of collaborative teams are there?

Probe: How are new teachers assigned and mentored?

Does the school have instructional coaches? If so, how are they used?

How does the school use student grouping practices?

Probe for flexible groups (groups that change based on student need) vs. static groups (groups that stay the same over long time periods).

What specific instructional strategies are in place for ELL students?

Probe for sheltered English

Curriculum

I'd like learn more about the curriculum programs that you employ at your school. Try and get names of curriculum programs (including software), texts, or materials, any supplementary materials, etc.

Tell me about your reading/ writing/ language arts program.

Tell me about your math program.

INSTRUCTIONAL INTERVENTIONS

I'd like to learn what instructional interventions your school has in place for students who struggle after core classroom instruction, i.e., after the initial dose of instruction.

How are students who are struggling identified and monitored?

Probe: Data from a single assessment used once a year? OR: Multiple assessments examined throughout the year?

What kinds of extra help do you have in your school for struggling students?

When is extra help provided, for how long, and where?
Probes: tutoring (what does this look like?), Tier 2 intervention, etc.
Who does it? Licensed teachers and/or aides, and split between the two

Does the school provide an Extended day? Summer School?

How are the interventions for and progress of students monitored?

ASSESSMENTS

Now, let's talk about assessments. Tell me what kind of assessment system or systems in place in your school have been particularly useful for improving student learning.

Probe for (1) benchmark assessments (e.g., NWEA MAP) or (2) short cycle/formative (Renaissance Learning STAR, AIMESWEB, etc.).

How are these assessments administered?

Probes: By the teacher or online, adaptive, etc.?
What is the cost per pupil of these assessments?

How do teachers use data from these assessments?

For Reading, for math?
For ELL kids, for poverty struggling kids?

PROFESSIONAL DEVELOPMENT

I'm going to shift gears a little to professional development for teachers. Can you tell me what PD looks like in your school?

What kinds of professional development topics does professional development focus on in your school have been particularly helpful for improving student learning?

Probe for: professional development that focuses on instructional strategies; on extra help for ELL/struggling poverty kids; curriculum reforms; on using data; etc. Anything linked to their overall curriculum and instructional strategies and focused on ELL and poverty kids

How is professional development delivered in your school?

Probe for: is delivery school based? ongoing versus one shot; what kinds of follow-up is provided?

Type	Time Allocated	Notes
Individual planning		
Collaborative Work with other teachers		
Pupil-free days for PD		

SCHOOL CULTURE

I'd like to step back a little now and ask you to tell me about your school culture. What's it like to work here? What do you think it's like to be a student here? What do you think your colleagues would say if I asked them the same question?

How well connected do students feel to the school?

What do you see as current or potential challenges to continued improvements in student achievement?

Is there anything else you think is important for us to know in terms of understanding how your school achieves learning gains?

Walter Bracken Elementary School

Introduction

Bracken Elementary School is unique because it is both a magnet school and a franchise school in the Clark County School District. As a magnet school starting in first grade (kindergarten is provided to neighborhood students), Bracken has a particular focus — the Science, Technology, Engineering, The Arts, and Mathematics (STEAM) Academy — that draws students from outside its neighborhood via an application and lottery system. It is also a franchise school, so the Bracken principal leads more than one school in order to replicate the successful approach established at their original school. These distinctions also mean that Bracken has additional resources via the school district and other grant funds to staff and outfit the school's STEAM labs.

Enrollment has been fairly consistent in recent years, at around 500 students. The school also has very low transiency and low teacher turnover; staff reported that this consistency has contributed to their success.

Table 1 identifies class sizes by grade.

Table 1: Bracken Elementary School Class Sizes

Grade Level	Class Size
Kindergarten	23
First	22
Second	21
Third	24
Fourth	28
Fifth	28

The school is 58 percent Latino, 18 percent white, 11 percent black, 6 percent Asian, and 6 percent multi-racial. Fifty-six percent of students qualify for free and reduced priced lunch, and 18 percent of students are English learners (ELs).

This case study summary has seven sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing

Staffing classrooms with quality teachers committed to Bracken's STEAM mission is an important focus of school administration. When the school became the STEAM-focused magnet school, a number of teachers who did not support the school's mission chose to leave the school. In recent years, when vacancies exist, applicants for the school tend to be those drawn to the mission and culture of the school. Bracken currently experiences little to no teacher turnover.

The principal explained that everything at Bracken is team based. Teachers work closely in grade-level teacher teams throughout the year. Each classroom in a given grade receives the same materials, which helps teachers to better work together and foster student learning. The teachers noted they often consult with each other on what worked well on a particular lesson to identify ways to better engage students with the content when lessons are less effective. The grade-level teachers also have a common prep time, which can be used for grade-level meetings, and are used once a week for professional learning community (PLC) time.

Table 2: Staffing at Bracken Elementary School

Category	FTE
Administration	
Principal	.3
Assistant Principal	1
Coordinators	2
Clerical	2
Main Program	
Core Teachers	22
Elective Teachers	4
Instructional Coaches	1
EL teachers	
Tutors/Tier 2 interventionists	3
Librarian	
Gifted	1
Aides	2
Pupil Support	
Licensed	
Guidance Counselor	1
Nurse	.5
Psychologist	
Social Worker	.2
FASA (Safety Assistant)	1

Table 2 shows that the school has 22.0 core teacher positions. These are the grade-level teachers who teach reading, math, science, and social studies. The school also employs four “elective” or “specials” teachers to provide instruction in art, music, physical education, and library. A typical staffing standard, and the EB model formula, for the number of specials teachers needed would have 20 percent specials/elective teachers above the total number of core teachers, which would equal 4.4 positions for this school (0.2 x 22). Bracken also has two coordinator positions, a theme coordinator and computer coordinator, to support the STEAM mission and computer-based testing.

The school has one instructional coach and three certified temporary tutors (CTTs). The CTTs provide push-in intervention support with students identified as needing additional support, including inclusion with non-resource students. Bracken has one special education teacher with a self-contained classroom for students with more severe disabilities. The school has additional pupil support staff, including one guidance counselor, a 0.5 nurse, a 0.2 social worker, and one first aid safety assistant. As previously noted, as part of the franchise school program, the principal at Bracken is also principal at two other schools, so the principal position is allocated at 0.33 FTE.

Note that these case studies were focused on identifying resources and supports for at-risk and EL students, so special education resources were not specifically identified.

School Schedule

The instructional day runs from 8:55 a.m. to 3:26 p.m. (a six-hour, 31-minute school day). Accounting for the 45-minute student and staff lunch and recess period and 15-minute morning recess, Bracken provides five hours and 45 minutes of instruction for students. Students attend five 50-minute class periods; core teachers provide instruction for five of these six periods. All teachers have one class period of pupil-free time daily, and grade levels have common planning time. Weekly, a dedicated common prep period is designated for PLC time, which also provides an opportunity for other school faculty and staff to meet with the entire grade level, if needed. Thus, there is time during the regular school day for grade-level teams to meet and collaborate on a daily basis.

Teachers at Bracken are free to structure their day as needed. The schedule does not specify requirements for minutes spent on any given content area for any particular grade level, but teachers within each grade level are expected to cover the same content during the year. During the pupil-free time for grade-level teachers, students rotate among art, music, physical education, and library instruction.

Curriculum and Instructional Program

As a magnet school, Bracken's curriculum and instructional program is designed to support its STEAM Academy mission. Technology is a key strategy in the school, with 1:1 student devices (iPads). In reading, the key program used is *Reading Wonders* in kindergarten through fourth grade. Additional reading programs are utilized, including Words Their Way, STAR Reading, Accelerated Reader, Study Island, and Myon, among others. The primary program used in K-5 math is GO Math!, with additional programs including Investigations, Rocket Math, IXL Math, Star Math, Front Row, and Study Island, among others.

Student choice is a key instructional practice at Bracken. For example, in Explorations classes, students choose their reading series, as well as science, engineering, technology, engineering, and math choice classes. Course topics are developed based on student and parent interest and input. Previous courses included Ooey Gooey Science, Lego Robotics, Recycled Engineering, Art Studio, and Computer Coding. Periodic special instruction days provide hands-on activities and day-long immersion in different topics. These days have included Mighty Math, Super Science, Exciting Engineering, and Multicultural Field Day. Additionally, every class has a garden bed on the school campus, which the students plant, maintain, and harvest. Each of these special programs contributes to the school's hands-on STEAM mission.

Assessments and Data

Data-driven decision making is a key component of Bracken's educational philosophy. Dynamic assessment systems inform instruction, and staff use evidence to continuously improve school programs. Progress monitoring is done weekly to ensure interventions for struggling students are successful. Regularly utilized assessments include AIMESweb, STAR, Study Island (summative), IXL (formative), and Core Phonics.

Bracken's teaching staff utilizes assessment data to modify their instruction and target interventions. Assessment data is also used to identify groups of students the school's three certified temporary tutors will work with throughout the day. CTTs work closely with teachers to provide additional "push in" intervention support to identified students.

Extra Help Strategies for Struggling Students

At Bracken, teachers use a variety of programs via 1:1 student devices to differentiate instruction and also do small group work within the classroom. There are also three certified temporary teacher positions to provide additional push-in or pull-out intervention support.

Staff reported that ELs are primarily served in the regular classroom using the same strategies that are proven to be beneficial to all, including Kagan strategies, Rally Robin, working with peers, providing opportunities to speak, lots of visuals, learning by observation of other students (ex: making slides), having technology, immersion, and working in pairs. Students also are provided summer school.

Professional Development

Professional development at Bracken is ongoing, at 67 minutes per full school week, as required by the district. The topics/areas of focus for professional development are generally determined by the requests of the teaching staff. The leadership style of the school administrators is to trust that the teachers work together and identify areas to improve, and the principal and assistant principal then do everything in their power to get their teachers the materials, training, and resources they request.

The school's weekly PLC time is taken seriously at Bracken. Grade-level teams work independently during those times, and other school staff know they can access the entire grade level during these times if needed. School administrators only attend the grade-level PLCs if requested by the teachers or if administrators determine there is a need to intervene. The school participates in the required district EL professional development but doesn't believe the district trainings add much value to their approach with EL students. The principal believes the school is doing well with their EL students, and that they should be exempt from the district EL professional development process.

As a franchise school, the principal expressed a desire for one or two full professional development days, so that she could bring staff from all three schools together. The current weekly professional development format prevents opportunities for cross-school collaboration. Particularly with the franchise model, it would be helpful for all the schools operating under a single principal to have joint collaborative time.

School Culture and Leadership

Bracken has a very close-knit, collaborative school culture. Teachers reported feeling very supported and trusted by the administration in the school. This allows them a safe space to share ideas, take chances, and continuously grow and refine their practice from year to year. A saying at the school is “find solutions, remove excuses.” Administration is also regularly in classrooms providing instructional leadership.

According to staff, students and families are very engaged through the consistent, close community that the school develops. The school regularly hosts family events and also shares data and progress reports with families. Students are particularly empowered to be active contributors to their education to foster their confidence and independence. Students and teachers work together to set “stretch goals” for student progress. Collaboration between students is also a focus of classroom instruction.

The school’s culture also is grounded in the importance of exploration, both via its focus on hands-on, project-based STEAM instruction, as well as through its series reading initiative. All staff have lending libraries in their rooms with book series. Students are encouraged to find a series that suit their interests to spark their love of reading and connect with teachers throughout the school. Teachers also stress they are focused on supporting the whole child and developing their individual skills and interests.

Hunter Lake Elementary School

Introduction

Hunter Lake is an elementary school in the Washoe County School District, and is located in a middle-class community about two miles from downtown Reno. In fall 2017, Hunter Lake enrolled 428 students in kindergarten through sixth grade. Hunter Lake was selected for a case study based on its success with free and reduced-price meal students. Overall, Hunter Lake is a highly collaborative, data-driven school, with a skilled and effective faculty. Interviewees at the school reported using student performance data to develop lesson plans, provide differentiated instruction, and evaluate.

Some students live within walking distance of the school, while other students are transported to school either by bus or parents. Though the campus is surrounded by modest, split-level homes, the principal explained that some of attending students live at weekly motels down the road and their parents are trying to get by day to day.

The school about 62 percent white, 25 percent Latino, 7 percent multi-racial, and 7 percent other. About 45 percent of the school's students qualify for free and reduced-price eligible, and zero are English learners. Hunter Lake is Title 1 designated but unfunded. The average class size is 22 students (Table 1 shows the average class size by grade level).

Table 1: Hunter Lake Elementary School Class Sizes

Grade Level	Class Size
Kindergarten (3 classes)	20
First (3 classes)	17
Second (3 classes)	17
Third (2 classes)	24
Fourth (2 classes)	28
Fifth (2 classes)	30
Sixth (2 classes)	27

There are three sections of kindergarten through second grade and two sections from fourth through sixth grades.

The case study report has nine sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing and Scheduling

Staffing classrooms with top-quality teachers is a prime strategy for Hunter Lake. When asked how the school produced its student performance results, the first thing the principal noted was her hiring practices. Of 100 applications for two recent positions, she chose 23 candidates and watched each of them teach. She then selected five to be interviewed by the hiring committee. The hiring committee then met as a group and decided on the applicant they thought would be the best fit. Any member of

the staff can be part of the hiring committee. Teachers supported this claim, citing the importance of finding hires who best fits with the school.

Teachers work in tightly knit, grade-level teacher teams, which helps provide peer support throughout the year. All of the grade-level teachers are expected to be within a few minutes of each other on lessons. When the principal first started and this practice was implemented, it was difficult to get buy-in from some teachers, and as a result, there was some staff turnover. Over time, this collaborative approach has shown results and led to growing performance. Currently the school has a very stable staff able to provide continuity of effective instruction in every class, every year.

Further, according to the principal and the teachers, the school seeks to place the most effective teachers in the classrooms with the students and student groups that need the most help.

Table 2: Staffing in Hunter Lake Elementary School

Category	FTE
Administration	
Principal	1.0
Assistant Principal	
Clerical	1.0
Main Program	
Core Teachers	17.0
Elective Teachers: 1.0 Music, .5 Art, .5 PE	2.0
Instructional Coaches	
Special Education Self-Contained (Severe and Profound)	
Special Education (Mild and Moderate)	
EL teachers	0.3
Librarian	0.8
Gifted	0.1
Aides	0.6
Pupil Support	
Licensed	
Guidance Counselor	1.0
Nurse	0.2
Psychologist	0.33
Speech	1.0

The staffing configuration of the school shows the importance of Hunter Lake's reliance on effective core teachers. Table 3 shows that the school has 17.0 core teacher positions for 428 students in kindergarten through sixth grade. Core teachers are grade-level teachers who teach reading, math, science, and social studies. For kindergarten through sixth grade, this staffing equates to an average

class size of approximately 22 students. However, as noted above, average grade-level class sizes vary from 17 in grades one and two to 30 in grade five, with other grades in the mid 20s.

The school also employs “elective” or “specials” teachers to provide instruction in art, music, physical education, and technology. Music is the only elective that is funded by the district; the rest has to come from additional funding. Two FTEs provide this instruction, including the librarian who teaches some of the specials class sections. A typical staffing standard, and the EB model formula, for the number of specials teachers would have 20 percent specials/elective teachers above the total number of core teachers would equal 3.4 positions for this school (0.2 x 17).

When asked about instructional coaches, the principal said she was not able to hire a coach or interventionist because they did not receive any Title 1 funding. The principal has her teachers provide interventions within classroom time.

Students needing tiered interventions are identified through monthly identification meetings tied to student performance scores. Students are then grouped and reassessed before every meeting to see if the interventions are still needed. Hunter Lake has two resource teachers and additional pupil support staff, including one guidance counselor, 0.2 nurse, one speech therapist, and .33 psychologist.

Note that these case studies were focused on identifying resources and supports for at-risk and EL students, so special education resources were not specifically identified.

School Schedule

The instructional day runs from 8:55 a.m. to 3:00 p.m. (a six-hour, five-minute school day). Accounting for the 45-minute student and staff lunch and recess period and a 15-minute morning recess, Hunter Lakes provides five hours of instruction for students.

Teachers provide instruction for five of these six hours. All teachers have 60 minutes of pupil-free time at least twice a week. Once a week, all teachers use their pupil-free time to meet as a grade-level team. As a result, there is time during the regular school day for grade-level teams to meet and collaborate on a daily basis.

During the pupil-free time for grade-level teachers, students rotate among art, music, physical education, and some library instruction. Students spend considerable time each day on reading (1.5 hours), math (1.5 hours), and science and social studies (1.5 hours combined).

Curriculum and Instructional Program

The school uses Core Knowledge for ELA curriculum and Bridges and Envisions for math curriculum for all grades. Teachers said the math curriculum allows for differentiation of work for students of varying ability within each classroom. This allows the teachers to create more tiered instruction and activities. Some teachers said it would be nice if they could find a reading curriculum that was similar. The principal found the curricula they are using to be successful. Teachers do supplement with additional materials in order to create the best instruction for their classroom. The principal wants to continue

with the current math and reading curriculums but needs to find an adequate and beneficial curriculum for social studies.

In addition to the literacy curriculum, the principal has a list of seven elements that must be present in the classrooms in order to create a literacy-rich environment:

1. A variety of books, resources, and reading materials are displayed and readily available to students: Books must be facing out to invite readers
2. Current, useable vocabulary is displayed in the form of a word wall.
3. A teaching concept bulletin board is displayed: including a Math Focus Wall or any designated area that corresponds to the curriculum.
4. Information on writing is posted; with examples for students to understand
5. Current student work is displayed in the form of exemplars and it "tells" why it is excellent.
6. Students have materials for learning and can easily access resources.
7. Rubrics are posted relating to some portion of the content area.

Assessments and Data

Hunter Lake makes use of multiple assessments, including the AIMSWEB+, MAPs, and DRA. Additionally, there are other formative assessments that are used by particular teachers. Many of the grade-level teachers also create weekly assessments on the information they have been teaching to check for understanding and to make sure students still understand past topics.

MAP is a benchmark assessment administered online in September, January, and June. The MAP test results are used by the school to track student growth throughout the year and then after summer. The scores are placed on the data board for everyone to see, and they show whether students are moving up, if they are remaining stagnant, or moving down.

All of the teachers are aware of the scores of their students on all of the assessments. Each teacher these study team spoke with had a data sheet for all the different test scores of their students, which were highlighted based on their performance. The teachers used this data to create work groups and decide if there were lessons that needed to be retaught. One teacher developed his own assessments for math concepts and would have different groups each week who would work with him on the concepts that needed more understanding.

Extra Help Strategies for Struggling Students

Hunter Lake provides extra help to "students who need more." First, Hunter Lake counts on its grade-level teachers to provide strong instructional foundations, including many Tier 1 interventions. These Tier 1 interventions are facilitated via small groups during reading and math instructional blocks.

There is a Multi-Tiered System of Supports (MTSS) team that meets once a month with each grade level. The MTSS team includes the principal, counselors, and some teachers. During these meetings, the team identifies students that are "struggling" and decides whether they need Tier 2 interventions. The team also monitors previously identified students. These grade-level meetings ensure a continued focus on

identified students in the proper intervention tier with students moving between tiers throughout the year.

In addition, Hunter Lake has developed a 12-week, after-school program to provide more instruction for students who need extra learning time. This program focuses on making sure that kids are prepared for the MAP test. These students are able to work on concepts that they are falling behind on to build a better foundation.

Professional Development

According to the principal and most teachers, professional development in Hunter Lake is ongoing. It emanates first from intensive collaboration among all teachers, especially grade-level teams, where staff interacts over student data to improve lesson plans and overall instruction.

The monthly faculty meetings include professional development on specific issues and topics. These issues and topics are brought in by the teacher leader from her district meetings or from the principal and other staff. Additionally, teachers have personal planning time every day from 8:30 a.m. to 9:00 a.m. and from 3:00 p.m. to 3:30 p.m. There are also three non-pupil days where professional development occurs as a whole school with professional development provided by the principal. These days are usually used to build community among the staff and create excitement for the upcoming year.

School Culture and Leadership

The culture of Hunter Lakes is divided into three different categories:

1. Culture between staff and students
2. Culture between staff
3. Culture between staff and parents.

The staff works to hold the students accountable for their learning and their behavior. Students are well aware of all of their performance and know the particular concepts they need to work on. Students who earn the “Manager Badge” for good behavior get special privileges and their picture on the wall. Staff also hand out “Dragon Dollars” to students for good behavior. The students can use their “Dragon Dollars” at a school store to buy various prizes. Additionally, the principal at the end of school year does a raffle that includes a few large prizes and then smaller prizes. Every student receives a prize at the end of the school year.

The staff have started a mentoring program at the school. Every staff member receives an at-risk student. These are students who are struggling in school or need additional support to feel safe and comfortable at school. The staff member checks in with the student daily to see how they are doing and feeling. They also do weekly activities with the student. One of the teachers talked about going to his assigned student’s baseball game.

The culture between the staff is one of constant collaboration and support. The grade-level teachers meet as a team to create lesson plans and to check-in on each student’s performance and understanding of each lesson. The staff has bought into the performance of the whole school and not

just their students. There is a data wall that shows the performance of each student in each grade after each MAP test. It allows the teachers to see how students are progressing from one test cycle to the next. This allows the whole staff to support each other. The principal is very supportive of the teacher's ideas and encourages new ideas as well as consistent communication.

Hunter Lake Elementary creates a positive relationship with the community and parents. The principal reaches out to businesses within the community to gain contributions, whether a dollar donation or gift cards or services. The school also hosts parent nights to discuss data and other information within the school. The school provides food for the families, as well as some sort of performance from the children at these events.

Indian Springs Middle School

Introduction

Indian Springs is a small, relatively rural K-12 school in the Clark County School District. Located near Mount Charleston, the school serves children from Indian Springs, Cold Creek, Corn Creek, and Mt. Charleston, along with approximately 40 students from Las Vegas who open enroll in the school. The Creech Air Force Base in Indian Springs is the primary employer in the area for both military personnel and contractors who provide services and operations to support to the base. The principal said a lack of housing and employment opportunities has led to a decline in the town's population.

Indian Springs Middle School was selected as a case study based on its success with middle school students eligible for the free and reduced-price lunch program. Indian Springs has been a Title I school since 2011. Enrollment has been around 240 students for the past several years; the middle school enrollment is 45 middle school students. Overall, Indian Springs is highly collaborative school, with a skilled and effective faculty that sincerely believes small class sizes and high expectations are the key to its success.

Although the school's enrollment was previously in decline along with the town's population, Indian Springs has maintained a relatively stable student population over the past several years through open enrollment. Small class sizes and high expectations are main points the school advertises to draw additional families from Clark County to enroll in the school.

The school is 83 percent white, 9 percent Latino, and 9 percent American Indian. One hundred percent of students are free and reduced-price lunch eligible, and none are English Learners.

This case study summary has seven sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing

Keeping class sizes small, while staffing classrooms with high-quality teachers, is the prime strategy at Indian Springs. Most classes have between eight and 15 students per class. This year, the largest grade level had 26 students, so that grade was split into two classes to reduce the class size. As a small K-12 school, many of the school's staff members are shared among the elementary, middle, and high school classrooms. Administration, pupil support staff, and specials teachers are shared among the entire school. The middle school has designated math, English language arts, science, and social studies teachers. Other members of the staff work across the grades in the school. Therefore, it was not possible to quantify the percentage of staff time spent with middle school students vs. all students in the school.

Due to the size of the school, there is one teacher per content area for the middle school, which does not allow for grade-level collaborative teams. In recent years, the school has worked on both vertical

integration and cross-curricular planning, both across core subjects and between core subjects and electives/specials. Teachers are also supported by instructional coaches.

The school enjoys very low teacher turnover. Several staff members have been at the school for 30+ years, and most of the vacancies that occur at the school are due to retirement. The principal estimates that one teacher transfers to another school every several years. When hiring new staff, the principal believes that while content knowledge is important, the most important factor is the teacher's ability to create relationships with the kids. He believes that for students to be successful, they must have trust and a relationship with the teacher. Strong teacher-student relationships are the driving force behind the school's belief in small class sizes.

School Schedule

The instructional day begins at 8:04 a.m. and ends at 2:11 p.m. (a six-hour, seven-minute school day). Accounting for the 30-minute lunch period, Indian Springs provides five hours and 39 minutes of instruction for students.

Students attend six class periods per day. Student schedules are unique to each grade level, as middle school students need to cycle through each of the core middle school teachers' classrooms. Students are able to attend a variety of specials, including PE, band, health, technology, forensics, and theatre.

Teachers provide instruction for five of these six hours. All teachers have a daily prep period of 51 minutes of pupil-free time. At Indian Springs, it is relatively common for the school to "buy" prep periods for teachers willing to provide additional student academic or attendance support during those times.

The school is explicit in its expectations of what it means to be a highly effective teacher at Indian Springs Middle School, as outlined in the four-page document, "Our Vision of an Indian Springs Teacher." It outlines four key indicators: High Expectations; Building Student Rapport; Student Engagement; and Habits of Effective Teachers. For each indicator, the document outlines strategies for teachers to implement.

Curriculum and Instructional Program

The middle school does not utilize a standard curriculum, in part due to the small size of the school and not having multiple sections of a subject. The school recently identified a vertically aligned reading series that they will begin implementing next school year. The middle school math teacher uses her own curriculum, and supplements with an online math program, ALEKS, in which students are able to complete work at their own level. Currently, the middle school does not have a comprehensive curricular series in English language arts. The middle school teacher pulls materials from a variety of sources to address each Nevada Academic Content Standard.

The principal found the curricula the middle school teachers are using to be generally successful, therefore he gives the teachers autonomy and does not believe they need to change curricula unless they believe a change would be beneficial to students.

While no specific curriculum or lesson plan is required, the school does have requirements for lesson plan components:

1. The standard(s) being taught.
2. The student learning objective(s): must be written on the board using the "I can…" format.
3. Review: how will you connect new learning to prior learning?
4. Instructional procedures (including materials and resources, if applicable).
5. Guided, group, independent practice procedures.
6. Assessment of student learning: how will you be able to determine if the students understand the learning objective?

The middle school teachers also use common grading practices.

Assessments and Data

Indians Springs use AIMSweb and the Evaluate program for monitoring. They have found that regular assessment helps with pacing and supports decision-making. The school principal emphasized that their systematic, data-driven approach has been affective for supporting student learning. The school has "data walls" where results are posted so students can see their growth. They also regularly share data with parents and hold parent-teacher conferences (the number needed varying by the student).

Extra Help Strategies for Struggling Students

Indian Springs employs a number of strategies to support students identified as struggling, based on progress monitoring data and class performance. First, they implement Kagan strategies in the classroom to engage students and group students in heterogeneous groups of ability levels to provide differentiated instruction. Tutoring is also offered to students based on data. It is targeted to students identified as struggling, then tailored to the specific skill or content area they need more support in.

Third, the school also offers a homework club to provide extra support and a quiet learning environment. Fourth, the school also offers study skills classes. Being able to offer pull-out support to students is done by buying out prep periods of certified teaching staff. Finally, the school provides an extended school year (ESY) program for students with an Individualized Education Program (IEP). Since they do not have enough students to fill the program, they invite other struggling students (about 12) to participate. Through their ESY program they provide both academic support and enrichment for about six hours a day for a month to participating students.

Professional Development

With the school's relatively stable teaching staff, the principal tries to limit the amount of professional development provided to teachers. The school participates in the contractually obligated site-based collaboration time (SBCT), which has replaced professional learning community time at the school. The SBCT time is used to work on cross-curricular strategies and analyze student data. SBCT time is

leveraged as needed; sometimes the time is used for schoolwide purposes, other times by content area, other times by vertical alignment teams.

Professional development is differentiated based on the need of teachers, and the school takes advantage of district-provided trainings on content and instructional strategies. Much of the non-district-provided professional development is around new curriculum and assessment: when the school started using the Evaluate assessment, they held extensive professional development on that assessment. Similarly, when the elementary level adopted a new reading and math series, professional development was focused on that series.

The school does pay for contact units teachers take on their own time, as long as it relates to the content taught. This provides teachers with out-of-school-time professional development, and helps them attain their recertification/continuing education requirements.

School Culture and Leadership

The Indian Springs school culture is based on having high expectations for both staff and for students and on developing strong relationships. For staff members, the school principal indicated they get teacher buy-in right from the start during the hiring process by setting the clear expectations about what it takes to be an Indian Springs teacher. Further, staff members are hired for content knowledge, but even more importantly for their ability to create relationships and build trust. Teachers are in regular communication with families, and teachers at Indian Springs are expected make positive phone calls home twice a week to every family to build a positive association and trust. As a result, when the school calls home, it is not always bad news or for when a child is not doing well. This helps ensure parents are engaged and see themselves and their child's teacher as partners in their child's education.

School leadership and teachers across the school have high expectations of students – students are not permitted to do anything other than their best work. For example, an expectation is that students must complete their homework; if a student has not completed their homework, they are given lunch detention and must complete their homework. Teachers also call home for any work that receives less than a "C" and students are encouraged to redo the assignment.

Jo Mackey Magnet School

Introduction

Jo Mackey Magnet School is an elementary school of about 550 students in the Clark County School District. About 25 percent of the students come from the surrounding neighborhood and the rest from across the Las Vegas Valley. Over 10 years ago the district received a federal magnet grant for the school that allowed Mackey to transition to a leadership-focused magnet program. Mackey received the 2018 National Award of Merit from Magnet Schools of America.

The demographics of the school have changed over time. When the school principal started 13 years ago, the school was 100 percent black, and now the school is predominately Latino. Historically, the school was a "Prime 6" school, which aimed to enhance learning opportunities in culturally and racially diverse school settings by integrating white students into Prime 6 schools and integrating black students from the neighborhood into other schools. With this designation, Mackey still receives additional staffing from the district, including an assistant principal, counselor, learning strategist, security monitor, one other professional, and three kindergarten aides.

Mackey's student population is currently 46 percent Latino, 32 percent black, 11 percent white, 7 percent multi-racial, and 4 percent other. Seventy-six percent of students qualify for free and reduced priced lunch and about 10 percent of students are English learners (ELs). Mackey is a Title I school.

The school has very low mobility due to the magnet program and low teacher turnover. Attendance is also very high at 96 percent.

Kindergarten is a neighborhood program, and then the school has a lottery for admittance in first grade. Class sizes are shown in Table 1.

Table 1: Class Sizes

Grade Level	Class Size
Kindergarten	18-19
First	22-23
Second	24
Third	25
Fourth	30-31
Fifth	30-31

Class sizes range from 18-31 students, increasing at each grade level.

This case study summary has seven sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing

Table 2: Staffing at Mackey Magnet School

Category	FTE
Administration	
Principal	1
Assistant Principal	1
Clerical	2
Main Program	
Core Teachers	24
Elective Teachers	4
Instructional Coaches/Learning Strategist	3
EL teachers	
Tutors/Tier 2 interventionists	2
Librarian (now also Project-based Learning)	1
Gifted	.33
Aides (3 kindergarten, 1 library, 1 health)	5
Pupil Support	
Licensed	
Guidance Counselor	1
Nurse	.4
Other	
Campus Security Monitor	1
Theme Coordinator, School Communities Facilitator	2

Mackey is staffed by 24 core teachers and an additional four electives teachers (art, music, PE, and technology), as well as a .33 FTE Gifted and Talented Education (GATE) teacher. The librarian has transitioned into supporting project-based learning. There is a full-time reading coach, full-time math coach, and two certified temporary tutors (CTTs). To implement its magnet program, the school has a theme coordinator. Main office staff include the principal, assistant principal, an office manager, and a clerk.

Classroom teachers are identified as “student success advocates” for EL, but there are not specific EL teachers.

Leadership stresses that having funding sources for the additional staffing described above is critical to success.

School Schedule

As a magnet program, Mackey is extended by 19 minutes a day over the typical Clark County School District school day. The electives schedule is organized so teachers have common planning time by grade level multiple times a week. Tutoring is typically offered through a Saturday boot camp program.

Curriculum and Instructional Program

Staff at Mackey believe their "intervention and acceleration" block is the key to the success of their instructional program. All students receive Tier 2 intervention four days a week for 45 minutes a day. Students are assessed using the CorePhonics survey, and then are grouped based on grade level and ability, ranging from intensive intervention groups to accelerated groups. Within groups, teachers unpackage the Common Core standards to focus on specific standards or skills using a variety of methods of instruction, including small teacher-led groups, student-led groups, or center-based learning, with integrated hands-on learning and use of technology. On grade level and above group sizes are around 25 students, and more intensive groups are much smaller, generally 6-8 students. Teacher had data meetings every six weeks, and at the end of a nine-week period, students are re-grouped. By the end of fifth grade there are not any students in a lower group than on grade level.

The school does not have a set math curriculum; most teachers are doing Common Core-aligned instruction and the Clark County Math Framework using their own resources. The school does provide teachers with some common strategies that they can choose to use. Discourse around math is also a schoolwide focus, with teachers emphasizing how to talk about numbers and having students verbalize how they are solving problems instead of just plugging numbers into a formula. Staff say they are teaching students to think like mathematicians and provide real world applicability, so students see math as part of their daily lives and are confident in taking on any problem. The teachers see this as a way to support students in becoming productive citizens — a key tenant of the school's magnet program.

Overall, teachers are given license to teach as they wish, as long as they are meeting goals and standards.

Assessments and Data

Mackey uses regular progress monitoring and benchmark assessments in all grades, including MAP, AIMSweb, and the Core Phonics Survey. Students set goals as classes or individuals and hold each other accountable for meeting them. Students are also assigned accountability partners to discuss how they are going to reach goals and have regular check ins about progress and time for reflection.

Data teams meet every six weeks to review student data and determine placement for intervention block or any additional intervention needed.

Extra Help Strategies for Struggling Students

In addition to the intervention block described above, students who need additional support receive Tier 3 interventions via the school's two CTTs and two other staff members for 30 mins a day, four times a

week. This is possible due to Read by 3 funding. Finally, students who are recommended by their teachers also receive additional tutoring on Saturdays.

At Mackey, ELs do not receive separate instruction; instead, they are supported through the emphasis on student discourse and language development in the regular classroom. Schoolwide, teachers provide explicit vocabulary instruction with significant focus on academic language so all students are comfortable using this vocabulary. This includes providing contest clue and word strategies. Students are also given many opportunities to speak, including at assemblies. If a student does not know English well, they are paired with a buddy, so that as a pair they can work on both conversational and academic language. The reading coach also pushes into classrooms for additional support. Finally, eight or nine teachers have their Teachers of English to Speakers of Other Languages (TESOL) certification.

Professional Development

The first part of every Friday is dedicated to professional development (PD) in addition to common grade-level planning time. Vertical collaboration occurs during the site-based collaboration time (district initiative). Staff stressed how helpful it is to have consistent hour-long weekly meetings for PD instead of sporadic full days. They have found it quickly gives them the information they need, which they can apply and further reflect on through regular peer dialogue. This year, PD has focused on EL populations.

School Culture and Leadership

Staff and leadership feel they have an exceptional school and community that they describe as a family. The first two weeks of the year are focused on building a community within the classroom through character development and team building. Students feel loved and known by their teachers and teachers demonstrate to families that they care. Teachers feel respected and valued by their peers and school administration. Staff report that everyone works hard and is deeply invested in the success of their students; they find it deeply rewarding to see their students grow and thrive.

There is a clear commitment to excellence at Mackey. The magnet focus on leadership and global communication means that ensuring students are good citizens and connected to the community — within and outside of the school — is the foundation of the school's program. Further, the school has clear expectations, as well as a common vision and language, with staff and students working to exemplify good leadership and citizenship. It sets the same high expectations for everyone at the school and provides a system of accountability.

As a magnet school, it also means that staff, students, and families all have real buy-in to the school because they have all chosen to be there. This buy-in provides a high level of consistency and stability.

Pahranagat Valley Elementary School

Introduction

Pahranagat Valley Elementary School is a small elementary school of about 130 students located in the Lincoln County School District. Described as a hard-working, blue collar community of low to middle income families, key employers include a nearby test site, the school district, agriculture, and ranching. Some people also commute nearly two hours to the Las Vegas area for work.

The average class size at Pahranagat Valley is 22 students. There is low student mobility and teacher turnover is essentially at zero. Staff stress the importance of their small community and the close bonds shared by staff and students.

The school is 90 percent white, 8 percent Latino, and 2 percent other. Thirty-seven percent of the school's students qualify for free and reduced-price eligible, and zero are English learners.

School Staffing

Staffing classrooms with high-quality teachers is an important strategy for Pahranagat Valley. When asked how the school produced its student performance results, the first thing the principal noted was his staff and their willingness to "do everything." The principal is firm in his belief that the people are what make the school, and that the school could not achieve the same level of success without its staffing. The school has very low teacher turnover, and when vacancies do occur, the principal works hard to ensure prospective teachers are a good fit for the school. The principal and teachers also pointed to the school's four paraprofessionals as a key component of the school's success.

With only one classroom per grade level, teachers at Pahranagat Valley do not have the benefit of grade-level teaming and collaboration. However, PVES teachers practice vertical integration, and collaborate across grade levels throughout the school year. The four paraprofessionals are utilized across the school, serving both special education and non-identified students in targeted small group or individual instruction, as directed by the classroom teachers.

Table 1: Staffing in Pahranagat Valley Elementary School

Category	FTE
Administration	
Principal	1.0
Assistant Principal	
Clerical	1.0
Main Program	
Core Teachers	7.0
Elective Teachers	
Instructional Coaches	
EL teachers	
Tutors/Tier 2 interventionists	0.5
Librarian	

Gifted	
Aides	4.0
Pupil Support	
Licensed	
Guidance Counselor	0.25
Nurse	

The staffing configuration of the school shows Pahranagat Valley's reliance on effective core teachers with support from paraprofessionals. Core teachers are the grade-level teachers who teach reading, math, science, and social studies. The school also benefits from the Read by Grade Three specialist, who works in the school two days each week, providing additional support to students. The school does not have any instructional coaches. The principal and special education teacher serve as instructional coaches to the teachers, and occasionally a district-provided coach will come to the school.

The school is not able to employ dedicated "elective" or "specials" teachers to provide instruction in art, music, physical education or technology. Music and library are regularly offered, but are staffed by the school's paraprofessionals, rather than by specials teachers. Other specials, such as art and technology, are integrated into the curriculum by the core teachers. A typical staffing standard, and the EB model formula, for the number of specials teachers needed is to have 20 percent specials/elective teachers above the total number of core teachers would equal 1.4 positions for this school (0.2 x 7).

School Schedule

Pahranagat Valley Elementary School operates on a four-day week, Monday through Thursday, and the instructional day runs from 7:30 a.m. to 2:55 p.m. (a seven-hour, 25-minute school day). The school also operates a part-day universal prekindergarten program for the community's three- and four- year-olds. The school does not have a cafeteria, so each day the students are bussed a short distance to the local high school for lunch, and then are bussed back to school.

Teachers have great latitude in their use of time during the school day. Core instruction takes place from 7:30 a.m. to 11:00 a.m. each day. This block is used for math and English language arts core instruction. Next, students are transported to the high school for lunch. On their return from lunch, core instruction may continue, and students rotate through specials (music, library, and physical education — art was dropped as a separate special due to staff availability but is integrated into the core classroom) and spend time on science and history. Brain breaks are highly encouraged, and students have two recess breaks during the school day. The timing of those recess breaks is at the discretion of the classroom teacher.

Curriculum and Instructional Program

The school currently uses GO Math! in all grades expect kindergarten, as the school is in the first year of a five-year phase in of *Eureka Math*, beginning with kindergarten this year. The school places a strong emphasis on phonics. Lexia is used with all students but is seen as particularly effective for struggling

students because it can be differentiated to a student's level and has a strong phonics component. There is a high fidelity with using Lexia across all grade levels in the school. Accelerated reader and math programs are also utilized in the school. The principal found the curriculums teachers are using to be successful. Teachers supplement with additional materials as they see fit.

The school is proud of its 40 Book Challenge, where students in every grade level are challenged to read 40 books during the school year at their appropriate reading level. Students and teachers monitor progress throughout the school year, and there is a reward for every student that completes the challenge. The principal and teachers alike cited the challenge as a key way the school helps all students improve their literacy skills.

The school has adopted 1:1 technology, where every student has access to a Chromebook during the school day. The school highly values the benefits of integrating technology into the classroom, and noted it is particularly useful for Lexia and other web-based individualized platforms in which students can access content and assignments tailored at their individual levels without having to schedule time in a lab. As a result of the 1:1 integration, the school's former computer lab is being converted into a Response to Intervention (RTI) space.

Assessments and Data

The school administers MAP three times a year in order to allow for data-driven instruction and targeted interventions. As previously noted, the school utilizes Lexia and other web-based programming, which provide regular performance data on each student. Teachers utilize this data to help modify instruction and identify students who would benefit from additional intervention supports.

Extra Help Strategies for Struggling Students

Students who are struggling greatly benefit from the small class sizes and small school setting. Teachers also regularly group by ability based on data. Students who are struggling also receive push-in/pull-out support provided by paraprofessionals and support from the Read by Grade Three interventionist. Paraprofessionals are able to work one-on-one with students for 15-20 minutes at a time and can quickly address any skills gaps.

Preschool for all students was also highlighted as being helpful for student success.

Professional Development

Because Pahranagat Valley has a four-day school week, most professional development occurs on Fridays. The district also requires professional development one Friday each month. Additionally, some trainings occur on Monday afternoons. The school doesn't have much funding for professional development, so it leans on the Nevada Regional Professional Development Program and district-provided professional development. The principal works with teachers to identify the areas they want to focus on for professional development. As with other aspects of the school, there is a strong belief in flexibility and the principal trusts his teachers to identify areas of professional development that will contribute to student growth and development. The most intensive professional development occurs when new programs or curricula are adopted.

The monthly staff meetings also include professional development on specific issues and topics. These issues and topics are usually identified by teachers. Usually one or two teachers will participate in a professional development activity, then present on it at the staff meeting. Several teachers attend MegaConference, which tends to have a heavy special education focus, and is seen as particularly valuable by the principal and teachers alike.

School Culture and Leadership

Pahranagat Valley is a small, deeply connected community. By virtue of being a small town, everyone knows each other and there are positive relationships both within the school and outside of the school. Teachers report working collegially together and feeling well supported by school administration. Further, parents place a lot of trust in the school because of how well they know the staff and from often being former students themselves.

Staff members strive to create a welcoming and supportive environment for students that allows them to flourish. One staff member put it simply, “happy cows give good milk.” If school is both a fun and engaging place to be, and students feel loved and valued, then learning comes naturally.

Pleasant Valley Elementary School

Introduction

Pleasant Valley Elementary School is located in the most southern portion of Washoe County and extends south to Carson City. The majority of the homes in the neighborhood are single-family homes on an acre of land. People in the community work for or own family-run businesses. In fall 2017, Pleasant Valley enrolled 466 students in kindergarten through fifth grade. Pleasant Valley was selected based on its success with students eligible for free and reduced-price meals.

Overall, Pleasant Valley is a highly collaborative school, with a skilled and effective faculty. It is also a data-driven school. Nearly everyone interviewed said they use student performance data to develop lesson plans, provide differentiated instruction, and evaluate results.

Class sizes averaged 23 students (Table 1 shows the average class size by grade level).

Table 1: Pleasant Valley Elementary School Class Sizes

Grade Level	Class Size
Kindergarten (3 classes)	25
First (4 classes)	20
Second (4 classes)	20
Third (3 classes)	25
Fourth (3 classes)	25
Fifth (3 classes)	25

There were three sections of kindergarten, four sections of first and second grades, and three sections in third through fifth grades.

The school is 81 percent White, 12 percent Latino, and five percent other. Twenty-one percent of students in the school are free and reduced-price lunch eligible and zero are English learners.

The case study report has nine sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing and Scheduling

Pleasant Valley strives to maintain a well-qualified and collaborative staff. The principal mentioned there were only three reasons for teacher turnover at the school: death, retirement, or moving. Last year the school received 57 transfer applications from within the Washoe district for two openings. Teachers enjoy the school culture and feel as though leadership gives them the autonomy to do what is most successful for the students.

Teachers work closely together in grad-level teams to develop curriculum and share lesson ideas. Additionally, they work between grades to discuss the material that needs to be taught for students to be successful when entering the next grade. Each grade-level team meets with the lower and higher grade-level teams to create new classes for the upcoming year. For example, the third grade team would give the fourth grade team a recommendation of how they believe the students should be grouped. The fourth grade team would then review and reach out to the third grade team with any questions or changes they would like to see. The principal will then review and approve; he said he rarely makes changes. The staff has been very stable, which has led to effective instruction.

Table 2: Staffing in Pleasant Valley Elementary School

Category	FTE
Administration	
Principal	1.0
Assistant Principal	
Clerical	1.6
Main Program	
Core Teachers	20.0
Elective Teachers: 1.0 Music, .4 Art, .4 PE, and .5 Computer	2.3
Instructional Coaches	
Special Education Self-Contained (Severe and Profound)	
Special Education (Mild and Moderate)	0.5
EL teachers	0.1
Tutors/Tier 2 interventionists	0.5
Librarian	0.8
Gifted	0.2
Aides	
Special Education Aide	3.0
Pupil Support	
Licensed	
Guidance Counselor	1.0
Clinical Aide	0.7
Nurse	0.2
Psychologist	0.2
Speech	

The school's staffing configuration of the school shows the importance of Pleasant Valley's reliance on effective core teachers. Table 2 shows that the school has 20.0 core teacher positions for 466 students in kindergarten through grade five. Core teachers are the grade-level teachers who teach reading, math, science, and social studies. For kindergarten through grade five, this staffing equates to an average class

size of approximately 23 students. However, as noted above, average grade-level class sizes vary from 25 in kindergarten and in third through fifth grades to 20 students in second and third grades.

The school also employs “elective” or “specials” teachers to provide instruction in art, music, physical education, library, and technology. Music is the only elective that is funded by the district, the rest has to come from additional funding. Two FTEs provide this instruction, including the librarian who teaches some of the specials class sections. A typical staffing standard, and the EB model formula, for the number of specials teachers needed to have 20 percent specials/elective teachers above the total number of core teachers would equal 4.0 positions for this school (0.2 x 20).

When asked about instructional coaches, the principal said that they were able to have one teacher tutor who is a former teacher. The funding for the position is picked up through school fundraising. She is able to work with students in second through fourth grades. The interventionist is very focused on making sure kids are able to meet the Read by Grade Three Act. The principal has the teachers send out a group of kids to meet with the interventionist in order to work on reading skills. The school has additional pupil support staff, including one guidance counselor, 0.2 nurse, a 0.7 clinical aid, and .33 psychologist.

Note that these case studies were focused on identifying resources and supports for at-risk and EL students, so special education resources were not specifically identified.

School Schedule

The instructional day runs from 8:55 a.m. to 3:00 p.m. (a six-hour, five-minute school day). Accounting for the 45-minute student and staff lunch and recess period and a 15-minute morning recess, Pleasant Valley provides five hours of instruction for students.

Teachers provide instruction for five of these six hours. All teachers have 60 minutes of pupil-free time at least twice a week. Once a week, all teachers at each grade level have the same pupil-free time period. Currently, there is no time during the regular school day for grade-level teams to meet and collaborate on a daily or weekly basis. These meetings had occurred in the past and the teachers are expressed a desire to hold them again.

During the pupil-free time for grade-level teachers, students rotate among art, music, physical education, computers, and, some library instruction. Students’ day consist of 1.5 hours of reading, 1.5 hours of math, 1.5 hours combined a day of science and social studies.

Curriculum and Instructional Program

The school uses Houghton Mifflin Harcourt for ELA curriculum, which is supplemented with Core Knowledge and Engage New York. Accel Math had been used as the math curriculum until last year; they have started using Bridges Math for kindergarten and first grade and Envisions for second through fifth grades. The principal found the curriculums they are using to be successful. The teachers can supplement the material with additional resources. One fifth grade teacher uses various news articles to supplement some of the ELA curriculum.

Assessments and Data

Pleasant Valley makes use of multiple assessments, including MAP three times a year, DRA, and STARR. Teachers can use any additional tests besides MAP that the teachers identify. Many of the grade-level teachers also create assessments on the information they have been teaching to check for understanding.

MAP is a benchmark assessment administered online in September, January, and June. The teachers use the MAP data to see the progress of their students and to make decisions on the type of interventions they may need to provide for particular students or may need to stop providing for other students. All of the teachers are aware of the scores of their students on all of the assessments. Each teacher we talked to had a data sheet of all the different test scores of their students and they were highlighted based on their performance. The teachers used this data to create work groups and to decide if there were lessons that needed to be retaught.

Extra Help Strategies for Struggling Students

Discussions with Pleasant Valley staff did not identify many additional supports beyond the .5 interventionist described above.

Professional Development

According to the principal and to most teachers, professional development in Pleasant Valley is ongoing. It emanates first from the principal's willingness to give the teachers autonomy to create and develop their own lesson plans. Wednesdays are early release days that are used to review information from either the principal, counselor, or teacher leader. The principal goes over any changes with district policy or school policy that the staff needs to know. The counselor works on the whole child curriculum with the teachers and how they can better implement it in their classrooms. The teacher leader works with teachers on curriculum training. Additionally, teachers have personal planning time every day from 8:30 a.m. to 9:00 a.m. and from 3:00 p.m. to 3:30 p.m. The teachers have an additional three professional days at the beginning of the year: one is a teacher's day, another is the principal's day, and there is also a district day. On the most recent principal's day, the staff learned information provided by the district on topics such as new curriculum requirements and testing practices. The team then worked on team building and spent time at an escape room.

School Culture and Leadership

The staff works to hold the students accountable for their learning and their behavior. Students are also encouraged to enjoy school. The principal holds assemblies where he dresses up and does crazy things like shaving his head. The school has not shortened the student lunches but rather has increased the number of recesses.

The culture between the staff is one of constant collaboration and support. The teachers feel free to create the types of lesson plans they want and create the type of grade-level teams that are the best for each grade. For example, in the fifth grade, students rotate between three teachers. Each teacher specializes in a specific subject. This gives the students a feel for what middle school will be like. The teachers all work together to create classes for the upcoming year to make sure they are balanced and

students can feel the safe and excited to learn. The principal is very supportive of the teacher's ideas and encourages new ideas as well as consistent communication. Additionally, the principal has added some mental health days in the calendar for the teachers to leave early and do something that will assist with their mental and physical health.

Pleasant Valley Elementary creates a positive relationship with the community and parents. Every year they host a carnival for the people in the community, including the students and parents. Community members look forward to the carnival every year. It is something that binds past and current families with the school.

Vegas Verdes Elementary School

Introduction

Vegas Verdes Elementary School is a school of about 580 students (anticipated to increase to about 700 students next year) in Clark County School District in Las Vegas. The school is a franchise school, meaning that the principal leads more than one school in order to replicate the successful approach seen in the principal's original school. As a franchise, the school has extra administration staffing. The school also receives additional funding through Victory funding, which leadership has described as a powerful and a crucial element that allows them to have the staffing and supports needed for their students to be successful. Teachers and school administrators believe strongly in the school and its approach to learning.

The school is very high need — 100 percent of students are eligible for free and reduced-priced lunch and 42 percent of students are English learners (ELs). The school also has high mobility. Eighty-seven percent of students are Latino, three percent are white, and the remaining 10 percent of students are black.

Average class sizes in kindergarten and first grade are about 20 students, increasing up to 24 students in second and third grades, then no more than 28-30 students in fourth and fifth grades.

This case study summary has seven sections: 1) school staffing, 2) scheduling, 3) curriculum and instructional program, 4) assessments and data, 5) extra help strategies for struggling students, 6) professional development, and 7) school culture and leadership.

School Staffing

When asked how the school produced its student performance results, the first thing the Vegas Verdes principal highlighted was the systems approach – flipped classrooms with paired teachers, individual goals and a contract for each student, and additional financial incentives for teachers. With the flipped model, elementary teachers are asked to focus on a couple of content areas, rather than every content area, and the paired teachers will "flip" into the other's classroom to teach certain content areas. The principal and assistant principals agreed that in order for the flipped model to work, you need to have the right type of teacher, who enjoys collaborative planning and shared instructional goals and strategies. The principal and assistant principals believe the flipped model is a draw for a lot of teachers, who enjoy sharing responsibilities and working collaboratively with another teacher. By definition, the paired teaching, flipped classroom requires teachers to work closely together.

The school is also very data-driven, and the school's growth analyst serves a vital role, putting together monthly data sheets for every student, meeting weekly with the teachers, and analyzing data to determine which students should be pulled into small groups for additional intervention.

The principal believes you need "superstar" teachers, those willing to go above and beyond to meet student need, and these are the teachers he recruits. He has developed a relationship with the University of Nevada, Las Vegas to help build the next generation of superstar teachers for his schools.

The school also accepts two Teach for America teachers each year. The principal does a lot of hiring through word-of-mouth referrals, rather than the traditional recruitment process.

Table 2: Staffing in Vegas Verdes Elementary School

Category	FTE
Administration	
Principal	0.33
Assistant Principal	2
Clerical	3
Main Program	
Core Teachers	26
Elective Teachers	5
Instructional Coaches	5
EL teachers	
Tutors/Tier 2 interventionists	1.5
Librarian	
Gifted	
Aides (number includes 1 PE and .5 Library Aide)	1.5
Pupil Support	
Licensed	
Guidance Counselor	
Nurse	0.33
Psychologist	0.33
FASA (First Aid Safety Assistant)	1.0

The staffing configuration of the school shows that that the school has 26.0 core teacher positions for 428 students in prekindergarten through fifth grade. Core teachers are the grade-level teachers who teach reading, math, science, and social studies. The principal reported that social studies is integrated into English/language arts instruction.

The school also employs “elective” or “specials” teachers to provide instruction in art, music, physical education, and technology. Five FTEs provide this instruction, which is in line with the school having teachers instruct for five of six daily hours of student instruction. A typical staffing standard, and the EB model formula, for the number of specials teachers needed to have 20 percent specials/elective teachers above the total number of core teachers, would equal 5.2 positions for this school (0.2 x 26).

The principal feels strongly that when Response to Intervention (RTI), a multi-tier approach to the early identification and support of students with learning and behavior needs, is properly funded, it is very effective, but that classroom teachers can’t do everything themselves. Vegas Verdes has been able to fund and staff the program appropriately, so the school’s RTI specialist monitors data on all students, and a Tier 3 Interventionist provides Tier 3 instruction to students who need it. The school has additional

pupil support staff, including a 0.33 FTE nurse (a full time nurse that is shared among the three franchise school sites), a first aide safety assistant (FASA), and .33 FTE psychologist.

Note that these case studies were focused on identifying resources and supports for at-risk and EL students, so special education resources were not specifically identified.

School Schedule

The instructional day runs from 8:15 a.m. to 2:26 p.m. (a six-hour, nine-minute school day). During the pupil-free time for grade-level teachers, students rotate among art, music, physical education, and technology instruction.

As noted previously, Vegas Verdes implements a flipped classroom model, with students moving between two teachers that specialize in certain subjects. For example, one teacher focuses on English and social studies, and the other focuses on math and science. In the past, Vegas Verdes has also implemented a blended model that added a certified teacher tutor to work specifically with each teaching pair, so the students' core instruction was delivered in three parts, with a computer lab session between core blocks to receive individualized interventions via software programs and small group support. This model allowed the school the keep class sizes small, but did mean the overall caseload of students was higher for each teacher. As such, it is a demanding model that requires the right teachers. Vegas Verdes does not currently have any blended model classrooms but may in the future.

Curriculum and Instructional Program

The school uses Reading A-Z, Kagan, and Explicit Phonics for reading/language arts. For the school's EL students, leveled readers with picture support and thinking maps are utilized. Fast Forward Language and Reading Intervention is an online program used to support each student at their own level. ST Math is the math curriculum for all grades. ST Math is a visual math program, which the principal believes is a better fit for the EL students, since it's not as dependent on language acquisition for math understanding. There is a heavy focus on reading and math at Vegas Verdes — social studies content is integrated into the reading program. Some science is integrated into math classes, but the school also utilizes the Full Option Science System (FOSS) science kits for the dedicated science curriculum.

Assessments and Data

Regular assessment and progress monitoring are an integral part of Vegas Verdes program design. The school has a growth analyst that holds weekly meetings with teachers to review data and collaboratively decide which students need interventions. In addition to MAP, the school uses Evaluate, a specific benchmark assessment system, to help students see their progress and take ownership of learning. Teachers set goals (academic growth, attendance, and behavior) with students that become part of contracts that are signed by teachers, students, and parents. By setting these goals collaboratively, students believe the expectations are fair and have additional buy-in to meet them. Having common assessments and clear goals also allows the staff to work together collaboratively and make data-driven decisions.

Extra Help Strategies for Struggling Students

Vegas Verdes has a strong RTI process in place, which the school principal credits to the extra staffing. There is an RTI site leader, who meets once a week with each grade level for problem solving. These meetings also include a representative from the grades above and below and a counselor.

The school has a nine-week cycle where students are identified through regular assessment as needing additional support. The classroom teachers provide Tier 1 and Tier 2 interventions in the classroom, with additional support for Tier 2 students via the growth analyst who works with small groups of students (four to five students at a time). Teachers and the growth analyst monitor student progress, and if students in Tier 2 are not improving, they move to Tier 3 to receive additional pull-out intervention (up to 60 minutes). If students then demonstrate growth they move back to Tier 2. The school principal described this as a dynamic process, a "revolving door" of support based on each student's changing needs throughout the year.

For EL students, the school believes that language acquisition support is just part of good Tier 1 instruction, and that the Kagan structures and the mixed instructional approach they employ in the classroom — where students are regularly talking to peers and receive less "sit and get" — is the best way to serve EL students. For newcomer students (WIDA L1s and L2s), the school also provides pull-out or push-in intervention, particularly to support vocabulary, with a certified teacher tutor using technology (iReady, Reading Eggs) for 30 minutes a day, as well as additional materials. The school also has some tutoring after school for ELs, as well as Saturday boot camps for testing. Furthermore, most Vegas Verdes teachers are Teachers of English to Speakers of Other Languages (TESOL) certified.

In addition to instructional resources, the school also provides social–emotional support through counselors and character education.

Professional Development

As with all Clark County schools, most professional development days have been replaced with weekly site-based collaboration time. This time is separate from each teacher's daily planning/prep period. As such, professional development is an ongoing and teacher-driven process. At Vegas Verdes, professional development starts with the school's strategists meeting with teachers to identify topics of interest for teachers. The school also conducts a survey of teachers where they can tell what professional development they need.

The key to Vegas Verdes' approach to professional development is that professional development is differentiated by need and is flexible as teachers' needs change throughout the year. Vegas Verdes participates in the district's mandated EL training, which most administrators and faculty feel is not an effective use of their time.

School Culture and Leadership

Vegas Verdes has a strong school culture, led by a confident school leader with a clear vision. Deep and meaningful engagement is apparent at all levels, from leadership, to staff, to students and to families. The principal says it all starts with having the right teachers who want to be there and then trusting them and empowering them as professionals. Teachers reported feeling highly valued and autonomous,

which in turn, appears to promote engagement and staff longevity. Students are engaged as active participants in their learning and growth, and the school has built a caring and safe environment that is welcoming to students. High attendance levels are indicative of student engagement. Families are engaged both through the goal setting process previously described, and also through regular events. Vegas Verdes typically tries to hold regular events that include a fun activity paired with sharing data or resources, such as a breakfast or afternoon with books, math and reading nights, and harvest festivals to help bring out community social supports.

Appendix K: 2018 Successful Schools

School Code	District	School Name
2193	Clark	Batterman ES
2157	Clark	Bonner ES
2081	Clark	Bozarth ES
2246	Clark	Bracken ES
2179	Clark	Brookman ES
2225	Clark	Cahlan ES
2184	Clark	Conners ES
2094	Clark	Dickens ES
2263	Clark	Diskin ES
2080	Clark	Fine ES
2268	Clark	French ES
2272	Clark	Frias ES
2181	Clark	Gehring ES
2120	Clark	Gibson ES
2186	Clark	Goolsby ES
2209	Clark	Herron ES
2187	Clark	Hummel ES
2135	Clark	Jydstrup ES
2169	Clark	Kesterson ES
2132	Clark	May ES
2249	Clark	McCaw ES
2298	Clark	McDoniel ES
2083	Clark	ORoarke ES
2145	Clark	Piggot ES
2160	Clark	Rhodes ES
2221	Clark	Rowe ES
2189	Clark	Simmons ES
2264	Clark	Smith Helen ES
2286	Clark	Staton ES
2098	Clark	Steele ES
2241	Clark	Sunrise Acres ES
2230	Clark	Taylor Glen ES

School Code	District	School Name
2192	Clark	Thiriot ES
2176	Clark	Twitchell ES
2154	Clark	Vanderburg ES
2077	Clark	Wallin ES
2287	Clark	Wolff Elise ES
4209	Elko	Mountain View ES
16207	Washoe	Beck ES
16261	Washoe	Caughlin Ranch ES
16206	Washoe	Hunter Lake ES
16210	Washoe	Melton ES
2612	Clark	Coronado HS
2418	Clark	Las Vegas Acad HS
2620	Clark	NW Career & Tech HS
2425	Clark	Palo Verde HS
2435	Clark	West C&T HS
3501	Douglas	Douglas HS
16509	Washoe	Galena HS
16502	Washoe	Reno HS
2348	Clark	Cadwallader MS
2349	Clark	Canarelli MS
2347	Clark	Fertitta MS
2317	Clark	Guinn MS
2323	Clark	Johnson MS
2329	Clark	Lyon MS
2353	Clark	Mannion MS
2338	Clark	Miller Robert MS
2339	Clark	Rogich MS
2360	Clark	Tarkanian MS

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APPENDIX IV

REVENUES AND EXPENDITURES FOR PUBLIC ELEMENTARY AND SECONDARY EDUCATION: FY20

IES Institute of Education Sciences

Revenues and Expenditures for Public Elementary and Secondary Education: FY 20

FINANCE TABLES
May 2022

A Publication of the National Center for Education Statistics at IES

This set of tables introduces new data for national and state-level public elementary and secondary revenues and expenditures for fiscal year (FY) 2020. Specifically, this report includes the following school finance data:

- revenue and expenditure totals
- revenues by source
- expenditures by function and object
- current expenditures[1]
- current expenditures per pupil.

The expenditure functions include instruction, instructional staff support services, pupil support services, general administration, school administration, operations and maintenance, student transportation, other support services (such as business services), food services, enterprise operations, and total current expenditures. Objects reported within a function include salaries, employee benefits, purchased services, supplies, and equipment.

The finance data used in this report are from the National Public Education Financial Survey (NPEFS), a component of the Common Core of Data (CCD). The CCD is the primary National Center for Education Statistics (NCES) database on public elementary and secondary education in the United States.

State education agencies (SEAs) in each of the 50 states; the District of Columbia; and the 5 other jurisdictions of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands report these data annually to NCES. While the tables in this report include data for all NPEFS respondents, the figures and selected findings are limited to the 50 states and the District of Columbia.

The tables in this report present descriptive information on the revenues and expenditures for FY 20. The tables and figures chosen for this report demonstrate the range of information available when using NPEFS. They do not represent all of the data and are not meant to emphasize any particular issue.

Whenever comparisons were made between FY 19 and FY 20 data, the FY 19 data were obtained from the NPEFS FY 19 final (version 2a) data file. Updated tables for FY 19 can be found online at https://nces.ed.gov/ccd/data_tables.asp.

RELATED NCES REPORTS

Revenues and Expenditures for Public Elementary and Secondary Education: FY 19 (NCES 2021-302). https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021302

Revenues and Expenditures for Public Elementary and Secondary School Districts: FY 19 (NCES 2021-304). https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021304

Suggested citation:
Cornman, S.Q., Phillips, J.J., Howell, M.R., and Zhou, L. (2022). *Revenues and Expenditures for Public Elementary and Secondary Education: FY 20* (NCES 2022-301). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [date] from https://nces.ed.gov/pubsearch.
For questions about content, contact Stephen Cornman at stephen.cornman@ed.gov. To view this report online, go to https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022301. This report was prepared in part under Interagency Agreement (IAA) No. ED-IES-11-1-J-0007 with the U.S. Census Bureau. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

DATA

The tables present data from the FY 20 NPEFS provisional (version 1a) data file and the FY 19 NPEFS final (version 2a) data file. The membership data used in this report come from the State Nonfiscal Survey, school year 2019–20 version 1a and 2018–19 version 1a.

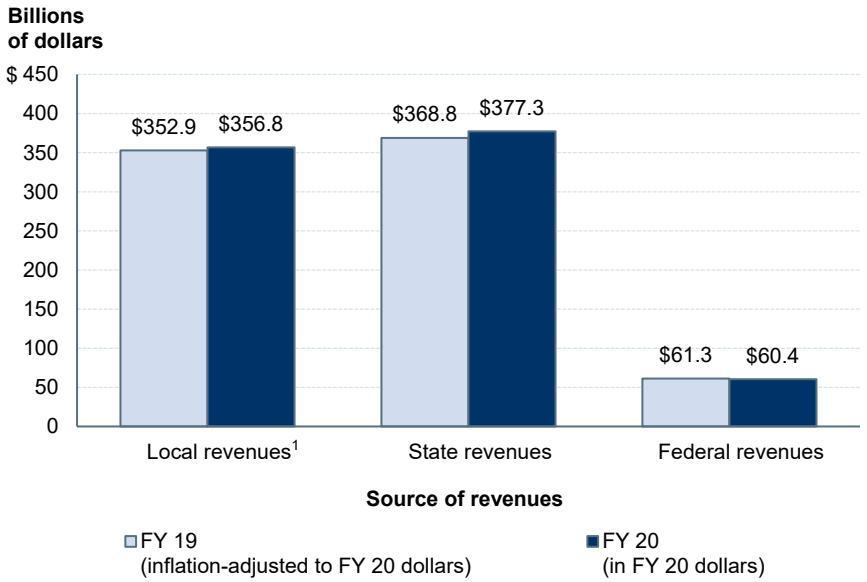
SEAs report data for CCD surveys annually to NCES. The U.S. Census Bureau conducts the data collection for the finance surveys on behalf of NCES. NCES collects data for all three CCD nonfiscal universe surveys through the ED*Facts* submission system. SEAs participate in CCD voluntarily, following standard definitions for the data items they report.

The NPEFS instructions ask SEAs to report revenues and expenditures covering prekindergarten through high school public education in regular, special, and vocational schools; charter schools; and state-run education programs (such as special education schools or education programs for incarcerated youth).

For definitions of finance terms and more information about the methodology used in these surveys, see the following report:

Documentation for the NCES Common Core of Data National Public Education Financial Survey (NPEFS), School Year 2019–20 (Fiscal Year 2020). https://nces.ed.gov/ccd/pdf/2022302_FY20_NPEFS_Documentation.pdf

Figure 1. Source of revenues for public elementary and secondary education for the United States (in billions of dollars): FY 19 and FY 20



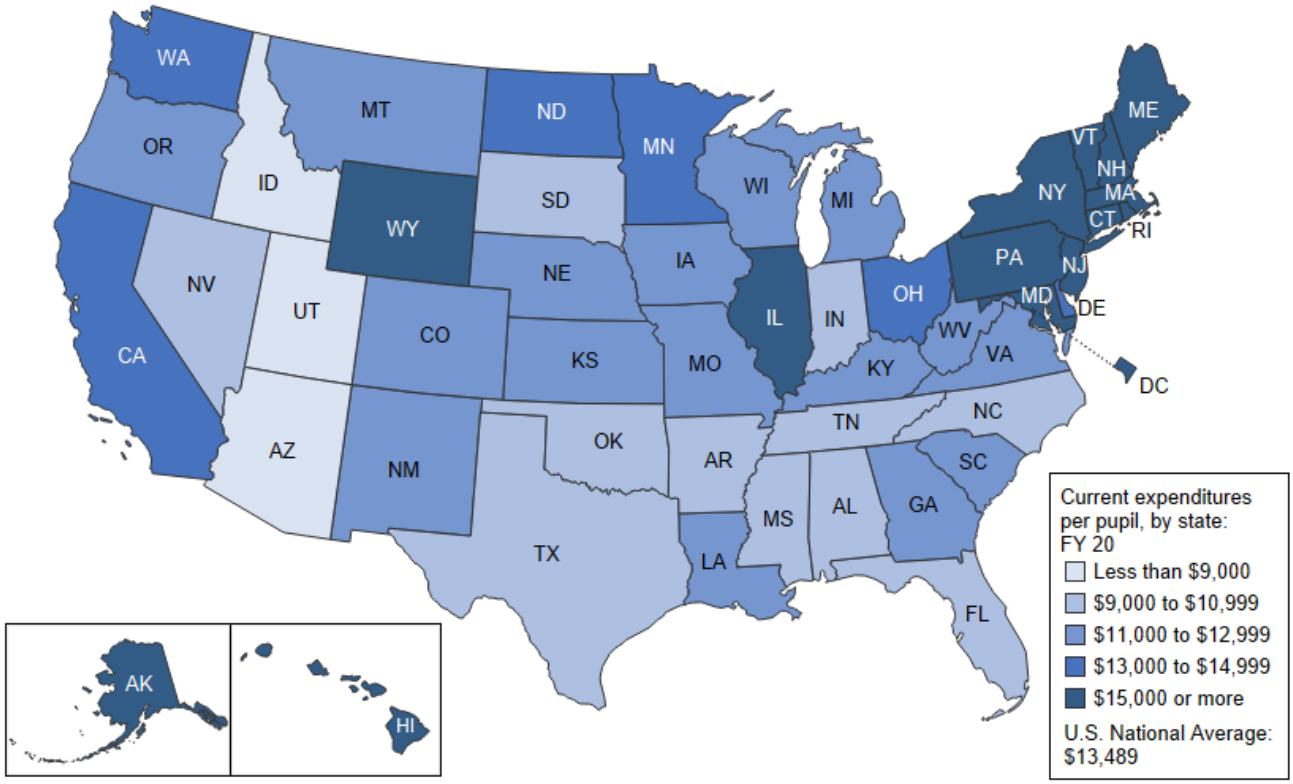
[1] Local revenues include intermediate revenues from education agencies with fundraising capabilities that operate between the state and local government levels.
NOTE: Data include the 50 states and the District of Columbia. Data have been adjusted to FY 20 dollars to account for inflation using the Consumer Price Index (CPI), which is published by the U.S. Department of Labor, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 19, Final Version 2a; and FY 20, Provisional Version 1a; and *Digest of Education Statistics 2020,* table 106.70. Retrieved November 9, 2021, from https://nces.ed.gov/programs/digest/d20/tables/dt20_106.70.asp.

The 50 states and the District of Columbia reported $794.6 billion in revenues collected for public elementary and secondary education in FY 20 (table 1). State and local governments provided $734.2 billion, or 92.4 percent of all revenues (derived from table 1). The federal government contributed $60.4 billion, or 7.6 percent of all revenues. Total revenues increased by 1.5 percent after adjusting for inflation[2] (from $783.0 to $794.6 billion) from FY 19 to FY 20, local revenues increased by 1.1 percent (from $352.9 to $356.8 billion), state revenues increased by 2.3 percent (from $368.8 to $377.3 billion), and federal revenues decreased by 1.5 percent (from $61.3 to $60.4 billion) (tables 1 and 9) **(figure 1)**.

Total revenues per pupil averaged $15,711 on a national basis in FY 20 (table 2). This reflects an increase of 1.5 percent between FY 19 and FY 20, after adjusting for inflation, and follows an increase of 2.8 percent from FY 18 to FY 19 (table 2). The percentage change in revenues per pupil from FY 19 to FY 20 ranged from 15.4 percent in New Mexico to -2.4 percent in Kentucky. Total revenues per pupil increased in 38 states and the District of Columbia between FY 19 and FY 20. Total revenues per pupil decreased in 12 states between FY 19 and FY 20.

Current expenditures for public elementary and secondary education across the nation increased by 0.7 percent between FY 19 and FY 20, after adjusting for inflation (from $677.4 to $682.2

Figure 2. Current expenditures per pupil for public elementary and secondary education, by state: FY 20



NOTE: Data include the 50 states and the District of Columbia. These data are not adjusted for geographic cost differences. Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt. Per pupil expenditures are calculated using student membership. The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 20, Arizona, New York, and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this figure. This figure only includes expenditures for K–12 and special education preschool programs in California. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a and "State Nonfiscal Survey of Public Elementary/Secondary Education," school year 2019–20, Provisional Version 1a.

billion) (tables 3 and 9), after increasing 2.1 percent between FY 18 and FY 19.

Within that increase, expenditures for instruction also increased by 0.8 percent between FY 19 and FY 20, after adjusting for inflation (from $409.3 to $412.6 billion), and student support expenditures increased by 3.5 percent between FY 19 and FY 20, after adjusting for inflation (from $41.6 to $43.0 billion) (table 9).

Current expenditures per pupil[3] on a national basis increased by 0.7 percent between FY 19 and FY 20, after adjusting for inflation (from $13,395 to $13,489), following an increase of 2.2 percent between FY 18 and FY 19 (tables 4, 5, and 9). Current expenditures per pupil ranged from $8,287 in Utah to $25,273 in New York. After New York, current expenditures per pupil were the next highest in the District of Columbia ($23,754), Vermont ($22,124), New Jersey ($21,385), and Connecticut ($20,889) (table 4 and **figure 2**). After Utah, current expenditures per pupil were the next lowest in Idaho ($8,337), Arizona ($8,694), Oklahoma ($9,395), and Nevada ($9,548).

The states with the largest increases in current expenditures per pupil from FY 19 to FY 20, after adjusting for inflation, were New Mexico (9.3 percent), Illinois (5.7 percent), Kansas (4.0 percent), Texas (3.7 percent), and Indiana (3.7 percent). The states with the largest decreases in current expenditures per pupil from FY 19 and FY 20, after adjusting for inflation, were Delaware[4]

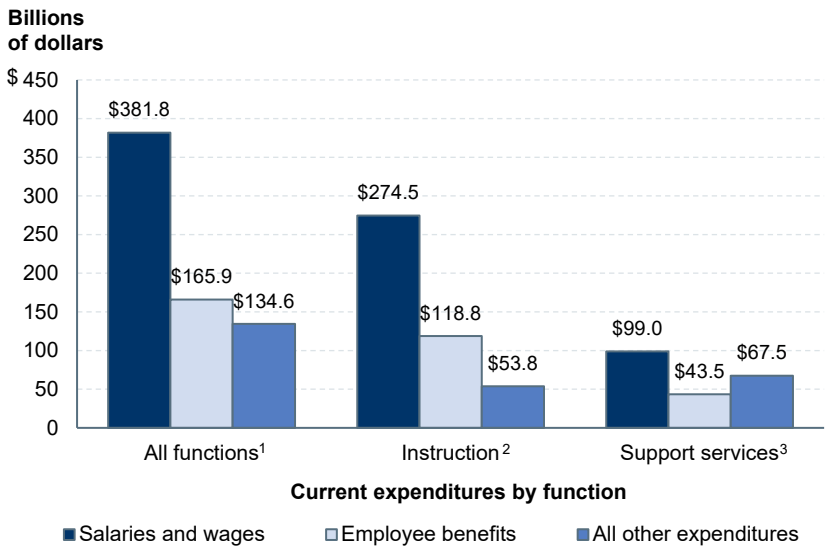
(-12.8 percent), Connecticut (-2.7 percent), Arizona (-2.4 percent), Alaska (-2.0 percent), and Arkansas (-1.9 percent) (table 5).

In FY 20, salaries and wages ($381.8 billion) in conjunction with employee benefits ($165.9 billion) accounted for 80.3 percent ($547.6 billion) of current expenditures for public elementary and secondary education (derived from table 6 and **figure 3**). Expenditures for instruction and instructional staff support services comprised 65.5 percent ($447.0 billion) of total current expenditures (derived from table 6).[5]

Total expenditures increased by 1.6 percent after adjusting for inflation (from $781.2 to $793.7 billion) between FY 19 and FY 20 (tables 7 and 9). Of the $793.7 billion in total expenditures, 86.0 percent are current expenditures, 10.2 percent are capital outlay expenditures, 2.7 percent are interest on debt, and 1.1 percent are expenditures for other programs (derived from table 7 and **figure 4**).

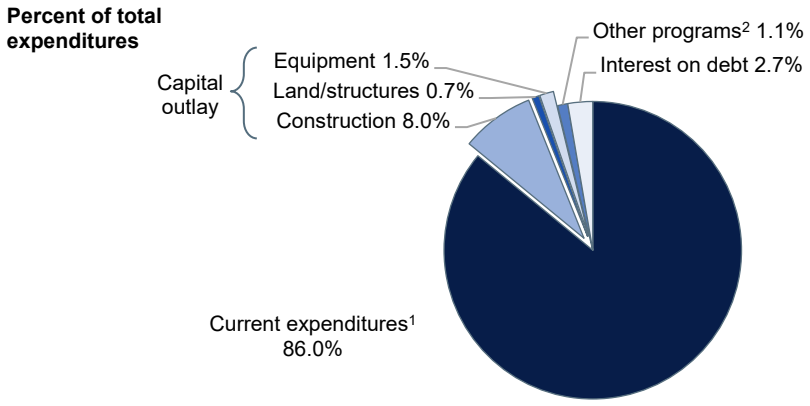
Current expenditures from federal Title I grants for economically disadvantaged students[6] (including carryover expenditures) accounted for $15.0 billion, or 2.2 percent of current expenditures for public elementary and secondary education at the national level in FY 20 (derived from table 8). Nationally, Title I expenditures per pupil averaged $297 and ranged from $118 in Utah to $497 in Louisiana.[7]

Figure 3. Salaries and wages, employee benefits, and other expenditures, by function for the United States (in billions of dollars): FY 20



[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt. Total current expenditures for all functions is the sum of total instruction and instruction-related current expenditures, total support services current expenditures, and total current expenditures for all other functions.
[2] Includes instruction and instructional staff support services current expenditures.
[3] Includes student support services, operation and maintenance of plant, student transportation, general administration, school administration, and other support services.
NOTE: Data include the 50 states and the District of Columbia. All other expenditures include expenditures other than salaries and wages and employee benefits (e.g., purchased services, supplies, and other). California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this figure. This figure only includes expenditures for K–12 and special education preschool programs in California.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a.

Figure 4. Percentage distribution of total expenditures for public elementary and secondary education and other related programs in the United States, by type of expenditure: FY 20



[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.
[2] Other program expenditures include expenditures for community services, adult education, community colleges, private schools, interest on debt, and other programs that are not part of public elementary and secondary education.
NOTE: Data include the 50 states and the District of Columbia. Detail may not sum to totals because of rounding. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this figure. This figure only includes expenditures for K–12 and special education preschool programs in California.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a.

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ENDNOTES

[1] Researchers generally use current expenditures instead of total expenditures when comparing education spending between states or across time. Current expenditures exclude expenditures for capital outlay, which tend to have dramatic increases and decreases from year to year. Current expenditures are for public elementary and secondary education only. Many school districts also support community services, adult education, private education, and other programs, which are included in total expenditures. These programs and the extent to which they are funded by school districts vary greatly, both across and within states.

[2] Whenever comparisons were made between FY 19 and FY 20 data, the FY 19 data were adjusted to FY 20 dollars. Inflation adjustments utilize the Consumer Price Index (CPI) published by the U.S. Department of Labor, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers. For comparability to fiscal education data, NCES adjusts the CPI from a calendar year to a school fiscal year basis (July through June). See *Digest of Education Statistics 2020*, table 106.70. Retrieved November 9, 2021, from https://nces.ed.gov/programs/digest/d20/tables/dt20_106.70.asp. The FY 19 amount adjusted to FY 20 dollars is equal to the FY 19 amount multiplied by the 2019-20 CPI (257.230) and then divided by the 2018-19 CPI (253.268).

[3] The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. The FY 20 NPEFS data file includes total student membership reported on the school year 2019-20 State Nonfiscal Survey that includes grades prekindergarten through grade 12 (plus ungraded). If the reported fiscal data exclude prekindergarten programs, total membership on the NPEFS data file also excludes prekindergarten membership. As part of the FY 20 NPEFS collection process, NCES asked SEAs to review student membership data from the State Nonfiscal Survey and verify that the membership data are consistent with the programs covered in the revenues and expenditures data reported in NPEFS.

Arizona, New York, and Oregon indicated that the state fiscal data reported in NPEFS did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. California did not report prekindergarten membership in the State Nonfiscal Survey. In FY 18 and FY 19, the prekindergarten membership data for California in the State Nonfiscal Survey public release file

have been imputed and only include preschool students with disabilities, as reported for the Individuals with Disabilities Education Act (IDEA). The number of students enrolled in preschool in California is likely much higher. The NPEFS total student membership variable excludes prekindergarten membership in California for FY 19 and FY 20. For FY 19 and FY 20, California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts in this report. For FY 19 and FY 20, this report only includes expenditures for K–12 and special education preschool programs in California. For FY 18, fiscal data for all of California's prekindergarten programs are included.

Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership.

[4] In Delaware, the decline in current expenditures per pupil is due primarily to a decrease in the amount reported for employee benefits paid by the state on behalf of local education agencies (LEAs). The state is reviewing this decline and may provide corrected data in the final file.

[5] Expenditures for instruction and instructional staff support services include expenditures that are directly related to providing instruction and for activities that assist with classroom instruction. The instruction and instruction-related expenditures category is more expansive than only instruction expenditures. Specifically, the instruction and instruction-related expenditures category includes salaries and benefits for teachers, teaching assistants, librarians and library aides, in-service teacher trainers, curriculum development, student assessment, technology (for students, but outside the classroom), and supplies and purchased services related to those activities.

[6] FY 19 U.S. Department of Education funds are available for spending by school districts beginning with the 2019–20 school year. Title I grants data are from *Digest of Education Statistics 2020*, table 401.60. Retrieved January 6, 2022, from https://nces.ed.gov/programs/digest/d20/tables/dt20_401.60.asp. This report presents the calculated allocation amounts as published by the U.S. Department of Education for the following formula grant programs: Grants to Local Education Agencies (Basic, Concentration, Targeted, and Education Finance Incentive Grants), Migrant Education, and Neglected and Delinquent Children. Allocations were made in FY 19 and became available for use in the 2019–20 school year. Actual amounts received by LEAs may be smaller than those presented due to state-level adjustments to federal Title I allocations and permitted state reservations for administration and school improvement activities.

[7] Title I expenditures are reported by states on NPEFS as either current year or carryover expenditures. A provision in the Title I statute allows LEAs to carry over a portion of the funds allocated to be spent in future fiscal years; however, some states did not separate carryover expenditures from current year expenditures in their NPEFS reporting. As a result, current year expenditures may exceed the total allocation amount for a particular state.

LEAs may also receive Title I funding through competitive grant programs. Title I expenditures reported on NPEFS include all expenditures for Title I programs, including both formula and competitive grants. While these programs account for a small proportion of total Title I funds, the inclusion of these programs may cause expenditures to exceed the total allocation amount for a particular state.

The law does not stipulate how Title I funds are to be spent. Many Title I funds are used to support schoolwide programs, such as extended-day kindergarten programs; learning laboratories in mathematics, science, and computers; special afterschool and summer programs to extend and reinforce the regular school curriculum; and other services to extend and accelerate academic progress. Thus, Title I expenditures per pupil are calculated by dividing the total of current year and carryover expenditures by membership, which includes both Title I eligible students and noneligible students.

For more information on the distribution of Title I funds, see https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019016.

Table 1. Source of revenues and type of expenditures for public elementary and secondary education, by state or jurisdiction: FY 2020

State or jurisdiction	Revenues [in thousands of dollars]				Expenditures [in thousands of dollars]			
	Total	Local[1]	State	Federal[2]	Total	Total current[3]	Capital outlay[4]	Other[5]
United States[6]	**$794,568,095**	**$356,835,188**	**$377,341,078**	**$60,391,828**	**$793,718,886** [7, 8, 9]	**$682,217,081** [7, 8]	**$81,334,789** [8, 9]	**$30,167,016** [8, 9]
Alabama	8,703,515	2,765,682	4,953,327	984,506	8,442,654	7,546,680	613,846	282,128
Alaska	2,614,818	570,197	1,660,021	384,601	2,605,253	2,417,641	153,298	34,314
Arizona	12,175,096	4,546,329	6,237,220	1,391,547	11,853,130 [7]	9,830,663 [7]	1,559,645	462,822
Arkansas	5,874,455	2,225,247	3,011,242	637,967	6,062,958 [7]	5,152,468 [7]	735,239	175,251
California	100,127,294	35,347,874	56,846,136	7,933,283	101,119,632 [7, 8]	85,303,209 [7, 8]	11,353,810 [8]	4,462,614 [8]
Colorado	13,187,699	6,826,099	5,536,044	825,555	13,297,765	10,577,428	2,011,019	709,318
Connecticut	11,884,392	6,602,906	4,786,094	495,393	12,095,669 [7, 9]	10,939,432	783,643 [9]	372,594 [9]
Delaware	2,450,066	761,092	1,504,434	184,540	2,115,498	1,974,936	102,863	37,698
District of Columbia	2,703,715	2,501,478	†	202,237	2,862,000	2,134,996	535,368	191,636
Florida	33,934,527	16,795,390	13,657,772	3,481,365	33,867,714 [7]	29,455,336 [7]	3,267,046	1,145,332
Georgia	23,826,892	10,644,995	11,234,259	1,947,638	23,263,875	20,680,204	2,305,632	278,039
Hawaii	3,447,871	51,323	3,118,291	278,258	3,214,491	2,999,586	197,243	17,662
Idaho	3,082,137	751,262	2,032,417	298,459	3,044,950	2,593,494	372,673	78,783
Illinois	39,071,160	20,942,210	15,728,126	2,400,824	38,332,124	33,895,711	3,188,321	1,248,091
Indiana	13,777,624	4,035,331	8,710,782	1,031,511	12,913,458	11,352,772	1,131,856	428,831
Iowa	7,408,114	2,946,928	3,930,911	530,276	7,526,068	6,200,533	1,149,811	175,724
Kansas	7,358,312	1,945,496	4,882,714	530,102	7,416,841	5,955,857	1,194,524	266,461
Kentucky	8,757,350	3,001,240	4,751,147	1,004,964	8,990,754	7,868,145	840,084	282,525
Louisiana	9,444,754	4,147,561	4,144,028	1,153,166	9,222,695	8,531,692	548,898	142,105
Maine	3,180,672	1,678,830	1,308,712	193,130	3,201,181	2,896,754	218,731	85,696
Maryland	17,015,238	8,705,658	7,419,591	889,990	16,471,112	14,482,716	1,757,026	231,369
Massachusetts	19,782,831	10,791,067	8,066,237	925,527	20,103,635	18,945,441	719,758	438,436
Michigan	22,091,388	7,133,717	13,003,148	1,954,522	21,520,069	18,434,000	1,943,985	1,142,084
Minnesota	14,825,590	4,237,278	9,762,147	826,164	15,602,721	12,060,038 [7]	2,532,299	1,010,385
Mississippi	5,032,201	1,830,415	2,533,272	668,514	5,098,633	4,480,071	518,260	100,302
Missouri	12,347,541	7,480,480	3,794,955	1,072,106	12,167,466	10,376,141	1,279,748	511,577
Montana	2,054,110	906,367	889,390	258,353	2,188,381	1,808,763	315,756	63,862
Nebraska	4,849,888	2,872,708	1,612,543	364,636	4,949,669	4,233,748	579,683	136,238
Nevada	5,712,603	3,124,806	2,133,303	454,493	5,770,874	4,744,497	801,801	224,576
New Hampshire	3,382,784	2,165,952	1,055,087	161,745	3,275,770	3,085,986	141,233	48,551
New Jersey	33,683,025	17,248,440	15,135,461	1,299,124	32,775,804	30,193,909	1,581,320	1,000,575
New Mexico	4,796,238	833,858	3,274,998	687,383	4,529,152	3,847,755	593,461	87,937
New York	76,961,931	43,311,844	30,327,359	3,322,728	73,773,174	66,108,405	4,084,582	3,580,187
North Carolina	16,424,985	4,432,796	10,298,925	1,693,263	17,075,124	15,452,367	1,524,711	98,045
North Dakota	1,934,395	672,771	1,058,059	203,564	1,976,768	1,655,922	267,827	53,018

See notes at end of table.

Table 1. Source of revenues and type of expenditures for public elementary and secondary education, by state or jurisdiction: FY 2020—Continued

State or jurisdiction	Revenues [in thousands of dollars]				Expenditures [in thousands of dollars]			
	Total	Local[1]	State	Federal[2]	Total	Total current[3]	Capital outlay[4]	Other[5]
Ohio	26,417,647	13,718,534	10,763,752	1,935,360	26,884,062	23,199,551	2,675,464	1,009,046
Oklahoma	7,570,497	3,066,965	3,716,207	787,326	7,492,173	6,611,657	762,613	117,903
Oregon	9,249,698	3,752,839	4,914,734	582,124	10,035,375	7,480,233	1,949,319	605,823
Pennsylvania	34,047,550	18,691,298	13,058,176	2,298,077	33,798,433	29,748,924	2,507,919	1,541,591
Rhode Island	2,745,636	1,359,585	1,166,201	219,850	2,786,820	2,544,539	144,060	98,222
South Carolina	11,417,956	4,780,352	5,708,951	928,653	10,810,512	8,881,032	1,483,309	446,171
South Dakota	1,747,683	912,002	589,618	246,064	1,749,948	1,454,403	249,734	45,812
Tennessee	11,113,864	4,704,475	5,283,765	1,125,624	11,299,958	10,121,192	848,060	330,705
Texas	70,617,931	36,253,037	27,103,224	7,261,670	72,961,269	57,118,703	11,520,352	4,322,214
Utah	6,839,133	2,559,669	3,804,950	474,514	7,125,828	5,673,815	1,189,404	262,609
Vermont	1,896,966	59,400	1,707,184	130,381	2,002,387	1,919,477	62,775	20,135
Virginia	18,145,002	9,672,024	7,349,818	1,123,159	18,489,958	16,785,047	1,520,538	184,373
Washington	20,157,771	4,741,451	14,240,399	1,175,921	20,880,863[7]	16,608,508[7]	3,533,704	738,651
West Virginia	3,783,283	1,257,156	2,089,510	436,618	3,663,346	3,332,337	264,505	66,505
Wisconsin	13,082,031	5,741,891	6,483,833	856,307	13,249,954[7]	10,943,582[7]	1,539,920	766,453
Wyoming	1,830,236	728,881	962,604	138,751	1,760,939	1,576,787	178,114	6,038
Other jurisdictions								
American Samoa	‡	‡	‡	‡	‡	‡	‡	‡
Guam	320,465	245,364	†	75,101	328,794	323,486	2,543	2,764
Commonwealth of the Northern Mariana Islands	86,958	0	20,227[10]	66,731	90,331	82,286	1,521	6,524
Puerto Rico	2,212,418	254	1,495,710[10]	716,454	2,221,321	2,123,785	52,258	45,277
U.S. Virgin Islands	222,957	177,698	†	45,259	171,356	171,190	0	167

† Not applicable.

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Local revenues include intermediate revenues from education agencies with fundraising capabilities that operate between the state and local government levels.

[2] Revenues from federal sources include amounts received from funds authorized by the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Although the CARES Act was enacted in March 2020, local education agencies (LEAs) do not begin receiving federal funds that flow through the state until after allocations are made by the federal government, assurances and certifications are signed and awards are made by the state, and reimbursement for expenditures is requested by the LEA. Because of this process, there is a lag between the time when the funds are appropriated and when LEAs record the amounts as revenues. Most states end their fiscal year on June 30; therefore, the amounts reported for FY 20 are expected to be only a small portion of the total amounts allocated to LEAs. Given variations in accounting methods and timelines for awarding these funds, many states and LEAs did not record any CARES Act revenues in FY 20.

[3] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.

[4] Capital outlay includes expenditures on property and construction of facilities.

[5] Other program expenditures include expenditures for community services, adult education, community colleges, private schools, interest on debt, and other programs that are not part of preK–12 public education.

[6] United States totals include the 50 states and the District of Columbia.

[7] Value affected by redistribution of reported values to correct for missing data items and/or to distribute state direct support expenditures.

[8] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

[9] Value contains imputation for missing data.

[10] Reported state revenue data are revenues received from the central government of the jurisdiction.

NOTE: Detail may not sum to totals because of rounding. Total revenues do not include proceeds from bond sales or the sale of property or equipment, nor do they include the use of existing assets or securities. Expenditures made from these funds are included. Therefore, in some instances, total expenditures may exceed total revenues.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a.

Table 2. Amounts and percentage changes of inflation-adjusted state, local, and federal revenues per pupil, by year and state or jurisdiction: FY 2018 through FY 2020

State or jurisdiction	State, local, and federal revenues per pupil[1] FY 18 (inflation-adjusted to FY 20 dollars)	FY 19 (inflation-adjusted to FY 20 dollars)	Percentage change FY 18–FY 19	FY 20[2]	Percentage change FY 19–FY 20
United States[3]	**$15,060**	**$15,483**	**2.8**	**$15,711**	**1.5**
Alabama	11,188	11,594	3.6	11,695	0.9
Alaska	19,736	19,859	0.6	19,807	-0.3
Arizona	10,052	10,558	5.0	10,768	2.0
Arkansas	12,017	11,917	-0.8	11,822	-0.8
California	15,068	16,264	7.9	16,247	-0.1
Colorado	12,765	13,774	7.9	14,441	4.8
Connecticut	22,475	23,051	2.6	22,694	-1.6
Delaware	16,894	16,778	-0.7	17,509	4.4
District of Columbia	30,272	29,575	-2.3	30,082	1.7
Florida	11,023	11,287	2.4	11,872	5.2
Georgia	12,593	12,966	3.0	13,464	3.8
Hawaii	18,759	17,507	-6.7	19,040	8.8
Idaho	9,399	9,517	1.3	9,907	4.1
Illinois	19,318	19,129	-1.0	20,152	5.3[4]
Indiana	13,054	13,006	-0.4	13,104	0.8
Iowa	14,277	14,347	0.5	14,320	-0.2
Kansas	14,029	14,156	0.9	14,777	4.4
Kentucky	12,878	12,964	0.7	12,655	-2.4
Louisiana	13,240	13,446	1.6	13,294	-1.1
Maine	16,608	17,029	2.5	17,642	3.6
Maryland	18,542	18,325	-1.2	18,710	2.1
Massachusetts	19,691	20,045	1.8	20,620	2.9
Michigan	14,303	14,544	1.7	14,768	1.5
Minnesota	15,984	16,451	2.9	16,598	0.9
Mississippi	10,350	10,559	2.0	10,799	2.3
Missouri	13,372	13,505	1.0	13,562	0.4
Montana	13,381	13,955	4.3	13,702	-1.8
Nebraska	14,833	14,499	-2.3	14,696	1.4
Nevada	11,114	11,369	2.3	11,496	1.1
New Hampshire	18,459	19,053	3.2	19,540	2.6
New Jersey	23,139	23,979	3.6	23,856	-0.5
New Mexico	12,513	12,552	0.3	14,481	15.4[5]
New York	28,255	29,074	2.9	29,422	1.2
North Carolina	10,116	10,460	3.4	10,526	0.6
North Dakota	16,699	16,613	-0.5	16,649	0.2
Ohio	15,461	15,448	-0.1	15,633	1.2
Oklahoma	9,802	10,647	8.6	10,758	1.0
Oregon	15,157	15,545	2.6	15,875	2.1
Pennsylvania	19,411	19,666	1.3	19,653	-0.1
Rhode Island	19,007	19,024	0.1	19,126	0.5
South Carolina	13,997	14,375	2.7	14,510	0.9
South Dakota	12,452	12,460	0.1	12,488	0.2
Tennessee	10,946	11,051	1.0	10,952	-0.9
Texas	12,139	12,514	3.1	12,850	2.7
Utah	9,424	9,823	4.2	9,989	1.7

See notes at end of table.

Table 2. Amounts and percentage changes of inflation-adjusted state, local, and federal revenues per pupil, by year and state or jurisdiction: FY 2018 through FY 2020—Continued

State or jurisdiction	State, local, and federal revenues per pupil[1] FY 18 (inflation-adjusted to FY 20 dollars)	FY 19 (inflation-adjusted to FY 20 dollars)	Percentage change FY 18–FY 19	FY 20[2]	Percentage change FY 19–FY 20
Vermont	20,954	21,145	0.9	21,865	3.4
Virginia	13,679	13,874	1.4	13,990	0.8
Washington	15,913	17,539	10.2[6]	17,650	0.6
West Virginia	13,409	13,714	2.3	14,359	4.7
Wisconsin	14,668	15,020	2.4	15,293	1.8
Wyoming	20,029	19,447	-2.9	19,344	-0.5
Other jurisdictions					
American Samoa	5,926	6,461	9.0	‡	‡
Guam	10,988	10,765	-2.0	11,123	3.3
Commonwealth of the Northern Mariana Islands	—	—	—	—	—
Puerto Rico	7,141	8,529	19.4[7]	7,563	-11.3[7]
U.S. Virgin Islands	19,680	20,560	4.5	20,442	-0.6

— Not available. Data are missing for the Commonwealth of the Northern Mariana Islands because the jurisdiction did not report student membership.

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Per pupil revenues are calculated using student membership. The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 20, Arizona, New York, and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 18 and FY 19, the data in the Nonfiscal public release file have been imputed and only include preschool students with disabilities, as reported for the Individuals with Disabilities Education Act (IDEA). The number of students enrolled in preschool in California is likely much higher. The NPEFS total student membership variable excludes prekindergarten membership in California for FY 19 and FY 20.

[2] Revenues from federal sources include amounts received from funds authorized by the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Although the CARES Act was enacted in March 2020, local education agencies (LEAs) do not begin receiving federal funds that flow through the state until after allocations are made by the federal government, assurances and certifications are signed and awards are made by the state, and reimbursement for expenditures is requested by the LEA. Because of this process, there is a lag between the time when the funds are appropriated and when LEAs record the amounts as revenues. Most states end their fiscal year on June 30; therefore, the amounts reported for FY 20 are expected to be only a small portion of the total amounts allocated to LEAs. Given variations in accounting methods and timelines for awarding these funds, many states and LEAs did not record any CARES Act revenues in FY 20.

[3] United States totals include the 50 states and the District of Columbia.

[4] In Illinois for FY 20, the Teachers' Retirement System valuation of the net pension cost increased by $1.5 billion, resulting in an increase to state payments made by the state on behalf of local education agencies (LEAs) for employee benefits.

[5] In New Mexico for FY 20, revenue from federal sources increased due to an increase in funding to address issues related to the COVID-19 pandemic.

[6] In FY 19, Washington was ordered by the Supreme Court to increase its share of basic education and reduce reliance on local sources. The main driver to the increase on total revenue is the revenue from state resources. This increase was $2.5 billion in FY 19. Over the past 3 years, the state has increased education funding by some $12.5 billion.

[7] In Puerto Rico, enrollment has continued to decline due to Hurricanes Irma and Maria. In FY 19, there was an increase in state funds for projects within the Special Education Secretariat and an increase in disbursements from the Federal Emergency Management Agency (FEMA) due to the completion of development projects. No additional funds from FEMA were received in FY 20.

NOTE: Data have been adjusted to FY 20 dollars to account for inflation using the Consumer Price Index (CPI), which is published by the U.S. Labor Department, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 18, Final Version 2a; FY 19, Final Version 2a; and FY 20, Provisional Version 1a; "State Nonfiscal Survey of Public Elementary/Secondary Education," school year 2019–20, Provisional Version 1a; and *Digest of Education Statistics 2020*, table 106.70. Retrieved November 9, 2021, from https://nces.ed.gov/programs/digest/d20/tables/dt20_106.70.asp.

Table 3. Current expenditures for public elementary and secondary education, by function, subfunction, and state or jurisdiction: FY 2020

State or jurisdiction	Current expenditures[1] [in thousands of dollars]											
			Support services[2]									
	Total	Instruction	Total support services	Student support services[4]	Instructional staff support	General adminis-tration	School adminis-tration	Operations and maintenance	Student transpor-tation	Other support services	Food services	Enterprise operations[3]
United States[5]	**$682,217,081[6, 7]**	**$412,616,246[6, 7]**	**$244,380,811[6, 7]**	**$42,992,359[6,7]**	**$34,421,487[6, 7]**	**$13,281,271[6, 7]**	**$38,972,040[6, 7]**	**$61,895,001[6, 7]**	**$26,271,137[6, 7]**	**$26,547,516[6, 7]**	**$24,109,702[6, 7]**	**$1,110,323[7]**
Alabama	7,546,680	4,388,859	2,761,404	502,999	314,431	194,210	476,990	720,306	372,877	179,591	396,417	0
Alaska	2,417,641	1,287,501	1,042,160	190,918	198,527	35,383	149,062	291,868	76,669	99,731	77,716	10,263
Arizona	9,830,663[6]	5,375,218[6]	3,985,541[6]	795,716[6]	492,084[6]	188,388[6]	542,192[6]	1,134,313[6]	372,913[6]	459,935[6]	468,684	1,219
Arkansas	5,152,468[6]	2,882,302[6]	2,004,462[6]	289,707[6]	414,303[6]	131,426[6]	270,783[6]	545,155[6]	184,398[6]	168,690[6]	262,581[6]	3,124
California	85,303,209[6, 7]	50,125,908[6, 7]	31,993,858[6, 7]	5,710,781[6, 7]	5,332,932[6, 7]	1,334,199[6, 7]	5,680,889[6, 7]	7,968,432[6, 7]	1,811,705[6, 7]	4,154,920[6, 7]	2,951,153[7]	232,290[7]
Colorado	10,577,428	5,784,943	4,430,272	709,013	636,354	193,092	805,188	972,692	299,179	814,754	312,322	49,892
Connecticut	10,939,432	6,753,375[6]	3,907,527[6]	812,863[6]	388,624[6]	253,262[6]	626,609[6]	929,209[6]	519,378[6]	377,582[6]	202,281[6]	76,249
Delaware	1,974,936	1,085,615	817,249	211,409	75,022	19,934	97,992	229,778	121,431	61,682	71,652	420
District of Columbia	2,134,996	1,081,517	1,002,427	193,347	99,484	121,431	155,151	198,121	128,849	106,045	50,824	229
Florida	29,455,336[6]	18,068,719[6]	10,032,178[6]	1,412,512[6]	1,863,086[6]	278,577[6]	1,593,643[6]	3,054,022[6]	1,045,869[6]	784,469[6]	1,354,439	0
Georgia	20,680,204	12,592,080[6]	7,071,700[6]	1,193,383[6]	1,078,684[6]	274,681[6]	1,346,590[6]	1,563,053[6]	924,780[6]	690,529[6]	965,930	50,495
Hawaii	2,999,586	1,775,678	1,086,709	311,161	97,238	13,941	218,453	297,093	55,905	92,918	137,199	0
Idaho	2,593,494	1,558,232[6]	922,397[6]	156,714[6]	143,499[6]	62,787[6]	148,614[6]	232,300[6]	104,211[6]	74,272[6]	111,167[6]	1,698
Illinois	33,895,711	20,975,386[6]	12,131,509[6]	2,543,526[6]	1,281,198[6]	1,276,278[6]	1,770,784[6]	2,671,862[6]	1,385,596[6]	1,202,264[6]	788,817	0
Indiana	11,352,772	6,498,026	4,360,784	639,253	509,340	230,962	769,157	1,261,362	589,556	361,154	493,962	0
Iowa	6,200,533	3,721,160	2,212,068	376,617	386,393	160,739	358,632	530,300	209,656	189,732	259,892	7,413
Kansas	5,955,857	3,523,701	2,172,682	422,525	251,061	159,664	356,014	575,191	232,849	175,379	259,474	0
Kentucky	7,868,145	4,599,382	2,753,116	405,506	418,817	168,968	471,206	654,689	419,347	214,582	492,381	23,265
Louisiana	8,531,692	4,777,227[6]	3,300,938[6]	543,523[6]	449,396[6]	230,595[6]	565,270[6]	799,935[6]	467,576[6]	244,644[6]	453,299	229
Maine	2,896,754	1,703,120	1,102,859	206,273	141,979	105,195	156,768	318,366	135,973	38,306	90,478	298
Maryland	14,482,716	9,238,837[6]	4,871,380[6]	693,135[6]	786,724[6]	105,683[6]	894,055[6]	1,265,614[6]	722,843[6]	403,327[6]	372,499	0
Massachusetts	18,945,441	12,181,350	6,249,140	1,529,988	903,851	369,896	821,915	1,497,516	770,910	355,063	514,951	0
Michigan	18,434,000	10,480,254	7,274,886	1,565,357	988,103	396,294	1,038,004	1,582,925	719,803	984,400	678,860	0
Minnesota	12,060,038[6]	7,857,117[6]	3,697,119[6]	369,303[6]	593,478[6]	443,001[6]	487,402[6]	789,273[6]	705,448[6]	309,216[6]	479,443	26,359
Mississippi	4,480,071	2,576,085	1,658,464	244,677	206,091	154,041	271,277	458,866	202,580	120,931	245,338	183
Missouri	10,376,141	5,849,730	4,091,473	717,380	403,176	589,802	609,732	1,037,238	505,147	228,998	434,937	0
Montana	1,808,763	1,061,898	668,097	120,699	62,453	58,745	104,447	185,368	82,212	54,172	76,242	2,526
Nebraska	4,233,748	2,616,877	1,440,027	229,878	132,994	99,786	214,938	395,746	114,797	251,890	172,663	4,181
Nevada	4,744,497	2,787,009	1,776,370	274,634	296,482	64,498	358,421	431,336	170,858	180,141	180,991	127
New Hampshire	3,085,986	1,966,397	1,053,830	248,989	99,185	111,977	176,320	245,541	129,168	42,651	65,758	0
New Jersey	30,193,909	18,093,205	11,300,099	3,213,915	1,130,279	620,561	1,505,636	2,905,574	1,171,819	752,314	548,563	252,041
New Mexico	3,847,755	2,190,937	1,479,768	402,637	98,162	111,582	217,273	385,192	124,663	140,260	177,049	0
New York	66,108,405	45,207,730	19,715,517	2,056,674	3,096,432	349,549	3,065,045	5,498,831	3,007,411	2,641,575	1,185,129	28
North Carolina	15,452,367	9,653,840[6]	5,044,919[6]	879,019[6]	521,488[6]	284,484[6]	972,052[6]	1,269,297[6]	611,183[6]	507,396[6]	753,608[6]	0
North Dakota	1,655,922	1,001,372	539,899	67,923	59,075	70,091	88,137	140,046	65,363	49,263	78,447	36,204

See notes at end of table.

Table 3. Current expenditures for public elementary and secondary education, by function, subfunction, and state or jurisdiction: FY 2020—Continued

State or jurisdiction	Current expenditures[1] [in thousands of dollars]											
			Support services[2]									
	Total	Instruction	Total support services	Student support services[4]	Instructional staff support	General administration	School administration	Operations and maintenance	Student transportation	Other support services	Food services	Enterprise operations[3]
Ohio	23,199,551	13,860,982	8,652,574	1,691,658	892,388	742,562	1,240,777	1,935,295	1,048,260	1,101,634	685,144	850
Oklahoma	6,611,657	3,782,180	2,405,946	457,633	249,157	200,152	370,905	689,240	182,807	256,052	378,120	45,411
Oregon	7,480,233	4,350,115	2,897,958	630,484	286,144	104,952	487,724	581,721	324,568	482,366	229,717	2,443
Pennsylvania	29,748,924	18,436,831	10,297,915	1,791,644	1,094,253	865,101	1,371,828	2,685,349	1,310,027	1,179,713	851,359	162,819
Rhode Island	2,544,539	1,557,744	925,971	279,800	93,856	39,150	120,624	192,029	91,026	109,486	60,371	453
South Carolina	8,881,032	4,917,050	3,531,821	688,277	549,672	82,746	603,642	890,457	319,917	397,112	413,613	18,548
South Dakota	1,454,403	857,582	515,774	83,527	54,079	51,189	73,070	146,848	50,758	56,303	74,657	6,389
Tennessee	10,121,192	6,087,656	3,524,301	548,785	637,190	212,972	648,185	801,750	364,934	310,485	509,235	0
Texas	57,118,703	33,307,803	20,966,330	3,053,575	3,027,524	827,401	3,368,711	6,009,333	1,614,605	3,065,180	2,844,570	0
Utah	5,673,815	3,578,276	1,849,989	299,912	259,511	69,402	386,518	493,122	159,267	182,256	245,054	496
Vermont	1,919,477	1,212,924	652,106	155,440	76,676	36,515	118,989	139,831	62,449	62,207	51,584	2,862
Virginia	16,785,047	10,201,485	5,974,224	899,119	1,195,181	293,834	981,717	1,464,821	836,413	303,139	600,805	8,533
Washington	16,608,508[6]	9,818,095[6]	6,364,729	1,305,492	1,225,008	162,130	980,299	1,256,153	603,189	832,459	343,670	82,014
West Virginia	3,332,337	1,916,268	1,191,662	184,242	121,288	52,668	183,050	343,874	241,313	65,227	224,407	0
Wisconsin	10,943,582[6]	6,474,623[6]	4,084,586[6]	581,223[6]	632,047[6]	246,176[6]	566,178[6]	1,069,433[6]	424,998[6]	564,531[6]	384,373	0
Wyoming	1,576,787	936,045	592,095	99,596	77,088	30,621	85,184	159,332	73,685	66,588	47,875	773
Other jurisdictions												
American Samoa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Guam	323,486	139,463	161,833	29,623	24,697	4,521	17,336	55,878	7,389	22,389	22,191	0
Commonwealth of the Northern Mariana Islands	82,286	32,821	34,099	7,963	9,197	3,026	2,524	2,607	1,687	7,095	15,366	0
Puerto Rico	2,123,785	888,600	991,949	313,153	59,200	62,551	84,660	325,573	55,170	91,642	243,236	0
U.S. Virgin Islands	171,190	107,663	53,488	12,727	5,135	6,714	10,677	5,219	5,118	7,897	9,755	285

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlays, other programs, and interest on long-term debt.

[2] Support services is an expenditure function divided into seven subfunctions: student support services, instructional staff support, general administration, school administration, operations and maintenance, student transportation, and other support services.

[3] Enterprise operations include operations that are operated as a business and receipts from the operation are expected to fund the enterprise (e.g., school bookstores and certain afterschool activities).

[4] Student support services include attendance and social work, guidance, health, psychological services, speech pathology, audiology, and other student support services.

[5] United States totals include the 50 states and the District of Columbia.

[6] Value affected by redistribution of reported values to correct for missing data items and/or to distribute state direct support expenditures.

[7] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “National Public Education Financial Survey (NPEFS),” FY 20, Provisional Version 1a.

Table 4. Student membership and current expenditures per pupil for public elementary and secondary education, by function, subfunction, and state or jurisdiction: FY 2020

State or jurisdiction	School year 2019–20 student membership[1]	Current expenditures[2] per pupil											
				Support services[3]									
		Total	Instruction	Total support services	Student support services[5]	Instructional staff support	General administration	School administration	Operations and maintenance	Student transportation	Other support services	Food services	Enterprise operations[4]
United States[6]	**50,575,201**	**$13,489[7,8]**	**$8,158[7,8]**	**$4,832[7,8]**	**$850[7,8]**	**$681[7,8]**	**$263[7,8]**	**$771[7,8]**	**$1,224[7,8]**	**$519[7,8]**	**$525[7,8]**	**$477[7,8]**	**$22[8]**
Alabama	744,235	10,140	5,897	3,710	676	422	261	641	968	501	241	533	0
Alaska	132,017	18,313	9,753	7,894	1,446	1,504	268	1,129	2,211	581	755	589	78
Arizona	1,130,693	8,694[7]	4,754[7]	3,525[7]	704[7]	435[7]	167[7]	480[7]	1,003[7]	330[7]	407[7]	415	1
Arkansas	496,927	10,369[7]	5,800[7]	4,034[7]	583[7]	834[7]	264[7]	545[7]	1,097[7]	371[7]	339[7]	528[7]	6
California	6,163,001	13,841[7,8]	8,133[7,8]	5,191[7,8]	927[7,8]	865[7,8]	216[7,8]	922[7,8]	1,293[7,8]	294[7,8]	674[7,8]	479[8]	38[8]
Colorado	913,223	11,583	6,335	4,851	776	697	211	882	1,065	328	892	342	55
Connecticut	523,690	20,889	12,896[7]	7,462[7]	1,552[7]	742[7]	484[7]	1,197[7]	1,774[7]	992[7]	721[7]	386[7]	146
Delaware	139,930	14,114	7,758	5,840	1,511	536	142	700	1,642	868	441	512	3
District of Columbia	89,878	23,754	12,033	11,153	2,151	1,107	1,351	1,726	2,204	1,434	1,180	565	3
Florida	2,858,461	10,305[7]	6,321[7]	3,510[7]	494[7]	652[7]	97[7]	558[7]	1,068[7]	366[7]	274[7]	474	0
Georgia	1,769,657	11,686	7,116[7]	3,996[7]	674[7]	610[7]	155[7]	761[7]	883[7]	523[7]	390[7]	546	29
Hawaii	181,088	16,564	9,806	6,001	1,718	537	77	1,206	1,641	309	513	758	0
Idaho	311,096	8,337	5,009[7]	2,965[7]	504[7]	461[7]	202[7]	478[7]	747[7]	335[7]	239[7]	357[7]	5
Illinois	1,938,813	17,483	10,819[7]	6,257[7]	1,312[7]	661[7]	658[7]	913[7]	1,378[7]	715[7]	620[7]	407	0
Indiana	1,051,411	10,798	6,180	4,148	608	484	220	732	1,200	561	343	470	0
Iowa	517,324	11,986	7,193	4,276	728	747	311	693	1,025	405	367	502	14
Kansas	497,963	11,960	7,076	4,363	849	504	321	715	1,155	468	352	521	0
Kentucky	691,996	11,370	6,647	3,979	586	605	244	681	946	606	310	712	34
Louisiana	710,439	12,009	6,724[7]	4,646[7]	765[7]	633[7]	325[7]	796[7]	1,126[7]	658[7]	344[7]	638	#
Maine	180,291	16,067	9,447	6,117	1,144	787	583	870	1,766	754	212	502	2
Maryland	909,404	15,926	10,159[7]	5,357[7]	762[7]	865[7]	116[7]	983[7]	1,392[7]	795[7]	444[7]	410	0
Massachusetts	959,394	19,747	12,697	6,514	1,595	942	386	857	1,561	804	370	537	0
Michigan	1,495,925	12,323	7,006	4,863	1,046	661	265	694	1,058	481	658	454	0
Minnesota	893,203	13,502[7]	8,797[7]	4,139[7]	413[7]	664[7]	496[7]	546[7]	884[7]	790[7]	346[7]	537	30
Mississippi	466,002	9,614	5,528	3,559	525	442	331	582	985	435	260	526	#
Missouri	910,466	11,397	6,425	4,494	788	443	648	670	1,139	555	252	478	0
Montana	149,917	12,065	7,083	4,456	805	417	392	697	1,236	548	361	509	17
Nebraska	330,018	12,829	7,929	4,363	697	403	302	651	1,199	348	763	523	13
Nevada	496,934	9,548	5,608	3,575	553	597	130	721	868	344	363	364	#
New Hampshire	173,124	17,825	11,358	6,087	1,438	573	647	1,018	1,418	746	246	380	0
New Jersey	1,411,917	21,385	12,815	8,003	2,276	801	440	1,066	2,058	830	533	389	179
New Mexico	331,206	11,617	6,615	4,468	1,216	296	337	656	1,163	376	423	535	0
New York	2,615,760	25,273	17,283	7,537	786	1,184	134	1,172	2,102	1,150	1,010	453	#
North Carolina	1,560,350	9,903	6,187[7]	3,233[7]	563[7]	334[7]	182[7]	623[7]	813[7]	392[7]	325[7]	483[7]	0
North Dakota	116,185	14,252	8,619	4,647	585	508	603	759	1,205	563	424	675	312

See notes at end of table.

Table 4. Student membership and current expenditures per pupil for public elementary and secondary education, by function, subfunction, and state or jurisdiction: FY 2020—Continued

State or jurisdiction	School year 2019–20 student membership[1]	Current expenditures[2] per pupil											
				Support services[3]									
		Total	Instruction	Total support services	Student support services[5]	Instructional staff support	General administration	School administration	Operations and maintenance	Student transportation	Other support services	Food services	Enterprise operations[4]
Ohio	1,689,867	13,729	8,202	5,120	1,001	528	439	734	1,145	620	652	405	1
Oklahoma	703,719	9,395	5,375	3,419	650	354	284	527	979	260	364	537	65
Oregon	582,661	12,838	7,466	4,974	1,082	491	180	837	998	557	828	394	4
Pennsylvania	1,732,449	17,172	10,642	5,944	1,034	632	499	792	1,550	756	681	491	94
Rhode Island	143,557	17,725	10,851	6,450	1,949	654	273	840	1,338	634	763	421	3
South Carolina	786,879	11,286	6,249	4,488	875	699	105	767	1,132	407	505	526	24
South Dakota	139,949	10,392	6,128	3,685	597	386	366	522	1,049	363	402	533	46
Tennessee	1,014,744	9,974	5,999	3,473	541	628	210	639	790	360	306	502	0
Texas	5,495,398	10,394	6,061	3,815	556	551	151	613	1,094	294	558	518	0
Utah	684,694	8,287	5,226	2,702	438	379	101	565	720	233	266	358	1
Vermont	86,759	22,124	13,980	7,516	1,792	884	421	1,371	1,612	720	717	595	33
Virginia	1,297,012	12,941	7,865	4,606	693	921	227	757	1,129	645	234	463	7
Washington	1,142,073	14,542[7]	8,597[7]	5,573	1,143	1,073	142	858	1,100	528	729	301	72
West Virginia	263,486	12,647	7,273	4,523	699	460	200	695	1,305	916	248	852	0
Wisconsin	855,400	12,794[7]	7,569[7]	4,775[7]	679[7]	739[7]	288[7]	662[7]	1,250[7]	497[7]	660[7]	449	0
Wyoming	94,616	16,665	9,893	6,258	1,053	815	324	900	1,684	779	704	506	8
Other jurisdictions													
American Samoa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Guam	28,812	11,227	4,840	5,617	1,028	857	157	602	1,939	256	777	770	0
Commonwealth of the Northern Mariana Islands	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico	292,518	7,260	3,038	3,391	1,071	202	214	289	1,113	189	313	832	0
U.S. Virgin Islands	10,907	15,695	9,871	4,904	1,167	471	616	979	478	469	724	894	26

— Not available. Data are missing for the Commonwealth of the Northern Mariana Islands because the jurisdiction did not report student membership.

Rounds to zero.

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 20, Arizona, New York, and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership.

[2] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.

[3] Support services is an expenditure function divided into seven subfunctions: student support services, instructional staff support, general administration, school administration, operations and maintenance, student transportation, and other support services.

[4] Enterprise operations include operations that are operated as a business and receipts from the operation are expected to fund the enterprise (e.g., school bookstores and certain afterschool activities).

[5] Student support services include attendance and social work, guidance, health, psychological services, speech pathology, audiology, and other student support services.

[6] United States totals include the 50 states and the District of Columbia.

[7] Value affected by redistribution of reported expenditure values to correct for missing data items and/or to distribute state direct support expenditures.

[8] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a; and "State Nonfiscal Survey of Public Elementary/Secondary Education," school year 2019–20, Provisional Version 1a.

Table 5. Amounts and percentage changes of inflation-adjusted current expenditures per pupil, by year and state or jurisdiction: FY 2018 through FY 2020

State or jurisdiction	Current expenditures per pupil[1] FY 18 (inflation-adjusted to FY 20 dollars)	FY 19 (inflation-adjusted to FY 20 dollars)	Percentage change FY 18–FY 19	FY 20	Percentage change FY 19–FY 20
United States[2]	**$13,113**	**$13,395[3]**	**2.2**	**$13,489[3]**	**0.7**
Alabama	10,073	10,265	1.9	10,140	-1.2
Alaska	18,376	18,681	1.7	18,313	-2.0
Arizona	8,680	8,910	2.7	8,694	-2.4
Arkansas	10,541	10,574	0.3	10,369	-1.9
California	13,129	13,854[3]	5.5	13,841[3]	-0.1
Colorado	10,614	11,245	5.9	11,583	3.0
Connecticut	20,886	21,471	2.8	20,889	-2.7
Delaware	15,843	16,178	2.1	14,114	-12.8[4]
District of Columbia	24,011	23,344	-2.8	23,754	1.8
Florida	10,018	10,143	1.2	10,305	1.6
Georgia	11,155	11,379	2.0	11,686	2.7
Hawaii	15,801	16,384	3.7	16,564	1.1
Idaho	8,134	8,168	0.4	8,337	2.1
Illinois	16,496	16,535	0.2	17,483	5.7
Indiana	10,401	10,412	0.1	10,798	3.7
Iowa	12,154	12,120	-0.3	11,986	-1.1
Kansas	11,502	11,505	#	11,960	4.0
Kentucky	11,488	11,457	-0.3	11,370	-0.8
Louisiana	12,063	12,107	0.4	12,009	-0.8
Maine	15,622	15,931	2.0	16,067	0.9
Maryland	15,711	15,819	0.7	15,926	0.7
Massachusetts	19,000	19,496	2.6	19,747	1.3
Michigan	12,117	12,241	1.0	12,323	0.7
Minnesota	13,383	13,505	0.9	13,502	#
Mississippi	9,236	9,398	1.8	9,614	2.3
Missouri	11,439	11,527	0.8	11,397	-1.1
Montana	11,934	12,171	2.0	12,065	-0.9
Nebraska	13,283	12,945	-2.5	12,829	-0.9
Nevada	9,372	9,426	0.6	9,548	1.3
New Hampshire	17,197	17,730	3.1	17,825	0.5
New Jersey	21,062	21,662	2.8	21,385	-1.3
New Mexico	10,328	10,630	2.9	11,617	9.3[5]
New York	24,472	25,271	3.0	25,273	#
North Carolina	9,653	9,953	3.1	9,903	-0.5
North Dakota	14,289	14,253	-0.3	14,252	#
Ohio	13,366	13,643	2.1	13,729	0.6
Oklahoma	8,474	9,347	10.3[6]	9,395	0.5
Oregon	12,340	12,652	2.5	12,838	1.5
Pennsylvania	16,978	17,156	1.0	17,172	0.1
Rhode Island	17,576	17,813	1.4	17,725	-0.5
South Carolina	11,097	11,166	0.6	11,286	1.1
South Dakota	10,640	10,487	-1.4	10,392	-0.9
Tennessee	9,952	10,097	1.5	9,974	-1.2
Texas	10,006	10,023	0.2	10,394	3.7
Utah	7,854	8,074	2.8	8,287	2.6

See notes at the end of table.

Table 5. Amounts and percentage changes of inflation-adjusted current expenditures per pupil, by year and state or jurisdiction: FY 2018 through FY 2020—Continued

State or jurisdiction	Current expenditures per pupil[1] FY 18 (inflation-adjusted to FY 20 dollars)	FY 19 (inflation-adjusted to FY 20 dollars)	Percentage change FY 18–FY 19	FY 20	Percentage change FY 19–FY 20
Vermont	20,961	21,549	2.8	22,124	2.7
Virginia	12,672	12,840	1.3	12,941	0.8
Washington	13,462	14,566	8.2	14,542	-0.2
West Virginia	11,996	12,461	3.9	12,647	1.5
Wisconsin	12,902	12,888	-0.1	12,794	-0.7
Wyoming	16,726	16,481	-1.5	16,665	1.1
Other jurisdictions					
American Samoa	5,040	5,512	9.4	‡	‡
Guam	10,266	10,039	-2.2	11,227	11.8[7]
Commonwealth of the Northern Mariana Islands	—	—	—	—	—
Puerto Rico	6,840	8,001	17.0[8]	7,260	-9.3[8]
U.S. Virgin Islands	16,054	16,858	5.0	15,695	-6.9

— Not available. Data are missing for the Commonwealth of the Northern Mariana Islands because the jurisdiction did not report student membership.

Rounds to zero.

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt. Per pupil expenditures are calculated using student membership. The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 20, Arizona, New York, and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 18 and FY 19, the data in the Nonfiscal public release file have been imputed and only include preschool students with disabilities, as reported for the Individuals with Disabilities Education Act (IDEA). The number of students enrolled in preschool in California is likely much higher. The NPEFS total student membership variable excludes prekindergarten membership in California for FY 19 and FY 20.

[2] United States totals include the 50 states and the District of Columbia.

[3] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. For FY 19 and FY 20, California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. For FY 19 and FY 20, this table only includes expenditures for K–12 and special education preschool programs in California. In FY 18, fiscal data for all of California's prekindergarten programs are included.

[4] In Delaware, the decline in current expenditures per pupil is due primarily to a decrease in the amount reported for employee benefits paid by the state on behalf of local education agencies (LEAs). The state is reviewing this decline and may provide corrected data in the final file.

[5] New Mexico's increase in current expenditures per pupil is due to increases in instruction salary-related expenditures and student support services salary-related expenditures.

[6] Oklahoma's increase in current expenditures per pupil for FY 19 is due to passage of House Bill 3705, which increased the compensation for certified and noncertified personnel. Additionally, the legislature approved the largest budget for common education in state history.

[7] Guam's increase in current expenditures per pupil is due to increases in instructional support and operations and maintenance expenditures to respond to COVID-19.

[8] In FY 19, Puerto Rico's current expenditures per pupil increased due to a decrease in the number of students enrolled for FY 19. In FY 20, Puerto Rico's schools were closed for certain periods of time due to both earthquakes in the southern area of the Island and precautionary measures for COVID-19. These closures affected the provision of services for the school year.

NOTE: Data have been adjusted to FY 20 dollars to account for inflation using the Consumer Price Index (CPI), which is published by the U.S. Labor Department, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 18, Final Version 2a; FY 19, Final Version 2a; and FY 20, Provisional Version 1a; "State Nonfiscal Survey of Public Elementary/Secondary Education," school year 2019–20, Provisional Version 1a; and *Digest of Education Statistics 2020*, table 106.70. Retrieved November 9, 2021, from https://nces.ed.gov/programs/digest/d20/tables/dt20_106.70.asp.

Table 6. Current expenditures, salaries and wages, and employee benefits for public elementary and secondary education, by function and state or jurisdiction: FY 2020

State or jurisdiction	Current expenditures[1] [in thousands of dollars]									
	All functions			Instruction and instruction-related[2]			Support services[3]			
	Total[5,6]	Salaries and wages	Employee benefits	Total[6]	Salaries and wages	Employee benefits	Total[6]	Salaries and wages	Employee benefits	All other functions[4]
United States[7]	**$682,217,081** [8, 9]	**$381,752,932** [8, 9]	**$165,869,089** [8, 9]	**$447,037,733** [8, 9]	**$274,508,730** [8, 9]	**$118,763,123** [8, 9]	**$209,959,323** [8, 9]	**$98,957,980** [8, 9]	**$43,516,113** [8, 9]	**$25,220,025** [8, 9]
Alabama	7,546,680	4,272,421	1,683,291	4,703,289	2,978,656	1,118,199	2,446,974	1,152,412	479,148	396,417
Alaska	2,417,641	1,130,994	700,145	1,486,029	775,732	467,085	843,632	332,792	217,797	87,979
Arizona	9,830,663 [8]	5,775,772 [8]	1,748,326 [8]	5,867,302 [8]	3,999,760 [8]	1,166,396 [8]	3,493,457 [8]	1,648,395 [8]	538,908 [8]	469,904
Arkansas	5,152,468 [8]	3,082,364 [8]	877,806 [8]	3,296,605 [8]	2,216,920 [8]	625,686 [8]	1,590,159 [8]	791,007 [8]	228,478 [8]	265,704 [8]
California	85,303,209 [8, 9]	47,539,853 [8, 9]	23,211,184 [8, 9]	55,458,839 [8, 9]	33,118,161 [8, 9]	16,092,930 [8, 9]	26,660,926 [8, 9]	13,292,860 [8, 9]	6,535,333 [8, 9]	3,183,443 [9]
Colorado	10,577,428	6,423,133	2,095,980	6,421,297	4,325,979	1,391,898	3,793,917	1,945,478	652,037	362,214
Connecticut	10,939,432	5,889,593 [8]	3,043,786 [8]	7,141,999 [8]	4,276,715 [8]	2,148,155 [8]	3,518,903 [8]	1,516,660 [8]	832,230 [8]	278,530 [8]
Delaware	1,974,936	1,232,616	277,271	1,160,636	853,889	198,701	742,227	344,097	76,328	72,073
District of Columbia	2,134,996	1,319,854	292,801	1,181,001	834,394	195,642	902,943	481,371	96,412	51,052
Florida	29,455,336 [8]	16,064,915 [8]	5,234,695 [8]	19,931,805 [8]	11,455,698 [8]	3,558,845 [8]	8,169,093 [8]	4,195,405 [8]	1,482,465 [8]	1,354,439
Georgia	20,680,204	12,030,356 [8]	5,202,115 [8]	13,670,764 [8]	8,684,654 [8]	3,851,334 [8]	5,993,016 [8]	3,049,182 [8]	1,187,689 [8]	1,016,424
Hawaii	2,999,586	1,551,713	904,869	1,872,916	1,107,508	627,474	989,471	397,704	247,902	137,199
Idaho	2,593,494	1,540,685 [8]	552,274 [8]	1,701,732 [8]	1,123,498 [8]	391,958 [8]	778,898 [8]	379,457	142,526 [8]	112,865 [8]
Illinois	33,895,711	16,199,741 [8]	11,652,023 [8]	22,256,584 [8]	11,578,458 [8]	8,320,468 [8]	10,850,310 [8]	4,385,596 [8]	3,249,205 [8]	788,817
Indiana	11,352,772	6,050,842	3,281,583	7,007,366	4,165,544	2,268,026	3,851,444	1,715,641	964,286	493,962
Iowa	6,200,533	3,934,209	1,335,814	4,107,553	2,853,031	952,863	1,825,675	984,295	346,452	267,306
Kansas	5,955,857	3,640,307	1,301,589	3,774,761	2,549,818	901,158	1,921,621	1,002,398	361,903	259,474
Kentucky	7,868,145	4,315,972	2,435,104	5,018,200	3,028,413	1,669,432	2,334,299	1,134,551	632,145	515,646
Louisiana	8,531,692	4,526,694 [8]	2,189,793 [8]	5,226,623 [8]	3,160,351 [8]	1,492,870 [8]	2,851,542 [8]	1,217,282 [8]	610,700 [8]	453,527
Maine	2,896,754	1,627,211	670,925	1,845,098	1,149,218	474,274	960,880	441,924	181,735	90,776
Maryland	14,482,716	8,470,912 [8]	3,692,633 [8]	10,025,561 [8]	6,221,884 [8]	2,758,232 [8]	4,084,657 [8]	2,102,637 [8]	874,256 [8]	372,499
Massachusetts	18,945,441	10,927,358	4,550,692	13,085,201	7,947,322	3,589,284	5,345,289	2,664,316	879,309	514,951
Michigan	18,434,000	8,376,818	5,595,846	11,468,358	5,899,030	3,955,460	6,286,783	2,343,736	1,561,793	678,860
Minnesota	12,060,038 [8]	7,164,118 [8]	2,465,740 [8]	8,450,595 [8]	5,619,865 [8]	1,958,041 [8]	3,103,642 [8]	1,384,875 [8]	454,587 [8]	505,801
Mississippi	4,480,071	2,651,823	937,650	2,782,176	1,868,256	644,489	1,452,373	709,366	254,583	245,522
Missouri	10,376,141	6,314,986	2,029,018	6,252,906	4,269,571	1,356,792	3,688,297	1,936,843	629,239	434,937
Montana	1,808,763	1,061,385	333,022	1,124,351	746,953	231,285	605,644	288,163	92,634	78,768
Nebraska	4,233,748	2,487,442	936,349	2,749,870	1,825,357	694,354	1,307,033	608,030	222,487	176,844
Nevada	4,744,497	2,744,644	1,174,599	3,083,491	1,924,098	810,593	1,479,888	774,315	340,281	181,118
New Hampshire	3,085,986	1,602,945	777,526	2,065,583	1,188,788	577,564	954,645	393,158	193,063	65,758
New Jersey	30,193,909	15,548,858	8,593,620	19,223,484	10,663,148	6,072,099	10,169,820	4,648,773	2,468,468	800,604
New Mexico	3,847,755	2,209,195	766,750	2,289,100	1,487,245	511,574	1,381,606	672,572	236,384	177,049
New York	66,108,405	33,786,210	16,921,955	48,304,163	27,157,246	13,517,047	16,619,085	6,137,955	3,307,614	1,185,157
North Carolina	15,452,367	9,344,378	3,539,571 [8]	10,175,329 [8]	6,809,822	2,543,311 [8]	4,523,431 [8]	2,266,939	882,904 [8]	753,608 [8]
North Dakota	1,655,922	981,705	377,458	1,060,448	704,217	277,591	480,823	243,799	89,911	114,651

See notes at end of table.

Table 6. Current expenditures, salaries and wages, and employee benefits for public elementary and secondary education, by function and state or jurisdiction: FY 2020—Continued

State or jurisdiction	Current expenditures[1] [in thousands of dollars]									
	All functions			Instruction and instruction-related[2]			Support services[3]			
	Total[5,6]	Salaries and wages	Employee benefits	Total[6]	Salaries and wages	Employee benefits	Total[6]	Salaries and wages	Employee benefits	All other functions[4]
Ohio	23,199,551	12,939,162	5,077,634	14,753,370	9,095,406	3,404,420	7,760,187	3,608,400	1,551,681	685,994
Oklahoma	6,611,657	3,902,432	1,262,212	4,031,337	2,773,817	888,781	2,156,789	1,020,383	328,754	423,531
Oregon	7,480,233	3,822,230	2,378,105	4,636,259	2,600,218	1,602,555	2,611,814	1,159,366	729,712	232,160
Pennsylvania	29,748,924	14,440,405	9,277,753	19,531,085	10,619,473	6,764,277	9,203,662	3,550,303	2,339,209	1,014,178
Rhode Island	2,544,539	1,436,813	668,165	1,651,600	1,024,250	494,243	832,115	410,023	173,261	60,824
South Carolina	8,881,032	5,045,072	2,119,965	5,466,721	3,526,413	1,461,775	2,982,150	1,395,989	593,527	432,161
South Dakota	1,454,403	865,576	265,093	911,661	617,209	184,976	461,695	220,609	70,162	81,046
Tennessee	10,121,192	6,009,713	2,019,399	6,724,846	4,477,077	1,494,118	2,887,111	1,349,970	465,958	509,235
Texas	57,118,703	38,027,739	7,307,556	36,335,327	27,197,401	5,032,670	17,938,806	9,872,374	1,933,063	2,844,570
Utah	5,673,815	3,278,888	1,458,909	3,837,787	2,365,248	1,051,644	1,590,478	826,533	374,202	245,550
Vermont	1,919,477	1,002,108	490,695	1,289,600	693,804	387,371	575,430	292,442	97,220	54,446
Virginia	16,785,047	10,345,133	4,260,543	11,396,665	7,517,841	3,077,617	4,779,044	2,610,627	1,090,384	609,338
Washington	16,608,508[8]	10,098,694	3,942,047	11,043,103[8]	7,132,393	2,730,949	5,139,721	2,827,122	1,128,985	425,684
West Virginia	3,332,337	1,832,430	901,778	2,037,556	1,238,295	590,395	1,070,374	525,448	274,999	224,407
Wisconsin	10,943,582[8]	5,988,393[8]	2,633,211[8]	7,106,670[8]	4,435,157[8]	1,897,153[8]	3,452,539[8]	1,450,116[8]	690,137[8]	384,373
Wyoming	1,576,787	896,122	422,217	1,013,134	625,525	289,071	515,006	254,288	123,667	48,648
Other jurisdictions										
American Samoa	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡
Guam	323,486	158,871	54,458	164,160	110,106	36,999	137,136	46,936	16,971	22,191
Commonwealth of the Northern Mariana Islands	82,286	32,059	8,914	42,018	26,086	7,051	24,902	5,973	1,863	15,366
Puerto Rico	2,123,785	1,107,225	152,400	947,801	755,655	104,009	932,749	269,876	37,146	243,236
U.S. Virgin Islands	171,190	105,228	47,280	112,798	76,073	34,122	48,352	23,812	10,405	10,039

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.

[2] Includes instruction and instructional staff support services current expenditures.

[3] Includes student support services, operation and maintenance of plant, student transportation, general administration, school administration, and other support services.

[4] Includes food services and enterprise operations current expenditures.

[5] Total current expenditures for all functions is the sum of total instruction and instruction-related current expenditures, total support services current expenditures, and total current expenditures for all other functions. Detail may not sum to totals because of rounding.

[6] The total column includes expenditures other than salaries and wages and employee benefits (e.g., purchased services, supplies, and other). These details are not presented in this table.

[7] United States totals include the 50 states and the District of Columbia.

[8] Value affected by redistribution of reported values to correct for missing data items and/or to distribute state direct support expenditures.

[9] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “National Public Education Financial Survey (NPEFS),” FY 20, Provisional Version 1a.

Table 7. Total expenditures for public elementary and secondary education and other related programs, by type of expenditure and state or jurisdiction: FY 2020

State or jurisdiction	Expenditures [in thousands of dollars]						
	Total expenditures	Current expenditures for public elementary/ secondary education[1]	Capital outlay			Other programs[2]	Interest on debt
			Construction	Land and existing structures	Equipment[3]		
United States[4]	**$793,718,886** [5, 6, 7]	**$682,217,081** [5, 6]	**$63,326,373** [5, 6]	**$5,944,191** [5, 6]	**$12,064,225** [5, 6, 7]	**$8,739,021** [6, 7]	**$21,427,996** [6]
Alabama	8,442,654	7,546,680	465,217	43,855	104,773	107,322	174,806
Alaska	2,605,253	2,417,641	87,244	49,835	16,220	7,163	27,151
Arizona	11,853,130 [5]	9,830,663 [5]	825,042	179,317	555,286	115,083	347,738
Arkansas	6,062,958 [5]	5,152,468 [5]	594,985	49,068	91,186	30,552	144,699
California	101,119,632 [5, 6]	85,303,209 [5, 6]	9,992,807 [6]	579,253 [6]	781,750 [5, 6]	1,077,809 [6]	3,384,805 [6]
Colorado	13,297,765	10,577,428	1,446,510	246,583	317,925	84,132	625,186
Connecticut	12,095,669 [5, 7]	10,939,432	539,403 [5]	84,602 [5]	159,639 [5, 7]	269,575 [7]	103,018
Delaware	2,115,498	1,974,936	89,507	279	13,077	13,862	23,836
District of Columbia	2,862,000	2,134,996	446,606 [5]	30,362	58,400 [5]	19,475	172,162
Florida	33,867,714 [5]	29,455,336 [5]	2,341,178	198,330	727,538	505,188	640,144
Georgia	23,263,875	20,680,204	1,963,458	77,555	264,618	35,690	242,349
Hawaii	3,214,491	2,999,586	189,819	0	7,424	17,662	0
Idaho	3,044,950	2,593,494	270,424	29,944	72,305	6,250	72,533
Illinois	38,332,124	33,895,711	2,196,133 [5]	344,448 [5]	647,740	205,591	1,042,501
Indiana	12,913,458	11,352,772	758,088	208,042	165,726	91,711	337,120
Iowa	7,526,068	6,200,533	918,344	22,767	208,700	40,349	135,374
Kansas	7,416,841	5,955,857	853,664	88,807	252,053	4,708	261,752
Kentucky	8,990,754	7,868,145	639,033	28,892	172,159	81,903	200,622
Louisiana	9,222,695	8,531,692	440,501	23,018	85,379	15,215	126,890
Maine	3,201,181	2,896,754	172,208	443	46,079	31,251	54,445
Maryland	16,471,112	14,482,716	1,588,435	9,324	159,268	39,306	192,064
Massachusetts	20,103,635	18,945,441	408,073	219,732	91,953	75,911	362,525
Michigan	21,520,069	18,434,000	1,279,039	220,335	444,610	299,539	842,545
Minnesota	15,602,721 [5]	12,060,038 [5]	1,972,172 [5]	309,321 [5]	250,806	557,591	452,794
Mississippi	5,098,633	4,480,071	221,264	126,649 [5]	170,348 [5]	32,738	67,564
Missouri	12,167,466	10,376,141	967,716 [5]	6,474	305,558 [5]	189,641	321,936
Montana	2,188,381	1,808,763	229,193	19,457	67,106	10,857	53,005
Nebraska	4,949,669	4,233,748	188,511	238,487	152,685	3,207	133,031
Nevada	5,770,874	4,744,497	658,838	96,845	46,117	23,956	200,620
New Hampshire	3,275,770	3,085,986	90,030	5,871 [5]	45,332 [5]	5,836	42,715
New Jersey	32,775,804	30,193,909	1,339,283	66,696	175,341	301,275	699,300
New Mexico	4,529,152	3,847,755	239,252	284,771	69,438	13,121	74,816
New York	73,773,174	66,108,405	3,387,815	53,628	643,139	1,793,503	1,786,683
North Carolina	17,075,124	15,452,367	1,227,684	62,438	234,590	68,549	29,496
North Dakota	1,976,768	1,655,922	201,453	13,046	53,328	18,246	34,772
Ohio	26,884,062	23,199,551	2,061,771	12,543	601,151	469,279	539,767
Oklahoma	7,492,173	6,611,657	466,553	185,113	110,947	29,493	88,410
Oregon	10,035,375	7,480,233	1,861,686	6,861	80,772	36,916	568,906
Pennsylvania	33,798,433	29,748,924	1,716,523	133,943	657,453	542,138	999,452
Rhode Island	2,786,820	2,544,539	31,776	5,739	106,545	59,695	38,527
South Carolina	10,810,512	8,881,032	1,073,291	168,010	242,008	67,714	378,457
South Dakota	1,749,948	1,454,403	174,537 [5]	27,375 [5]	47,821	5,986	39,826
Tennessee	11,299,958	10,121,192	531,873	94,914	221,273	84,693	246,013
Texas	72,961,269	57,118,703	9,977,058	309,369	1,233,925	472,402	3,849,812
Utah	7,125,828	5,673,815	767,925	287,302	134,178	61,595	201,014

See notes at end of table.

Table 7. Total expenditures for public elementary and secondary education and other related programs, by type of expenditure and state or jurisdiction: FY 2020—Continued

State or jurisdiction	Expenditures [in thousands of dollars]						
	Total expenditures	Current expenditures for public elementary/ secondary education[1]	Capital outlay			Other programs[2]	Interest on debt
			Construction	Land and existing structures	Equipment[3]		
Vermont	2,002,387	1,919,477	38,813	2,373	21,590	10,495	9,641
Virginia	18,489,958	16,785,047	861,564	303,369 [5]	355,605 [5]	75,863	108,510
Washington	20,880,863 [5]	16,608,508 [5]	3,034,252	170,389	329,063	80,408	658,242
West Virginia	3,663,346	3,332,337	175,701	32,499	56,304	52,210	14,295
Wisconsin	13,249,954 [5]	10,943,582 [5]	1,286,804	79,534	173,581	492,169	274,284
Wyoming	1,760,939	1,576,787	37,317	106,385	34,412	4,198	1,840
Other jurisdictions							
American Samoa	‡	‡	‡	‡	‡	‡	‡
Guam	328,794	323,486	0	0	2,543	0	2,764
Commonwealth of the Northern Mariana Islands	90,331	82,286	0	0	1,521	6,524	0
Puerto Rico	2,221,321	2,123,785	11,413	0	40,845	45,277	0
U.S. Virgin Islands	171,356	171,190	0	0	0	167	0

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.

[2] Other program expenditures include expenditures for community services, adult education, community colleges, private schools, and other programs that are not part of public elementary and secondary education.

[3] Equipment includes expenditures for initial, additional, and replacement items of equipment, such as machinery, furniture and fixtures, and vehicles. Equipment may be purchased for instruction, support services, food services, enterprise operations, facilities acquisition and construction, or other programs.

[4] United States totals include the 50 states and the District of Columbia.

[5] Value affected by redistribution of reported values to correct for missing data items and/or to distribute state direct support expenditures.

[6] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

[7] Value contains imputation for missing data.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “National Public Education Financial Survey (NPEFS),” FY 20, Provisional Version 1a.

Table 8. Title I allocations and Title I expenditures per pupil for public elementary and secondary education, by state or jurisdiction: FY 2020

State or jurisdiction	Title I grants for the disadvantaged, FY 19[1] [in thousands of dollars]	School year 2019–20 student membership[2]	Current expenditures[3] [in thousands of dollars] Total	Title I expenditures[5]	Title I carryover expenditures[6]	Current expenditures per pupil	Title I expenditures per pupil[4]
United States[7]	**$15,685,340**	**50,575,201**	**$682,217,081 [8, 9]**	**$12,856,119**	**$2,164,339**	**$13,489 [9]**	**$297**
Alabama	259,790	744,235	7,546,680	220,574	18,893	10,140	322
Alaska	62,988	132,017	2,417,641	61,209	0	18,313	464
Arizona	348,683	1,130,693	9,830,663 [8]	242,071	0	8,694	214
Arkansas	162,264	496,927	5,152,468 [8]	144,761	0	10,369	291
California	2,079,389	6,163,001	85,303,209 [8, 9]	1,445,765	404,820	13,841 [9]	300
Colorado	153,307	913,223	10,577,428	157,487	550	11,583	173
Connecticut	132,143	523,690	10,939,432	89,340	25,368	20,889	219
Delaware	53,198	139,930	1,974,936	29,842	19,051	14,114	349
District of Columbia	49,171	89,878	2,134,996	40,415	2,643	23,754	479
Florida	920,110	2,858,461	29,455,336 [8]	866,277	11,972	10,305	307
Georgia	547,317	1,769,657	20,680,204	435,433	88,757	11,686	296
Hawaii	53,505	181,088	2,999,586	14,150	35,655	16,564	275
Idaho	63,242	311,096	2,593,494	56,486	0	8,337	182
Illinois	673,946	1,938,813	33,895,711	460,626	233,925	17,483	358
Indiana	261,819	1,051,411	11,352,772	253,450	0	10,798	241
Iowa	90,566	517,324	6,200,533	80,925	9,827	11,986	175
Kansas	109,525	497,963	5,955,857	84,180	7,798	11,960	185
Kentucky	238,800	691,996	7,868,145	187,637	50,785	11,370	345
Louisiana	345,523	710,439	8,531,692	224,307	129,131	12,009	497
Maine	54,277	180,291	2,896,754	29,344	24,661	16,067	300
Maryland	244,109	909,404	14,482,716	187,872	54,885	15,926	267
Massachusetts	255,717	959,394	18,945,441	190,551	68,598	19,747	270
Michigan	477,898	1,495,925	18,434,000	460,808	0	12,323	308
Minnesota	169,255	893,203	12,060,038 [8]	159,074	0	13,502	178
Mississippi	206,609	466,002	4,480,071	228,262	0	9,614	490
Missouri	251,337	910,466	10,376,141	247,967	33,160	11,397	309
Montana	50,712	149,917	1,808,763	57,442	4,397	12,065	412
Nebraska	84,859	330,018	4,233,748	83,154	0	12,829	252
Nevada	137,448	496,934	4,744,497	137,834	6,629	9,548	291
New Hampshire	45,295	173,124	3,085,986	40,346	0	17,825	233
New Jersey	370,352	1,411,917	30,193,909	374,193	0	21,385	265
New Mexico	130,918	331,206	3,847,755	120,099	0	11,617	363
New York	1,229,947	2,615,760	66,108,405	986,919	136,665	25,273	430
North Carolina	472,051	1,560,350	15,452,367	446,201	0	9,903	286
North Dakota	40,222	116,185	1,655,922	42,771	0	14,252	368
Ohio	584,102	1,689,867	23,199,551	583,435	15,581	13,729	354
Oklahoma	192,308	703,719	6,611,657	188,826	32,248	9,395	314
Oregon	170,172	582,661	7,480,233	162,742	1,817	12,838	282
Pennsylvania	641,281	1,732,449	29,748,924	568,634	71,920	17,172	370
Rhode Island	55,064	143,557	2,544,539	52,523	8,021	17,725	422
South Carolina	256,873	786,879	8,881,032	242,118	0	11,286	308
South Dakota	49,683	139,949	1,454,403	30,530	21,932	10,392	375
Tennessee	310,364	1,014,744	10,121,192	237,413	70,959	9,974	304
Texas	1,557,572	5,495,398	57,118,703	1,113,689	377,932	10,394	271
Utah	83,943	684,694	5,673,815	56,481	24,056	8,287	118

See notes at end of table.

Table 8. Title I allocations and Title I expenditures per pupil for public elementary and secondary education, by state or jurisdiction: FY 2020—Continued

State or jurisdiction	Title I grants for the disadvantaged, FY 19[1] [in thousands of dollars]	School year 2019–20 student membership[2]	Current expenditures[3] [in thousands of dollars] Total	Title I expenditures[5]	Title I carryover expenditures[6]	Current expenditures per pupil	Title I expenditures per pupil[4]
Vermont	37,540	86,759	1,919,477	19,381	5,220	22,124	284
Virginia	280,756	1,297,012	16,785,047	265,115	0	12,941	204
Washington	288,528	1,142,073	16,608,508[8]	156,797	101,387	14,542	226
West Virginia	102,440	263,486	3,332,337	73,863	26,673	12,647	382
Wisconsin	208,794	855,400	10,943,582[8]	188,025	28,624	12,794	253
Wyoming	39,632	94,616	1,576,787	28,775	9,800	16,665	408
Other jurisdictions							
American Samoa	19,447	‡	‡	‡	‡	‡	‡
Guam	21,071	28,812	323,486	0	0	11,227	0
Commonwealth of the Northern Mariana Islands	11,755	—	82,286	0	0	—	—
Puerto Rico	406,234	292,518	2,123,785	217,794	50,552	7,260	917
U.S. Virgin Islands	10,146	10,907	171,190	0	0	15,695	0

— Not available. Data are missing for the Commonwealth of the Northern Mariana Islands because the jurisdiction did not report student membership.

‡ Reporting standards not met. Due to turnover within the American Samoa government, the jurisdiction was not able to fully report data for all items or reported inconsistently with the previous year. Total current expenditures for FY 20 were reported to be 20 percent lower than in FY 19; therefore, the data do not meet quality standards and are suppressed.

[1] FY 19 U.S. Department of Education funds are available for spending by school districts beginning with the 2019–20 school year. Title I grants for the disadvantaged include allocations for Grants to Local Education Agencies (Basic, Concentration, Targeted, and Education Finance Incentive Grants); Migrant Education Grants; and Neglected and Delinquent Children Grants.

[2] The student membership variable is derived from the State Nonfiscal Survey of Public Elementary/Secondary Education. In FY 20, Arizona, New York, and Oregon indicated that the state fiscal data reported in the National Public Education Financial Survey (NPEFS) did not include finance data for prekindergarten programs. In these states, the NPEFS total student membership variable excludes prekindergarten membership. California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. Illinois and New Hampshire indicated that the state fiscal data reported in NPEFS did not include independent charter school districts, and students in those independent charter school districts are excluded from the NPEFS total student membership.

[3] Current expenditures include instruction, instruction-related, support services, and other elementary/secondary current expenditures but exclude expenditures on capital outlay, other programs, and interest on long-term debt.

[4] Title I expenditures per pupil are calculated as current and carryover expenditures divided by total membership, which includes both Title I eligible students and noneligible students. Title I expenditures per pupil are included in current expenditures per pupil.

[5] Title I expenditures are expenditures from the original Title I grant under the Elementary and Secondary Education Act.

[6] Title I carryover expenditures are expenditures made against the original Title I grant of the prior fiscal year.

[7] United States totals include the 50 states and the District of Columbia.

[8] Value affected by redistribution of reported values to correct for missing data items and/or to distribute state direct support expenditures.

[9] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 20, Provisional Version 1a; "State Nonfiscal Survey of Public Elementary/Secondary Education," school year 2019–20, Provisional Version 1a; and *Digest of Education Statistics 2020*, table 401.60. Retrieved January 6, 2022, from https://nces.ed.gov/programs/digest/d20/tables/dt20_401.60.asp.

Table 9. Revenues and select expenditures for public elementary and secondary education in the United States, by source of revenues and type, function, and subfunction of expenditures: FY 2019 and FY 2020

Revenue or expenditure (United States total[1])	[in thousands of dollars][2] FY 19 (in FY 19 dollars)	FY 19 (inflation-adjusted[3] to FY 20 dollars)	FY 20 (in FY 20 dollars)	Percentage difference FY 19 inflation-adjusted[3] and FY 20
Total revenues	**$770,907,024**	**$782,966,714**	**$794,568,095**	**1.5**
Local revenues	347,466,015	352,901,603	356,835,188	1.1
State revenues	363,102,060	368,782,250	377,341,078	2.3
Federal revenues[4]	60,338,949	61,282,862	60,391,828	-1.5
Total expenditures[5]	**769,124,638** [6]	**781,156,445**	**793,718,886**	**1.6**
Current expenditures[7]	666,951,524 [6]	677,384,986 [6]	682,217,081	0.7
Expenditures for instruction	403,039,543 [6]	409,344,495 [6]	412,616,246	0.8
Total support services expenditures	237,747,072 [6]	241,466,270 [6]	244,380,811	1.2
Student support services expenditures[8]	40,915,351 [6]	41,555,411 [6]	42,992,359	3.5
Current expenditures per pupil	13,189 [6]	13,395 [6]	13,489	0.7
Expenditures for construction	56,377,570 [6]	57,259,513 [6]	63,326,373	10.6
Expenditures for land and existing structures	4,926,001 [6]	5,003,061 [6]	5,944,191	18.8
Expenditures for equipment	11,825,943 [6]	12,010,942 [6]	12,064,225	0.4
Expenditures for interest on debt	20,442,697 [6]	20,762,493 [6]	21,427,996	3.2

[1] United States totals include the 50 states and the District of Columbia.

[2] Except current expenditures per pupil, which were presented in dollars.

[3] Data have been adjusted to FY 20 dollars to account for inflation using the Consumer Price Index (CPI), which is published by the U.S. Labor Department, Bureau of Labor Statistics. This price index measures the average change in inflation of a fixed market basket of goods and services purchased by consumers.

[4] Revenues from federal sources include amounts received from funds authorized by the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Although the CARES Act was enacted in March 2020, local education agencies (LEAs) do not begin receiving federal funds that flow through the state until after allocations are made by the federal government, assurances and certifications are signed and awards are made by the state, and reimbursement for expenditures is requested by the LEA. Because of this process, there is a lag between the time when the funds are appropriated and when LEAs record the amounts as revenues. Most states end their fiscal year on June 30; therefore, the amounts reported for FY 20 are expected to be only a small portion of the total amounts allocated to LEAs. Given variations in accounting methods and timelines for awarding these funds, many states and LEAs did not record any CARES Act revenues in FY 20.

[5] The subcategories of total expenditures do not include expenditures for other programs (e.g., community services, adult education, community colleges, private schools, interest on debt, and other programs that are not part of public elementary and secondary education).

[6] California did not report prekindergarten membership in the State Nonfiscal Survey of Public Elementary/Secondary Education. California reported prekindergarten expenditures separately, and these expenditures were excluded from the amounts reported in this table. This table only includes expenditures for K–12 and special education preschool programs in California.

[7] The subcategories of current expenditures do not include food services and enterprise operations.

[8] Expenditures for student support services are included in total support services expenditures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," FY 19, Final Version 2a; and FY 20, Provisional Version 1a; and *Digest of Education Statistics 2020*, table 106.70. Retrieved November 9, 2021, from https://nces.ed.gov/programs/digest/d20/tables/dt20_106.70.asp.