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Study of a New Method of Funding for Public Schools in Nevada

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Introduction

The *Nevada Plan* for School Finance currently forms the basis for funding K–12 education in the state. This funding allocation model guarantees a level of state funding per pupil and is intended to equitably distribute funds to all districts. American Institutes for Research (AIR) was commissioned to conduct the following study to investigate how the state finance system could be improved by determining how it could best address the differential funding needs of students and smaller rural districts are met.

Study Objectives

The purpose of this study is to evaluate options available to the state for improving the equity by which funds are distributed to districts serving students living in all parts of the state. The project consists of four major activities to carry out this evaluation:

- Provide an in-depth overview of the current *Nevada Plan*.
- Develop an inventory of state finance systems that shows how states are addressing the additional costs of serving students with specific needs (e.g., poverty, English language learners, and special education) and how they adjust for differences in services being provided in rural, remote areas.
- Analyze methods used in selected comparable states for addressing the individual student needs and special district characteristics.
- Provide recommendations to improve Nevada's existing school funding model and incorporate best practices for ensuring student needs and challenges of delivering education in smaller rural, remote districts are addressed.

This report presents the results of this investigation. The work has been conducted over the past three months and has involved analyzing data collected from all 50 U.S. states. AIR team members have examined state funding formulas, demographic characteristics, and fiscal data from all of the states and based on empirical analyses of these data, have attempted to identify the best practices that lead to an equitable distribution of funding with respect to the incidence of students in poverty, English language learners, students enrolled in special education programs, and students attending schools in districts that have a small scale of operations.

Over the course of the study, we have gathered and analyzed data on enrollment, student demographics, district characteristics, and other relevant data pertaining to patterns of cost and resource allocation in public schools for Nevada. Some data came from the Nevada Department of Education, and we have interviewed a number of key knowledgeable individuals who have been immersed in the inner workings and modifications of the *Nevada Plan*. In addition, the team also had the opportunity to gather information from representatives of the

Nevada School Districts at a session organized for the Nevada School Superintendents annual meetings held on June 18, 2012 in South Lake Tahoe, Nevada.

The report examines in considerable detail the Distributive School Account (DSA) Equity Allocation Model, which proved to be a transparent but intricate mechanism that encompasses the key adjustments intended to achieve an equitable distribution of revenues across the state's districts. The report also includes a detailed analysis of the allocation of funding for special education services in the state.

With a clear understanding of how the current system works, the team then created a modeling tool designed to simulate the distributive effects of adopting various funding adjustments to account for the additional costs related to serving students with various needs or serving students in larger or smaller, more remote districts. The simulation model, the Formula Adjustment Simulator (FAS), is designed to facilitate thoughtful decision making by Nevada State policymakers by providing a structure for analyzing the data and showing the impact of alternative approaches to improving the *Nevada Plan*.

Organization of Study

The remainder of the report is organized as follows: Chapter 1 provides a detailed overview and historical account of the Nevada state funding system; Chapter 2 includes a comprehensive state inventory of finance systems that documents the different types of funding mechanisms used by states throughout the country; Chapter 3 contains two analyses that identify (1) states that are similar to Nevada in terms of the needs of the students they serve and scale with which their districts operate and (2) alternative funding practices that might be implemented by Nevada to promote greater funding equity to its students and districts; Chapter 4 documents the development of the simulation model (FAS) introduced earlier and includes a series of alternative funding practices that are simulated in the context of the Nevada finance system; and Chapter 5 provides our suggested recommendations and concluding thoughts.

Chapter 1—Overview and Analysis of *Nevada Plan*

This Chapter responds to two of the tasks in Objective 1 under the scope of work: (a) to present a historical overview of Nevada's K–12 school finance system, including requested input from stakeholders and (b) to provide an in-depth description of the current funding allocation system for public elementary and secondary schools. This part of the report is divided into four sections: (1) Evolution of Nevada Funding System (History/Previous Studies/Stakeholder Input), (2) How the Current Funding System Works (Formula/Revenue Sources), (3) Analysis of the Funding System Based on Criteria for an Optimal System, and (4) Issues to Explore.

While the purpose of this study is narrowly focused, that is, to explore how the differentiated needs of students might be addressed in Nevada's funding allocation system, an overview of the current system provides an opportunity to examine the allocation system in its entirety. In fact, "the current economic downturn may provide an opportunity for the state to take its time to thoroughly analyze the total funding allocation system."[1] In this way, when the economic environment improves, the state would have a comprehensive plan for implementing an updated *Nevada Plan* consistent with current state educational goals and accountability efforts. Thus, comments in this section will focus on both current issues identified in this study and potential issues that the state may wish to explore in the future.

Evolution of Nevada Funding System (History/Previous Studies/Stakeholder Input)

The Early Years

The public school system in Nevada was established by the first session of Nevada's legislature in 1865. It was based on previous territorial laws, the laws of California, and the Nevada Constitution. The legislature of 1865 created a system financed partly by state funds derived from a permanent school fund, special taxes, and some support from the state general fund. The basis for the distribution of monies was amended several times in the early history of the state. Originally, funds were allocated based on the actual number of school-aged children residing within the district. However, this resulted in rural districts suffering from a lack of minimum support to operate schools. The Apportionment Law of 1877 established an apportionment unit based on 100 children, age 6 to 18, per unit as determined by census count.[2] This was called a *teacher apportionment unit.* Subsequent to the law, 25 percent of funding for schools was based on a unit allocation, and 75 percent of funding continued to be

[1] Comment from participant at stakeholders meeting with Nevada district superintendents at Nevada Association of School Administrators (NASA) in Lake Tahoe, Nevada, June 18, 2012.

[2] Bennett, R. A. (2003). *An analysis of Nevada's public school funding system*. Unpublished Ed.D. dissertation, University of Nevada, Las Vegas.

based on a per-pupil census count. The law was amended in 1885 to again benefit rural districts by increasing the unit proportion of funding from 25 percent to 40 percent.

Nevada has had an ongoing struggle to determine the best apportionment methods to address the needs of both rural and more urban areas. In 1890, the apportionment law was changed by redefining a teacher unit based on 75 children per unit instead of 100. In 1911, a new apportionment law established a teacher allotment unit based on 30 children per unit. This new apportionment law required 70 percent of the funding allocation to be distributed by teacher units and 30 percent distributed by per-pupil count.

In subsequent years, legislative interest shifted to a focus on the taxation process and taxpayer fairness. In 1917, the legislature changed the evolution of the distributive school account by pledging a definite or predictable sum of money to school districts rather than a proportional part of monies available. It also established procedures for levying a state school support tax. The changes in the collection and distribution of state revenues for education were the first indications of the state's concern for the equalization of district wealth. The assessed valuation of property within school districts had begun to vary widely.

In 1925, the state legislature changed how it would allocate funds from child census counts to counts based on the actual number of pupils enrolled in school. The apportionment and distribution laws changed little up to and through the 1940s. If costs increased, districts relied on the counties to provide increases in the per-pupil apportionment. The counties carried the burden of increases until the 1947 legislature provided a substantial increase in the teacher unit allocations.

1948–68

A formal recommendation was made to the 1947–48 Nevada Legislature to appoint an interim committee of the State Department of Education to consider the reorganization of the educational system within the state. *The Nevada School Finance Survey Group* determined that Nevada was facing many education problems because of the number of school districts and their small size, which resulted in organizational inefficiencies. As of June 1947, Nevada had 238 school districts, many with fewer than 10 students. The group recommended that schools be administered on a community interest, county unit, or regional basis. It also recommended the creation of a position for Assistant Superintendent for Finance, Budgeting, and Statistics. This recommendation reflected the study group's belief that many of the problems facing the financing of schools were due to a lack of modern accounting and budgeting procedures within the State Department of Education.[3] Finally, the group recommended further study of high-cost programs such as capital improvements and pupil transportation. The Survey Group's recommendations led to the continuous study of the Nevada school system over the next decade.

[3] Ibid, p. 61.

Governor Charles H. Russell commissioned the *Governor's School Survey Committee* to compile a report of *Public Education in Nevada.*[4] The Division of Surveys and Field Services at George Peabody College for Teachers was commissioned to complete the report.[5] The task of the survey staff was "to determine the conditions in Nevada public schools, to identify problems that require solution, and to express its professional judgment as to the proper solution of the problems."[6] This report became known as the Peabody Report and provided comprehensive recommendations that resulted in dramatic changes in how Nevada funded its public schools. The report was delivered to the Survey Committee on November 6, 1954, and recommended the following:

- Allocating dollars per teacher unit
- Providing allocations based on average daily attendance (ADA)
- Making school districts county co-terminus
- Funding transportation
- Allowing districts more flexibility in assessing additional taxes to support education

Although not all of the recommendations were adopted, the Peabody Study resulted in "increased appropriations and made possible the operation of the schools on a more adequate financial basis."[7]

In 1959, the legislature authorized the governor to appoint another school survey committee. The Governor's School Survey Committee contracted with the University of Wyoming to complete a fact-finding study of Nevada schools. The areas of finance, personnel, business management, and curriculum were explored. One of the primary areas of concern was the sufficiency of funds for public schools. In fact, the 1959 legislature had to enact an emergency distributive school fund for one year and then continued it for the second year of the biennium. Another concern was the increasing inequity to taxpayers as the result of varying assessed valuations of property throughout the state. The charge to the Wyoming study committee was to "determine if Nevada's then current 'minimum assistance program' met the criteria of a minimum foundation program."[8] The Wyoming study results were submitted to Governor Grant Sawyer's survey committee in 1960. Based on the Wyoming study, the Governor's School Survey Committee outlined principles for the development of a state funding allocation system

[4] McClurkin, W. D. (1954). *Public education in Nevada: A survey report*. Nashville, TN: George Peabody College for Teachers, Division of Survey and Field Services.
[5] Ibid
[6] Ibid, p. vii.
[7] Stetler, B. F. (1959). Biennial report of the superintendent of public instruction of the state of Nevada. *Appendix to Journal of Senate and State Assembly.* Carson City, NV. p. 12.
[8] National Education Association. (2011). *Rankings & estimates.* Washington, DC: NEA Research. Retrieved from http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf

that lead to the adoption of the *Nevada Plan* in 1967. It is still the basis of the Nevada funding formula used today. The committee's recommendations were as follows:

- Every child should have an equal educational opportunity.
- State law should define the minimum foundation program in broad terms of both educational standards and costs.
- The program should encourage the development of local school administrative units and attendance areas that are large enough to facilitate operation of a complete economical and efficient education program.
- The program should be determined by an equitable, objective, practical, and weighted measure of educational need.
- The program should include the cost of transportation.
- The program should include the cost of capital outlay.
- State aid should be apportioned strictly on the basis of an objective formula easily comprehended by state and local agents.
- All school districts should support the foundation program at a uniform rate of local taxation.
- State support of the equalization plan should be the difference between the amount of revenue raised locally and the objectively determined level of the foundation guarantee.

In the 1960s, Nevada was ranked fourth in the nation in per-pupil expenditures,[9] which compares with current national rankings that vary from 37th to 48th in per-pupil expenditures. The percentage of state revenues for education was at 54.6 percent, well above average for the nation, as compared with the proportion of current state revenues at 30.8 percent, well below average for the nation.[10]

1963–88

Subsequent to the Wyoming study, several pivotal events occurred in relation to Nevada's funding allocation system[11]:

- 1963—Legislature commissioned a study to develop the Nevada funding formula based on the Wyoming study's recommendations.
- 1967—The Nevada Legislature enacted the state funding formula, subsequently referred to as the *Nevada Plan*.

[9] Sawyer, G. (1963). Message of governor Grant Sawyer to the legislature of Nevada. *Appendix to Journal of Senate and State Assembly*. Carson City, NV.
[10] National Center for Education Statistics. (2011). *Digest of education statistics*. Retrieved from http://nces.ed.gov/programs/digest/2011menu_tables.asp
[11] Bittman, D. T. (2003). *A history of public school finance and educational trends within the state of Nevada: Summary and conclusions.* Unpublished Ph.D. dissertation, University of Nevada, Las Vegas.

- 1971—A study commissioned by Governor O'Callahan recommended all statutory references to joint school districts be deleted from the Nevada Revised Statutes; it also recommended consolidation.
- 1973—Funding for special education was enacted as an add-on to the *Nevada Plan* and distributed as a unit allocation.
- 1977—An economic trigger for the property tax rate was enacted into law; also, the Nevada Assembly reviewed the concept of deconsolidation for Clark County School District (CCSD) but no action was taken.
- 1979—A property tax relief package was approved; a proposal to study the practicality of deconsolidation was not adopted.
- 1981—The tax rate was detriggered to provide relief to state; a study of *Nevada Plan* authorized; and the local school support tax was raised from 1.0 percent to 1.5 percent on taxable sales.
- 1983—The property tax dedicated to public schools was raised from $0.50 to $0.75 per $100 of assessed valuation.
- 1984—The Senate approved the school finance study; counties with more than 400,000 population were authorized to earmark $0.60 of the real property transfer tax for school district capital projects.

1988–06

- 1988—The Price Waterhouse Study was commissioned to examine fiscal affairs of state and local governments, to analyze Nevada's taxing system and intergovernmental relationships, and to make policy recommendations to the 1989 Nevada Legislature.
- 1988—The Interim Study Committee examined class size reduction.
- 1989—The Nevada Legislature enacted the Class-Size Reduction Act, establishing categorical funding for class size reduction for Grades K–3 through a phase-in program.
- 1991—The Nevada Legislature increased the local school support tax from 1.5 percent to 2.25 percent on taxable sales.
- 1995—A study commissioned to explore the feasibility of reconfiguring the structure of Nevada's school districts was conducted by Management Analysis & Planning Associates (MAP). Eight of 34 recommendations were adopted. Major items adopted included the following: (1) a process for realigning districts initiated locally or by voter petition, (2) provision for charter schools, (3) provision for a statewide technology plan, and (4) provision for an interim committee to explore the state's participation in financing school construction.
- 1997—The Nevada Education Reform Act (NERA) was passed as Nevada's accountability program.

The 2006 Adequacy Study

With increased pressure to respond to both federal and state accountability demands for ensuring every child has the opportunity to meet standards and pass proficiency exams, Nevada districts were feeling the strain of trying to meet expectations under current funding levels. This was, in part, due to functioning under a funding allocation system that had been developed at an earlier time in Nevada's history; a time when the state had less population, was demographically homogeneous, and was basically a rural state.

In 2006, a study was commissioned to look at the adequacy of Nevada's funding system in the context of new national and state accountability demands. Conducted by Augenblick, Palaich and Associates, *Estimating the Cost of an Adequate Education in Nevada*[12] focused on determining two key cost elements: (1) a base, per-student cost adjusted for district size and (2) additional cost weights (add-on weights) for children with special needs, including special education children, children at risk of failing in school, English language learners (ELLs), and children in Career and Technical Education (CTE) programs. Results of a professional judgment methodology recommended a *starting cost* of an increased funding level of $79.6 million, or $231 per student on average, and a *goal cost* representing the starting cost plus add-on weights for special education and CTE programs. The projected cost using 2003–04 data adjusted for inflation was $3,55 billion. The report provided a nine-year phase-in to increase revenues to meet adequacy funding projections. The student cost weights from the professional judgment methodology yielded weights for small, moderate, and large districts and are summarized in Table 1.1. They range from a weight of 0.04 for a child enrolled in CTE in a large district to 3.55 for a child with severe special education needs in a small district.

Table 1.1. Added Cost Weights for Nevada Students With Special Needs*

Special Needs	Small District	Moderate District	Large District
SPED Mild	1.04	0.88	0.89
SPED Moderate	1.69	1.28	1.29
SPED Severe	3.55	2.52	2.44
At-Risk	0.31	0.29	0.35
ELLs	1.21	0.56	0.47
CTE	0.14	0.05	0.04

* Figures taken from John Augenblick et al. *Estimating the Cost of an Adequate Education in Nevada* (Denver, CO: Augenblick, Palaich and Associates, Inc., 2006).

Since the Adequacy Study, there has been an economic downturn both nationally and in the state. To date, no action has been taken on the study's recommendations.

[12] Augenblick, J., Silverstein, J., Brown, A. R., Rose, D., DeCesare, D., & Anderson, A. B. (2006). *Estimating the cost of an adequate education in Nevada.* Denver, CO: Augenblick, Palaich and Associates, Inc.

2000–12 Equity

Over the past decade, the equity of the Nevada funding allocation system appears to have eroded.[13] [14] [15] For example, in 1991, the coefficient of variation for net current expenditures was 0.0103.[16] A coefficient of variation is the standard deviation of a distribution divided by the mean, expressed as a percentage. It represents the degree to which the dispersal of a distribution clusters near the mean. The value ranges from 0 to 1.0. The lower the coefficient of variation is, the greater the equity is. The Augenblick study reported a coefficient of variation of 0.473 for 2003–04 but district populations were not weighted, resulting in an overinflated measure. In the field of school finance, a coefficient of 0.150 or less is considered to be acceptable.[17] In other words, two thirds of the distribution of per-pupil expenditures should be within 15 percent of the mean. Equity measures overall are problematic for Nevada because 70-plus percent of the student population resides within one school district (Clark County). Equity measures are based on the underlying assumption of a normal distribution curve, which Nevada does not demonstrate.

National Ranking and Reports

Examining national rankings in school finance requires the careful consideration of the definitions used in calculating those rankings. Different entities use different definitions, so it is important to make certain, if you are making comparisons, to compare "apples" with "apples." Although one might criticize individual rankings and how they are calculated, the important thing to examine is the overall pattern of a state's performance over time. For Nevada, the historical pattern of performance for per-pupil expenditures as well as other measures in the *NEA Estimates and Rankings* is not exemplary. When the *Nevada Plan* was adopted in the 1960s, the state ranked fourth in per pupil expenditures. Over the past decade, Nevada has consistently ranked in the lowest quartile for per-pupil expenditures and other funding measures for public education, sometimes ranking in 46th or 48th place.[18] In the most recent NEA *Rankings & Estimates* [19] Nevada ranked 48th in current expenditures per pupil and 50th in public school revenue per $1,000 of personal income, a measure of state effort for education. It is the opinion of the research team that there is substantial room for improvement in meeting the reasonably equal educational opportunity needs of the state's school children.

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[13] Jordan, K. F., & Lyons, T. S. (1990). *Financing Education in an Era of Change.* Bloomington, IN: Phi Delta Kappa.
[14] Augenblick, J., Silverstein, J., Brown, A. R., Rose, D., DeCesare, D., & Anderson, A. B. (2006). *Estimating the cost of an adequate education in Nevada.* Denver, CO: Augenblick, Palaich and Associates, Inc.
[15] Baker, B. D., Sciarra, D. G., & Farrie, D. (2010). *Is school funding fair? A national report card*. Newark, NJ: Education Law Center. Retrieved from http://www.schoolfundingfairness.org/National_Report_Card_2010.pdf
[16] Bennett, R. A. (2003). *An analysis of Nevada's public school funding system.* Unpublished Ed.D. dissertation, University of Nevada, Las Vegas.
[17] Adequacy Study, p. 105.
[18] National Education Association. (2011). *Rankings & estimates*. Washington, DC: NEA Research. Retrieved from http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf
[19] Ibid.

In the most recent *National Report Card* for 2012, prepared for the Rutgers Education Law Center, Nevada received low rankings or grades on three of four "fairness measures."[20] The *Report Card* consists of separate but interrelated fairness measures. The 50 states plus the District of Columbia were evaluated on each of these measures. The four measures are as follows:

- *Funding Level*—This measures the overall level of state and local revenue provided to school districts and compares each state's average per-pupil revenue with that of other states, including states within the region. To recognize the variety of interstate differences, each state's revenue level is adjusted to reflect differences in regional wages, poverty, economies of scale, and population density. **Nevada ranked 38th** for 2009, the most recent year reported.
- *Funding Distribution*—This measures the distribution of funding across local districts within a state, relative to student poverty. The measure shows whether a state provides more or less funding to schools based on their poverty concentration, using simulations ranging from 0 percent to 30 percent child poverty. **Nevada received a grade of "F."** (Five states received a grade of "F" for 2009.)
- *Effort*—This measures differences in state spending for education relative to state fiscal capacity. "Effort" is defined as the ratio of state spending to state per-capita gross domestic product (GDP). **Nevada received a grade of "F."** (This grade translates to an effort index of 0.032—indices ranged from 0.024 in **Delaware** to 0.063 in **Vermont**, with those falling below 0.033 receiving a grade of "F." Fourteen states received this grade for 2009.)
- *Coverage*—This measures the proportion of school-age children attending the state's public schools, as compared with those not attending the state's public schools (primarily parochial and private schools but also home-schooling). The share of the state's students in public schools and the median household income of those students, are important indicators of the distribution of funding relative to student poverty (especially where more affluent households simply opt out of public schooling), and the overall effort to provide fair school funding.[21] **Nevada ranked 17th** for 2009. This was the most positive measure for Nevada of the four fairness measures. The state has a private/public income ratio of 2.01. Income ratios ranged from 1.18 for Wyoming to 3.49 for the District of Columbia. Nevada had a median household income for public schools of $71,515 and for private schools of $109,262.

[20] Baker, B. D., Sciarra, D. G., & Farrie, D. (2010). *Is school funding fair? A national report card*. Newark, NJ: Education Law Center. Retrieved from http://www.schoolfundingfairness.org/National_Report_Card_2010.pdf
[21] Ibid, p. 7.

Nevada has made recent attempts to improve the overall equity of its funding allocation system, particularly with the new Equity Allocation Model described in the next section. However, the state should consider providing close scrutiny of equity or fairness measures in the future and planning strategies for improvement.

Stakeholder Input

As part of the overview for this study, two stakeholder meetings were held to gather information regarding concerns and issues with the Nevada funding allocation system. Participants were provided a brief overview of the study as well as instructions and questions to guide group discussion. In addition, an e-mail address was created to receive ongoing input from individuals following the meetings. The stakeholder meetings were held on June 18, 2012, for district superintendents/designees and on June 22, 2012, for district financial officers/business managers.

Stakeholder input was consolidated into a continuous anonymous transcript. The transcript was coded and recurring themes identified. Primary issues and requests for consideration are outlined below, with words in bold denoting recurring terms emphasized in the transcript. The overarching concern of stakeholders was **funding** that took into consideration the unique characteristics of **schools, students**, and **districts**.

Primary Issues

- **Reduction** in **funding** has resulted in no **textbook** adoptions despite textbooks currently in use becoming obsolete.
- **Reduction in funding** has resulted in **reduction in teaching staff** and an increase in **class size** (e.g., class size increases in one district were as follows: kindergarten grew 12 percent; first and second grades grew 37.5 percent; and third grade grew 15.8 percent).
- Concessions in **salary and benefits** have resulted in the erosion of funding for the effective delivery of programs.
- Differential treatment in the funding of **charter schools** versus regular public schools calls into question the **equity** of charter school funding.
- The current **funding level** is a barrier to the educational **success** of students.
- Noneducational factors and differentials between **geographic areas** are critical factors for **rural districts**.
- The question of equity in the funding formula leaves 15 districts “terrified” as long as the inadequacy of **funding** is not addressed.

- Legislated **authority** for districts to have **greater flexibility** in spending and relief in the area of **collective bargaining** is needed in order for districts to spend monies effectively and efficiently.

Primary Requests for Consideration

- Provision of information on how other states fund education and **models** of funding
- Consideration of the fact that few states have the rural attributes found in Nevada, with a sales tax-based economy and capped **ad valorem** rates
- Additional flexibility in spending and a loosening of **bureaucratic** requirements to allow districts to **maximize** the efficiency with which dollars are used
- Establishment of a rainy day fund to ensure the **stability** of the **Distributive School Account (DSA) model**
- Recognition of the differentiated needs of **students**
- Recognition of the **higher cost** of educating students in **rural** communities
- Recognition of the cost/weighting of each district's **unique** characteristics, economies of scale, and **geographic** cost difference
- Provision of a hold-harmless phase-in for any redistribution of funds to avoid excessive **reductions** in funding in any given year
- Funding for facilities to **charter schools** that have demonstrated high performance
- Elimination of sponsorship fees for **charter schools**

In addition, the transcript was entered into Wordle[22] to provide a visual representation of stakeholder input. Wordle is a software program that creates "word clouds" from the text provided. The clouds give greater prominence to words that appear more frequently in the source text. Figure 1.1 presents the illustration generated using the stakeholder transcript.

[22] *Wordle.* (n.d.). *Beautiful word clouds.* Retrieved from http://www.wordle.net

Figure 1.1. Word Cloud From Stakeholder Transcript

How the Current Funding System Works (Formula/Revenue Sources)

The *Nevada Plan*

The primary objective of the Nevada funding formula, the *Nevada Plan*, for elementary and secondary education is to "ensure each Nevada child [receives] a reasonably equal educational opportunity".[23] The *Nevada Plan* is an equalized minimum foundation program that is designed to recognize local variation in wealth and expenditures per pupil. A foundation program is the most common type of funding formula used in the United States. As we will see in Chapter 2, 36 of the 50 states use some form of a foundation program.[24] In essence, in a minimum foundation program the *state sets a guaranteed amount of money per pupil for educating elementary and secondary pupils*, determines the amount of money per pupil districts can raise from local revenue sources, and then *pays the difference between the local revenues raised and the state guarantee*.[25]

The Nevada formula is expressed in both per-pupil weights and unit allocations. The *Nevada Revised Statutes* state that the plan "should supplement local financial ability to whatever extent necessary in each school district to provide programs of instruction in both compulsory and elective subjects that offer full opportunity for

[23] *Nevada Revised Statutes*, 2011, 387.121.
[24] Verstegen, D. A. (2011). *A quick glance at school finance: A 50-state survey of school finance policies and programs. Vol. I: State by state descriptions.* Retrieved from http://www.schoolfinances.info.
[25] Odden, A. R., & Picus, L. O. (2008). *School finance: A policy perspective* (4th ed.). New York: McGraw-Hill.

every Nevada child to receive the benefit of the purposes for which public schools are maintained."[26] The basic support guarantee is dispersed from the general fund through a Distributive School Account (DSA). The primary purpose of the DSA is to provide the financial mechanism by which the state meets its obligation under the *Nevada Plan* provision.[27] DSA payments are paid to districts quarterly in August, November, February, and May to meet the state's share of the basic support guarantee. However, since 2009, in accordance with a determination made by the State Controller (pursuant to Subsection 8 of NRS 387.124), the state has paid DSA apportionments on a monthly basis.

The Nevada Plan is referred to as an "equity allocation model" and is composed of 12 calculation modules. There are three additional modules that provide supporting documentation and underlying assumptions for the allocation model.[28] These modules were developed and refined through an expert committee that commenced its work in 2004. The model allows for the calculation of each district's unique basic support guarantee. Two of the primary reasons for the update of the model were to add additional transparency to the program and to refine the district grouping used in the individual district calculations of their basic support guarantee that dealt with size, density, and sparsity. (See Appendix A for district groupings.) The following is a description of the basic components of the *Nevada Plan*.

Basic Support Ratio. This part of the formula determines the staffing and operating expenditures for each district with adjustments related to density, sparsity, size, and differences in educational costs among districts. It is expressed as a ratio that represents the *relative cost* of a district doing business in Nevada compared with the statewide average cost. It takes into account certain economies of scale for districts to services. Staffing costs are determined by aggregating school enrollments within *attendance areas* with allowable teacher staffing units assigned by projecting the aggregated enrollments through a Teacher Allotment Table maintained by the Nevada Department of Education (see Appendix B). Once units are assigned to each attendance area, they are aggregated within their respective districts. Operating costs are based on prior year expenditures incrementally increased for inflation and additional monies when the general fund allows. The basic support ratios for Nevada districts are indexed to the mean, which is expressed as a 1.0. Ratios ranged from

[26] *Nevada Revised Statutes*, 2011, 387.121.
[27] Bennett, R. A. (2003). *An analysis of Nevada's public school funding system*. Unpublished Ed.D. dissertation, University of Nevada, Las Vegas.
[28] Nevada State Department of Education Administrative and Fiscal Services. (2011).*The Nevada plan: Nevada revised statutes (NRS) 387.121: Guaranteed per pupil level of educational financial support.* Las Vegas, NV: Author.

0.9621 (Clark) to 3.1398 (Esmeralda) for 2010–11.[29] Although the state refers to this as a cost-based formula,[30] technically it is not. The formula calculations are based on incrementally adjusted historical expenditure data rather than on data that accurately takes into account the differential cost of providing education across the various districts in the state.

Wealth Adjustment Factor. This component adjusts for each district's local revenues (wealth). These adjustments are referred to as outside revenues because they are not guaranteed by the state, but they still are regarded as part of the *Nevada Plan*. Basically, the calculation functions to regress districts' local wealth toward the mean local wealth for the state. This particular component is the primary reason that Nevada historically has scored high on some national rankings for equity.[31] However, it should be noted that, at the time, these particular rankings looked at only one aspect of equity, horizontal *taxpayer* equity. These rankings did not consider performance on other components of equity, such as horizontal or vertical *pupil* equity. Horizontal pupil equity refers to treating pupils in like circumstances similarly. Vertical pupil equity refers to treating pupils in different circumstances according to their differentiated needs.

Transportation Allotment. This component of the formula functions as a percentage cost reimbursement program. The state reimburses 85 percent of allowable capital and operating expenditures based on a four-year rolling average adjusted for inflation.

Basic Support Level. This component combines the previous three components of the *Nevada Plan* to arrive at a district's preliminary basic support level. Because the state basic support guarantee includes transportation costs, these costs must first be backed out of the total. Then the guarantee is "adjusted" for the district's "cost of doing business." This results in the Adjusted Basic Support per Pupil (ABSPP). Finally, the three components of the *Nevada Plan* are added together.

[29] Nevada Department of Education *DSA Module 10* 2010-11.
[30] Ibid.
[31] National Education Association. (2011). *Rankings & estimates.* Washington, DC: NEA Research. Retrieved from http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf

Illustration:

ABSPP = [*state basic support guarantee*] –
[*state average transportation allotment*] x
[*basic support ratio*]

Preliminary Basic Support Guarantee Per-Pupil = [*ABSPP*] +
[per-pupil *wealth adjustment factor*] +
[per-pupil *transportation allotment*]

Special Education Units. After the unique preliminary basic support for each district is calculated, units are added for special education programming. These units function as an add-on to the *Nevada Plan* formula. The funding units were initially designed to cover the cost of an average teacher salary for a specified number of special education pupils by disability. Since the baseline units were established, they have been increased incrementally; however, the increases have not always mirrored the proportional increases in some district's special education population. Thus, the number of units allocated appears to be idiosyncratic across some districts with like characteristics. This draws the equity of the distribution of special education units into question.[32] The unit allocation for 2011–12 was $39,768, which represents approximately 69 percent of the average cost of a teacher ($57,312).

Once the special education units for a district are allotted the total individual district's state guarantee can be calculated.

Illustration:

State Basic Support Guarantee = [*total weighted pupil enrollment*] x
[*preliminary basic support guarantee per pupil*] +
[*total value of special education units*]

The weighted pupil enrollment in the formula is determined by a single count day at the end of September. There are currently two per-pupil weights in the formula: 1.0 for pupils in Grades 1–12 and 0.6 for prekindergarten and kindergarten pupils officially enrolled by count day. Nevada's specific formula is currently not in statute as formulae are in most states.

[32] Parrish, T. B., & Shambaugh, L. (2009). *Analysis of special education funding in Nevada.* Washington, DC: American Institute of Research.

Revenue Sources

The *Nevada Plan*'s financial support for elementary and secondary schools is composed of a combination of state and local revenues. The state's major General Fund revenue sources are a 2 percent state sales tax, gaming taxes, an insurance premium tax and a tax based on wages paid by an employer to employees. State revenue sources also include an out-of-state 2.25 percent local school support sales tax not attributable to any single county or school district and a portion of an annual slot-machine tax. Two locally generated tax revenues also are included in the *Nevada Plan*: a county-collected 2.25 percent sales tax (increased by the 2009 Legislature to 2.60 percent beginning July 1, 2010 through June 30, 2011, and extended by the 2011 Legislature through June 30, 2013) and a one-third of $0.75 or $0.25 per $100 of assessed valuation property tax.[33]

In addition to *Nevada Plan* revenues, districts have designated local revenue sources "outside of the plan." These funds consist of two thirds of $0.75 or $0.50 per $100 of assessed valuation property tax, a portion of the governmental services tax (GST), franchise fees, unrestricted federal revenues, interest, and other local revenues dedicated to education. (See Appendix C for a diagram of complete state and local revenue sources.)[34]

The proportion of revenues for education from different governmental sources is 62.6 percent local, 30.8 percent state, and 6.6 percent federal.[35] This is somewhat atypical as most states have increased their state share so that state and local share percentages are closer to each other. In many cases these changes were in response to litigation.[36] The proportion of revenues from different sources is 51 percent from sales tax, 19 percent from property tax, 15 percent from gaming tax, and 15 percent from other sources.[37] Thus, Nevada's major source of revenue for schools is the sales tax. This leaves the state particularly vulnerable to the vagaries of economic downturns as evidenced by the last two legislative sessions.[38] An over-reliance on the sales tax, because it is a regressive tax, also can result in the poor paying a disproportional share of their income for education when compared with other segments of the population.[39]

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[33] Nevada State Department of Education Administrative and Fiscal Services. (2011). *The Nevada plan: Nevada revised statutes (NRS) 387.121: Guaranteed per pupil level of educational financial support.* Las Vegas, NV: Author.
[34] Ibid.
[35] Nevada State Department of Education. (2012). *State and local revenue sources in Nevada.* Carson City, NV: Author.
[36] Brimley, V., Verstegen, D. A., & Garfield, R. (2012). *Financing education in a climate of change*. New York: Pearson.
[37] Nevada State Department of Education. (2012). *State and local revenue sources in Nevada.* Carson City, NV: Author.
[38] Takahashi, P. (2012, August 6).With pink slips looming, arbitration victory is bittersweet for teachers union. *Las Vegas Sun*. Retrieved from http://www.lasvegassun.com/news/2012/may/02/school-district-says-teacher-layoffs-way-after-arb/
[39] Baker, B. D., Green, P., & Richards, C. E. (2008). *Financing education systems*. Upper Saddle River, NJ: Pearson.

Nevada has no local leeway. Local revenue levels are specified by the state legislature.[40] In other words, there is no local choice regarding revenues for operations. Districts may not go to the voters to ask for additional revenues for operations as is possible in some other states.[41] Although this may contribute to Nevada's ability to maintain a standard of equity it also puts an increased burden on the state to ensure funding is sufficient to maintain "programs of instruction . . . that offer full opportunity for every . . . child."[42] If the state guarantee is insufficient to achieve its educational purpose, a district has no authority to raise the needed additional revenues in order to meet state goals and accountability benchmarks.

The Minimum Foundation Program

Once local revenues are determined, the minimum foundation program can be calculated to determine the amount of money coming to districts from the state.

Illustration:

State Aid = [*State Basic Support Guarantee*] (*calculated through Nevada Plan*) –

[*Specified Nevada Plan Local Revenues*] (*combined revenues from a 2.25% sales tax and $0.25 per $100 of assessed valuation for property tax*)

External Categorical Funds

Nevada provides funding for several categorical programs. These are funds that are earmarked for a specific educational purpose but are outside the per-pupil expenditures provided under the *Nevada Plan*. Examples include the Class-Size Reduction program, Early Childhood Education, remediation programs, and student counseling services.[43] Because of the current economic downturn, several categorical programs are no longer being funded, such as signing bonuses for in-demand teachers, innovation/prevention of remediation, and disruptive students.[44] The advantages of external categorical dollars are as follows: (1) they are earmarked funds that must be spent for their intended purpose and (2) they are relatively easy to add to existing state legislation. The disadvantages are as follows: (1) they are outside the basic support guarantee and thus can be easily eliminated (as discussed earlier) and (2) they may be less flexible as to how dollars can be used. (A state has specific rules and regulations for external categorical dollars. These stipulations may result in a loss of flexibility and may curtail districts from delivering programs in a way they deem most effective for their unique student

[40] NRS 374.015
[41] Ibid.
[42] Ibid.
[43] Nevada State Department of Education. (2012). *State and local revenue sources in Nevada.* Carson City, NV: Author.
[44] J. Teska, personal communication, June 29, 2012.

populations.) External categorical funds are not equalized and thus may have an adverse effect on the overall equity of a state's funding allocation system. Finally, with categorical funds that are dispersed partly through pupil count data and partly through grant applications, smaller districts that do not have grant writing expertise on staff may be disadvantaged.

Capital Outlay

Essentially, there is no capital outlay funding provided through the state except for capital expenditures for transportation (i.e., buses, cars, etc.). Revenues for capital expenditures such as building schools must be raised locally either through bonds or pay-as-you-go programs. There is a mandated legislative limit on bonded indebtedness: "The total bonded indebtedness of a county school district must at no time exceed an amount equal to 15 percent of the total of the last assessed valuation of taxable property."[45] As education is a state responsibility this places Nevada in a potentially vulnerable position. Traditionally, capital outlay costs have been borne exclusively by local districts. Despite education being a state responsibility, many states have not supported local school construction.[46] One major problem with local capital outlay funding is the low assessed valuation of property in small districts. In these districts bonding for school construction may become a mathematical impossibility. The cost of a new building or a major renovation could exceed the assessed valuation of a small district. Yet, wealthy and/or larger districts are able to build or renovate educational facilities with a small tax levy because of the accumulative assessed valuation. Such potential inequities can undermine a state's concept of "reasonably equal educational opportunity."

Analysis of Funding System Based on Criteria for an Optimal System

The research literature in public school finance provides multiple criteria for an optimal funding allocation system. Providing criteria for analysis offers the means by which a state can evaluate and refine the elements of its own program. For the purpose of this study, the eight criteria outlined by Chambers and Levin (2009) will be used.[47] Although this is not an exhaustive list, it provides us with the most pertinent elements to examine Nevada's current funding system. In addition to the authors' analysis of the funding formula, comments relative to these criteria were incorporated from stakeholder meetings.[48] The criteria are as follows:

Sufficiently Funded and Equitable on Both Horizontal and Vertical Dimensions. *The resource allocation system provides sufficient funding for programs that meet the needs of a specific population of students. The system must be horizontally and vertically equitable, that is,*

[45] *Nevada Revised Statutes* 387.440.
[46] Verstegen, D. A. (2011). *A quick glance at school finance: A 50-state survey of school finance policies and programs. Vol. I: State by state descriptions.* Retrieved from http://www.schoolfinances.info.
[47] Chambers, J. G., & Levin, J. D. (2009). *Determining the cost of providing an adequate education for all students.* Washington, DC: National Education Association.
[48] Comments from stakeholders meeting with Nevada district superintendents, NASA, Lake Tahoe, Nevada, June 18, 2012.

distribute funds to serve students with like needs in a like manner and serve students with different needs in systematically different ways.

The current funding system only addresses the vertical equity needs of special education pupils. It does not provide differentiated resources for the needs of other types of pupils. The purpose of the Wyoming study, discussed in the first section of this chapter, was to address the needs of taxpayers. The Wyoming study was the impetus for the last major changes to the Nevada state funding formula other than the addition of special education units in 1973. The current formula is an elegantly designed funding mechanism suitable for an essentially homogeneous rural state. This makes sense in view of the population base and demographic characteristics of Nevada in 1967 when the *Nevada Plan* was implemented. However, the Nevada of the 1960s and 1970s is not the Nevada of today. Nevada is a diverse state in terms of types of schools (from one room school houses to 3,000-plus comprehensive high schools), types of pupils (the largest school district is now majority-minority), and languages spoken (approximately 145 different languages).[49]

As discussed in the historical overview, Nevada's performance on some equity measures has eroded over the past decade. Addressing the differentiated needs of pupils and the unique needs of necessary small schools were the two most common comments from the stakeholders meetings conducted under this project. Stakeholders stated that with the current level of resources, they were not able to sufficiently meet the needs of all of their students. The student groups mentioned most often for which they struggled to provide effective programming were at-risk, ELL, special education, and gifted and talented. In the most recent *National Report Card,* Nevada received a grade of "F" for the years 2007, 2008, and 2009 in the *distribution of funding* across local districts within a state relative to student poverty.[50] This was one of four fairness measures discussed in the historical overview section of this chapter. This grade is to be expected in view of the fact that the *Nevada Plan* does not currently address the differentiated needs of children in poverty. In addition to the above equity challenges, Nevada also may exhibit vulnerabilities in the equity of its capital outlay program, particularly for districts near the ceiling of their bonded indebtedness. In view of these multiple challenges, **the *Nevada Plan* currently does not meet this criterion for an optimal funding allocation system**.

Transparent, Understandable, and Accessible. *The system must be clear to all stakeholders, straightforward, and based on publicly available data.*

[49] Ryan, C. (2011, March 14). School district seeks study on actual cost of educating students. *Las Vegas Sun.* Retrieved from http://www.lasvegassun.com/news/2011/mar/14/school-district-seeks-study-actual-cost-educating-/

[50] Baker, B. D., Sciarra, D. G., & Farrie, D. (2010). *Is school funding fair? A national report card*. Newark, NJ: Education Law Center. Retrieved from http://www.schoolfundingfairness.org/National_Report_Card_2010.pdf

The State Department of Education has made great strides to ensure transparency of its funding system. It seeks input from its constituents and commits to continuous improvement. The formula is broken down into separate modules through its Equity Allocation Model that explains and illustrates each module. Districts are provided worksheets for submitting *Nevada Plan* data elements. The Equity Allocation Model is readily available from the State Department of Education. However, although the end calculations are available through these modules, it is difficult to arrive at the underlying data elements. It is not always clear what calculations are going on "behind" the module data columns. This makes simulation calculations difficult. **The *Nevada Plan* currently only <u>partially meets</u> this criterion for an optimal funding allocation system.**

Cost Based. *The formula must carefully enumerate and justify the differential costs of providing programs to diverse student populations in different settings.*

Except for special education funding, the current formula does not enumerate nor justify the differential costs of providing programs to diverse student populations in different settings. In addition, the funding formula calculations are incrementally adjusted historical expenditure data based on a benchmark. Making adjustments to outdated data runs the risk of perpetuating past inequities. It can lead to the consistent overfunding or underfunding of programs. The state currently has no provision or process for systematically reviewing cost ratios or cost data used in its formula. **The Nevada Plan currently <u>does not meet</u> this criterion for an optimal funding allocation system**.

Capable of Minimizing Incentives. *The funding formula should guard against distortion caused by overidentification or misreporting of students in need, enrollment sizes, and so on.*

The state provides clear definitions for components in the *Nevada Plan* and because of minimal weighting, there are limited opportunities for a district to distort data. **The *Nevada Plan* currently <u>meets</u> this criterion for an optimal funding allocation system**. However, there is a vulnerability that comes more from the "informal negotiations" with districts and "adjustments" that come after the basic formula is calculated. These may put some districts at an unfair advantage or disrupt the overall equity of the program.[51] One might hypothesize that if continuous adjustments are necessary to bring the formula in line with current realities, then perhaps the funding model is no longer viable to meet the educational needs of the state.

Reasonable in Its Administrative Costs. *Administrative costs should be minimal at both local and state levels and the system should not be overburdened by excessive data and reporting requirements.*

In the data provided, administrative costs were not specified. Steps have been taken by the State Department of Education to clarify, simplify, and make more transparent the data

[51] Comments from stakeholders meeting with Nevada district superintendents, NASA, Lake Tahoe, Nevada, June 18, 2012.

demands placed on districts for *Nevada Plan* information. Although earmarked funds, as well as unfunded or underfunded mandates, could increase overall administrative costs there was not sufficient data to evaluate this claim. **There was <u>not sufficient information</u> to determine whether or not the *Nevada Plan* meets this criterion for an optimal funding allocation system.**

Predictable, Stable, and Timely. *The system should be robust and stable enough to allow policymakers to project future needs and to plan to allocate resources properly and systematically in advance.*

Stability and predictability are necessary in a state funding system in order for districts to plan and proceed in an orderly manner from one fiscal year to the next. However, because schools are financed through tax revenues, a change in the economic conditions can disrupt the stability of funding.[52] As stated earlier, this was particularly true of Nevada because of the overreliance on the sales tax for the funding of schools. "For this reason, most experts contend that school funding should come from multiple tax sources which respond in different ways to changing economic conditions."[53] Because of Nevada's taxation system for education, **the *Nevada Plan* currently <u>does not meet</u> this criterion for an optimal funding allocation system**.

Accountable for Learning Outcomes and Spending. *The state should monitor that resources are being used effectively and progress toward the educational goal is being realized, which will require an appropriate accountability structure in place that can support data-driven decision making. The system should also provide wide latitude to schools that are producing favorable results.*

Nevada has a comprehensive accountability system based on the requirements of the No Child Left Behind (NCLB) Act that is monitored by the federal Department of Education. There are four basic premises of the program: (1) accountability for results, (2) emphasis on doing what works based on scientific research, (3) expanded parental options, and (4) expanded local control and flexibility.

NCLB requires that states implement an accountability system for schools that evaluates whether they are making adequate yearly progress (AYP) toward the goals of the legislation. In compliance with NCLB, Nevada AYP classifications are made annually and are based on the percentage of students tested (participation), the percentage of students who score at or above the proficient level on annual statewide tests of academic achievement, and another academic indicator: school attendance or graduation rate.[54] The state also requires school improvement plans. Moreover, the state requires that fiscal data be disaggregated to the school and program

[52] Jordan, K. F., & Lyons, T. S. (1990). *Financing education in an era of change*. Bloomington IN: Phi Delta Kappa.
[53] Ibid, p. 26.
[54] Nevada Department of Education. (2007). *A guide to No Child Left Behind & adequate yearly progress analyses in Nevada.* Carson City, NV: Author. Retrieved from http://nde.doe.nv.gov/APAC.htm

level using a downward accounting model.[55] The accountability system is clearly delineated on the State Department of Education website and provides, among other things, fiscal, demographic, attendance, and test performance data. The state also has recently implemented new state performance standards and a growth model for determining student progress. **The *Nevada Plan* currently meets this criterion for an optimal funding allocation system.** However, an additional observation is that the funding system does not appear to be linked to state goals or accountability outcomes. The formula provides no incentives for productivity or educational outcomes. This may be an area of future exploration.

Politically Acceptable. *Implementation should avoid major sudden short-term loss of funding to schools.*

The *Nevada Plan* has several mechanisms to ensure a district does not have to experience a sudden loss in funds.[56] It includes a "hold-harmless" provision to protect districts during times of declining enrollment. The hold-harmless provision provides that enrollment must be based upon the larger of the current year's enrollment, or that of either of the previous two years. The provision holds a district harmless for a one-year period except for districts with declining enrollments of 5 percent or more, which are afforded two years.

An additional provision assists school districts with significant growth in enrollment within the school year. If a district grows by more than 3 percent but less than 6 percent after the second school month, a growth increment of 2 percent of basic support is added to the guaranteed level of funding. If a district grows by more than 6 percent, the growth increment is 4 percent.[57] **The *Nevada Plan* currently meets this criterion for an optimal funding allocation system.**

[55] EDadmin, In$ite. (2012). http://www2.edmin.com/products/InSite/index.cfm
[56] See Subsections 2 and 3 of NRS 387.1233.
[57] Nevada State Legislative Counsel Bureau, Fiscal Analysis Division. (2011). *The Nevada plan for school finance: An overview* [Legislative session]. Carson, NV: Author.

A summary of Nevada's performance on the optimal funding criteria is included in Table 1.2.

Table 1.2. Summary of Performance on Optimal Funding Criteria*

Optimal Funding Criteria	Meets Criteria	Partially Meets Criteria	Does Not Meet Criterion	Insufficient Data to Evaluate
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	√			

* Optimal funding criteria taken from Jay G. Chambers and Jesse D. Levin, *Determining the Cost of Providing an Adequate Education for All Students* (Washington, DC: National Education Association, 2009).

Issues to Explore

Several issues evolved from the analysis of Nevada's funding allocation system that require dialogue and further exploration. In some cases, we have noted that the item was beyond the scope of the current study.

- The current formula **does not sufficiently address the vertical equity needs of the pupils** in the state.
- The funding formula was **developed for state conditions that have dramatically changed** since its inception.
- The *Nevada Plan* **uses incrementally adjusted expenditure data based on a benchmark**. Making adjustments to outdated data runs the risk of perpetuating past inequities.
- The state **has not updated cost data** either through a cost study or costing-out process. Currently, the state can only perpetuate the benchmark data incrementally. This can lead to the overfunding or underfunding of programs.

- There is **no mandated periodic review** of the *Nevada Plan*. Many states require a periodic review, for example, every five years. This ensures the funding formula is based on current costs and district characteristics.
- The state **uses a single count day for enrollment** calculation in the *Nevada Plan*. This may act as a disincentive to hold pupils in school. It could be a contributing factor to dropout statistics.
- There is **no state funding support for capital outlay**. This may be an issue for districts at or near their bonding capacity to be able to maintain and renovate existing facilities or build new ones. Capital outlay is beyond the scope of the current project.
- There is **no local leeway**. This imposes a greater burden on the state to ensure funding so that all students have the opportunity to meet state standards and pass appropriate proficiency examinations. Approaches to providing local leeway or taxation are beyond the scope of the current study.
- The Nevada funding allocation system **does not have a sufficiently diverse tax base** to enhance funding stability during changing economic conditions. The diversity of the current tax base is beyond the scope of the current project.
- The funding system **does not** appear to be **linked to state goals or accountability outcomes**. The formula provides no incentives for productivity or educational outcomes.

Although this study will focus on the vertical equity issues within the formula, the additional issues can form a nexus for future discussion and planning of possible funding system refinements.

Chapter 2—Inventory of State Finance Systems

This chapter responds to the first task listed under the scope of work, development of an inventory of state finance systems that address individual student needs and characteristics, including the following: (1) students with disabilities; (2) English language learners (ELLs); (3) students who are at-risk as defined by such metrics as test scores or eligibility for free or reduced-priced meals; and (4) any other individual student needs and characteristics addressed in the funding models of other states that are deemed notable. Also discussed, as delineated in the scope of work, is a list of states that incorporate the needs and challenges of school districts in remote areas and small schools in their methods for financing public schools. The information source is a 50-state survey of state finance policies and programs with data from fiscal year (FY) 2011.[58]

These findings are discussed later. First, the major approach for distributing state aid for public K–12 schooling is reviewed across states to provide a context for discussion of student needs. Then, mechanisms used to pay for students with special needs and high costs are discussed. Next, district factors for small schools in remote areas are examined and compared across the states. Finally, an emerging area of interest is discussed: gifted and talented education funding.

Major State Finance Systems

The 50-state school finance survey showed that no fundamentally new state finance distribution models have emerged in recent years. Most states are financing schooling using funding systems that have been in place for almost a century. However, they have modified these systems in important ways. States are moving to weighted systems to tailor funding streams to individual student needs and characteristics and providing additional funding for remote schools/districts. Also, adequacy—that is, whether funding is sufficient to meet state laws, rules and regulations--is emerging as a target for the state guarantee under foundation programs, the type of finance system used in Nevada and the most heavily used system today (45 states use this system).[59]

[58] Verstegen, D. A. (2011). *A 50-state survey of school finance policies and programs*. www.schoolfinances.info. Data were collected from the chief finance officer or their designee in all 50 states for 2010–11, formatted, and posted for peer review and verification on the Web. Changes were incorporated and uploaded to the website. For previous work using 2007 data, see Verstegen, D. A. (2011). Public education finance systems in the United States and funding policies for populations with special educational needs. *Education Policy Analysis Archives*, *19*(21). Retrieved from http://redalyc.uaemex.mx/redalyc/pdf/2750/275019735021.pdf. See also, Verstegen, D. A., & Jordan, T. S. (2009). A fifty-state survey of school finance policies and programs: An overview. *Journal of Education Finance, 34*(3), 212–230.

[59] See Verstegen, D. A., & Knoeppel, R. C. (in press). Statehouse to schoolhouse: Education finance apportionment systems in the United States. *Journal of Education Finance*.

Table 2.1 provides a listing of the number of states using each major type of finance system drawn from the 50-state survey. As shown in the table, states provide funding to their public elementary and secondary school districts using one of four types of finance formulae:

- Foundation Programs (36 states)—Provides a uniform state guarantee per pupil, with state and local district funding.
- District Power Equalization Systems (3 states)—Provides funding that varies based on tax rates.
- Full State Funding (1 state)—All funding is collected and distributed by the state.
- Flat Grants (1 state)—Provides a uniform amount per pupil from state funds; localities can add funding to this amount.
- Combination Systems (9 states)—These combine several funding plans (listed earlier).

Table 2.1. State School Finance Formulae, by State

Finance System	*State*
Foundation program (36)	AK, AL, AZ, AR, CA, CO, DE, FL, ID, IN, IA, KS, ME, MA, MI, MN, MS, MO, NE, NV, NH, NJ, NM, NY, ND, OH, OR, PA, RI, SC, SD, TN, VA, WA, WV, WY
Full state funding (1)	HI
Flat grant (1)	NC
District power equalizing (DPE) (3)	CT, VT, WI
Combination/Tiered system (9)	GA, IL, KY, LA, MT, MD, OK, TX, UT

The Foundation Program

The survey findings showed that the Foundation School Program (FSP) was the finance system of choice, with 36 states reporting using it, including **Nevada**. When states employing a foundation program as part of a combination/tiered funding approach are added to states supporting education through these funding plans, the total number of states using foundation formulae to pay for public elementary and secondary education increases to 45 states. Recently, **New York**, **Indiana**, and **Michigan** have shifted to a foundation program for funding public education.

Foundation program allocation schemes support education through a set state guarantee of funding per pupil or per teacher, which historically was intended to pay for a basic or minimum education program. Localities contribute to the state guarantee through a uniform tax rate or the funding that would result from it. Local support is drawn mainly from the property tax although some states, like Nevada, also use the sales tax for local funding under the plan. With similar tax efforts, poor localities raise less funding and wealthy localities raise more funding because of variations in the local property tax base. The state makes up the difference up to the state guarantee per pupil—this is called "equalization." Usually localities can "go beyond" this amount with additional property taxes that are not equalized by the state.[60]

The state guarantee per pupil varies across the states. For 2011, Arizona reports providing $3,267.72 per *weighted* student (where differential weights exist for grade level, special education, small and isolated schools, ELL, and other areas approved by the legislature); the foundation amount in Arkansas is $6,023 per student in average daily membership (ADM) based on the previous year's attendance. In Nevada, for the 2011 fiscal year, the foundation program provided $5,192 in basic support per student enrolled on count day.

The local contribution to the FSP also varies across the states. In Colorado, it is capped at 27 mills ($27 per $1,000 of assessed valuation of property [or $2.70 per $100 assessed valuation]). The local contribution for public schooling under the *Nevada Plan* is $0.25 per $100 assessed valuation (2.5 mills per $1,000 assessed valuation) and 2.25 percent of sales taxes.[61] Additional property taxes ($0.50 per $100 assessed valuation) and various other revenues collected outside basic aid also contribute to funding under the *Nevada Plan*.

Of those states employing a FSP, a few (e.g., Alabama) use a teacher unit for allocation purposes, but most states base allocations on a pupil unit. Students are counted in various ways. Utah has a weighted student foundation program with additional weight given to students in small/sparse districts. In Virginia, students are counted for seven months and an average is taken to determine average daily membership (ADM). In Nevada, there is only a single count of students enrolled on the last day of the first month of school.

District Power Equalizing Systems

Unlike FSPs, District Power Equalizing (DPE) Systems support taxpayer equity, rather than pupil equity, by providing *equal yield in the form of funding for similar tax rates (effort)* across the state. They consist of a guaranteed tax base system, guaranteed yield approach, and percentage equalizing formulae. These are quickly becoming obsolete, most likely because they permit differential funding per pupil across the state based on variations in tax rates. Only three states reported using a district power equalization approach, including Vermont (guaranteed

[60] Brimley, V. D., Verstegen, D. A., & Garfield, R. (2012). *Financing education in a climate of change*. New York: Pearson.

[61] Currently, 2.6 percent of sales tax is provided for public education through the Local School Support Tax (LSST).

yield), Wisconsin (three-tiered guaranteed tax base), and Connecticut (percentage equalization).

These finance systems shift decision choices and policy options for taxing and spending from the state to the locality. There are various levels of state support based on local choices unlike a foundation program that provides a single level of basic aid per pupil. For example, the guaranteed yield system in Vermont has a base of $8,544 per pupil at a tax rate of 8.6 mills. For every percent of funding the voters add to this amount, the tax rate goes up 1 percent—until double tax rates become operative above 125 percent of the average spending level.

Other Funding Approaches

Other major finance systems used by states include **full state funding** (FSF) or the **flat grant**—each is used in only one state. Although local funds are not part of the finance plan under FSF, flat grants do permit local supplements but they are not equalized by the state. Flat grants were used by states as an initial means of assistance for schooling but have since been abandoned as a major approach for state funding because they provide low levels of aid and drive inequalities because of the excess local funding permitted. North Carolina reports using a flat grant as the major state aid mechanism. Hawaii is the only state that reports employing full state funding. In Hawaii, all public education funding is collected and distributed by the state.

Interestingly, nine states provide **two-tiered systems**, that is, combination approaches to distribute funding to school districts: Georgia pays for schools through a combination foundation and guaranteed yield formula, Illinois uses three finance formulae. In Kentucky, under SEEK (Support Education Excellence in Kentucky), funding is derived from a base foundation level with an optional two tiers of supplementation under a District Power Equalization Program.

Key Issues in Choosing a Funding Formula

A key issue related to funding formulae and the amount of funds they provide per pupil is whether the funding plan is equitable with respect to providing equal opportunities for all students, regardless of their circumstance. Another issue is whether the amount of funding is adequate—sufficient to teach all children to ambitious standards, laws, and requirements. The following are some examples of how selected states have addressed this issue of adequacy:

- In **South Carolina**, base funding supports a *minimally adequate education*, according to the state.
- **Maine's** foundation program specifically mentions that it is an *"adequacy"-based formula*—it uses cost analysis to establish the amount, level, and cost of education components needed in each school to ensure all students have equitable opportunities *to achieve proficiency* on learning standards.

- **Missouri** develops an "adequacy target" based on several factors, including the average current expenditures of districts meeting all performance standards established by the Missouri State Board of Education.

Therefore, whether the adequacy target funds a minimum or quality education is an important issue that the state inventories raise. Many states have moved away from the *minimum* foundation program to providing an *adequate* foundation program that targets quality, often in response to school finance litigation.[62] Also, how basic support is determined is another important issue. In the past, the amount of the major equalizing grant was based more on politics or residual budgeting than on a rational basis anchored in research.[63]

Financing Individual Student/District Needs and Characteristics

States also provide finance adjustments to the foundation amount/basic support to acknowledge cost pressures beyond the control of the school district that affect providing an equitable educational opportunity for all students. These cost pressures include size (e.g., enrollment), geography (e.g., locale type or dispersion of enrollment), labor market characteristics (e.g., supply and demand for labor and cost of living), and special student needs and characteristics (e.g., poverty, English language learner, or disability status of students). Students in poverty (as a proxy for students at risk of low performance or dropping out of school), students with limited English proficiency, or students with disabilities may require additional resources (e.g., smaller classes, specialized staff, or instructional materials) to meet state standards, laws, and goals. Small and remote school districts may also experience higher education per-pupil costs because of diseconomies of scale.

Provisions to increase funds for justifiably higher costs than the foundation amount can be *included* in the major finance grant through weights or can be *added* to that amount as a separate provision outside the major finance formula, through categorical aid. A question remains concerning whether the amounts expended for high-cost students are sufficient and the interplay of funding streams when students fall into several special categories. Another issue is what constitutes best practice in providing funding for individual student/district needs.

Federal aid also is provided for individual student needs and characteristics, as specified later. However, rules and regulations accompanying the receipt of federal aid—including supplement

[62] Verstegen, D. A. (2004). Towards a theory of adequacy: The continuing saga of equal educational opportunity in the context of state constitutional challenges to school finance systems. *Saint Louis University Public Law Review, 33*(2), 499–530. Verstegen, D. A. (2002). Financing adequacy: Towards new models of education finance that support standards-based reform. *Journal of Education Finance*, *27*(3), 749–781. Verstegen, D. A. (1998). Judicial analysis during the new wave of school finance litigation: The new adequacy in education. *Journal of Education Finance, 24*(1), 51–68.

[63] Verstegen, D. A. (2002). Financing adequacy: Towards new models of education finance that support standards-based reform. *Journal of Education Finance*, *27*(3), 749–781.

not supplant and maintenance of effort—usually disallow comingling of federal, state and local dollars.

Special Education Funding

Table 2.2 lists funding mechanisms states use to pay for students receiving special education and related services. Appendix D provides a brief description of each state's special education funding provision. State aid for exceptional students is supplemented by federal aid under the Individuals with Disabilities Education Act (IDEA).

According to the 50-state survey, all but one state reports providing state aid for special education although apportionment systems vary. Generally, states pay for special education programs and services using one of **four methods**:

- Per-pupil funding—either pupil-weighted or a flat grant
- Cost reimbursement—state defines eligible costs
- Instructional/teacher units—funds to support teachers
- Census—based on total student population rather than eligibility for special education

States may also provide funding for services through intermediate units rather than directly to the local education agency (LEA) as is the case in Colorado, New York, Montana, and Wisconsin. Other approaches include funding for extraordinary high-cost students, which is used in tandem with other apportionment methods (described in more detail later).

Student Weights. Overall, 20 states reported providing assistance for special education students through weights that recognize the excess cost of programs and services beyond general education. For example, *if additional special education costs are 90 percent above general education funding, the special education weight would be 0.90*; *the total student weight (including general education) would be 1.90.*[64] States may set limits on the percentage of students funded under weighted systems to limit costs and can include multiple or single weights for different categories of disability to reflect cost variations. When states use weights to fund special education, as general funding increases or decreases, so does special education funding. Weights treat special students equitably but provide no incentive for efficiency. Weights also vary widely across states. Some of the options used by states are highlighted in the following list:

[64] Parrish, T. B., & Verstegen, D. A. (1994). *Fiscal provisions of the Individuals with Disabilities Education Act: Policy issues and alternatives* (Policy Paper No. 3). Palo Alto, CA: American Institutes for Research, Center for Special Education Finance. For seminal work on special education costs, see Rossmiller, R. A., Hale, J. A., & Frohreich, L. E. (1970). *Educational programs for exceptional children: Resource configurations and costs* (National Education Finance Project, Special Study No. 2). Madison: University of Wisconsin. Verstegen, D. A. (1994). *Fiscal provisions of the Individuals with Disabilities Education Act: Historical overview* (Policy Paper No. 2). Palo Alto, CA: American Institutes for Research, Center for Special Education Finance.

- Several states (e.g., **Maryland**, **Oregon**, and **Utah**) use a single weight to fund special education programs.
- **Arizona** has 10 weights and Oklahoma has 12 weights based on a student's disability (e.g., orthopedic impairment, visual impairment).
- **Texas** has nine weights based on instructional arrangements (e.g., resource room, self-contained), including a weight (an additional 0.10) for "mainstreamed students."
- **Hawaii** uses four broad categories of need coupled with hours a week that services are rendered. Indiana has five categories of support.
- **Iowa** provides three weights based on need: 0.72, 1.21, and 2.74.
- **Delaware** and **Kentucky** have three broad weighted categories based on exceptionality. For example, Kentucky provides funding for children and youths with *mild, moderate, and severe* disabilities, weighted 0.24, 1.17, and 2.35, respectively.

Table 2.2. State Allocation Policies for Special Education

Allocation Mechanism	*State*
Per pupil/Weighting (20)	AZ, FL, GA, HI, IA, KS, KY, LA, MD, MO, NY, OH, OK, OR, SC, TN, TX, UT, WA, WV
Cost reimbursement (7)	AR, IN, ME, MI, MN, NE, VT, WY
Unit (6)	AL, DE, ID, MS, NV, VA
Census (9)	CA, ID, IL, MA, NJ, NC, ND, NM, PA
Other (16)*	AL, AR, CA, CO, CT, ID, IL, MD, MN, MT, NH, NY, ND, OR, SD, WA

*Multiple methods are used in some states.

Cost Reimbursement and Unit Based Funding of Special Education. States also use cost reimbursement methods to support special education. These methods usually define eligible cost-categories and the percentage of these costs that will be reimbursed by the state. Seven states currently use this approach. In addition, six states use instructional *unit* approaches that pay for teachers, generally based on need or the number of students served. **Nevada** uses this "unit" approach to pay for special education and related services.

Census-Based Funding of Special Education. A new category of interest is census-based funding. It provides funding based on an overall percentage of total students in a school district, not on the basis of the number of students eligible for special education and related services. Thus, this model provides no fiscal incentives for classification yet provides funding for special education programs and related services. **California** uses this model and reports that it is based on the assumption that over reasonably large geographic areas, the incidence of disabilities is

relatively uniformly distributed. New Jersey's new funding system for special education also uses a census-based method of funding.

Other Approaches to Funding Special Education. Sixteen (16) states report "other" funding approaches that may be used in combination or singularly. **Alaska** provides a block grant to districts that funds special students, including vocational education, gifted and talented, and bicultural/bilingual students. Illinois and several other states use additional types of funding for special education such as personnel reimbursement, and preschool and private school placement funding allocations.

Another common example is to couple census funding with "other" state assistance for extraordinary or, what are often referred to as catastrophic, costs a district may incur for the most severely involved students with disabilities. Several states report funding extraordinarily high-cost, exceptional students. For example, **Alabama** reports a "catastrophic" funding category for this purpose, Connecticut reports an Excess Cost Grant for extraordinary costs a school district may incur for special education students, defined as 4.5 times the prior year's average cost per pupil. Massachusetts has a "circuit breaker" that provides state funds for special education costs above 4 times the foundation budget at 75 percent of costs.

Funding for Low-Income/At-Risk Students and ELLs

Several states report providing supplemental funding for low-income/at-risk students and English language learners, as shown in Tables 2.3 and 2.4. Appendix E provides a short description of state-by-state funding provisions for low-income students or students at-risk of dropping out of school. Appendix F provides a listing of weights states use for funding low-income/at-risk students. A state-by-state description of funding mechanisms for English language learners/limited English proficient students is shown in Appendix G. A listing of ELL funding and weights is provided in Appendix H. State funds for low-income students are supplemented by federal aid under Title I of the Elementary and Secondary Education Act, also called the No Child Left Behind Act.

Most states use weighted approaches to address the needs of low-income/at-risk students and ELLs. Variations among these states include the eligibility requirements put in place and whether the funding adjustment occurs inside or outside the major finance system. In addition, formulae for low-income/at-risk students may be used to target funding to a school based on federal free and reduced price lunch (FRPL) participation (which defines eligible incomes), but once funding is received at a school site, it is available to redistribute based on particular needs, such as low test scores or remediation that are identified by the school district.

Currently, 36 states supplement the general state finance system for low-income students, a proxy for low achievement and/or being at risk of dropping out of school. There are 14 states that do not provide additional funding for these students, including **Nevada**. A few states base

funding directly on the number of students in need of remediation, which is a notable change from the past when funding was based on the number of students eligible for the FRPL program—the factor most used today. For example:

- In **Kentucky**, the eligibility criterion is based on free lunch recipients only.
- In **Michigan**, it is free breakfast, lunch, or milk pupils.
- In **Iowa**, eligibility is based partially on both the free or reduced-price lunch count and the enrollment of the school district used for the budget.
- In **Kansas**, participation is based on free meals, with additional funds based on density and nonproficient at-risk students.

Table 2.3. State Funding Mechanisms for Low-Income/At-Risk Students

Program/Policy	*Yes—36*	*No—14*
Low-Income/ At-Risk Funding	AL, CA, CO, CT, DE, GA, HI, IL, IN, IA, KS, KY, LA, MA, MD, ME, MI, MN, MS, MO, NE, NH, NJ, NY, NC, OH, OK, OR, PA, SC, TN, TX, VT, VA, WA, WI	AK, AZ, AR, FL, ID, MT, NV, NM,ND, RI, SD, UT,WV, WY

Survey information revealed that some states provide additional funding based on performance, or provide assistance for students at-risk of dropping out of school. For example:

- **New York** provides state support for students who are at-risk of not meeting learning standards.
- **South Carolina** provides funding directly for students who fail to meet statewide standards in reading, writing, and mathematics or who do not meet the first-grade-readiness test standards.
- In **Delaware**, an Academic Excellence unit is provided for each group of 250 pupils. Funds also are provided for extra time for students at risk of not meeting state standards in core subjects.

Weights vary but range from an additional 0.05 in **Mississippi** to 0.97 in **Maryland**. The average weight is 0.29—or an additional 29 percent funding per pupil beyond the base.[65] However, most states provide about an additional 0.20 to 0.25 in funding for low-income students and

[65] The ELL and low-income range and average reflect computations of single weights reported by states not multiple or sliding scale weights.

target eligibility on either federal FRPL status or both. The following states provide these additional percentages:

- **Missouri,** 25 percent
- **Kentucky**, 15 percent
- **Georgia**, 31 percent
- **Minnesota**, 100 percent for free lunch recipients and 50 percent for reduced-price lunch recipients
- **Kansas**, 45.6 percent
- **Georgia**, 53.37 percent

Some states provide funding on a sliding scale based on prevalence rates (concentrations) of students that are low income, because larger concentrations of low-income students incur higher costs, on average. This is a new area of support that emerged in survey findings.

- In **Arkansas**, for a school district in which 90 percent or more students are eligible for FRPL, the state provides an additional $1,488 per pupil. For 70 percent to 90 percent, additional funding is $992. For less than 70 percent, additional funding is $496 per pupil.
- In **Kansas**, a weight of 45.6 percent is used with additional funds available for high or medium density. For example, for high density (students on free meals exceed 50 percent of total district enrollment) or a density of 212.1 students per square mile and a free lunch percentage of at least 35.1 percent and above—districts receive 0.10 per at-risk student.
- In **New Hampshire**, differentiated funding varies by school based on the rate of free and reduced-price lunch recipients from 12 percent (additional funding of $863 per student) to above 48 percent (additional funding of $3,450 per student).

Depending on the overall context of the funding allocation system and the supplemental manner in which the differentiated needs of students may be addressed, lack of formula funding may put school districts in a position of having to make a false choice: either take funds from the general education program to pay for high-cost students at-risk of failing academically and/or dropping out of school or ignore the special needs of these students altogether.

Funding for English Language Learners

Funding for ELLs, bilingual education, or students with limited English proficiency (LEP) is a growing area of interest across the states. These funding policies are shown in Table 2.4 by state and are described in Appendix G. Appendix H provides an illustrative listing of state funding approaches for ELL students including weighted approaches. Federal aid for ELL is provided through Title III, Part A—English Language Acquisition—under the Elementary and Secondary Education Act.

Currently, more than 85 percent of states provide additional support for ELL or LEP students. Only eight states, including **Nevada**, do not provide funding for ELL/LEP students.

Table 2.4. State Funding Mechanisms for ELLs

Funding Policy	*Yes—42*	*No—8*
English Language Learner/ Limited English Proficient	AL, AK, AZ, AR, CA, CT, FL, HI, ID, IL, IN, IA, GA, KY, KS, LA, ME, MD, MA, MI, MN, MO, NE, NH, NJ, NM, NY, NC, ND, OK, OH, OR, RI, TN, TX, UT, VA, VT, WA, WI, WV, WY	CO, DE, MS, MT, NV,PA, SC, SD

States support English language learners through a variety of funding methods, including weighted approaches as well as with block grants, per-pupil funding, unit funding, and lump-sum general state appropriations. Weights vary widely from 0.10 in **Texas** to 0.99 in **Maryland**. The average weight is 0.387, or another 38.7 percent in funding. Selected approaches for the states follow:

- **Wyoming** provides a full-time teacher for every 100 ELL students.
- In **Arizona**, a weight of 0.115 is included in the basic state aid calculations.
- **Florida** reports funding for speakers of other languages weighted at 0.147.
- The new weighted-student formula in **Hawaii** supports ELL students at 0.2373 of general education aid.
- **Iowa** provides an additional 0.22 per pupil.
- **Missouri** supports LEP students at 0.60 of Basic Aid when the count of students exceeds the statewide threshold, currently at 1.1 percent of the district's average daily attendance.
- **New Jersey** provides an additional 0.50 for a student who is limited English proficient (LEP). If a student is both LEP and low income, the weight is 0.125.

Only three states **provide no additional support** for either compensatory education or English language learners: **Nevada**, **Montana**, and **South Dakota**.

Funding for Remote and Small Schools

Table 2.5 lists states that provide funding for remote and small schools through their finance system. Appendix I provides a short description of each state's provision for distributing these funds to school districts. As shown, 32 states recognize size and/or sparsity of small schools or districts.[66] Small size is used to adjust funding in 25 states; 15 states provide assistance to isolated school districts with some states employing both adjustments. Eighteen states do not include either factor in their funding system while several states include both.

Table 2.5. State Funding Mechanisms for Sparsity/Density of Small Schools

Program/Policy	*Yes—32*	*No—18*
Sparsity/Density or Small Schools	AK, AZ, AR, CA, FL, HI, ID, IN, IA, KS, LA, ME, MI, MN, MO, NV, NM, NY, NC, ND, OH, OK, OR, SD, TX, UT, VT, VA, WA. WV, WI, WY	AL, CO, CT, DE, GA, IL, KY, MD, MA, MS, MT, NE, NH, NJ, PA, RI, SC, TN

The following represents some highlights of how different states incorporate size and sparsity into their finance system for K–12 schools:

- **Florida** has a sparsity index that recognizes the relatively higher operating cost of smaller districts due to sparse student populations.
- **Kansas** employs a linear transition formula ranging from 100 to 1,622 students. Districts with fewer than 100 students have a low-enrollment weight of $3,993.42 per pupil. Each increase or decrease of one pupil changes the low-enrollment weight down or up (i.e., inversely to the enrollment change). High enrollments of 1,622 and over are weighted an additional 0.03504 times the Basic State Aid Per Pupil (BSAPP).
- In **New Mexico**, the following types of schools and districts qualify for additional aid:
  - Schools with fewer than 200 elementary and junior high school pupils
  - Districts with fewer than 200 or 400 senior high school pupils

[66] See also Grider, A., & Verstegen, D. A. (2000). Legislation, litigation and rural & small schools: A survey of the states. *Journal of Education Finance*, *26*(1), 103–120.

    - Districts with between 4,000 and 10,000 average daily membership (ADM), but fewer than 4,000 ADM per high school
    - Districts with fewer than 4,000 total ADM
- In **Oklahoma**, school district size of 529 or less is weighted in the State Aid formula with a Small School District Weight.
- **Wyoming** uses multiple adjustments to provide needed teachers based on size. An elementary school with fewer than 49 pupils in average daily attendance receives one full time teacher for every 7 students and one assistant principal position. If it has more than 49 students, then it receives a minimum of 6 teachers.

Other Individual Student Needs and Characteristics

There are a variety of other weights/adjustments states use to tailor funding systems to meet unique student and district needs in K–12 education. For example, approximately 28 states, including **Nevada**, fund vocational education, or career and/or technical education. In **Louisiana**, students in vocational education have a supplemental cost weight of 0.06. **Hawaii** adds a supplemental cost weight for transient students of 0.05. In **New Jersey**, security aid is a component of the funding system. In **Alaska**, a cost differential is incorporated into the funding system. **Pennsylvania** and **Maryland** employ geographic cost of education adjustments.

In addition to weights for student characteristics and needs, the most prevalent type of funding weights used across the states is for different grade levels. These modify base funding amounts by grade level within a school. For example, **Hawaii** provides supplemental weights for grade-level differences, which are as follows: 0.15 for K–2, 0.0347 for elementary school, 0.1004 for middle school, and 0.0240 for high school.

Gifted and Talented Funding Policy

Another area of funding for special student characteristics emerging from the survey findings is for gifted and talented students (G&T). Information on funding for G&T students is shown by state in Table 2.6; Appendix J describes each state's policy for financing gifted and talented students. Currently, 33 states provide additional funding for G&T student programs as part of their finance system; 17 states, including **Nevada**, do not provide separate G&T funding.[67]

- In **Arkansas**, an incremental weight of 0.15 is provided per pupil based on 5 percent of the school district's ADM the previous year.
- In **Virginia**, the state provides one instructional position per 1,000 eligible students.
- **Hawaii** has an incremental weight for gifted and talented students of 0.0265 for an estimated 3 percent of the school's total population.
- **Louisiana** reports an incremental weight of 0.60 for gifted students.

[67] Nevada does not receive additional federal aid for gifted and talented students.

Table 2.6. State Funding Mechanisms for Gifted and Talented

Funding Policy	*Yes—33*	*No—17*
Gifted and Talented	AK, AR, CA, CO, FL, GA, HI, ID, IA, IN, KY, LA, ME, MD, MN, MS, MO, MT, NJ, NM, NC, ND, OH, OK, PA, SC, TN, TX, UT, VA WA, WI, WY	AL, AZ, CT, DE, IL, KS, MA, MI, NE, NV, NH, NY, OR, RI, SD, VT, WV

Only two states, **South Dakota** and **Nevada**, report ***no additional state funding*** *for any of the following student needs and characteristics*: **compensatory/at risk students, English language learners, or gifted and talented students**.[68]

Summary

Nevada provides funding to public schools using a foundation program—the finance system used in whole or in part in 45 states. However, Nevada's funding system was created in 1967, and it has changed little over the past nearly 50 years. It generally lacks support for individual student needs and characteristics. Much has changed since the state initiated the *Nevada Plan* in 1967. Nevada was mainly a rural state then with greater homogeneity—but student diversity has grown enormously since that time. Yet, Nevada is one of only two states that does not fund low-income/at-risk students, English language learners, or gifted and talented students. Moreover, small and remote schools do not receive additional state aid. As the committee that recommended the *Nevada Plan* stated at the time, "Future experience may dictate necessary changes not indicated by today's conditions." Perhaps that time has arrived in the Silver State.

[68] Note the inclusion of Nevada in this statement reflects how the Nevada Department of Education responded to the survey item.

Chapter 3—Identifying Adjustments Used to Address Cost Factors

Defining Cost Factors

The main motivation behind this study is to investigate adjustments that might be made to the Nevada school finance system to improve the equity with which it allocates funding to districts based on the needs of the student population served, as well as regional characteristics that affect the costs of providing educational services. This is well-aligned to general consensus in the field of education finance. Specifically, the research questions embedded in our investigation are responsive to a large body of work in the education finance literature that focuses on identifying factors that differentiate the costs of providing education among various settings. In the *Handbook of Research in Education Finance and Policy*, Duncombe and Yinger (2008) sum up the main factors thought to affect educational costs (*cost factors*):

> *Education costs can be affected by three categories of factors, each of which is outside of the district control: 1) geographic differences in resource prices, 2) district size, and 3) the special needs of some students. (p. 238)*

We operationalize these cost factors with the following definitions and explanations of how these factors affect the cost of providing similar educational opportunity across students with differing circumstances:

- *Student Needs*—Pupil characteristics that necessitate additional and/or specialized services, including low-income (eligible for free or reduced-price lunch [FRPL]), English language learner (ELL) designation, and enrollment in special education programs.

  Students from low-income families, whose first language is one other than English, or who have been identified with a disability will require additional services to meet their needs to achieve state outcome standards. These additional services require the investment of additional personnel and non-labor resources, that is, additional costs. Vertical equity (i.e., ensuring students with varying needs have the same educational opportunities) will require the state to ensure the provision of additional dollars for schools and districts who have larger shares of these special need populations of students.

- *Scale of District Operations*—Geographic and population characteristics of a school district, including enrollment (number of students served by a district) and student population density (district enrollment divided by the area of a district in square miles).

  Scale refers to the factors that may result in costs associated with the diseconomies of small school districts. In fact, scale is really a short-hand term for a combination of factors that include the size as measured by enrollment; density, as measured by the enrollment per square mile; and sparsity of population (as reflected in the dispersion of population within a geographic area). Remote rural districts that are located far away from more urbanized communities may require schools to operate at

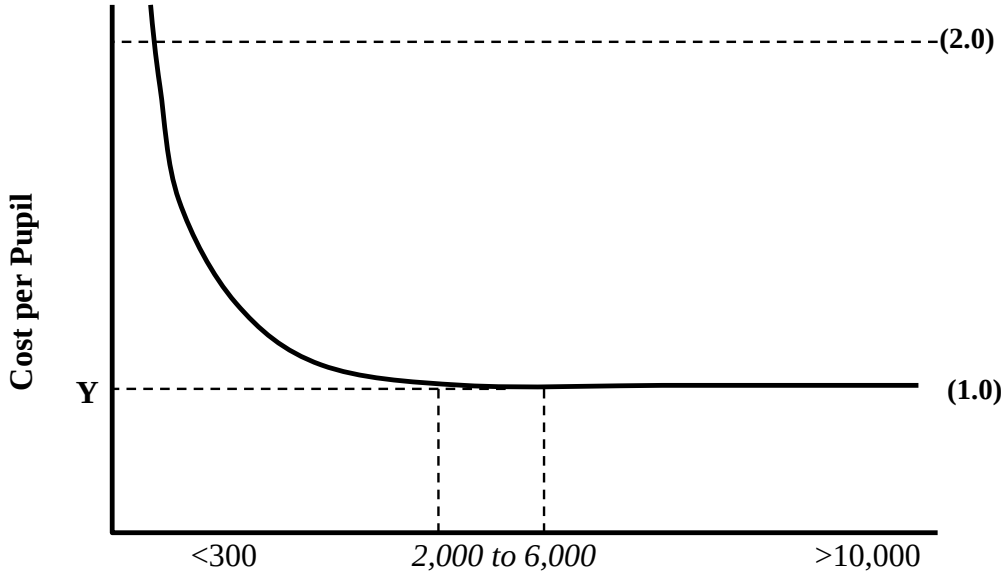
necessarily small sizes because of the cost of transporting children to and from schools—that is, to avoid children spending inordinate amounts of time on school buses. Such schools will be small and will require replication of certain minimum levels of administrative and support costs (the services of principals, pupil support, and custodial personnel) and the combination of educational services across multiple grade levels (e.g., self-contained classes with three or more grade levels per classroom). Both of these factors will tend to raise the cost per pupil of providing quality educational services.

The cost perspective on economies of scale is of primary interest in school finance policy. This is because the measurement of cost differences across districts of varied size has direct implications for the design of state school funding formulas. For example, if it is found to cost 25 percent more than average to provide comparable education services in a district with only 300 pupils, then the state may choose to allocate an additional 25 percent aid per pupil. Legislators should be cognizant, however, of the anticonsolidation incentive created by such policies.

Figure 3.1 provides a general depiction of how unified (K–12) school district per-pupil operating costs vary with district size, holding outcomes, and other factors constant (from Baker, 2005).[69] Y represents the per-pupil costs of achieving a specific level of student outcomes in a district that is scale efficient (2,000 to 6,000 or more students). This cost is set to 1.0 (1 x basic cost). Costs rise for smaller districts along a curve, increasing gradually for districts with below 2,000 students down to 1,000 students, then increasing more sharply approaching 300 students and fewer. In studies of marginal costs associated with economies of scale, the marginal costs for the smallest districts range from about 20 percent to 100 percent above basic costs in scale efficient districts.

[69] Baker, B. D. (2005). The emerging shape of educational adequacy: From theoretical assumptions to empirical evidence. *Journal of Education Finance, 30*(3), 277–305.

Figure 3.1. General Depiction of the Relationship Between Per-Pupil Operating Costs and District Size



- *Geographic Differences in Resource Prices*—Differences in the costs to hire similarly qualified staff across different regional labor markets.

  Adjustments for this cost factor focus on assessing the geographic variations in the cost of providing educational services across arising out of differences in the labor markets within which districts operate. It attempts to answer the following question:

  "How much more or less does it cost to recruit and employ comparable teachers, administrators, and other school staff in different locations throughout a state?"

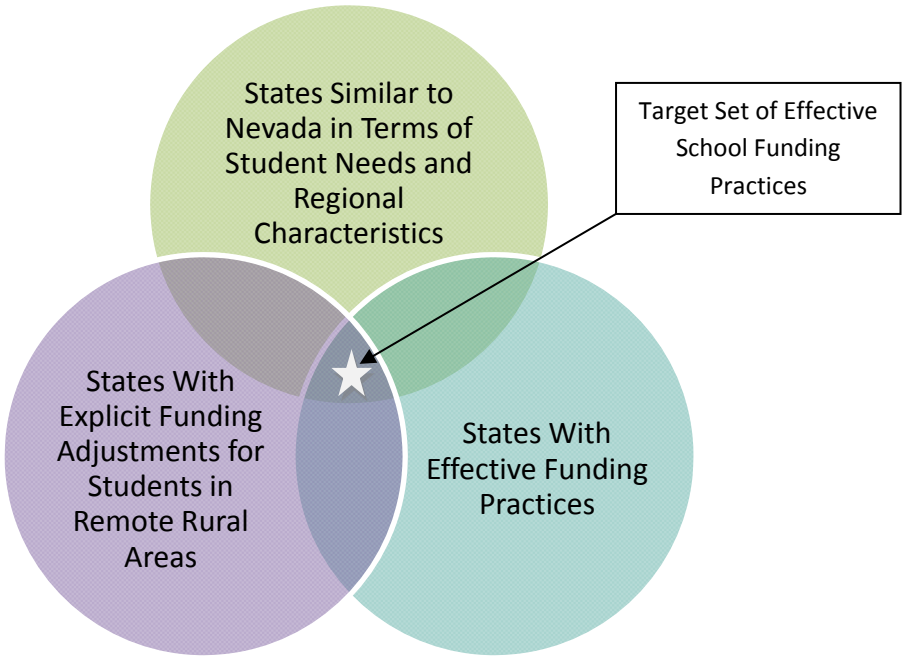
  Ideally, to properly control for the true variation in staffing costs across labor markets (districts), one must utilize estimate that reflects factors that are solely outside the control of local school district decision makers. That is, one cannot simply compare the average salaries of teachers and other educational staff across districts, as these reflect preferences of the demand rather than the supply side of the market (for instance, the preference of some districts to pay much higher wages regardless of what the going rate is for teachers in their immediate labor market).

General Methodology

The proscribed methodology developed in the original scope of work dictated a sequential approach in which the research team would first identify five states that were similar to Nevada in terms of various cost factors related to student needs (poverty, English language learners, special education) and scale of district operations (district size in terms of enrollment, degree of remoteness, etc.). Next, it would be determined whether or not each of the five similar states included an adjustment mechanism in its school funding systems for the differential costs of providing education to students in remote rural areas. Any states that did not incorporate such an adjustment in their funding system would be discarded and replaced with an alternative state that did make use of such an adjustment. As a final step, the funding mechanisms of this group of similar states that also made use of rural remote funding adjustments would be evaluated for effective practices in terms of funding adjustments to account for the differential costs of serving students in remote rural areas but also for student needs. The application of these cost adjustment practices would then be simulated in the context of the Nevada state funding system.

Figure 3.2 depicts the intersection between this state selection criteria and identification of effective practices in a Venn diagram, where the intersection of all three circles denoted by the star in the diagram represents the target set of states with effective funding practices, necessarily including remote rural adjustments, that are similar in terms of student needs and regional characteristic to Nevada.

Figure 3.2. Venn Diagram of Selection of States to Identify Effective Funding Practices



This chapter provides more in-depth descriptions of the research steps taken to identify similar states and the effective funding practices used to address each of the various cost factors.

Determining Similar States

Selecting comparison states to serve as Nevada's "peers" with respect to student needs and district characteristics required compilation and synthesis of a broad collection of extant, publicly available data sets containing demographic, administrative, organizational, and fiscal information. These data were used, as proposed, to investigate and characterize the diversity of districts within states along types of dimensions: student needs, district remoteness and rurality, and revenue sources.

Selecting states similar to Nevada is a difficult task given the heterogeneity of states and Nevada's uniqueness. Because no common algorithms exist for selecting similar entities based on the types of data and criteria involved, the research team developed a relatively straightforward methodology. The approach identifies states that are similar to Nevada with respect to the variables of interest by focusing on average district-level measures of student needs, district remoteness, and revenue sources within groups of districts categorized by four locale classifications. The locale area classifications are determined by the National Center for Educational Statistics for every school district in the nation, which denote the degree of remoteness based upon population and proximity to urban areas. These four main locale types within which districts have been analyzed are as follows: (1) City, (2) Suburb, (3) Town, and (4) Rural. The table in Appendix K provides the formal definitions of each locale types. Table 3.1 summarizes the data sources for the key variables used in this analysis.

To facilitate comparisons between Nevada and other states, averages across districts for each of the variables listed below were calculated by locale group within each state. This meant that for each variable of interest, we were actually making four distinct comparisons between Nevada and each state, one for each locale type. For example, the average poverty across districts in Nevada was calculated for the City, Suburb, Town, and Rural districts separately and these were compared with similar locale-specific district averages in other states.

The process of making these comparisons was automated. For each variable of interest, each of the locale-specific averages across states were sorted and ranked. Any states that fell within seven positions in the rankings above or below Nevada were then identified as similar for that variable/locale combination. To summarize all of these lists, a score was given to each state for each variable of interest, which indicated the number of locales in which the state ranked similar to (within seven rankings of) Nevada. These scores ranged from 0, meaning no locales in the comparison state showed averages similar to Nevada, to 4, which indicated every locale average was deemed similar. For example, Colorado received a score of 4 for the percent of ELL students. This meant that Colorado had comparable average percentages of ELL students for

City, Suburban, Town, and Rural school districts compared with the same types of school districts in Nevada. North Dakota, conversely, received a score of 0, which meant that none of the locale-specific averages for ELL students was similar between this state and Nevada.

Table 3.1. Data Sources Used to Identify Similar States

Dimension	Analysis Variables	Contributing Data Source
Student Needs	Percent English Language Learners	National Center for Education Statistics (NCES) Common Core School and District Data
	Percent Special Education	
	Percent FRPL Eligible	
	Percent Poverty	U.S. Census Small Income Area Poverty (SAIPE) Data
Remoteness and Rurality	Student Density	• National Center for Education Statistics (NCES) Common Core School and District Data • US Census Bureau—TIGER/Line® Shapefiles
	Herfindahl Index[70]	National Center for Education Statistics (NCES) Common Core School and District Data
	Percent of Districts by Locale	
	Percent of Statewide Enrollment by Locale	
	District Enrollment Size	
Revenue Sources	Percent of Revenue From Local Sources	National Center for Education Statistics (NCES) Common Core District Finance Data
	Percent of Revenue From State Sources	
	Percent of Revenue From Federal Sources	

Table 3.2 contains the results of this analysis. Each column in the table represents one of the dimensions of student needs and scale of operations that were analyzed. For example, the first column of the table indicates that Colorado, Delaware, Kansas, Montana, South Dakota, and Wyoming were all deemed similar to Nevada in terms of the incidence of student poverty or low-income status. Although these results are interesting, they do not offer clear patterns of states that are consistently similar to Nevada across all or even a majority of the student need and regional characteristic dimensions considered.[71]

[70] The Herfindahl Index is used to measure the within-district concentration of the schooling market. The index ranges from 0 to 1, where lower values denote a lower market concentration where the proportion of districtwide enrollment is more evenly shared across schools, while higher values indicate that there is a more uneven distribution of enrollment share across schools in the district.

[71] Although within categories of these dimensions, there are states that are similar across multiple dimensions (e.g., Colorado with respect to student needs, Florida with respect to regional characteristics, etc.).

Table 3.2. States With Similar Within-Locale Characteristics										
Student Needs			Scale of District Operations					Revenue Sources		
Percent Poverty or FRPL Eligible	Percent English Language Learners	Percent Special Education	Student Density	Herfindahl Index	Percent of Districts by Locale	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		

Given these findings, the general methodology put forth above, although perfectly logical, must be modified somewhat to accommodate the reality that Nevada is truly unique in terms of the combinations of student needs, scale of district operations, and composition of revenue sources. To this end, we have broadened our approach to identify the most effective practices with respect to the differential funding of student needs (low-income, English language learners, and special education) and remote/rural populations to encompass all states. Once those states using the relatively most effective practices in each of these areas are identified (and the practices simulated in the context of Nevada's state funding system), we point out whether they also happen to be similar to Nevada along this dimension.

Identifying Cost Adjustments

The following section describes the analyses used to identify the funding practices thought to be most effective across states, which are later used in the simulation model presented in Chapter 4. Different methods were drawn upon to identify funding practices that could be considered effective with respect to each of the cost factors. As different methods were employed to identify effective practices for the various cost factors, the descriptions are organized around each of these approaches as follows:

Table 3.3. Approaches Used to Identify Cost Factor Specific Funding Practices

Cost Factor	Approach Used
• Student Poverty • Scale and Student Density	• Empirical Analysis of Implicit Funding Weights Across States
• Special Education • Geographic Differences in Labor Prices	• Mainstream Education Finance Literature
• English Language Learners	• Evaluation of Explicit Funding Weights Used in Other States

Identifying Student Poverty Cost Adjustments

To identify which states employ more effective funding practices with regard to accounting for the differential costs of students that are impoverished or being served in remote rural areas, we relied on a statistical analysis that estimates the relationships between funding per-pupil and the student poverty and regional characteristic cost factors, respectively. It is important to note that this approach provides estimates of the *implicit funding weights* or those relationships between per-pupil funding and cost factors that occur as an end result after a state-specific combination of multiple funding policies have interacted with one another. This is in stark contrast to the evaluation of those *explicit funding weights* described in Chapter 2 that represent the specific funding adjustments for various cost factors established by states as individual components of their finance systems, the intended effects of which may not be ultimately realized after they have been fully interacted with the other funding policies. With

this distinction in mind, the authors feel that the analysis of implicit funding weights is a superior method to identify effective funding practices. In effect, this empirical approach provides a measure of the net impact of the various features of a school funding formula.

The model we use to estimate implicit poverty funding weights closely follows that used in the recent *School Funding Fairness* report by Baker, Sciarra, and Farrie (2010).[72] Using a three-year panel of data on all school districts across the United States, we estimated state-specific models of the relationship between state and local revenues per pupil and various factors that influence the costs of providing equal educational opportunity. Next, we use that model to project whether each state's school finance system tends, on average, to provide more resources to school districts with higher concentrations of children in poverty than to districts with fewer children in poverty. We identify states with *progressive* (more resources to higher poverty districts) versus *regressive* (more resources in lower poverty districts) state school finance systems.

Specifically, our model corrects for (controls for) differences in school district size and population density to capture costs associated with sparsity and economies of scale, and we control for competitive wage variation using the National Center for Education Statistics (NCES) Comparable Wage Index (CWI). Although the main models make use of the district percent of students eligible for FRPL reported in the NCES Common Core Data as the measure of student poverty for each local public school district, we have also run models that employ the district percent of students in poverty per the Small Area Income Area Estimates (SAIPE) generated by the U.S. Census Bureau Poverty Rate.

State/Local Revenue per Pupil = *f*(Poverty, District Size, Student Density, Wages)

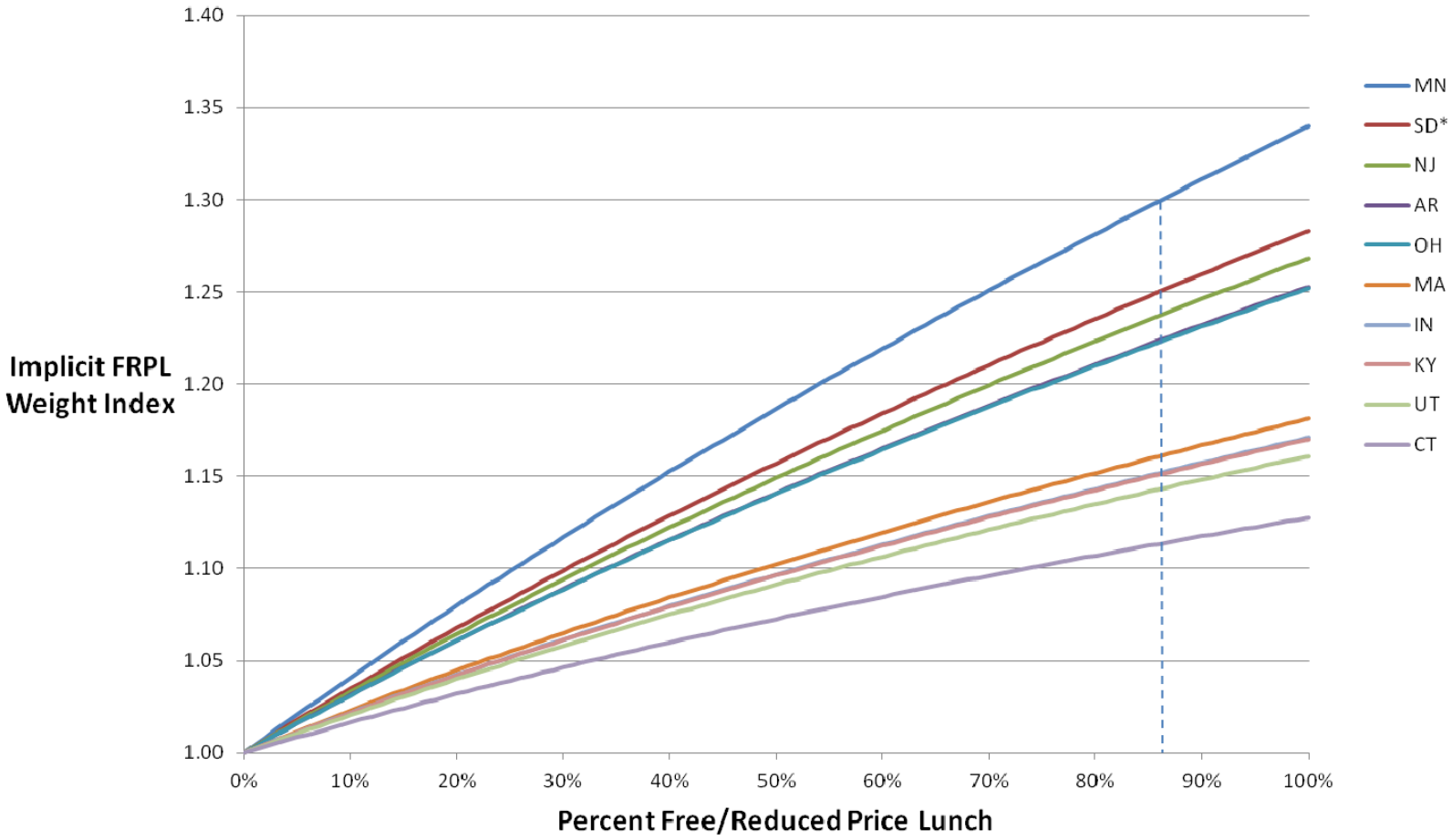
The most recent school funding fairness report, just released in June 2012, used data from 2006–07, 2007–08, and 2008–09. Here, we provide an update of the fairness profiles, including data from 2007–08 through 2009–10 (recently released data).

The models were run separately for each state to obtain individual relationships between state/local per-pupil funding and district percent FRPL or state-specific implicit poverty funding weights. The similar set of state-specific models was then run using the SAIPE poverty measure instead of FRPL. After omitting the state-specific estimates that did not prove to be statistically significant using both models, those corresponding to the FRPL models were rank ordered.[73] The largest 10 of these statistically significant estimates, representing the most progressive relationship between per-pupil funding and poverty, were selected as the most effective practices across the states.

[72] Baker, B. D., Sciarra, D. G., & Farrie, D. (2010). *Is school funding fair? A national report card*. Newark, NJ: Education Law Center. Retrieved from http://www.schoolfundingfairness.org/National_Report_Card_2010.pdf

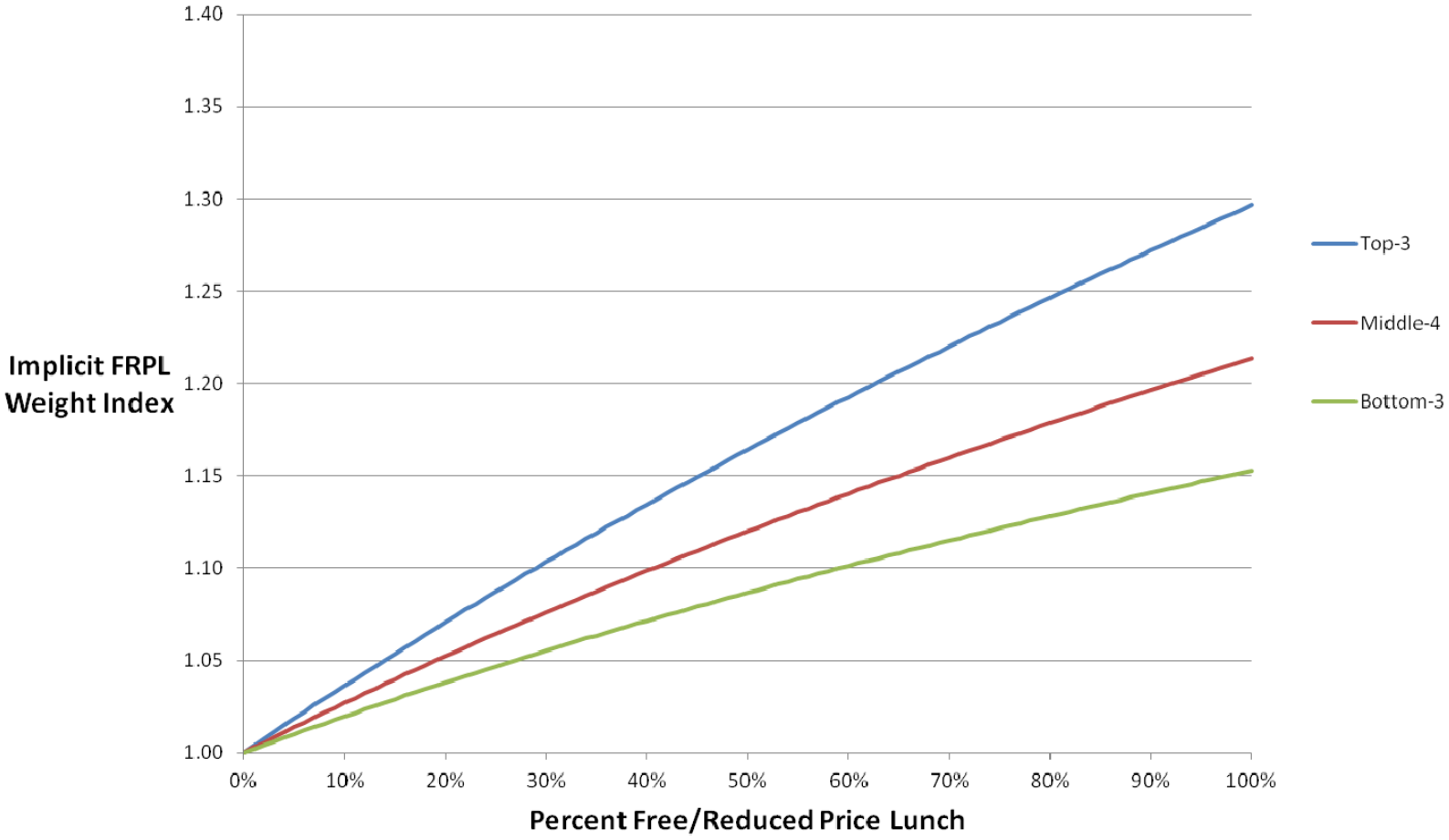
[73] "Statistically significant" implies that the estimated relationships were larger than would be expected by chance. The conventional 5 percent-significance level was used to make these determinations.

Figure 3.3 - Largest 10 Implicit Free/Reduced Price Lunch (FRPL) State/Local Revenue Funding Weight Profiles (FY 2009-10)



* South Dakota was deemed to have relative incidences of students eligible or receiving free/reduced price lunch across its City, Suburb, Small Town and Rural districts similar to Nevada.

Figure 3.4 - Average Implicit Free/Reduced Price Lunch (FRPL) State/Local Revenue Funding Weight Profiles for Top-3, Middle-4 and Bottom-3 (FY 2009-10)



The states associated with these most progressive funding/poverty relationships were as follows: Minnesota, South Dakota, New Jersey, Arkansas, Ohio, Massachusetts, Indiana, Kentucky, Utah, and Connecticut. Note that South Dakota also was identified as one of the states whose incidence of students in poverty across its Urban, Suburban, Small Town, and Rural districts was similar to that of Nevada.

Figure 3.3 illustrates the estimated relationships for these states as implicit funding weight profiles. The horizontal axis denotes the district-level percent of FRPL students while the vertical axis represents the implicit poverty funding adjustment. The funding adjustment index values reveal the difference in state/local per-pupil funding that is expected from a district with a specific percent of its students in poverty relative to a district serving no students in poverty. For example, the vertical dotted line at 86 percent FRPL intersects the profile for Minnesota at 1.30, which says that in that state a district with 86 percent of its students in poverty is expected to receive approximately 30 percent more state/local funding per-pupil compared with an otherwise similar district with 0 percent poverty. Figure 3.4 displays the average profiles for the top-3, middle-4, and bottom-3 of the 10 most progressive profiles.

To obtain the implicit poverty funding weight, one simply has to evaluate the profiles at 100 percent poverty. For instance, evaluating the Minnesota profile at 100 percent poverty yields an index value of 1.34, which is how much more that state effectively funds an impoverished student relative to one that is not in poverty. Table 3.4 includes the implicit poverty funding weights associated with each of the estimated profiles presented in the two graphics. The estimated weights presented in the table are used as effective practice to address student poverty in the simulation presented in Chapter 4.

Table 3.4. States With the Most Progressive Implicit Poverty Weights

State	State-Specific	Averages
Minnesota	1.34	1.30
South Dakota	1.28	
New Jersey	1.27	
Arkansas	1.25	1.21
Ohio	1.25	
Massachusetts	1.18	
Indiana	1.17	
Kentucky	1.17	1.15
Utah	1.16	
Connecticut	1.13	

Identifying Scale of Operations Cost Adjustments

The identification of particularly effective state practices that adjust funding to take into account scale of district operations (district size in terms of enrollment and degree of remoteness and rurality) uses results from the same models as those presented earlier for the

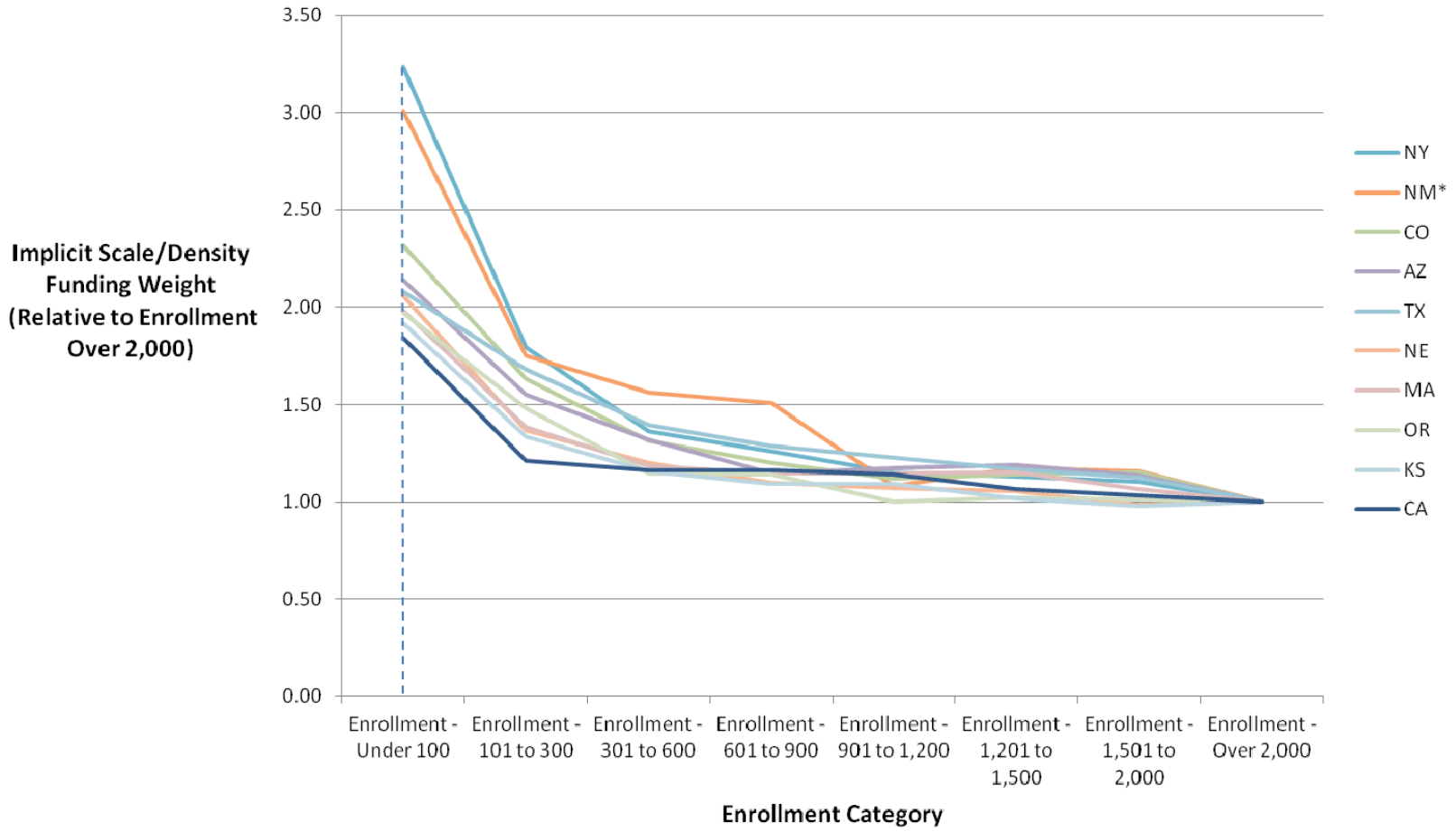
analysis of implicit poverty funding weights. Again, we have taken only the statistically significant estimates from the state-specific models and created scale/density profiles that can be used to create implicit weighting indices showing how much more each state funds smaller more remote districts relative to larger ones that are less remote.[74] Although the estimates used to generate the scale/density profiles are slightly more complicated than for poverty, the profiles themselves are easily interpreted in a similar manner.[75]

Figures 3.5 and 3.6 show the results for the 10 states that exhibit the most aggressive scale/density profiles (New York, New Mexico, Colorado, Arizona, Texas, Nebraska, Massachusetts, Oregon, Kansas, and California) and averages of the top-3, middle-4, and bottom-3 of these, respectively. It should be noted that out of these 10, New Mexico was the only state deemed similar to Nevada in terms of key scale characteristics (district enrollment and student density). That is, the profiles are those with the steepest at lower categories of enrollment. For example, in Figure 3.5 the dashed vertical line intersecting the implicit scale/density profile for New York shows that the average district with under 100 students has an implicit scale/index value of about 3.25, which suggests that such a district in that state receives approximately 225 percent more state/local funding per pupil than an otherwise similar district with 2,000 students or more (the reference enrollment category where the implicit scale/index equals 1.00). Using these results, the research team calculated formulas to generate smooth profiles that showed how relative funding varied by a continuous student count enrollment measure, which are ultimately used in the simulation model presented in Chapter 4.

[74] The profiles for each state were created by predicting the enrollment category-specific implicit scale/density funding weight value for the district with average density within each category.

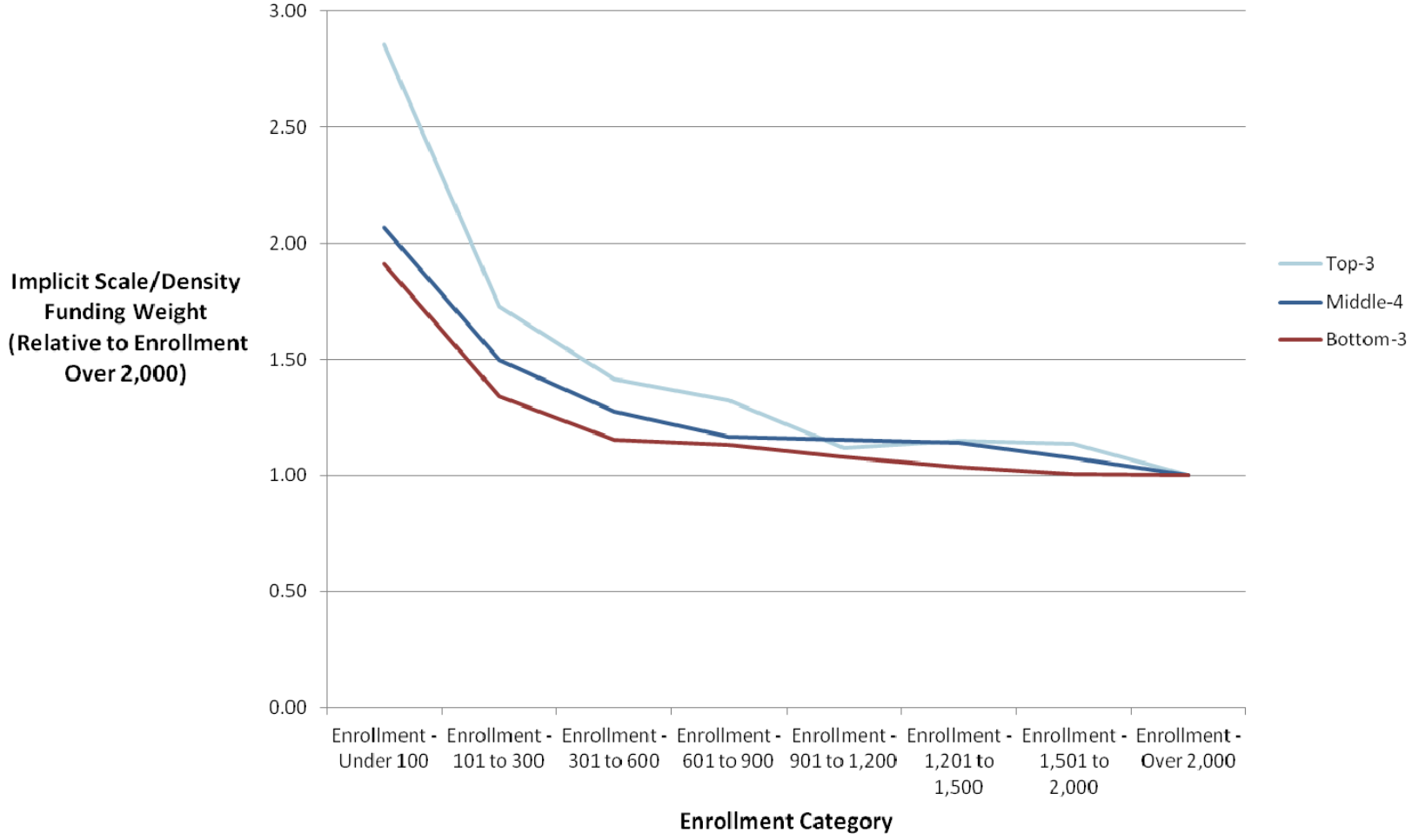
[75] The additional complexity exists because the model accounts for enrollment in terms of categorical indicators denoting enrollment ranges and interacts these dummy variables with a measure of student density.

Figure 3.5 - Largest 10 Implicit Scale/Density State/Local Revenue Funding Weight Profiles (FY 2009-10)



* New Mexico was deemed to have a similar average district size and student density across its City, Suburb, Small Town and Rural districts as Nevada.

Figure 3.6 - Average Implicit Scale/Density State/Local Revenue Funding Weight Profiles for Top-3, Middle-4 and Bottom-3 of Largest 10 (FY 2009-10)



Identifying Special Education Cost Adjustments

To identify special education funding adjustment weights that can be considered best practice we draw on data from a national study previously conducted by AIR for the Office of Special Education Programs (OSEP).[76] Since the inception of the Education for All Handicapped Children Act (EHA, and now commonly referred to as IDEA or IDEIA under its current reauthorization) in 1975 and even a few years before its inception, OSEP has conducted studies of special education spending about once every 10 years. The last of these studies conducted was carried out by AIR and produced a series of studies of the patterns of spending on special education across the United States and estimated the variations in spending for serving various student disability populations. A key product that came out of this work was the calculation of reliable per-pupil spending figures on students with various disabilities relative to per-pupil spending for the average regular education student (i.e., special education weights). These spending or cost ratios for special education students have ranged from about 1.9 in the earliest study (Rossmiller, Hale, & Frohreich, 1970) to 2.2 (Kakalik et al., 1981) to 2.3 (Moore, Strang, Schwartz, & Braddock, 1988), and 1.9 (Chambers, Pérez, Harr, & Shkolnik, 2005).

Each of the OSEP studies also examined the relative per-pupil spending on special education students for each one of the 12 disability categories. The latest of these studies by Chambers et al. (2005), which is referred to as the Special Education Expenditure Project (SEEP), developed estimates of these spending ratios by student disability based on analysis of a nationwide random sample of students with disabilities. Of all of the studies done, this was the largest and most comprehensive data collection and gathering of information about individual students from the most knowledgeable provider for that student. The data included detailed delineations of services, the amount of time the student spent in each of those services, and included the detailed resources devoted to providing both the regular and special education services received for those students. We believe that this analysis represent a reasonable basis and an objective source of data upon which to base a student weight and provides comprehensive evidence of *best practices* currently used to serve these students across the United States. A student weight is intended to reflect the relative cost of educating a student with a disability relative to a regular education student. The spending on special education students is based on services provided to those students as specified in their individualized education program (IEP), which is required under the federal IDEA legislation to define the specific special education services requirements for each child that is eligible. The IEP is a document that is intended to use the input from educational professionals and parents, and it specifies the goals for each individual student along with the services they believe are necessary for the student to achieve those goals.

[76]See 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.

For the special education cost simulations in Nevada, we used the 12 estimated SEEP weights corresponding to the disability categories recognized in the counts of special education students in the state. These weights are presented in Table 3.5, which shows the relative weights of students with disabilities using two alternative base weights: one shows the spending or cost ratio compared with a regular education student while the other shows the spending or cost ratio of a student with a disability compared with a special education student who is classified as having a specific learning disability (SLD).

Table 3.5. Specific Disability Category Weights

Student Category	Special Education Weight Using General Education Student as Comparison Group	Special Education Weight Using Student With Specific Learning Disability as Comparison Group
General Education Student	*Comparison group* 1.0	n/a
Specific Learning Disability (SLD)	1.6	*Comparison group* 1.0
Speech/Language Impairment (SLI)	1.7	1.1
Emotional Disturbance (ED)	2.2	1.4
Mental Retardation (MR)	2.3	1.4
Orthopedic Impairment (OI)	2.3	1.4
Other Health Impairment (OHI)	2.0	1.3
Autism (AUT)	2.9	1.8
Hearing Impairment/Deafness (HI/D)	2.4	1.5
Multiple Disabilities (MD)	3.1	1.9
Traumatic Brain Injury (TBI)	2.5	1.6
Visual Impairment/Blindness (VI/B)	2.9	1.8
Preschool (PRE) 2	2.0	1.3
Average Special Education Student	1.9	1.2

Source: Appendix B-1 of Special Education Expenditure Project (SEEP) Report 5, *Total Expenditures for Students With Disabilities, 1999–2000: Spending Variation by Disability* (Chambers, Pérez, & Shkolnik, 2003).

Chapter 4 details how the SEEP weights are used to simulate how special education funding could be allocated to Nevada school districts.

Identifying English Language Learner Cost Adjustments

A similar statistical model as the one used to identify effective funding practices for poverty and scale of operations was run in an attempt to uncover those practices that were most effective with respect to addressing the funding need associated with ELLs. However, because of the strong correlation between the incidence of students in poverty and ELLs (i.e., there is large

"overlap" in these populations such that English language learners also tend to be from low-income families), it was simply not possible to disentangle the relationship between per-pupil spending and the percent of low-income and ELL students. In turn, to identify the most effective ELL funding practices, we reviewed the explicit funding weights presented in Chapter 2.

Explicit ELL Funding Weights Used by States

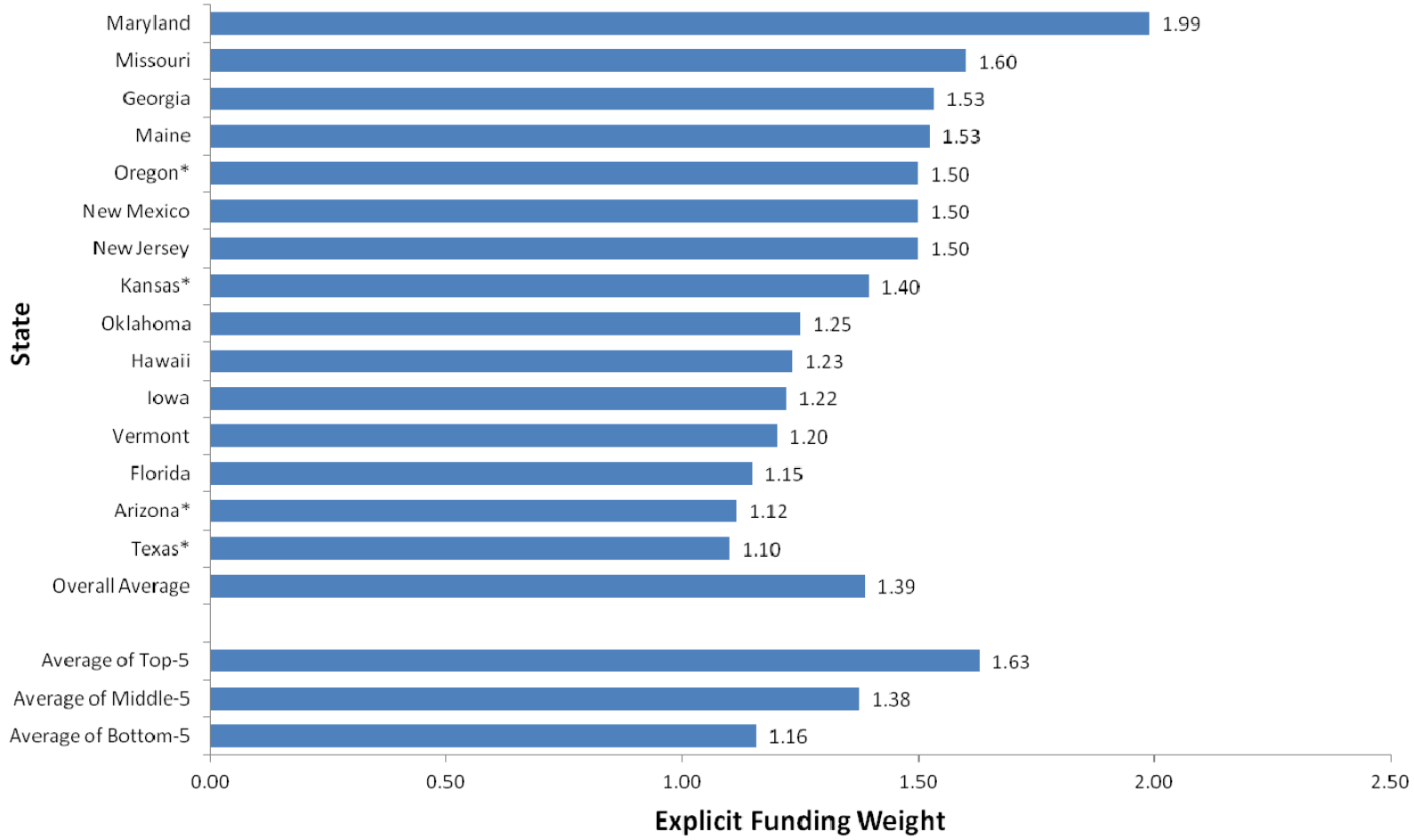
Using the inventory of state finance systems provided in Figure 3.7 illustrates the explicit ELL funding weights across all states as well as the average weight overall and for the largest, middle, and bottom 5, respectively. As can be seen from the figure, the weights vary widely ranging from 1.10 to 1.99, with an overall average of 1.39. The average of the top-, middle-, and bottom-5 are 1.53, 1.38, and 1.16, respectively. These figures are used in the simulation model presented in Chapter 4 that allows the user to see how the adoption of these various weights would play out in the context of the Nevada funding system.

A Note on Suggested Adjustments From Cost Studies

There is a large and growing body of studies coming out of the mainstream education finance literature that focuses on providing estimates of (1) the total cost of providing a sufficient education across districts within a state and (2) how costs vary across districts according to the three major cost factors (student needs, scale of operations, and geographic differences in labor prices).[77] These "costing-out" studies often provide alternatives to the existing implicit and explicit funding weights covered in this investigation that might be considered indicative of "best practice," as a key objective of this work is to identify the differential costs of providing an equitable opportunity for all students to meet a set of concrete educational goals regardless of their specific needs or characteristics of their district of residence. In contrast, it is unclear whether any of the state-specific explicit funding weights were designed to be aligned with producing the state's educational goals given the unique set of cost factors (student needs, scale of operations, and geographic variations in staffing prices). Although a systematic review of the suggested weights coming out of the costing-out literature was beyond the scope of the present study, the authors feel that it is most certainly a promising area of future research for the state.

[77] For a good overview of the main methods used in the costing-out literature, refer to the report by Chambers and Levin titled *Determining the Cost of Providing an Adequate Education for All Students* (Washington, DC: National Education Association, 2009).

Figure 3.7 - Explicit English Language Learner (ELL) Funding Weights Used Across States



Source: Deborah A. Verstegen, "Quick Glance at School Finance: A 50 State Survey of School Finance Policies and Programs Vol. I: State by State Descriptions", *2011*, http:schoolfinances.info.

Identifying Differential Wage Cost Adjustments

In the field of education finance, there is general recognition that districts located in different geographic regions of a state face differential costs of recruiting and employing comparable school personnel. Variations in the purchasing power of the educational dollar across local districts largely result from factors that are beyond local control. In general these factors include regional or district characteristics that affect the willingness of teachers and other professional personnel to supply their services to school districts in different regions of the state. Therefore, if a state is to provide equal access to similar educational resources in different parts of the state, the school finance formula should account for these differential costs of recruiting and employing school personnel.

To address this issue in the context of the current study, we have made use of the National Center for Education Statistics (NCES) Comparable Wage Index (CWI), which was designed to answer the following question:

> *How much more or less does it cost in different local school districts to recruit and employ comparable teachers and other school personnel?*

The CWI was originally developed by Lori Taylor and was published in Taylor and Fowler (2006) for NCES.[78] The CWI has been designed as an index of the labor market costs in various geographic locations controlling for differences in personal and industry characteristics. Taylor and Fowler (2006) describe the CWI as follows:

> *The basic premise of a comparable wage index is that all types of workers—including teachers—demand higher wages in areas with a higher cost of living (e.g., San Diego) or a lack of amenities (e.g., Detroit, which has a particularly high crime rate) (Federal Bureau of Investigation 2003). Therefore, one should be able to measure most of the uncontrollable variation in educator pay by observing variations in the earnings of comparable workers who are not educators.[79] The CWI reflects systematic, regional variations in the salaries of college graduates who are not educators. Provided that these non-educators are similar to educators in terms of age, educational background, and tastes for local amenities, the CWI can be used to measure the uncontrollable component of variations in the wages paid to educators. Intuitively, if accountants in the Atlanta metro area are paid 5 percent more than the national average accounting wage, Atlanta engineers are paid 5 percent more than the national average engineering wage, Atlanta nurses are paid 5 percent more than*

[78] The development of the CWI actually dates back to a more detailed analysis of the geographic cost of education index (GCEI) developed by Chambers (1998). Dr. Taylor's CWI provided a more readily available and simplified and easily understood approach to measuring geographic differences in labor market costs than Chambers original GCEI.

[79] See, for example, Rothstein and Smith (1997), Guthrie and Rothstein (1999), Goldhaber (1999), Alexander et al. (2000), Taylor et al. (2002), and Stoddard (2005).

the national average nursing wage, and so on, then the CWI predicts that Atlanta teachers should also be paid 5 percent more than the national average teacher wage.[80]

The index is designed to make use of those factors that affect labor supply to estimate differential patterns of compensation of school personnel across local school districts. That is, it predicts relative differences across labor markets in staff compensation rates using factors that are solely associated with labor market conditions outside of the control of the districts themselves and therefore represents the true differential costs of hiring and retaining staff across different regions. Appendix L provides a more detailed description of how the CWI is calculated.

Longitudinal analysis of the CWI shows that the geographic variation in the relative cost of labor is quite steady over time. Indeed, an early study by Chambers (1998) of geographic costs reports correlations well above 0.900 over time, and the CWI shows even higher correlations over time, ranging from 0.952 to 0.998. For the purpose of the present study, Dr. Taylor has recently provided us with an update through 2011 as she continually updates the index for her own and other research purposes. Chapter 4 shows how the CWI is used as an alternative adjustment for differential staffing costs to the implicit adjustments made in the current Nevada funding system.

[80] Documentation for the NCES Comparable Wage Index Data Files, May 2006, Lori L. Taylor Bush School of Government and Public Service, Texas A&M University, Mark C. Glander, K-Force Government Solutions, William J. Fowler, Jr., Project Officer, National Center for Education Statistics, p. 3.

Chapter 4—Simulation of Alternative Practices in Nevada

As explained in the previous chapter, mainstream education finance literature contends that there are three main types of factors that affect the cost of providing educational services and therefore should be considered in constructing an equitable state school funding formula:

- Student Needs (poverty, English language learners [ELLs], special education)
- Scale of District Operations
- Geographic Differences in Resource Prices

This chapter will address each one of these components in the context of the Nevada state funding system. We first provide a brief description and assessment of how each cost factor is (or is not) accounted for within the current *Nevada Plan*. Next, we show how the alternative effective adjustments identified in the previous chapter can be incorporated into the current system. Finally, we will introduce a simulation model developed by the research team that calculates projected funding allocations across Nevada districts resulting from the application of the various funding adjustments.

Our Understanding of the Distributive School Account (DSA) Model

With the three types of cost factors in mind, we next describe how these elements are currently treated by the current school funding formula in the state through the DSA Equity Allocation Model. After careful examination of the DSA, we have concluded that the model includes components that, by explicit design or otherwise, make funding adjustments for scale of operations (district size and degree of remoteness) and geographic differences in resource prices, but it contains no adjustments for pupil needs such as poverty or ELLs. However, special education is handled outside of the DSA separately and will be discussed later in this chapter.

How the DSA Treats Scale and Price

One of the key elements of the DSA Equity Allocation Model is a mechanism designed to calculate the basic support ratio (BSR). The portion of the DSA that calculates the BSR determines the staffing and operating expenditures for each district with adjustments related to scale of operations (district size, student density, and sparsity) and differential resource prices. From Chapter 1, the BSR is described as follows:

> *[The BSR] is expressed as a ratio that represents the relative cost of a district doing business in Nevada compared with the statewide average cost. It takes into account certain economies of scale for districts to provide like services. Staffing costs are determined by aggregating school enrollments within attendance areas with allowable teacher staffing units assigned by projecting the aggregated enrollments through a Teacher Allotment Table maintained by the Nevada Department of Education (see*

Appendix B). Once units are assigned to each attendance area, they are aggregated within their respective districts. Operating costs are based on prior year expenditures incrementally increased for inflation and additional monies when the general fund allows. The basic support ratios for Nevada districts are indexed to the mean, which is expressed as a 1.0. Ratios ranged from 0.9621 (Clark) to 3.1398 (Esmeralda) for 2010–11.

In essence, the BSR attempts to, through a fairly involved series of calculations, account for variations in the cost of providing educational services in different districts throughout the state. In particular, it is designed to account for cost differences associated with the diseconomies of small-scale operations associated with differences in enrollment, density, and sparsity of populations as well as differences in the costs of labor and nonlabor inputs faced by the districts across the state of Nevada.

Applauding the Intentions of the BSR

The BSR attempts to address variation in cost factors related to differential scale and staffing prices across the 17 Nevada districts. The DSA does this by performing various calculations related to average staff and expenditure levels based within groups of districts that operate on similar scale and possibly with similar labor market conditions. The teacher allotment table accounts for diseconomies of scale in smaller schools, allowing for increasing student-to-teacher ratios as district size increase. The varying district salary and operating costs are grouped together by type of locale, minimizing any one district's ability to gain revenues by inflating the costs used in the BSR calculations.

The BSR calculations also are intended to capture some of the factors underlying differences in the labor markets and markets for other goods and services confronted by different types of districts. That is, differences in labor and nonlabor spending result from differences in the wages or prices a district must pay to attract comparable personnel or purchase similar supplies and materials. Thus, to some degree, these differences in spending account for differences in the cost of comparable goods and services in different locations.

It is important to note that the DSA assumes that the historical staffing and expenditures represent a reasonable estimate of the differences in the true costs of providing educational services, which may not be the case. As long as these historical staffing and spending patterns are supported by local goals setting for schools and the ability of local communities to set their own taxes, it is not unreasonable to suggest that differential spending reflect, to some degree, the factors that impact their costs of doing business. However, these patterns of resource allocation also, in part, reflect choices that may well go beyond the absolute minimum costs of doing business.

Possible Caveats in the BSR Cost Adjustments

Although the BSR intends to reflect educational cost differences in the scale of district operations, the differences in labor and nonlabor expenditures in the BSR represent a combination of factors—some outside the control of the district and some that are within the control of the district. That is, differences in spending on labor and nonlabor reflect, in part, choices that the individual districts have made to recruit and employ a more talented labor force or to obtain better quality instructional materials. For example, districts with greater fiscal capacity (property wealth) have a greater ability to pay and may choose to pay higher compensation to attract a more talented staff of teachers and administrators. But it is important to point out that the grouping districts in the calculation of average labor and nonlabor spending by type/size of locality might mitigate some of these possible wealth-effects.

Isolating the Impact of Current Cost Factor Adjustments in the DSA

To create a simulation model that would allow the incorporation of alternative effective funding adjustments for individual cost factors, it was necessary to first construct measures of the adjustments currently included in the DSA that reflect the current system used in Nevada (i.e., to serve as a "baseline"). To this end, we used the DSA model to isolate the variations in spending reflected in the BSR into its two components: one component isolates the impact of scale (i.e., district size, student density, and sparsity) and another measures effect of wage-level differentials across districts. We refer to these as the *Scale-Only BSR* and *Average.*

DSA Scale-Only BSR Adjustment—The *DSA Scale-Only BSR Adjustment* attempts to isolate the impact of scale on educational spending. That is, it attempts to remove the variations in spending associated with variations in the patterns of compensation across districts. We used the DSA modules to recalculate the BSR by making the following adjustments:[81]

- Replaced all of the district-specific average calculations of the compensation of licensed teacher staff and administrative staff with statewide averages.
- Used an index of average compensation of teachers to adjust the per-pupil spending figures on classified personnel. In effect, this assumes that the variations in the average compensation of classified personnel follow those of teachers.[82]

In effect, we have taken out of the BSR calculations the differences arising out of compensation levels and left only those variations in labor and nonlabor spending that might be associated with scale.

[81] A more detailed description of the steps involved in calculating the DSA Scale-Only Adjustment is contained in Chapter 4.

[82] We have access to no data on actual average compensation levels for classified personnel, so we felt teacher salaries would be a reasonable and close approximation to be used for this purpose. This component could be made more accurate if we had actual average compensation levels by district for classified personnel.

DSA Wage Differential BSR Adjustment—Once we isolated the impact of scale, we then divided the BSR for each district by the *DSA Scale-Only BSR Adjustment* to obtain a measure of the difference in the BSR associated with differences in compensation of teachers, administrators, and classified staff across districts that we call the *DSA Wage Differential BSR Adjustment*. We have decomposed the BSR into its two constituent components in such a way that multiplying them together returns the original BSR:

Original BSR = DSA Scale-Only BSR Adjustment x

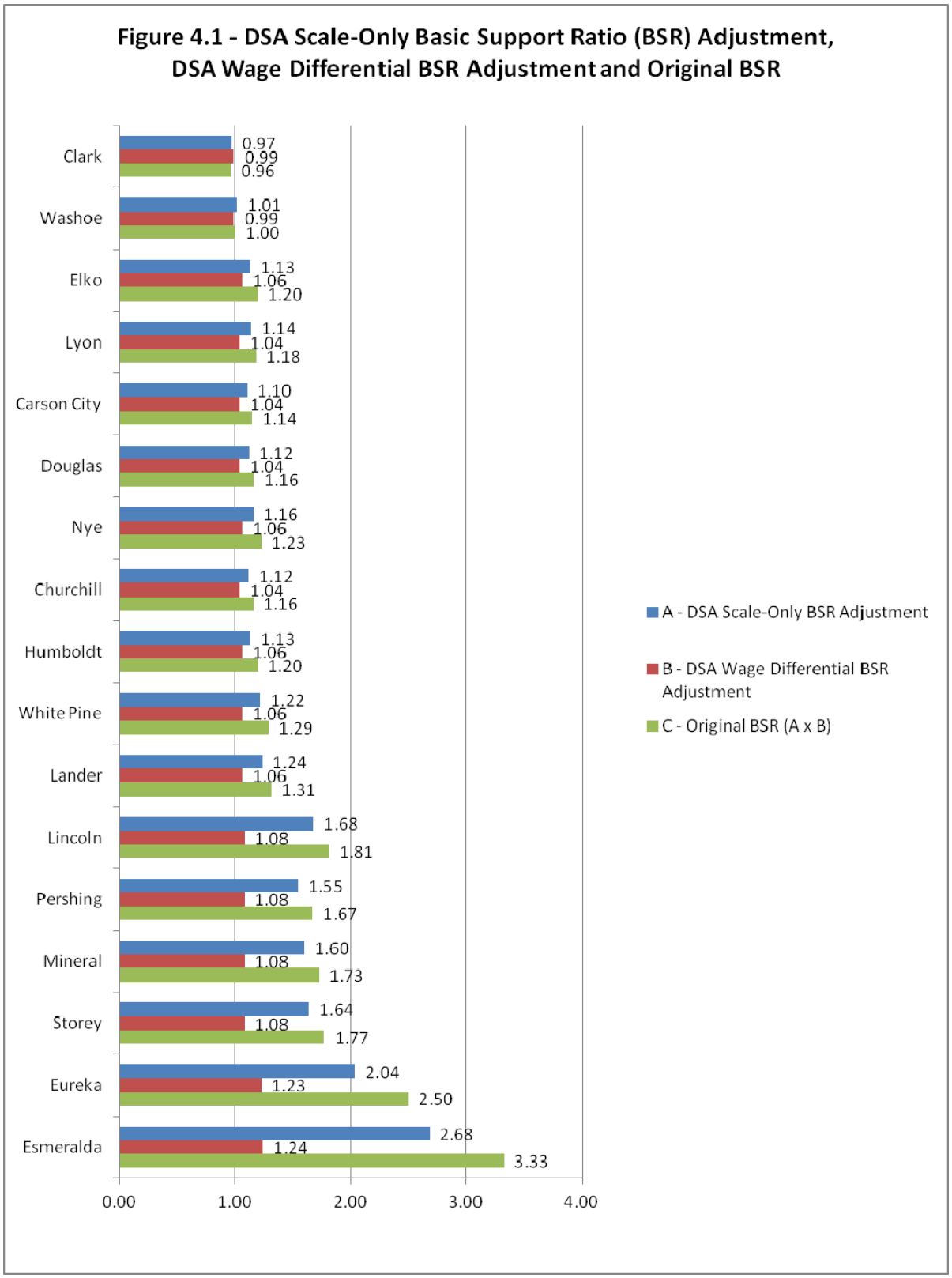
DSA Wage Differential BSR Adjustment

Table 4.1 shows the values of the newly created DSA BSR Scale-Only and Wage Differential Adjustments as well as the product of the two, which by definition equals the Original BSR.

Table 4.1. DSA Scale-Only Basic Support Ratio (BSR) Adjustment, DSA Wage Differential BSR Adjustment, and Original BSR

District	A—DSA Scale-Only BSR Adjustment	B—DSA Wage Differential BSR Adjustment	C—Original BSR (A x B)
Clark	0.97	0.99	0.96
Washoe	1.01	0.99	1.00
Elko	1.13	1.06	1.20
Lyon	1.14	1.04	1.18
Carson City	1.10	1.04	1.14
Douglas	1.12	1.04	1.16
Nye	1.16	1.06	1.23
Churchill	1.12	1.04	1.16
Humboldt	1.13	1.06	1.20
White Pine	1.22	1.06	1.29
Lander	1.24	1.06	1.31
Lincoln	1.68	1.08	1.81
Pershing	1.55	1.08	1.67
Mineral	1.60	1.08	1.73
Storey	1.64	1.08	1.77
Eureka	2.04	1.23	2.50
Esmeralda	2.68	1.24	3.33

Figure 4.1 presents the data included in Table 4.1 in a bar chart that allows easier comparisons across districts, which have been strategically sorted in descending order according to district scale (enrollment). The illustration makes clear how the DSA Scale-Only BSR increases as district size becomes smaller.



For instance, the Scale-Only BSR Adjustment for Esmeralda suggests that controlling for wage differentials under the current funding system this district of 48 students receives 2.68 times

the amount of basic support per-pupil funding received by the average-sized district in the state. At the other end of the spectrum, Clark being the largest school district with more than 300,000 students receives about 3 percent less per pupil than the average-sized district in the state (arguably because it does not have to endure the diseconomies of scale experienced by the smaller districts). The relevant policy here is whether the Scale-Only adjustments across the districts appropriately reflect the true cost differentials associated with operating smaller versus larger districts across the state.

The DSA Wage Differential BSR Adjustment can be interpreted in a similar fashion. Its value ranges from 0.99 in Clark to 1.24 in Esmeralda. The interpretation here is that independent of district size, Esmeralda is funded 24 percent higher on a per-pupil basis compared with the district attended by the average student. Clark, conversely, receives about 1 percent less per-pupil compared with the average attended district. Again, the relevant policy question here is whether the effective wage differential funding adjustment included in the BSR represents the true cost differences in hiring and retaining staff across the state's districts.

Simulating Cost Factor Adjustments Using the Funding Adjustment Simulator (FAS)

With the decomposition of the BSR into the DSA Scale-Only and Wage Differential BSR Adjustments components, we now have a starting point (baseline) model of how the current Nevada funding system separately addresses educational cost differences associated with district scale of operations and geographic price differences. This will allow us to replace these components with alternative adjustments and compare the district funding allocations under each scenario. The following section does just that, beginning with evaluating alternatives to the DSA Wage Differential BSR and Scale-Only BSR Adjustments, followed by incorporating the additional alternative funding adjustments for poverty and ELL identified in Chapter 3. To facilitate this analysis, we introduce a simulation model that has been developed for this purpose. Although the special education cost factor is accounted for in the state funding system, this mechanism resides outside of the DSA Equity Allocation Model and therefore is not covered in the simulation model. In turn, we have provided a separate analysis of incorporating the alternative special education funding practice identified in Chapter 3.

Incorporating the Comparable Wage Index (CWI) Into the DSA

We can see from the earlier discussion that the current DSA treats differences in resource prices through variations in the average compensation of teachers, administrators, and classified personnel across districts (at least implicitly in the calculations). As suggested earlier, the current approach to addressing price differences has some disadvantages in that it does not isolate the true costs of labor but rather incorporates some differences that are within the control of the school district by using average compensation levels to calculate the BSR. These average compensation levels used in the DSA calculations involve choices that the districts

make that to some extent are impacted by the preferences and fiscal capacity (i.e., wealth) of the district.

In Chapter 3, we introduced an alternative measure of resource price differentials that better represented the true price-level of hiring and retaining staff across various labor markets, the CWI. To compare a CWI-based funding adjustment against the DSA Wage Differential BSR Adjustment implied in the current BSR, we need to embed the CWI into the DSA modules. We can then use the DSA Scale-Only BSR Adjustment for each district in conjunction with a BSR calculated using the CWI instead of its native DSA Wage Differential BSR Adjustment to obtain an implicit overall index of the differences educational costs. The approach we take is careful to appropriately weight the CWI so that it is only applied to those portions of spending pertaining to school personnel (i.e., teachers, administrators, and classified staff) and not nonpersonnel (materials and supplies, books, etc.). The following describes how this is done.

Creating the Scale-Only/CWI BSR and CWI Wage Differential BSR Adjustment

The Scale-Only/CWI BSR uses the DSA Scale-Only BSR Adjustment and adjusts for salary differentials in different labor markets by applying the CWI using the following steps:

1. *Re-center the CWI*. We re-centered the CWI around the district serving the average student in the state—that is CWI = 1.00 corresponds to the pupil-weighted average of the raw CWI for Nevada. Centering this index this way ensures that the index as applied to Nevada school districts will be fiscally neutral.
2. *Adjust Compensation Using the CWI*. The classified staff expenditures, average teaching and average administrative staff salaries calculated and used in the DSA Scale-Only BSR Adjustment are each multiplied by the district's respective CWI.
3. *Use CWI-Adjusted Expenditure and Staff Data.* The CWI adjusted figures for classified staff expenditures and licensed teacher and administrative salaries are then used to replace the original numbers in the Table 2 of the Staff Accounting sheet of DSA Module 1 and linked into the other modules to calculate the Scale-Only/CWI BSR.
4. *Calculate CWI Wage Differential BSR Adjustment*. The CWI Wage Differential BSR Adjustment is simply just the ratio of the Scale-Only/CWI BSR to the DSA Scale-Only BSR Adjustment and can be interpreted as an implicit CWI index calculated for Nevada districts within the context of the DSA Equity Allocation Model.

Although the DSA Wage Differential BSR Adjustment is the implicit price-level adjustment component of the original BSR, the CWI Wage Differential BSR Adjustment is simply an analog adjustment that more directly takes into account geographic price differences derived from applying the raw CWI to the DSA modules. It is quite informative to compare these two approaches to addressing differential wage levels across districts. Table 4.2 shows the figures behind the calculation of the CWI Wage Differential BSR Adjustment (column C), which simply

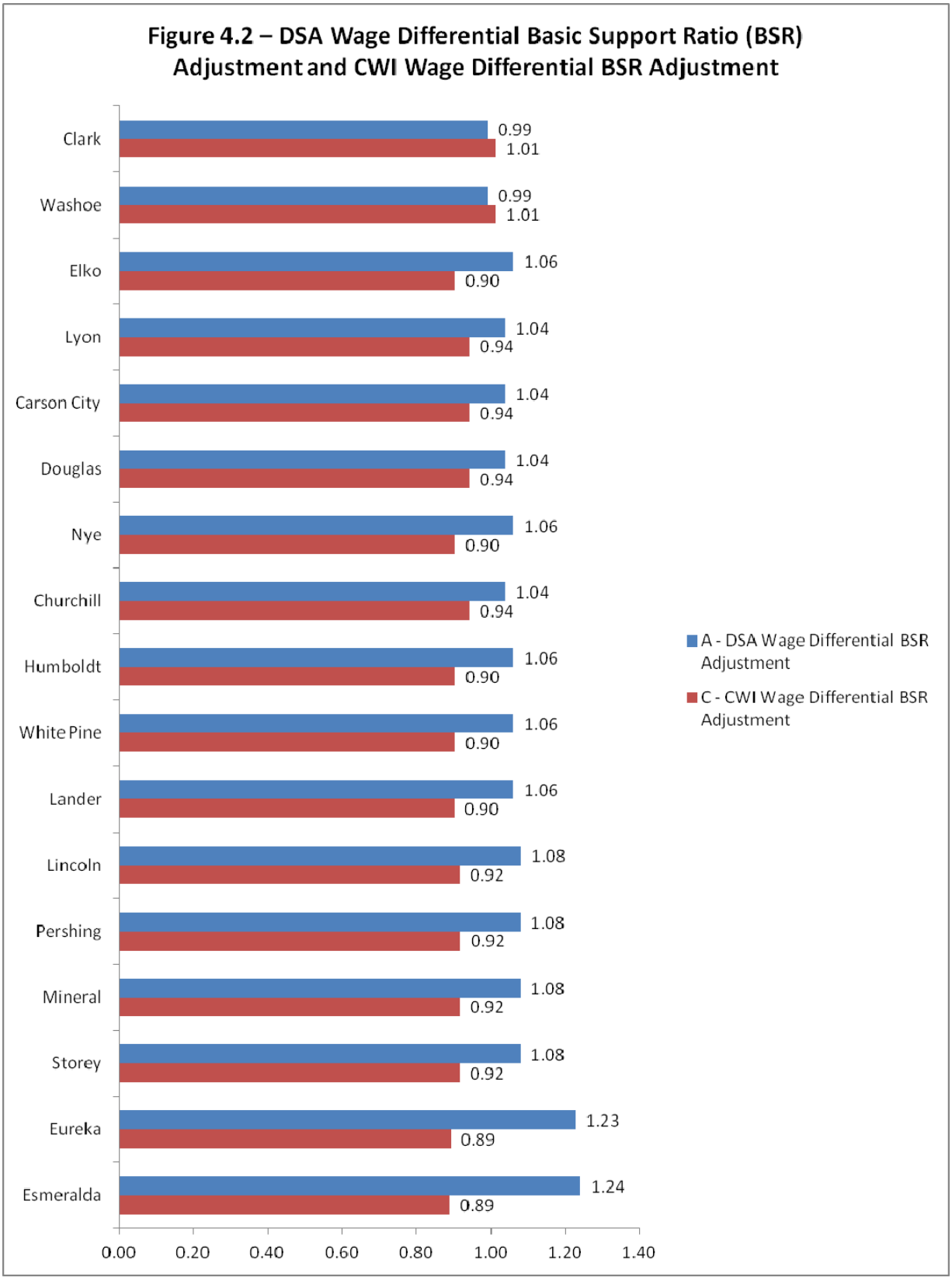
equals the Scale-Only/CWI BSR Adjustment (column B) divided by the DSA Scale-Only BSR Adjustment (column A). Figure 4.2 illustrates both adjustments across all districts in the state.

Washoe and Clark are the only two districts for which the CWI Wage Differential BSR Adjustment is higher than 1.00 (1.01), indicating that the wage level in these districts is higher than in the district attended by the average student. This result is quite consistent with previous literature, which shows that more urbanized areas tend to exhibit the highest labor costs within a state. In smaller and more rural districts, the CWI Wage Differential drops below 1.00, denoting lower than average wage levels. For instance, the CWI differential for Lyon of 0.94 suggests that staffing costs are approximately 6 percent lower than the district attended by the average student. Comparing the two adjustments shows that the original DSA Wage Differential Adjustment is higher than the CWI Wage Differential Adjustment for all districts other than Clark and Washoe, with the difference between the two adjustments becoming quite large in the smallest districts (note that the districts in the table are ordered in terms of enrollment from large to small). This finding shows that the way in which the current DSA Wage Differential Adjustment allocates dollars is not representative of the true variation in staffing costs across the state. In fact, the current adjustment directs proportionately more resources to those districts that in actuality have lower than average labor costs.

Table 4.2. DSA Wage Differential Basic Support Ratio (BSR) Adjustment and CWI Wage Differential BSR Adjustment

District	A—DSA Scale-Only BSR Adjustment	B—Scale-Only/CWI BSR	C—CWI Wage Differential BSR Adjustment (B / A)
Clark	0.97	0.98	1.01
Washoe	1.01	1.02	1.01
Elko	1.13	1.02	0.90
Lyon	1.14	1.07	0.94
Carson City	1.10	1.04	0.94
Douglas	1.12	1.05	0.94
Nye	1.16	1.05	0.90
Churchill	1.12	1.05	0.94
Humboldt	1.13	1.02	0.90
White Pine	1.22	1.10	0.90
Lander	1.24	1.12	0.90
Lincoln	1.68	1.54	0.92
Pershing	1.55	1.42	0.92
Mineral	1.60	1.47	0.92
Storey	1.64	1.50	0.92
Eureka	2.04	1.81	0.89
Esmeralda	2.68	2.38	0.89

Figure 4.2 – DSA Wage Differential Basic Support Ratio (BSR) Adjustment and CWI Wage Differential BSR Adjustment



Using the Nevada Funding Adjustment Simulator (FAS)

To simulate how dollar allocations to districts differ when the CWI Wage Differential Adjustment is put in place of the DSA Wage Differential Adjustment, we will make use of the simulation model developed for this study, the Nevada FAS. The FAS allows the user to implement up to four different alternative funding adjustments that control for the following cost factors: differential resource prices (Price Level), student poverty (Free/Reduced-Price Lunch), English language learners (English Learners), and scale of operations (Scale/Density).

Figure 4.3 provides a snapshot of the FAS interface page. The first panel contains the user-selected simulation settings. The first row is simply a set of toggles that turn each of the four possible cost factor adjustments "On" or "Off." When a given cost factor adjustment is turned to the "Off" position, indicating that it should not be applied, neutral values equal to 1.00 appear in the corresponding column under the Basic Support Ratio (BSR) Adjustments. When set to "On," the cost factor will be applied and numbers different from the neutral 1.00 will appear under the corresponding Basic Support Ratio (BSR) Adjustment column. The top-left cell in the panel provides a summary of the funding adjustment settings that have been selected, including indicators of whether an adjustment has been activated (toggled "On"), which specific adjustments have been selected, and the student funding weight (applicable only for the Free/Reduced-Price Lunch and English Learner adjustments).

The second row in the simulation setting panel contains pull-down menus that allow the user to select specific adjustments for each cost factor. For the Price Level and Scale Density menus are each prepopulated with DSA, which will apply the DSA Wage Differential BSR Adjustment and DSA Scale-Only BSR Adjustment, respectively. Using these two adjustments as depicted in the snapshot will provide dollar allocations that replicate the current DSA Equity Allocation Model. Each of the pull-down menus in the second row also is populated with various alternative funding adjustments identified in Chapter 3. For Price Level, this includes the CWI Wage Differential BSR Adjustment (CWI) discussed earlier. The other funding adjustment categories include state-specific alternatives that were identified.

The following are descriptions of the columns in the lower panel of the snapshot:

- Column A—The Original BSR from the most recent DSA Equity Allocation Model.
- Column B—The Price Level funding adjustment that allows the user to select either the DSA or CWI Wage Differential Adjustments (depending on which is chosen from the pull-down menu).
- Columns C and D—The Free/Reduced-Price Lunch and English Learner funding adjustments that allow the user to select values corresponding to each of the state-

specific (or average of state-specific) funding practices identified in Chapter 3 (depending on which is chosen from the pull-down menu).[83]

- Column E—The Scale/Density funding adjustment that allows the user to select values corresponding to either the DSA Scale-Only Adjustment or the state-specific/average of state-specific funding practices identified in Chapter 3 (depending on which is chosen from the pull-down menu).
- Column F—The Raw Adjusted BSR is the combination of all of the separate adjustments that were chosen and is calculated by simply multiplying each of the four individual adjustments in columns B, C, D, and E together.
- Column G—The Pupil-Weighted Adjusted BSR takes the Raw Adjusted BSR from column F and re-centers these figures around their pupil-weighted average. This is done to ensure that the application of this new BSR is fiscally neutral (i.e., that the index strictly redistributes the existing amount of available funding).
- Column H—The Current Foundation Basic Support Per Pupil is the legislatively approved total support level per pupil from the FY 2012 Basic Support Guarantee.[84]
- Column I—The DSA Projected Per-Pupil Funding is calculated by multiplying the Original BSR (column A) by the Current Foundation Basic Support Per Pupil (column H), which generates the district allocations in the current state funding system *prior to any adjustments made for wealth (DSA Module 8) or transportation (DSA Module 9)*.[85]
- Column J—The FAS Projected Per-Pupil Funding is calculated by multiplying the Pupil-Weighted Adjusted BSR (column G) by the Current Foundation Basic Support Per Pupil (column H), which generates the simulated district allocations corresponding to the funding adjustment choices made by the user.

Although not shown in the snapshot, the actual FAS also contains columns that calculate the total dollars corresponding to the per-pupil allocations in column I and J (Total DSA and FAS Projected Funding), the district-by-district differences between these two figures, and the amount of funding necessary to hold all districts harmless should their Total FAS Projected Funding fall short of what the current DSA provides.

[83] The menus of adjustment types for Free/Reduced Price Lunch, English Learners, and Scale/Density have been ordered in magnitude from most to least progressive.

[84] The figure used in the FAS was taken from cell D10 of the InputOutput worksheet of most recent version of DSA Module 2 (DSA-2-Module.xls).

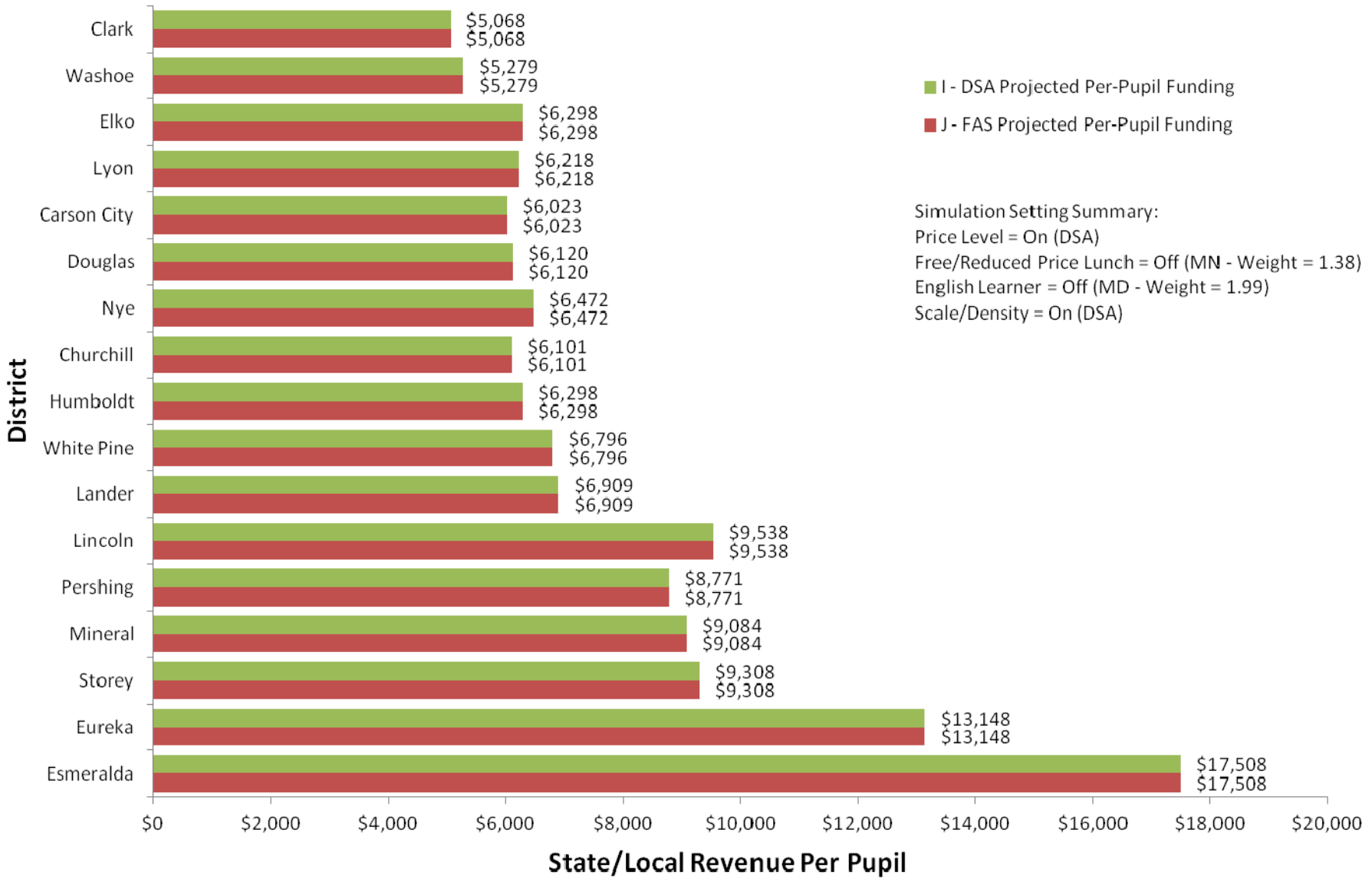
[85] It is important to note that the intention of the model is to provide simulations of different funding adjustments accounting for cost factors related to geographic differences in resource price levels, poverty, English learners, and scale/density (excluding transportation) and does not address how the projected district allocations are shared between local and state burden, which are dealt with in DSA Modules 8 and 9.

Figure 4.3. Snapshot of Funding Adjustment Simulator (FAS) Set to Baseline Model

Simulation Setting Summary: Price Level = On (DSA) Free/Reduced-Price Lunch = Off (MN - Weight = 1.38) English Learner = Off (MD - Weight = 1.99) Scale/Density = On (DSA)	Price Level	Free/Reduced -Price Lunch	English Learner	Scale/ Density
Toggle (On/Off)	On	Off	Off	On
Select Adjustment Type from Pull-Down Menu	DSA	MN	MD	DSA

		Basic Support Ratio (BSR) Adjustments								
District	A–Original BSR	B–Price Level	C–Free/ Reduced-Price Lunch	D–English Learner	E–Scale/ Density	F–Raw Adjusted BSR (B x C x D x E)	G–Pupil-Weighted Adjusted BSR	H–Current Foundation Basic Support Per-Pupil	I–DSA Projected Per-Pupil Funding (A x H)	J–FAS Projected Per-Pupil Funding (G x H)
Esmeralda	3.327	1.241	1.000	1.000	2.681	3.327	3.327	$ 5,263	$ 17,508	$ 17,508
Eureka	2.498	1.228	1.000	1.000	2.035	2.498	2.498	$ 5,263	$ 13,148	$ 13,148
Storey	1.768	1.079	1.000	1.000	1.638	1.769	1.768	$ 5,263	$ 9,308	$ 9,308
Mineral	1.726	1.079	1.000	1.000	1.599	1.726	1.726	$ 5,263	$ 9,084	$ 9,084
Pershing	1.667	1.078	1.000	1.000	1.545	1.667	1.667	$ 5,263	$ 8,771	$ 8,771
Lincoln	1.812	1.080	1.000	1.000	1.678	1.812	1.812	$ 5,263	$ 9,538	$ 9,538
Lander	1.313	1.061	1.000	1.000	1.237	1.313	1.313	$ 5,263	$ 6,909	$ 6,909
White Pine	1.291	1.061	1.000	1.000	1.217	1.291	1.291	$ 5,263	$ 6,796	$ 6,796
Humboldt	1.197	1.061	1.000	1.000	1.128	1.197	1.197	$ 5,263	$ 6,298	$ 6,298
Churchill	1.159	1.038	1.000	1.000	1.117	1.159	1.159	$ 5,263	$ 6,101	$ 6,101
Nye	1.230	1.061	1.000	1.000	1.159	1.230	1.230	$ 5,263	$ 6,472	$ 6,472
Douglas	1.163	1.038	1.000	1.000	1.120	1.163	1.163	$ 5,263	$ 6,120	$ 6,120
Carson City	1.144	1.038	1.000	1.000	1.102	1.144	1.144	$ 5,263	$ 6,023	$ 6,023
Lyon	1.181	1.038	1.000	1.000	1.138	1.182	1.181	$ 5,263	$ 6,218	$ 6,218
Elko	1.197	1.060	1.000	1.000	1.128	1.197	1.197	$ 5,263	$ 6,298	$ 6,298
Washoe	1.003	0.992	1.000	1.000	1.012	1.003	1.003	$ 5,263	$ 5,279	$ 5,279
Clark	0.963	0.992	1.000	1.000	0.971	0.963	0.963	$ 5,263	$ 5,068	$ 5,068

Figure 4.4 - Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)



The FAS also generates in real time a bar chart that compares the DSA and FAS projected per-pupil allocations and therefore allows the user to assess how their funding adjustment choices changed the allocations relative to those currently in place. The user will note that the graphics also include the simulation setting summary information directly under the chart legend. Figure 4.4 provides an example of the chart when the formula adjustments are set to a baseline model where the FAS mimics the current DSA funding allocations (i.e., with the Price Level and Scale/Density funding adjustments set to "DSA" and all other funding adjustments toggled to "Off," as in the snapshot in Figure 4.3).

Simulating Differential Wage Cost Adjustments

To simulate the effect of implementing the CWI Wage Differential Adjustment developed earlier, we have set the Price Level adjustment from "DSA" to "CWI" and left everything else the same. Figure 4.5 shows the results of this exercise. Clearly, the replacement of the existing DSA wage differential adjustment results in large differences between the existing DSA and projected FAS funding projections. As explained earlier, the CWI will direct additional funding to those districts with higher staffing costs associated with regional labor market conditions as opposed to district ability and/or preference to offer higher salaries. Clark and Washoe are the only two districts that would experience an increase in per-pupil funding under this scenario (by $106 and $111 per pupil, respectively). As the simulator was designed to generate fiscally neutral allocations, the remaining districts have FAS projections that fall short of what they receive under the current DSA (i.e., the FAS performs zero-sum calculations so that the reductions in revenues must be balanced against the increases in revenues across all of the districts). For example, although Elko currently receives an allocation of $6,298 per pupil under the current DSA, switching to the CWI adjustment results in a FAS per-pupil projection of $5,638 (representing a decrease of $660, or 9.3 percent). In terms of total dollars redistributed, the FAS projection would result in increases to Clark and Washoe on the order of $39,653,142, which would have to be made up by the reductions across the other districts. It follows that in order to hold these other districts harmless (i.e., to ensure that no district would experience a drop in funding), additional funding in this amount (equal to 1.8 percent of the FY 2012 legislatively approved statewide support level) would be required.

Simulating Student Poverty Cost Adjustments

As an example of how implementing an effective poverty cost adjustment would redistribute funding, we have chosen to use the most progressive of the state-specific poverty funding adjustments identified in Chapter 3. The poverty funding adjustment for Minnesota provided a student weight of 1.34, which implies that funding for an impoverished student is about 34 percent higher than for an otherwise similar student that is not in poverty. We apply this funding adjustment to the original baseline model by setting the Free/Reduced Price Lunch toggle to "On" and select as an adjustment type "MN." Figure 4.6 shows the results of this simulation, which

Figure 4.5 Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)

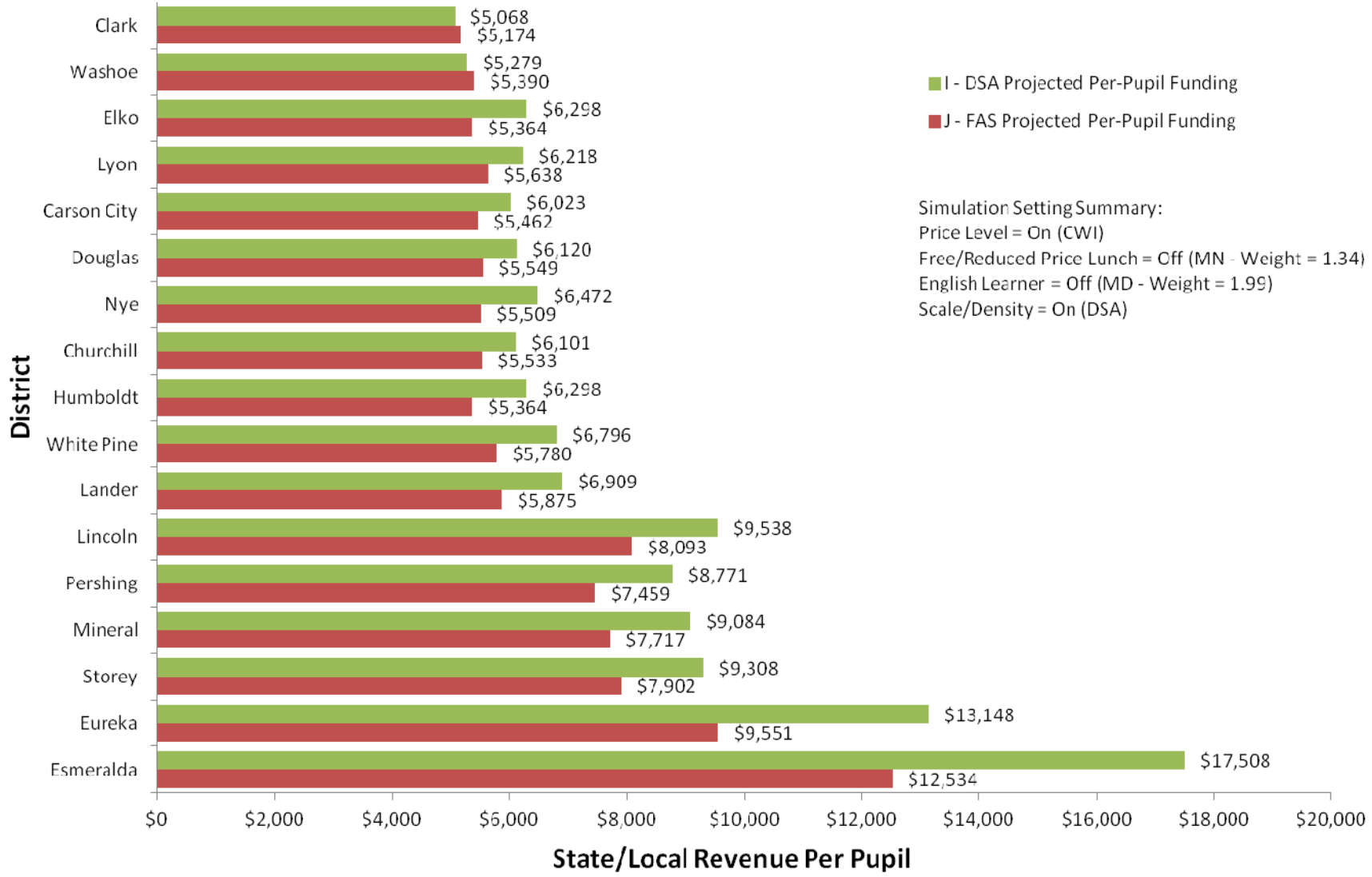
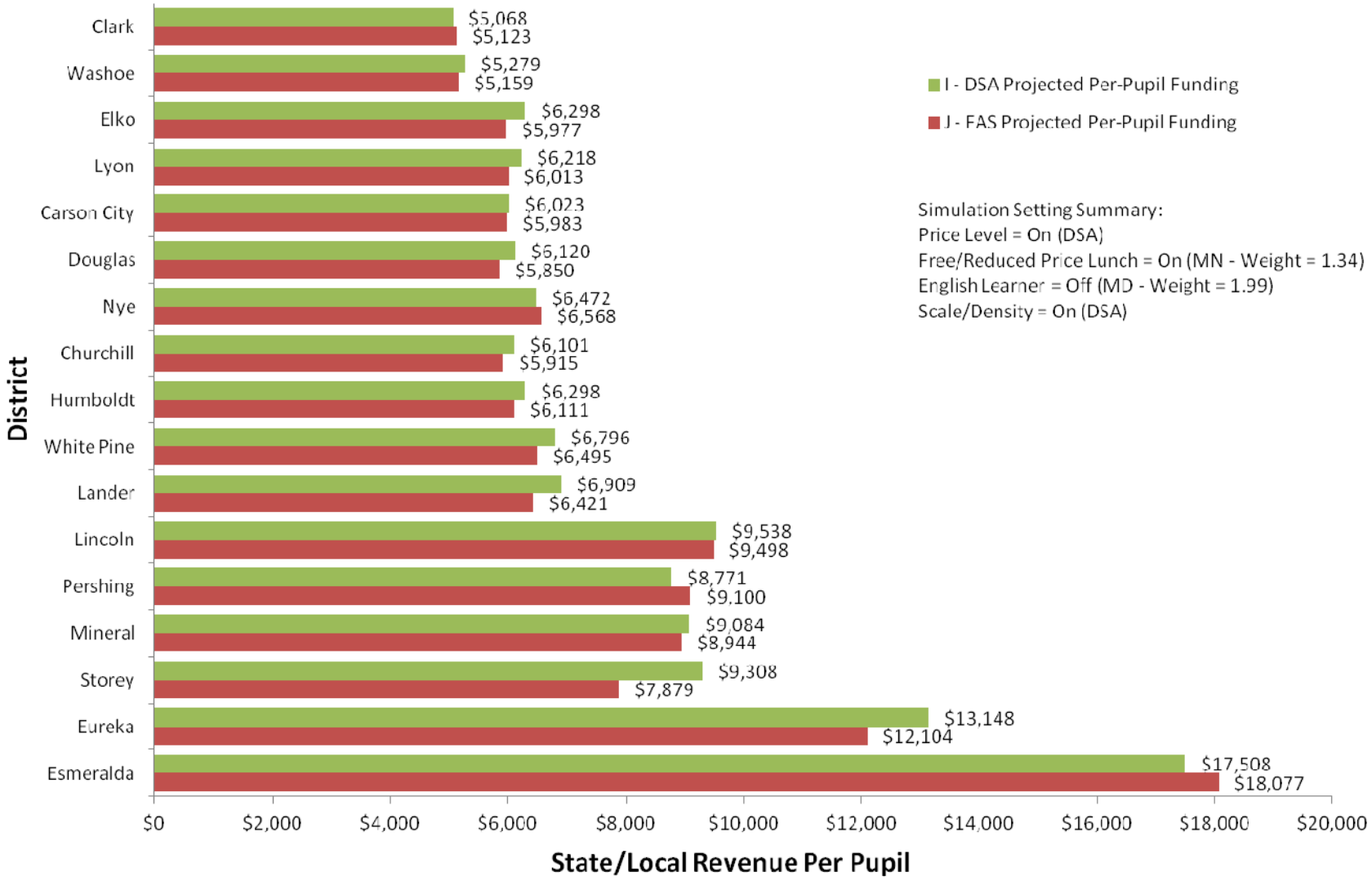


Figure 4.6 Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)



suggests that the current system is inequitable in terms of how funding is distributed with respect to student poverty. Here, Clark is projected to receive a modest funding increase of about $55 per pupil while Washoe would expect a decrease of approximately $120 per pupil (if they were not held harmless). Nye, Pershing, and Esmeralda would stand to gain $96, $329, $569 per pupil, respectively, while the remaining districts would have per-pupil decreases ranging from $39 to $1,429. The poverty funding adjustment would have more severe effects on the other districts and come with a hold-harmless price tag of $17,562,616, or 0.8 percent of the FY 2012 legislatively approved statewide support level).

Simulating English Language Learner Cost Adjustments

Following the approach put forth earlier, we activate the English Learner funding adjustment by setting the toggle to "On" and selecting the strongest adjustment, which in this case was identified in Chapter 3 for Maryland ("MD"), where there is an explicit ELL weight of 1.99. The results in Figure 4.7 suggest that the current funding system does not equitably distribute funding with respect to the ELL needs of districts. The applied adjustment would result in modest per-pupil funding increases for Clark, Washoe, and Carson City (on the order of $59, $32, and $39, respectively), a large increase for Esmeralda ($2,046), and decreases ranging from $274 to $1,804 for the other districts. The cost of holding the other districts harmless is even larger than was the case in the poverty scenario (because of the more generous weight applied), standing at $20,472,021, or 0.9 percent of the FY 2012 legislatively approved statewide support level.

Simulating Scale of Operations Cost Adjustments

We next provide a scenario using the scale of operations (scale and student density) funding adjustment. Here we replace the existing DSA scale/density funding adjustment with an adjustment from the state identified with the most aggressive scale/density profile in Chapter 3, New York (adjustment type set to "NY"). The results in Figure 4.8 suggest that compared with the state with the most aggressive practice with respect to funding rural remote districts, the current DSA model, to a varying extent, provides somewhat greater resource differentials to many of the midsized and smaller remote districts in Nevada. Under this scenario, all districts except for Clark, White Pine, and Lander would be considered overfunded with the degree of overfunding ranging from just $1 per-pupil in Storey to $1,842 in Lincoln. The amount to hold districts harmless in this case would be $39,724,694, or 1.8 percent of the FY 2012 legislatively approved statewide support level.

Figure 4.7 Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)

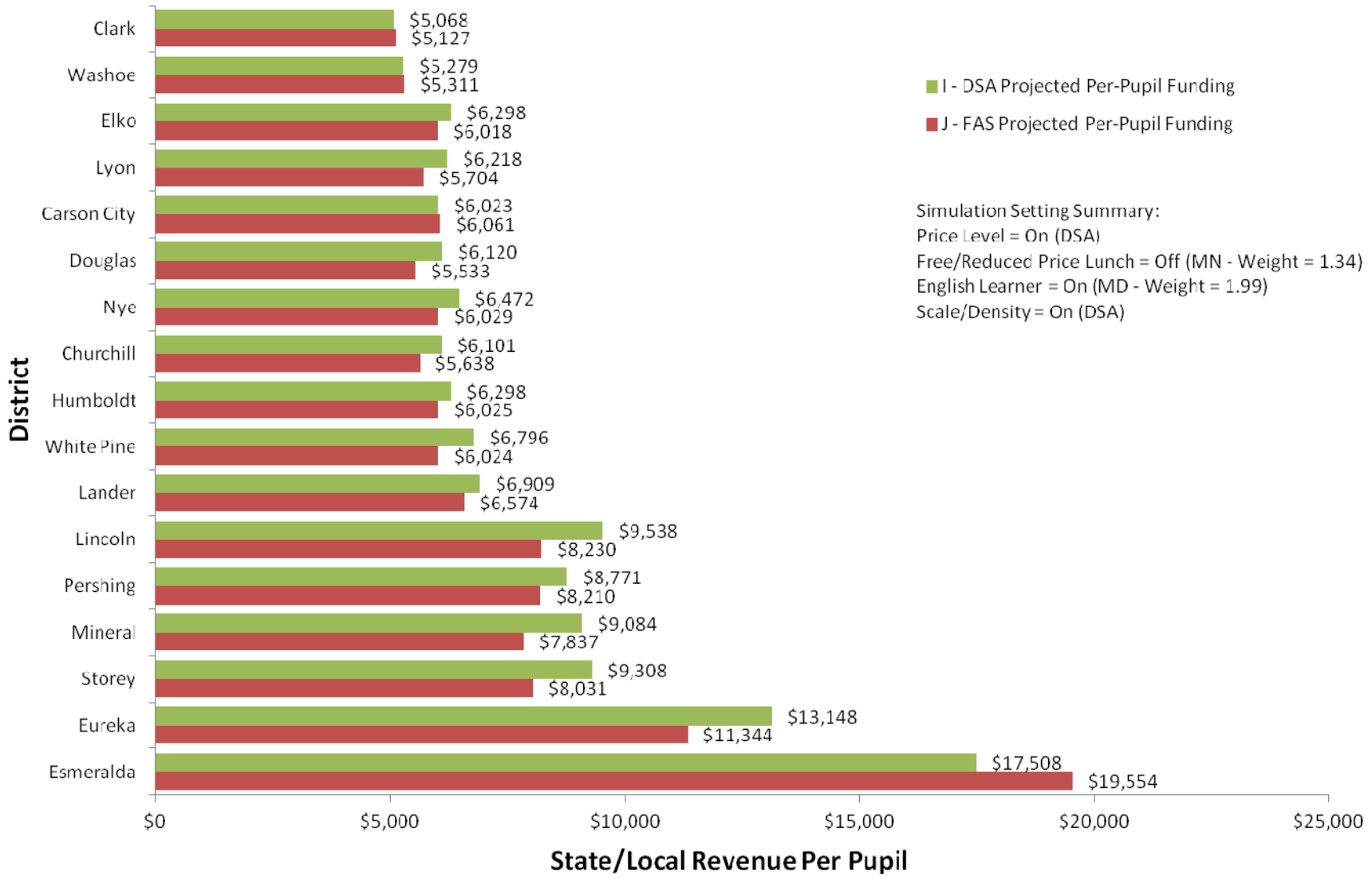


Figure 4.8 Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)

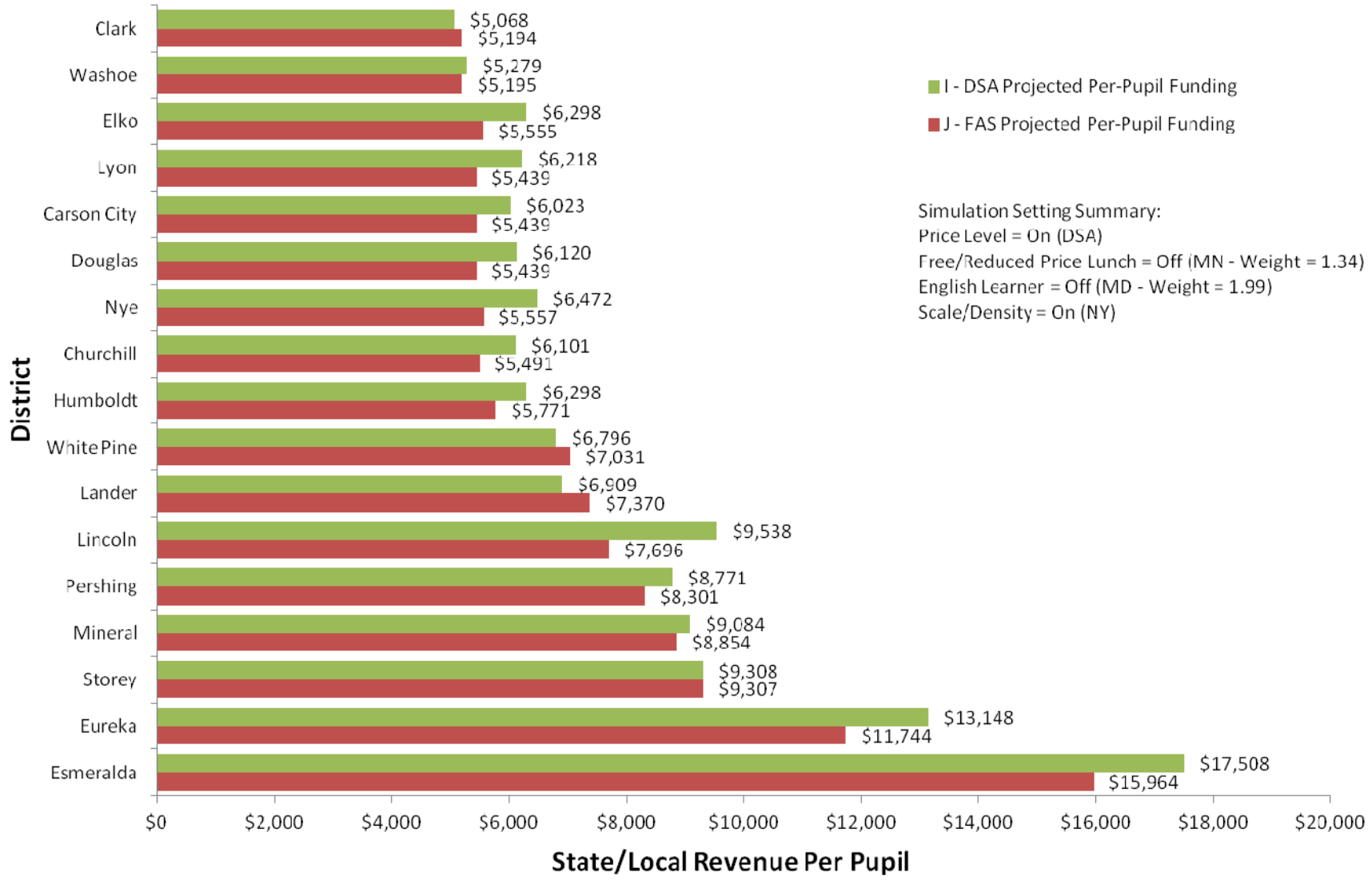


Figure 4.9 - Simulation Comparing State/Local Per-Pupil Funding Under Unadjusted and Adjusted Basic Support Ratios (BSRs)

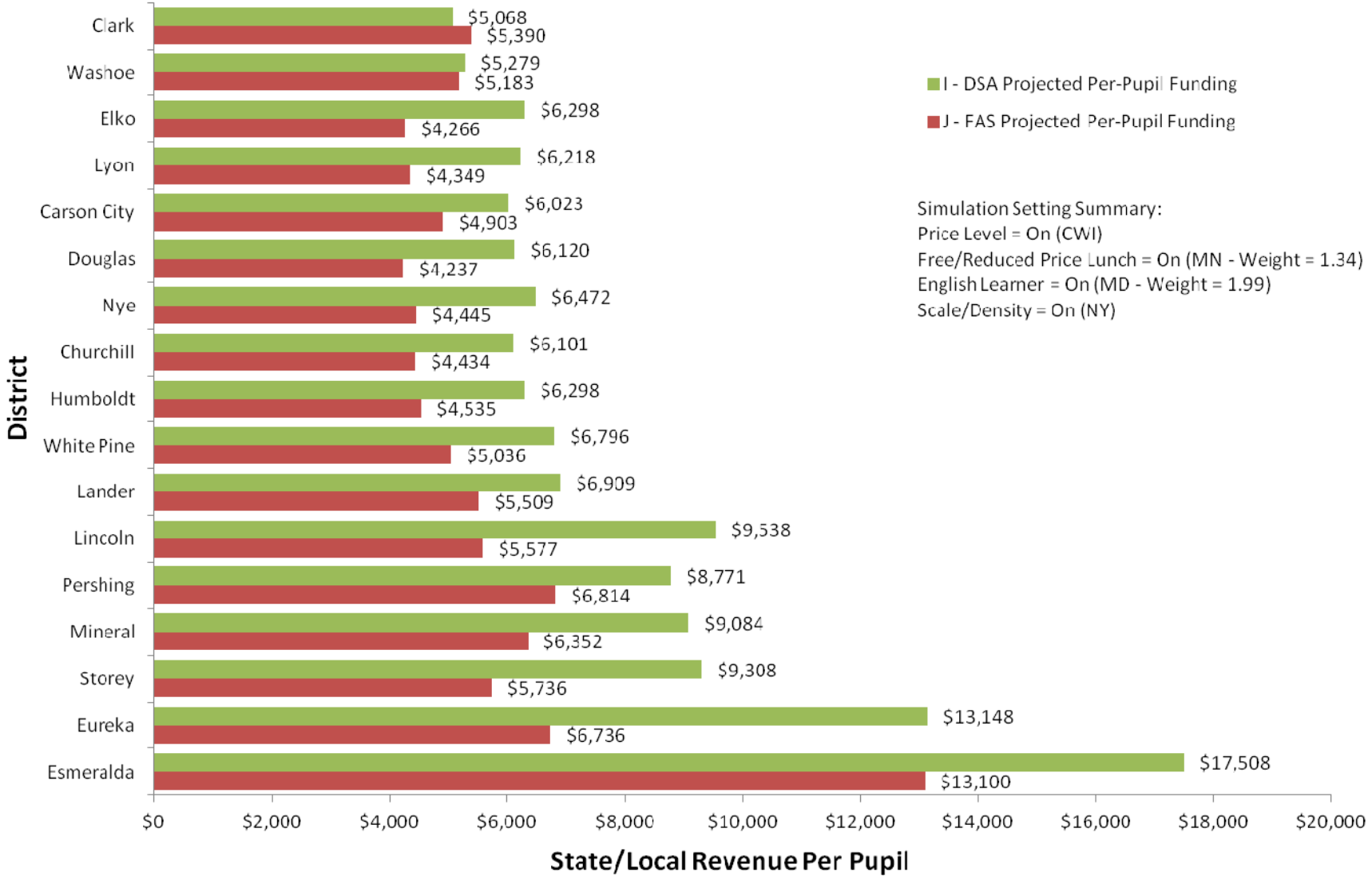


Figure 4.10. Snapshot of Funding Adjustment Simulator (FAS) Set to Combination of Progressive Funding Adjustments

Simulation Setting Summary: Price Level = On (CWI) Free/Reduced-Price Lunch = On (MN - Weight = 1.38) English Learner = On (MD - Weight = 1.99) Scale/Density = On (NY)	Price Level	Free/Reduced-Price Lunch	English Learner	Scale/ Density
Toggle (On/Off)	On	On	On	On
Select Adjustment Type From Pull-Down Menu	CWI	MN	MD	NY

		Basic Support Ratio (BSR) Adjustments									
District	A–Original BSR	B–Price Level	C–Free/ Reduced-Price Lunch	D–English Learner	E–Scale/ Density	F–Raw Adjusted BSR (B x C x D x E)	G–Pupil-Weighted Adjusted BSR	H–Current Foundation Basic Support Per-Pupil	I–DSA Projected Per-Pupil Funding (A x H)	J–FAS Projected Per-Pupil Funding (G x H)	K–FAS/DSA Difference (J–I)
Esmeralda	3.327	0.888	1.031	1.114	2.442	2.493	2.489	$ 5,263	$ 17,508	$ 13,100	$ (4,408)
Eureka	2.498	0.892	0.920	0.861	1.816	1.282	1.280	$ 5,263	$ 13,148	$ 6,736	$ (6,411)
Storey	1.768	0.916	0.846	0.861	1.636	1.092	1.090	$ 5,263	$ 9,308	$ 5,736	$ (3,571)
Mineral	1.726	0.917	0.984	0.861	1.557	1.209	1.207	$ 5,263	$ 9,084	$ 6,352	$ (2,731)
Pershing	1.667	0.917	1.036	0.934	1.461	1.297	1.295	$ 5,263	$ 8,771	$ 6,814	$ (1,958)
Lincoln	1.812	0.916	0.995	0.861	1.353	1.061	1.060	$ 5,263	$ 9,538	$ 5,577	$ (3,962)
Lander	1.313	0.902	0.928	0.949	1.318	1.048	1.047	$ 5,263	$ 6,909	$ 5,509	$ (1,401)
White Pine	1.291	0.902	0.955	0.884	1.258	0.958	0.957	$ 5,263	$ 6,796	$ 5,036	$ (1,760)
Humboldt	1.197	0.903	0.969	0.954	1.033	0.863	0.862	$ 5,263	$ 6,298	$ 4,535	$ (1,763)
Churchill	1.159	0.941	0.968	0.922	1.004	0.844	0.843	$ 5,263	$ 6,101	$ 4,434	$ (1,667)
Nye	1.230	0.903	1.014	0.929	0.994	0.846	0.845	$ 5,263	$ 6,472	$ 4,445	$ (2,027)
Douglas	1.163	0.941	0.955	0.902	0.994	0.806	0.805	$ 5,263	$ 6,120	$ 4,237	$ (1,883)
Carson City	1.144	0.941	0.992	1.004	0.994	0.933	0.931	$ 5,263	$ 6,023	$ 4,903	$ (1,120)
Lyon	1.181	0.941	0.966	0.915	0.994	0.828	0.826	$ 5,263	$ 6,218	$ 4,349	$ (1,869)
Elko	1.197	0.903	0.948	0.953	0.994	0.812	0.811	$ 5,263	$ 6,298	$ 4,266	$ (2,032)
Washoe	1.003	1.012	0.976	1.004	0.994	0.986	0.985	$ 5,263	$ 5,279	$ 5,183	$ (97)
Clark	0.963	1.012	1.010	1.009	0.994	1.026	1.024	$ 5,263	$ 5,068	$ 5,390	$ 321

Simulating Multiple Cost Adjustments

As a final demonstration, we combine all of the effective funding practices presented earlier into a single simulation. This simulation represents the simultaneous application of the four alternative funding practices described earlier:

- Price Level Adjustment—CWI
- Free/Reduced Price Lunch Adjustment—Minnesota (Weight = 1.38)
- English Learner Adjustment—Maryland (Weight = 1.99)
- Scale/Density Adjustment—New York

The results are graphed in Figure 4.9 and unsurprisingly show large differences between the current DSA and projected FAS per-pupil allocations. A modified screenshot of the FAS interface for this simulation is provided in Figure 4.10, where the final column calculates the absolute difference between the DSA and FAS Projected Per-Pupil Funding across the districts. The simulation clearly shows that implementation of this particular set of funding adjustments would result in sizable funding decreases for many of the state's districts.

A Note on the Intention of the FAS

The FAS has been developed to provide a flexible tool that can be used to evaluate the effects of implementing a broad range of funding adjustments intended to increase the equity with which educational resources are distributed to Nevada school districts. It is important to note that the presentation of the simulation model serves as a beginning to a policy-oriented process of determining what constitutes appropriate adjustments for each cost factor in the context of Nevada rather than offering an ultimate solution as to which adjustments should be used. We feel that the development of the FAS provides a readily accessible tool to policy makers in Nevada. The FAS will greatly facilitate policy discussion and help provide estimates of the impact of selecting alternative funding adjustments that are both effective and palatable to policy makers and stakeholders alike.

Analysis of Alternative Special Education Cost Adjustments

A major consideration in any state's funding practices is how to effectively finance its special education needs. Currently, Nevada uses a unit-based funding system, where each district is assigned a specific number of units. The value of each special education unit is set at $39,768 for the 2012–13 school year. Based on this unit value, we have presented the number of units along with the total dollars allocated to each of the 17 districts plus the state charter schools to provide special education services for the 2012–13 school year (see Table 4.3).

Table 4.3. Allocation of Units and Revenues for Special Education Services						
School Districts	**Nevada Group**	**Allocated Special Education Units, 2012–13**	**Allocated Amount, 2012–13**	**Average Students With Disabilities Per Special Education Unit**	**Average Total Number of Students Per Special Education Unit**	**Total Enrollment (All Students)**
Carson City	1	98.5	$ 3,917,148	9.4	78.6	7,741
Churchill	1	47	$ 1,869,096	12.2	83.3	3,917
Douglas	1	70	$ 2,783,760	11.3	89.6	6,273
Lyon	1	63	$ 2,505,384	17.4	130.6	8,228
Elko	2	84	$ 3,340,512	12.6	114.4	9,611
Humboldt	2	32	$ 1,272,576	15.4	107.3	3,434
Nye	2	58	$ 2,306,544	15.6	95.4	5,535
Lander	2	13	$ 516,984	9.2	85.4	1,110
White Pine	2	16	$ 636,288	12.1	86.3	1,380
Lincoln	3	18	$ 715,824	6.4	54.7	985
Mineral	3	8	$ 318,144	11.9	64.1	513
Pershing	3	16	$ 636,288	6.2	43.1	690
Storey	3	8	$ 318,144	7.8	51.0	408
Esmeralda	4	1	$ 39,768	3.0	64.0	64
Eureka	4	3	$ 119,304	8.0	84.0	252
Clark	5	1926	$ 76,593,168	17.2	162.7	313,301
Washoe	5	576	$ 22,906,368	14.7	112.4	64,740
State Charter Schools		11.5	$ 457,332	81.0	964.8	11,095
Totals		**3,049[86]**	**$ 121,252,632**	**16.1**	**144.07**	**439,277**

We have been unable to identify any formal documentation of how the number of units assigned to each district is exactly determined. According to the information we have received from various sources in the Nevada Department of Education, the number of units was assigned historically and the growth of units has been adjusted over time to ensure compliance with maintenance of effort requirements of IDEA.[87]

[86] Unit Value =$39,768. The unit value is the dollar amount allotted to each special education unit. This is calculated as the total allocation for special education ($121,252,632) divided by the total number of special education units (3,049).

[87] Special Education in Nevada, February 2009. For this information, we are relying heavily on conversations with Michael Alastuey, director of Public Policy at Applied Analysis and former deputy director at the Nevada State Budget Office.

Another complicating issue involves the treatment of gifted students within special education funding in Nevada. As we proceed in this analysis, we will point out alternative ways of analyzing the data. We first assume that special education funding allocations are focused only on those students with disabilities. We will then see what impact results from including gifted students as part of special education funding. Let's begin with the focus on students with disabilities only.

Students With Disabilities

Our understanding is that the special education unit itself is intended to represent an FTE special education teacher and the unit value of $39,768 reflects the average salary and benefit cost of a special education teacher.[88] Given that the average compensation of a licensed teacher in the state of Nevada is $57,312 (see DSA Module 5), a unit value of $39,768 represents a significant shortfall of revenue, even if the number of units assigned represents some sort of equitable distribution of services or funds.

One source we consulted suggested that the number of units assigned to any given district was originally based on total enrollment (special and non-special education) combined while others contended that the number of units is based on total count of students with disabilities.[89] Based on the analysis of current allocations of units, the empirical evidence would cast doubt that there is any rational or systematic process for the assignment of units to districts. Under this current system, the number of students with disabilities per-special education unit varies greatly across districts from as low as 5 students in Lincoln County to a high of 19 in Lyon Count, with a statewide average of 16 students per unit (see Table 4.3). The total number of students per unit (using all students, special and non-special education combined) varies from 43 to 162 (not including the charter schools).

Based on this analysis, we see two potential problems with the current approach to funding special education.

1. **Special education unit funding does not represent the average teacher compensation:** If the unit indeed is intended to represent the average compensation of a teacher, the value of $39,768 represents a substantial underfunding of that unit. Moreover, because the unit was, in theory, supposed to represent the value of a teacher, it provides no support for other licensed non-teaching personnel who might provide services to students with disabilities, much less any support for instructional aides or non-

[88] Special Education in Nevada, February 2009. This information on the unit value was based on a phone conversation with Michael Alastuey, former deputy director at the Nevada State Budget. This unit method was developed in the 1980s and each distributed unit was approximately equivalent to the average salary and benefits of a licensed teacher.

[89] That the assignment of units was based on total enrollment came from telephone conversations with Mike Alastuey, former Deputy Director at the Nevada State Budget.

personnel resources (e.g., specialized instructional materials, supplies, or technology) that might be necessary to serve students with disabilities. The special education unit as Nevada appears to use it has, at best, a vague link to the nature of the services received by any given student with a disability.

2. **The distribution of units appears to be inequitable:** Regardless of how the number of units is determined, the current method reveals an extremely disproportionate distribution of special education units between districts based on the number of students with disabilities per allotted unit.

Based on the data presented in the 2011 Statutes of Nevada, page 2141 (Chapter 370, AB 579), we calculated a total of 3,049 special education units and $121 million in expenditures across all districts and state charter schools in Nevada.

The goal of this project was to evaluate the current approach to school funding in Nevada and offer alternative recommendations for improving the equity by which educational services are funded. In the case of special education, it is treated outside of the DSA in an entirely separate funding model. Part of the reason for treating special education separately is because of the compliance oriented approach being used for supporting educational services for students with disabilities under IDEIA (the Individuals with Disabilities Education Improvement Act, the most recent reauthorization of IDEA). The state wants to be sure it can demonstrate its maintenance of effort in funding special education services. For this reason, we have continued to maintain the treatment of special education funding separate from the DSA.

That said, the inequity and apparent arbitrariness of the current system of funding need to be addressed in any reform of funding of special education services. Moreover, we desire to maintain the goals of reducing or minimizing any incentives for overidentification of students with disabilities or for serving students with disabilities in more segregated placements (i.e., encouraging districts to place students in the *least restrictive environment* possible).

With these goals in mind, we propose three basic funding methods for the consideration of policymakers in Nevada for reforming special education funding:

- **Fixed allocation per pupil:** This fixed allocation per pupil, allocates an equal amount per student eligible for special education services across all districts.
- **Weighted pupil funding:** A weighted model allocates revenues to districts based on the relative weights to each student that reflects the relative cost of providing educational services. Under this model, we will propose that each student will be assigned a weight corresponding to the relative cost of serving a student with that disability.

- **Census-based funding:** A census-based approach allocates revenues to districts based on the total enrollment (all students, special and non-special education, combined). This is the equivalent of assuming that there is a fixed (constant) incidence of special education students across all districts.

For each method, we hold the total expenditures on special education at the same amount as in the 2011 statutes, only redistributing the funds among districts.

Table 4.4 presents the results of each of these three alternative special education funding distribution approaches compared with the current allocations of funds. Before going into a discussion of the actual results and differences in the allocations resulting from these alternative models, we will describe how we arrived at each of these numbers.

Table 4.4. Comparison of Allocations Between the Current Nevada Special Education Funding Method and Alternative Funding Models: Fixed Weight, Pupil Weights, Grouped Pupil Weights, and Census Based										
			Fixed-Weight Allocation		Pupil-Weighted Allocation (SLD=1.0)		Pupil-Weighted Allocation Using Grouped Averages (SLD=1.0)		Census-Based Model	
School Districts	Nevada Group	Allocated Amount, 2012–13	Allocation Based on Fixed Per-Pupil Amount (All Spec Education With Same Weight), FY 2013	Percent Change From Original Allocation	Allocation Based on Weighted Pupil Allocation (Separate Weights by Disability Category SEEP), FY 2013	Percent Change From Original Allocation	Allocation Based on Group Weight and Group Incidence, FY 2013	Percent Change From Original Allocation	Census Based Allocation ($ Allocated Proportional to Total Enrollment), FY 2013	Percent Change From Original Allocation
Carson City	1	$ 3,917,148	$ 2,277,439	-42%	$ 2,193,332	-44%	$ 2,424,663	-38%	$ 2,136,731	-45%
Churchill	1	$ 1,869,096	$ 1,420,312	-24%	$ 1,364,631	-27%	$ 1,226,896	-34%	$ 1,081,201	-42%
Douglas	1	$ 2,783,760	$ 1,961,265	-30%	$ 1,921,028	-31%	$ 1,964,851	-29%	$ 1,731,522	-38%
Lyon	1	$ 2,505,384	$ 2,712,178	8%	$ 2,714,623	8%	$ 2,577,203	3%	$ 2,271,156	-9%
Elko	2	$ 3,340,512	$ 2,613,374	-22%	$ 2,482,478	-26%	$ 2,990,213	-10%	$ 2,652,902	-21%
Humboldt	2	$ 1,272,576	$ 1,215,293	-5%	$ 1,165,519	-8%	$ 1,068,400	-16%	$ 947,879	-26%
Nye	2	$ 2,306,544	$ 2,240,387	-3%	$ 2,154,987	-7%	$ 1,722,071	-25%	$ 1,527,813	-34%
Lander	2	$ 516,984	$ 293,943	-43%	$ 293,679	-43%	$ 345,348	-33%	$ 306,391	-41%
White Pine	2	$ 636,288	$ 476,731	-25%	$ 458,720	-28%	$ 429,351	-33%	$ 380,918	-40%
Lincoln	3	$ 715,824	$ 284,062	-60%	$ 268,548	-62%	$ 332,129	-54%	$ 271,887	-62%
Mineral	3	$ 318,144	$ 234,660	-26%	$ 225,150	-29%	$ 172,977	-46%	$ 141,602	-55%
Pershing	3	$ 636,288	$ 244,541	-62%	$ 234,995	-63%	$ 232,659	-63%	$ 190,459	-70%
Storey	3	$ 318,144	$ 153,147	-52%	$ 146,645	-54%	$ 137,572	-57%	$ 112,619	-65%
Esmeralda	4	$ 39,768	$ 7,410	-81%	$ 9,975	-75%	$ 12,909	-68%	$ 17,666	-56%
Eureka	4	$ 119,304	$ 59,283	-50%	$ 53,761	-55%	$ 50,828	-57%	$ 69,559	-42%
Clark	5	$ 76,593,168	$ 81,832,188	7%	$ 82,834,275	8%	$ 85,568,178	12%	$ 86,479,763	13%
Washoe	5	$ 22,906,368	$ 20,924,280	-9%	$ 20,415,570	-11%	$ 17,681,667	-23%	$ 17,870,035	-22%
State Charter Schools		$ 457,332	$ 2,302,140	403%	$ 2,314,716	406%	$ 2,314,716	406%	$ 3,062,528	570%
Totals		**$121,252,632**	**$121,252,632**	0%	**$121,252,632**	0%	**$121,252,632**	0%	**$121,252,632**	0%

The Fixed Allocation per Pupil

To determine the fixed allocation per pupil, we begin with the total dollars made available for special education services for the 2012–13 school year of $121,252,632. By dividing this amount by the total number of students with disabilities, we arrive at an average allocation of $2,470 per special education pupil. We then multiply this per pupil amount by the count of students with disabilities in each district and/or state charter schools to determine the amount available for each.

Weighted Pupil Funding

The weighted pupil funding draws on data from a national study conducted by AIR for the Office of Special Education Programs (OSEP).[90] Specifically, the Special Education Expenditure Project (SEEP), directed by Jay Chambers, resulted in a rich series of studies that provided estimates of special education spending ratios by student disability based on analysis of a nationwide random sample of students with disabilities. As mentioned in Chapter 3, this was and still remains to be the largest and most comprehensive data collection and gathered information about special education students from the most knowledgeable providers of services supplied to each individual. Although we have already listed the special education weights generated from this research in Chapter3, we summarize them again in Table 4.5:

Table 4.5. Specific Disability Category Weights

Student Category	Special Education Weight Using General Education Student as Comparison Group	Special Education Weight Using Student With Specific Learning Disability as Comparison Group
General Education Student	*Comparison group* 1.0	n/a
Specific Learning Disability (SLD)	1.6	*Comparison group* 1.0
Speech/Language Impairment (SLI)	1.7	1.1
Emotional Disturbance (ED)	2.2	1.4
Mental Retardation (MR)	2.3	1.4
Orthopedic Impairment (OI)	2.3	1.4
Other Health Impairment (OHI)	2.0	1.3
Autism (AUT)	2.9	1.8
Hearing Impairment/Deafness (HI/D)	2.4	1.5
Multiple Disabilities (MD)	3.1	1.9
Traumatic Brain Injury (TBI)	2.5	1.6
Visual Impairment/Blindness (VI/B)	2.9	1.8
Preschool (PRE) 2	2.0	1.3
Average Special Education Student	1.9	1.2

Source: Appendix B-1 of Special Education Expenditure Project (SEEP) Report 5, *Total Expenditures for Students with Disabilities, 1999–2000: Spending Variation by Disability* (2003).

[90] See Chambers et al. (2004).

Because special education is funded in Nevada outside of the DSA and the total dollars allocated are intended to be focused on special education students only, we decided to use the student weight based on SLD (i.e., using SLD as the *comparison group*) rather than the one that compares special education with regular education students. We multiplied the SLD based student weight by the proportion of students by disability category for each district and the state charter schools. This calculation produces an overall average student weight for each district/charter school. By dividing the total dollars made available by the Nevada legislature for special education services ($121,252,632) by the statewide total weighted enrollment across all districts and state charters, we determined that the average SLD students would be allocated $2,470. Multiplying the weighted sum of students for each district and charter by this base allocation provides, in effect, the weighted allocation of dollars (column 6 of Table 4.4).[91]

However, this approach treats each district separately in the determination of both the special education identification rates and the classification of students by disability. A district that identifies more students with disabilities receives greater funding, and a district that identifies greater proportions of students who are classified in high-cost disability categories will receive greater funding. To mitigate these incentives somewhat, we also calculated the allocations based on averages across groups of districts as was done in the calculations of the BSR in the DSA Modules. That is, using the same groupings of districts as was done in the current DSA Modules, we calculated group-based average identification rates and group-based average proportions of students classified by disability. By using the group averages, we recognize some of the variations in the identification and classification of special education students across districts, but we assume that districts in the same size/density group are facing similar circumstances and conditions that may impact the policies and determination of special education services. By grouping the districts, it reduces the impact of any one district on its own special education allocations, and the allocations of dollars are presented in column 8 of Table 4.4.

A Census-Based Approach

To avoid creating any incentives for identifying or classifying special education students, a number of states (9 out of the 50) use a census-based approach to allocating dollars for special education. This approach essentially allocates special education dollars to the district from the state based entirely on the total enrollment (special and non-special education combined) of the district or charter school. In effect, this is equivalent to assuming that all districts have the same identification and classification rate for special education students.

[91] For example, Carson City's mental retardation count is 17, which is multiplied by its SEEP weight of 2.3, and the same is done for the other disability categories for a weighted special education enrollment of 1,058 students. Carson City's special education allocation is $2,193,332 (1,058 disability-based weighted enrollment multiplied by $2,470 per weight pupil amount).

The census-based approach also generally provides flexibility in how special education dollars are used. It incentivizes districts to find ways to reduce the identification of special education students through such service models as response to intervention (RTI) or early intervention services. RTI attempts to identify learning deficits early and ameliorate the potential impact through various instructional interventions or strategies. Using a census-based system provides funds to districts to support RTI and other early intervention or pre-referral programs for students who do not (yet) have an IEP. The report of the *President's Commission on Excellence in Special Education* suggested that, to some extent, the rate of special education identification is due to inadequate school funding and the provision of quality programs being offered to students sufficiently early to avoid the learning problems that eventually lead to identification for special education services.[92]

Census-Based Model Combined With a Catastrophic Aid Program

Because census-based models do not provide differential funding for variations in identification or any other factors affecting the costs of special education services, they are often accompanied by catastrophic aid programs or what are otherwise known as risk management model or contingency fund. If Nevada does consider the implementation of a census-based approach to funding, we would also recommend the establishment of a contingency fund to which districts can apply for money to help pay for the cost of educating extraordinarily high-cost special education students. This type of contingency fund serves as an insurance provision to protect districts against extraordinarily high special education costs that may arise and be particularly difficult for small districts to sustain. Because of the number of small districts in Nevada, the establishment of this type of fund would be especially important.

As of 1999–2000, 31 states had such contingency funds for high-cost students. To define what constitutes a high-cost student, most states establish a threshold per-pupil cost based on a multiple of the average cost of a regular education student, and these multiples range from 1.1 to 5.0. Kansas reimburses expenditures over a base of $25,000 per student (Parrish, Harr, Anthony, Merickel, & Esra, 2003). The percentage of spending above this threshold covered by states also varies from 65 percent to 80 percent.

The contingency fund should be designed to be used rarely, to be transparent and simple, and to be low-cost to administer. Districts would be eligible to apply for funds for students for

[92] The introduction to the report to President Bush, states: "*Of those with 'specific learning disabilities,' 80% are there simply because they haven't learned how to read. Thus, many children identified for special education—up to 40%—are there because they weren't taught to read. The reading difficulties may not be their only area of difficulty, but it's the area that resulted in special education placement. Sadly, few children placed in special education close the achievement gap to a point where they can read and learn like their peers.*" Excerpt taken from *A New Era: Revitalizing Special Education for Children and Their Families*, report of the President's Commission on Excellence in Special Education (2002), available for download at http://www.ed.gov/inits/commissionsboards/whspecialeducation/index.html.

whom they can document costs of more than, for example, three times that of the average pupil. There should be some district responsibility (e.g., copay) for the excess costs for these high-cost students; thus, the state could cover 75 percent of the cost above the threshold of special education services for students who cost over three times the average per-pupil cost for a general education student.

Table 4.6 presents data that offer estimates of the potential costs of establishing a contingency fund to support exceptionally high-cost special education students in Nevada. Data used in this table include the Basic Support Guarantee derived from the DSA Module 2, data from the Nevada Department of Education, and estimates of costs and percentages of students under the alternative high-cost scenarios (1, 2, and 3). These high-cost scenarios are based on data originally collected as part of the SEEP referred to earlier, which was conducted by AIR for the U.S. Office of Special Education Program.[93] Scenario 1 classifies students as high cost if the cost of serving them is at least four times the Basic Support Guarantee ($5,374) while Scenarios 2 and 3 classify as high cost only the top 1 percent and the top one half of 1 percent of students, respectively, with respect to their cost of services. Under each of the three scenarios, we have estimated the percentage of special education students, based on district data, that are likely to be identified as high cost (e.g., severely and profoundly handicapped), and we have applied that percentage to actual counts of special education students in Nevada in 2012–13 (49,088).

In row E, we also have estimated the cost thresholds for students to qualify as being high cost under the two scenarios along with the average per-pupil costs for qualifying students. We have then calculated the excess cost for which the state would assume some responsibility for reimbursement. We are using cost estimates originally produced under the SEEP study conducted by AIR to come up with values for the cost thresholds and the average costs of the special education students identified under the two scenarios (see footnotes to the exhibit for further explanation).

We have then assumed the state would take responsibility for 75 percent of those excess costs under the contingency fund program and have calculated the total cost based on the percentages of students likely to be served. Based on these estimates, the costs of such a program under Scenarios 1, 2, and 3 are $21.2 million, $6.7 million, and $4.1 million, respectively. One can see that these estimates will vary with the choice of the criteria for classifying students as high cost along with the choice of what percent of costs the state will reimburse. Depending upon which scenario is selected, these figures represent a substantial investment of education funds to serve these high cost students amounting to approximately $73.3 million under scenario 1, $25.4 million under scenario 2, and $15.7 million under scenario 3.

[93] Data for this analysis draws on information published in the Journal of Special Education Leadership.

How large should a contingency fund be? Unfortunately, there is no straightforward answer to this question. AIR was able to obtain estimates from two states, Connecticut and New Hampshire, based on NCES data on total expenditures combined with data from (Parrish et al 2003) on the amounts set aside for these contingency funds. In both instances, the contingency funds were significantly less than 1 percent of total K–12 spending. New Hampshire set aside 1 million for the contingency fund while spending a total of 1.6 billion on K–12 education. Connecticut set aside $11.5 million while spending $6.2 billion on K–12 education.

Table 4.6. Steps to Calculating a Special Education Contingency Fund to Support Exceptionally High-Cost Students With Disabilities (2012–13)					
Row	**Description**	**Scenario 1**	**Scenario 2**	**Scenario 3**	**Source/Explanation**
A	High-cost student definition	4 x Base Cost	Top 1%	Top ½%	Scenario 1 equals four times base per-pupil cost, Scenarios 2 and 3 equal costs of top one and one-half percent of special education students, respectively
B	Total number of special education students	49,088	49,088	49,088	NDE Research Bulletin, 2011–12
C	Percent classified as high cost (estimated)	5.70%	1.00%	0.50%	Chambers et al., *Journal of Special Education Leadership* (2005)
D	Estimated students classified as high cost	2,798	491	245	Equals B x C
E	Base per-pupil cost (Basic Support Guarantee)	$ 5,374	$ 5,374	$ 5,374	Defined in DSA Module 2 (compatibility mode)
F	Estimated cost reimbursement threshold, above which costs are partially reimbursed from the contingency fund	$21,496	$38,918	$47,177	Scenario 1 is four times the base sufficiency cost while for Scenarios 2 and 3 the thresholds have been estimated[a]
G	Estimated average cost of a special education student falling above the threshold	$31,584	$57,183	$69,318	Estimates are based on ratio of per-pupil expenditures for high-cost special education students to general education students (source: Figure 1 in Chambers et al., *Journal of Special Education Leadership,* 2005)[b]
H	Average excess cost per high-cost special education student	$10,088	$18,264	$22,140	Average cost over and above the cost reimbursement threshold, equal to G–F[b]
I	Percentage of this excess cost that state would pay	75%	75%	75%	Option for state responsibility for excess costs based on a survey of practices from multiple states
J	Total amount necessary for Contingency Fund	$21,169,789	$6,724,186	$4,075,574	Equals D x H x I
K	Estimated total expenditure allocated to high-cost students over and above the Basic Support Guarantee	$73,335,999	$25,431,889	$15,694,345	Equals D x (G–E)

[a] As a rough estimate of the threshold values under scenarios 2 and 3, we applied the Scenario 1 ratio of the average high-cost special education student to cost reimbursement threshold in rows G and F, respectively, or 1.47 (=$31,584/$21,496). The estimated cost reimbursement thresholds for Scenarios 2 and 3 are as follows: $38,918 (=$57,183/1.47) and $47,177 (=$69,318/1.47).

[b] The ratios presented in the table below were applied to the projected sufficient base per-pupil cost to estimate the average cost per pupil of special education students qualifying as high cost under Scenarios 1, 2, and 3 in the exhibit above. In each case, the ratio in row C of the following table was applied to the $5,374 figure presented in Row E of Table 4.6.

		Scenario 1	Scenario 2	Scenario 3	
A	Nationwide estimates of the cost of a special education student, SEEP	$40,553	$69,760	$84,564	
B	Nationwide cost of a regular education student, SEEP	$6,556	$6,556	$6,556	
C	Ratio of A to B	6.19	10.64	12.90	

The Impact of Adding Gifted Students

In the previous analysis, we focused exclusively on students with disabilities. But it is our understanding that Nevada treats gifted students as special education. The SEEP Study, upon which the previous analysis was based, does not include gifted students in its analysis. There is no prevailing literature of which we are aware that provides a solid estimate of the relative cost or expenditure on gifted students. Nevertheless, we made some assumptions that would permit us to include gifted students in the analysis for this report. For the sake of simplicity, we made the assumption that the cost of a gifted student was between that of a regular student and a student who was classified as SLD. An SLD student has a weight of 1.6 relative to a regular education student, and therefore we are assuming for simplicity that a gifted student would have a weight of 1.3 relative to a regular student. Entering this number into our special education simulation model, this implies a weight of 0.81 (equal to 1.3/1.6) relative to an SLD student. This weight was used to recalculate all of the figures presented in Table 4.5 to show how the allocations under the different scenarios would change relative to the current allocations. These revised allocations of special education funds including gifted counts of students are displayed in Table 4.7.

It is important to note that adding gifted students to the analysis has no impact on the simulation of the costs of implementing the census-based approach since that is based on total enrollment, special and non-special education students combined.

Table 4.7. Comparison of Allocations Between Current the Nevada Special Education Funding Method and Alternative Funding Models With Gifted Students Included as Part of Special Education: Fixed Weight, Pupil Weights, Grouped Pupil Weights, and Census Based[a]										
			Fixed-Weight Allocation		Pupil-Weighted Allocation (SLD=1.0)		Pupil-Weighted Allocation Using Grouped Averages (SLD=1.0)		Census-Based Model	
School Districts	Nevada Group	Allocated Amount, 2012–13	Allocation Based on Fixed Per-Pupil Amount	Percent Change From Original Allocation	Allocation Based on Weighted Pupil Allocation	Percent Change From Original Allocation	Allocation Based on Group Weight and Group Incidence	Percent Change From Original Allocation	Census-Based Allocation ($ Allocated Proportional to Total Enrollment), FY 2013	Percent Change From Original Allocation
Carson City	1	$ 3,917,148	$ 3,395,115	-13%	$ 3,008,731	-23%	$ 2,619,002	-33%	$ 2,136,731	-45%
Churchill	1	$ 1,869,096	$ 1,374,066	-26%	$ 1,338,074	-28%	$ 1,325,233	-29%	$ 1,081,201	-42%
Douglas	1	$ 2,783,760	$ 1,951,215	-30%	$ 1,918,672	-31%	$ 2,122,336	-24%	$ 1,731,522	-38%
Lyon	1	$ 2,505,384	$ 2,532,472	1%	$ 2,584,863	3%	$ 2,783,768	11%	$ 2,271,156	-9%
Elko	2	$ 3,340,512	$ 2,536,580	-24%	$ 2,443,043	-27%	$ 2,746,711	-18%	$ 2,652,902	-21%
Humboldt	2	$ 1,272,576	$ 1,010,524	-21%	$ 1,024,043	-20%	$ 981,397	-23%	$ 947,879	-26%
Nye	2	$ 2,306,544	$ 1,862,897	-19%	$ 1,893,404	-18%	$ 1,581,838	-31%	$ 1,527,813	-34%
Lander	2	$ 516,984	$ 244,415	-53%	$ 258,031	-50%	$ 317,225	-39%	$ 306,391	-41%
White Pine	2	$ 636,288	$ 396,405	-38%	$ 403,038	-37%	$ 394,388	-38%	$ 380,918	-40%
Lincoln	3	$ 715,824	$ 236,200	-67%	$ 235,950	-67%	$ 309,218	-57%	$ 271,887	-62%
Mineral	3	$ 318,144	$ 203,337	-36%	$ 203,739	-36%	$ 161,045	-49%	$ 141,602	-55%
Pershing	3	$ 636,288	$ 211,553	-67%	$ 212,389	-67%	$ 216,610	-66%	$ 190,459	-70%
Storey	3	$ 318,144	$ 174,582	-45%	$ 162,877	-49%	$ 128,082	-60%	$ 112,619	-65%
Esmeralda	4	$ 39,768	$ 6,162	-85%	$ 8,764	-78%	$ 11,342	-71%	$ 17,666	-56%
Eureka	4	$ 119,304	$ 49,294	-59%	$ 47,236	-60%	$ 44,658	-63%	$ 69,559	-42%
Clark	5	$ 76,593,168	$ 79,759,523	4%	$ 81,219,460	6%	$ 85,592,537	12%	$ 86,479,763	13%
Washoe	5	$ 22,906,368	$ 23,120,875	1%	$ 22,059,778	-4%	$ 17,686,700	-23%	$ 17,870,035	-22%
State Charter Schools		$ 457,332	$ 2,187,415	378%	$ 2,230,540	388%	$ 2,230,540	388%	$ 3,062,528	570%
Totals		**$121,252,632**	**$121,252,632**	0%	**$121,252,632**	0%	**$121,252,632**	0%	**$121,252,632**	0%

[a] This table includes the total count of students with disabilities plus the count of gifted students as part of the analysis.

Table 4.8. Analysis of Enrollment, Special Education Units and Percent Identified as Eligible for Special Education With and Without Gifted Student Counts							
District	**Counts of Gifted and Talented Students**	**Total Special Education Enrollment, Including Gifted**	**Allocated Special Education Units, 2012–13**	**Average Students Per-Unit, Including Gifted, 2012–13**	**Average Students With Disabilities per Special Education Unit**	**Percent Total Enrollment Identified as Special Education (Including Gifted)**	**Percent of Total Enrollment Identified as Special Education Students**
Carson City	731	1,653	99	16.8	9.4	21.4%	11.9%
Churchill	94	669	47	14.2	12.2	17.1%	14.7%
Clark	5,704	38,833	1,926	20.2	17.2	12.4%	10.6%
Douglas	156	950	70	13.6	11.3	15.1%	12.7%
Elko	177	1,235	84	14.7	12.6	12.8%	11.0%
Esmeralda	0	3	1	3.0	3.0	4.7%	4.7%
Eureka	0	24	3	8.0	8.0	9.5%	9.5%
Humboldt	0	492	32	15.4	15.4	14.3%	14.3%
Lander	0	119	13	9.2	9.2	10.7%	10.7%
Lincoln	0	115	18	6.4	6.4	11.7%	11.7%
Lyon	135	1,233	63	19.6	17.4	15.0%	13.3%
Mineral	4	99	8	12.4	11.9	19.3%	18.5%
Nye	0	907	58	15.6	15.6	16.4%	16.4%
Pershing	4	103	16	6.4	6.2	14.9%	14.3%
Storey	23	85	8	10.6	7.8	20.8%	15.2%
Washoe	2,786	11,257	576	19.5	14.7	17.4%	13.1%
White Pine	0	193	16	12.1	12.1	14.0%	14.0%
State Charter Schools	133	1,065	12	92.6	81.0	9.6%	8.4%
Totals	**9,947**	**59,035**	**3,049**	**19.4**	**16.1**	**13.4%**	**11.2%**

Including gifted students as part of special education changes the landscape of the allocations and the percent of students identified as eligible for special education services. Excluding gifted, the average special education identification rate is 11.2 percent while with gifted included, the average identification rate equals 13.4 percent. Carson City stands out with the highest combined identification rate of 21.4 percent, almost half (44 percent) of which is accounted for by gifted students. Seven of the 17 districts in Nevada report no gifted students at all.

It is also noteworthy that the range of variation in the total number of special education students, including gifted, per unit allocation is still quite large. The average number of students per special education unit excluding gifted is about 16 and, excluding the state charter schools, ranges from 3 students per unit to more than 17 students. Including gifted, the average rises to more than 19 and, excluding the state charter schools, ranges from 3 to 20 students.

Analysis of the Special Education Funding Options

The analyses in Table 4.4 reveal that there are substantial reallocations of funds that result from any of the options for funding special education. We have been careful to ensure that all of the options were applied so that the impact would be fiscally neutral overall: that is, changes in the allocations across districts basically add up to zero. It is a zero sum game in effect: the total dollars remains at $121.3 million.

It is important for state policymakers to consider what they regard as the most equitable way to allocate funds and recognize that any short-term gains or losses in this process reflect the fact that the state is moving from a less to a more equitable solution and resolving any over- or underfunding that existed under the old system. That said, we also realize that sudden adjustments of funding can have substantial impact on programs, services, and children and cannot be done overnight, no matter how much better or preferable a new method for allocating funds might be. The so-called winners (losers) in moving from the old to a new system are resulting only from the fact that these districts were underfunded (or overfunded) under the old system.

Table 4.4 reveals that, regardless of which new option the state might adopt for funding special education, Clark County Public Schools stands to gain significant amounts of absolute dollars ranging from as low as a 7-percent increase under a fixed-weight allocation (with all students with disabilities receiving equal weight) to a 13-percent increase under a census-based system (with funds being allocated based on total enrollment—special and non-special education combined).

The State Charter schools also stand to gain substantial funds under almost any new option for funding special education. Under the current regime, State Charter schools are receiving roughly $460,000 in special education funding while under any of the new options, these schools would receive anywhere from about $2.3 million to just more than $3.1 million.

Lyon Public Schools would gain funding under the first three options—the fixed-weight or the pupil-weighted allocation with implemented with individual district or grouped rates of identification (reflecting the overall percent of students identified as eligible for special education services) and classification (reflecting the distribution of special education by disabilities) of special education students.

The losses of funds among the remainder of the districts range from just under 10 percent to as high as 80 percent and depend, to some degree, on which model is implemented.

Adding gifted students into the analysis of special education resulted in similar patterns of change across districts. Clark County and Lyon Public Schools along with the State Charter Schools gained funding under the same options they did before and the remaining districts lost

funding. However, the magnitudes of the changes, both positive and negative, tended to be somewhat smaller, with some exceptions.

There is a range of costs for holding districts harmless if Nevada were to decide to implement one of the four alternative funding models for special education immediately. By holding districts harmless, no districts lose any funding to prevent dramatic losses of services. Tables 4.9 and 4.10 present the district-by-district and total state costs of implementing the alternative models without and with gifted students included, respectively. In each case, the *fixed-weight model* was the least costly, amounting to $7.3 million and $5.1 million, respectively, while the *census-based* model was the most expensive at $12.5 million in both cases. District-by-district amounts show the amounts that each district would lose in real terms. Lyon, Clark, and the state charter schools would all gain revenues as suggested earlier with the exception of the *census-based model,* in which Lyon would join the remaining districts requiring state revenues to hold them harmless.

Table 4.9. Analysis of the Cost of Implementing Alternative Special Education Funding Models Under a "Hold-Harmless" Provision, Including Students With Disabilities Only				
School Districts	**Fixed-Weight Allocation**	**Pupil-Weighted Allocation (SLD=1.0)**	**Pupil-Weighted Allocation Using Grouped Averages (SLD=1.0)**	**Census-Based Model**
Carson City	$ 1,639,709	$ 1,723,816	$ 1,492,485	$ 1,780,417
Churchill	$ 448,784	$ 504,465	$ 642,200	$ 787,895
Douglas	$ 822,495	$ 862,732	$ 818,909	$ 1,052,238
Lyon	$ -	$ -	$ -	$ 234,228
Elko	$ 727,138	$ 858,034	$ 350,299	$ 687,610
Humboldt	$ 57,283	$ 107,057	$ 204,176	$ 324,697
Nye	$ 66,157	$ 151,557	$ 584,473	$ 778,731
Lander	$ 223,041	$ 223,305	$ 171,636	$ 210,593
White Pine	$ 159,557	$ 177,568	$ 206,937	$ 255,370
Lincoln	$ 431,762	$ 447,276	$ 383,695	$ 443,937
Mineral	$ 83,484	$ 92,994	$ 145,167	$ 176,542
Pershing	$ 391,747	$ 401,293	$ 403,629	$ 445,829
Storey	$ 164,997	$ 171,499	$ 180,572	$ 205,525
Esmeralda	$ 32,358	$ 29,793	$ 26,859	$ 22,102
Eureka	$ 60,021	$ 65,543	$ 68,476	$ 49,745
Clark	$ -	$ -	$ -	$ -
Washoe	$ 1,982,088	$ 2,490,798	$ 5,224,701	$ 5,036,333
State Charter Schools	$ -	$ -	$ -	$ -
Totals	**$ 7,290,622**	**$ 8,307,730**	**$ 10,904,213**	**$ 12,491,791**

Table 4.10. Analysis of the Cost of Implementing Alternative Special Education Funding Models Under a "Hold-Harmless" Provision, Including Students With Disabilities and Gifted Students as Part of Special Education				
School Districts	**Fixed-Weight Allocation**	**Pupil-Weighted Allocation (SLD=1.0)**	**Pupil-Weighted Allocation Using Grouped Averages (SLD=1.0)**	**Census-Based Model**
Carson City	$ 522,033	$ 908,417	$ 1,298,146	$ 1,780,417
Churchill	$ 495,030	$ 531,022	$ 543,863	$ 787,895
Douglas	$ 832,545	$ 865,088	$ 661,424	$ 1,052,238
Lyon	$ -	$ -	$ -	$ 234,228
Elko	$ 803,932	$ 897,469	$ 593,801	$ 687,610
Humboldt	$ 262,052	$ 248,533	$ 291,179	$ 324,697
Nye	$ 443,647	$ 413,140	$ 724,706	$ 778,731
Lander	$ 272,569	$ 258,953	$ 199,759	$ 210,593
White Pine	$ 239,883	$ 233,250	$ 241,900	$ 255,370
Lincoln	$ 479,624	$ 479,874	$ 406,606	$ 443,937
Mineral	$ 114,807	$ 114,405	$ 157,099	$ 176,542
Pershing	$ 424,735	$ 423,899	$ 419,678	$ 445,829
Storey	$ 143,562	$ 155,267	$ 190,062	$ 205,525
Esmeralda	$ 33,606	$ 31,004	$ 28,426	$ 22,102
Eureka	$ 70,010	$ 72,068	$ 74,646	$ 49,745
Clark	$ -	$ -	$ -	$ -
Washoe	$ -	$ 846,590	$ 5,219,668	$ 5,036,333
State Charter Schools	$ -	$ -	$ -	$ -
Totals	**$ 5,138,034**	**$ 6,478,979**	**$ 11,050,962**	**$ 12,491,791**

Chapter 5—Recommendations

After a review of the various components of school funding in the state of Nevada, we focus attention in this final chapter on all of our recommendations for reform and change. The recommendations are divided into three sections: those focused on the Distributive School Account, those focused on special education funding, and those that have more general application to Nevada school funding reform.

Distributive School Account DSA Model Recommendations

Modify DSA Adjustments for Scale/Density and Geographic Differences in Staffing Prices to Ensure Equity Across Districts

As we have demonstrated earlier in this report, the process used by the DSA to calculate the BSR attempts to adjust for two components of differences in educational costs (cost factors) across districts:

- **Scale/Density**—This component provides an estimate of the differences in educational costs associated with differences in district size and density of student population served.
- **Differences** in Staffing Prices—This portion of the BSR captures differences in educational costs associated with variations in the average compensation levels of educators across districts.

The following section offers a series of recommendations stemming from our in-depth investigation of the DSA and touches on the various elements involved in calculating the BSR that represent the current funding adjustments for differences in scale/density and compensation across Nevada districts.

Recommendation 1—Review and Revise the Teacher Allotment Tables and Attendance Areas

The teacher allotment tables are a critical component of the DSA. These tables provide the foundation for adjustments that account for the variation in the relative costs of services across the districts corresponding to differences in size and sparsity. The teacher allotment tables provide additional dollars to smaller districts to reflect the consolidation of courses and classes that inevitably are associated with smaller districts in rural and more remote locations. It is our understanding that the teacher allotment tables were last reviewed several years ago. However, because of the critical role that these tables play in determining funding allocations and guarantees in the current DSA, they need to be reviewed and possibly updated approximately every five years.

To carry this analysis out, we recommend a panel be convened that would be charged with examining existing school-level data on enrollments and actual teacher allocations and compare current pupil-teacher ratios with those suggested by the teacher allotment tables.

This same panel could simultaneously review the structure and conceptual underpinnings on which the attendance areas were built and the way in which the FTE allocations generated by the teacher allotment tables are affected by the choice of attendance areas. This type of analysis would help inform decisions by Nevada policymakers as to how the teacher allotment tables or attendance areas might be modified to create appropriate funding adjustments. The panel could seek out stakeholder input on how well the current funding adjustments meet the needs of districts in remote rural regions of the state and may be compared with similar adjustments in other states as we have done earlier in this report (e.g., the most aggressive scale/density funding profiles such as New York—see the scale of operations cost adjustment simulation in the section "Using the Nevada Funding Adjustment Simulator (FAS)" in Chapter 4). As part of this investigation, one could ask whether the teacher allotment tables might be better applied to school catchment areas rather than the larger attendance areas in which schools of varying sizes are lumped together and when and under what circumstances more aggregated school data might be permissible to use for this purpose.

In addition, while the attendance areas are being reviewed and possibly modified, the definitions and procedures for determining these should be well documented. Although we were able to obtain the data and the calculations underlying the attendance areas, we were not able to obtain any documentation that described how schools were assigned to attendance areas.

Recommendation 2—Update the FTE Staffing and Expenditure Data Used in DSA Calculations

As part of the many calculations involved in determining the BSR for each district, the DSA makes use of data on administrative and teacher full-time-equivalent (FTE) staff to calculate administrative to teacher ratios. The DSA then uses these ratios in conjunction with the projected teacher FTE allotments to calculate administrative staffing needs. In addition, the model uses per-pupil expenditure on classified staff and operations to calculate the funding necessary to support these functions. The research team found that the DSA currently uses information dating as far back as 2004 to support these calculations that underlie the BSR. After some investigation, including discussions with various individuals with ties to the Nevada Department of Education, it appears likely that the use of 2004 figures in the current DSA are simply those that were used the last time the model was modified by the DSA Evaluation Team in 2006.

The BSR is obviously a critical component to the determination of the amount of funding to be made available to each district, and the data underlying these calculations need to be as accurate as possible. Although we believe the basic conceptual framework on which the DSA has been developed is well founded, it is vitally important that these data are reviewed and updated on a periodic basis of roughly every three to five years. Note that modifying this information on a more frequent basis is not warranted, as it could create a perverse incentive for districts to distort their behavior, although this incentive is tempered by the district groupings explained later (see "Recommendation 4—Reconsider the Way the DSA Groups

Districts for Calculations"). Although we do not believe that many of the relationships that are utilized and measured within the DSA data and calculations change rapidly over time (e.g., from year to year), it is important to update these as the configurations of enrollments and services in each district may change in response to changes in local conditions over longer periods (e.g., five years). To this end, we strongly suggest that the administrative and teacher staffing data, as well as the information on operational and classified staff expenditures used to populate the DSA, be updated no less frequently than every five years.

Again, a key suggestion under this recommendation focuses on documenting the data elements utilized within the DSA calculations. The idea here is that detailed documentation be drafted as to *what* FTE staffing and expenditure data will be used to populate the DSA (including the year and source of the information) as well as *how* these data are employed by the DSA (i.e., what calculations are made using these pieces of data that enter the model). This should take the form of an independent stand-alone document that should greatly improve the procedures for maintaining and updating the DSA model over time as well as provide a much greater degree of transparency than is currently offered.

Recommendation 3—Replace the Implicit Wage Differential Adjustment in the DSA With a More Objective Measure of Geographic Labor Cost Variation, Such as the Comparable Wage Index (CWI)

As described in Chapter 3, the CWI is intended to capture the variations in the market price of hiring and retaining education staff across different geographic regions of Nevada. The CWI provides an estimate of the wages of noneducation laborers who have comparable characteristics and educational attainment while controlling for regional differences in the composition of industries. Currently, the DSA attempts to capture these labor market differences through what amounts to the model's grouped average levels of compensation of school personnel. Although the grouping of these averages reduces the ability of any given district to impact the average on which its own funding is determined, the implicit average compensation indices that help drive the BSRs in the current DSA at least partially reflect the choices of districts regarding personnel rather than external factors affecting the supply of labor and thus the market price of comparable staff. The CWI is explicitly designed to capture the differences in the staffing prices derived from the supply side of the market and are therefore outside the control of the districts. The findings presented in Chapter 4 show that the implicit staffing price adjustments made by the DSA are greatly driven by the demand side of the labor markets (district preferences), and these variations go beyond the patterns of variations commonly associated with true differences in the cost of comparable labor across districts (see the section "Incorporating the Comparable Wage Index (CWI) Into the DSA" in Chapter 4). For this reason, using the CWI or a similar type of measure would be a preferable way to capture differences in the prices of educational resources in adjusting distributions of school funding to local school districts.

Recommendation 4—Reconsider the Way the DSA Groups Districts for Calculations

We believe that the grouping of districts for calculating certain staffing, expenditure, and staff compensation averages seems to be conceptually reasonable. In effect, it groups districts by what amounts to size and other characteristics of the attendance areas to capture some of the systematic differences in staffing and spending that impact the costs of educational services in different geographic regions of the state. As the state begins to review the teacher allotment tables and the attendance areas within the DSA, we believe it would be useful to review the criteria for grouping the districts for the calculations contained within the DSA. Table 5.1 shows the variations in size and student density that exist across the 17 Nevada school districts. Our view is that the types of differences in costs that the DSA attempts to capture in the BSR are associated with differences in both size and student density. These two factors, size and density, taken together impact the way districts organize and provide services to students living in different communities. Distances between schools and sparsity of student populations may also have significant impact on the configurations and costs of services and should be studied and reviewed as part of the review of the teacher allotment tables and attendance areas. Although the definitions of district groupings are explained within the DSA, we believe that providing further information for the rationales and criteria underlying the organizing and assignment of districts to the groupings as well as conducting further analyses of distances between schools and between schools and the central offices would be useful in assessing the validity of these assignments of districts to groups. Specifically, further investigation on the appropriateness of the existing district groupings should be performed and include analyses of staffing and expenditures on non-personnel resources across districts in relation to their size, density values, and other criteria such as distances between schools. The state policymakers could then develop recommendations as to whether the assignments of districts to groupings are appropriate and what impact alternative groupings would have on the DSA allocations.

Table 5.1. Enrollment and Student Density (Number of Students per Square Mile) in Nevada Districts				
Districts	**Group**	**Group Description**	**Enrollment**	**Density**
Churchill	1	Centralized	4,206	0.85
Douglas	1	Centralized	6,591	9.29
Carson City	1	Centralized	7,761	53.65
Lyon	1	Centralized	8,765	4.38
Lander	2	Rural	1,136	0.21
White Pine	2	Rural	1,442	0.16
Humboldt	2	Rural	3,401	0.35
Nye	2	Rural	6,170	0.34
Elko	2	Rural	9,422	0.55
Storey	3	Small	447	1.70
Mineral	3	Small	571	0.15
Pershing	3	Small	719	0.12
Lincoln	3	Small	1,005	0.09
Esmeralda	4	Very Small	67	0.02
Eureka	4	Very Small	259	0.06
Washoe	5	Large	64,838	10.29
Clark	5	Large	307,059	38.91

Incorporate New Adjustments for Low-Income Students and English Language Learners into the DSA to Ensure Equity Across Districts

Recommendation 5—Embed the Pupil-Weighted Adjustments for Low-Income and English Language Learner Students as Well as Scale/Density Into the DSA Through the BSR

Nevada Is Not in Line With Most States on Need-Based Funding. As mentioned in Chapter 2, Nevada's current funding system does not include funding adjustments for the additional costs associated with serving low-income students or English language learners. Moreover, Nevada is generally not in line with the rest of the country, being one of 14 states that does not adjust funding to account for the needs of low-income students and one of only 8 that does not account for the additional cost of English language learners. As low-income students and English language learners are widely accepted in the mainstream education finance literature to be associated with higher educational costs, it is our strong recommendation that funding adjustments be incorporated into the current funding system to account for these student need cost factors.

There Are a Reasonable Range of Weights That Nevada Should Consider. The analysis in Chapter 3 provided examples of the adjustments used in other states to account for the additional costs associated with serving low-income students, ELLs, and those students in districts of varying sizes and degree of remoteness, which could be adopted by Nevada.

The Costs of Serving Low-Income Students. For example, we observed that the top ten states added anywhere from 13 to 34 percent more to state and local revenues for every low-income student over and above that provided to a non-low-income student (see Table 3.4). Currently, Nevada relies entirely on Federal funding (e.g., through distributions of Title I dollars under the current authorization of the Elementary Secondary Education Act, otherwise known as No Child Left Behind) to provide additional dollars for low-income students. Policymakers in the state of Nevada need to decide whether they want to be among the leaders in providing equal educational opportunities for low-income students, and deciding to adjust the Basic Support Guarantee somewhere in the range of the implicit low-income weights of the top ten states would be a step in that direction.

The Costs of ELL Programs. There is no rich literature of which we are aware describing a single best approach to addressing the needs of ELL students. The range of options and their costs are wide and represent a multitude of cost factors (e.g., numbers of languages represented among student populations and the extent to which there is a critical mass of students whose primary language is the same) and delivery systems (e.g., bilingual education, English as a second language, or language immersion). Our recommendation is for the expert panel to recommend the development of alternative models or creation of student-level data systems that can track the services students receive and the results. A student-level data system that tracks services can be used to estimate costs and linking such student level data to outcomes can help policymakers learn about what is working in different parts of the state.

The Formulate Adjustment Simulator (FAS) Provides a Mechanism for Determining the Impact of Alternative Weights. The FAS introduced in Chapter 4 and delivered with this report shows explicitly how to incorporate these alternative adjustments. Specifically, the FAS was developed to provide a flexible tool that can easily provide real-time analysis of the effects of various funding adjustments on projected funding to districts. It should be noted that the FAS is a strict *distributor* of existing funding so that whatever combination of adjustments chosen for the various cost factors, a fiscally neutral BSR is generated that represents an equitable allocation of funding across districts that takes into account the main factors thought to impact differences in educational costs. We strongly suggest that Nevada makes use of this tool both to select and implement funding adjustments for low-income students and English language learners that are palatable in terms of being both practical and politically acceptable.

Weights Should Be a Policy Judgment for Policymakers. Recommendations on what specific weights should be adopted by the State of Nevada for low-income or ELL students are beyond

the purview of the authors of this report. However, we can simply report what other states are doing and offer some options for policymakers within the state to consider. Adding a low-income or ELL weight for Nevada would indicate a new commitment by policymakers to equal educational opportunity for these categories of students. Next steps for the state of Nevada should involve establishing its own panels of educators (e.g., teachers, curriculum specialists, and program directors) and experts from across the state to assess available data and determine what appropriate weights should be. These experts should be supported by the development of data related to resource allocation and student outcomes from various sources across the state and using these data to identify what works for various categories of students served in different contexts. Decisions on what weights that should be established should be based on continuous examination of available data related to understanding the factors that lead to student success.

Policies Need to Be Established to Minimize Incentives for Overclassification. Key issues for an expert panel to consider are options to minimize or eliminate incentives to overclassify students based on targeted needs or disincentives associated with reclassification when a student no longer meets the special need eligibility requirement. The expert panel would need to set out objective criteria and standards to provide guidance to local decision makers on how to classify or reclassify students to be eligible for additional services related to addressing academic or language deficits. It is important that such criteria be well known and understood by local educators to minimize errors in student classification for the determination of program eligibility. One approach to reducing over-classification of students with language deficits is to establish a maximum period during which a student may be classified at a certain level of English language proficiency. Students would be automatically reclassified into a lower need category and become ineligible for additional funding. This would encourage districts to monitor student progress carefully during their periods of eligibility to ensure they are benefitting from the program and are prepared to receive general education services.

How Do You Count Students With Multiple Needs? Another critical issue relates to how you count children who might fit into more than one need category for the purpose of funding. The most common circumstances might include students who are English language learners but who also are from low-income families. Similarly, a student with a disability could also be from a low-income family. In each instance, our experience suggests that most states count the student in both categories. Students who satisfy the eligibility criteria of both categories generally have additional educational needs over those who do not. The additional funding provides the districts with flexibility on how to allocate resources to meet student needs. The focus of the state in this case should be less on details of how children are being counted or classified and more on whether they are learning.

What Options Are Available for Adjusting for Costs Related to District Scale? Through its current DSA model, Nevada currently exhibits an aggressive adjustment for differences in educational costs associated with the scale of operations. Analyses of the data in Chapters 3 and 4 show that Nevada currently does make a commitment that is larger than the 10 states with the most aggressive funding profiles (see Figure 3.5) for scale of operations. For example, drawing on data from Figures 4.3 and 4.10, the current DSA provides a scale-related cost adjustment of 2.76 (= 2.681/0.971) for Esmeralda, the smallest district in Nevada, relative to Clark County, the largest district in Nevada, while the implicit New York State cost profile based on scale of operations would have provided a cost adjustment of 2.46 (=2.442/0.994) for Esmeralda versus Clark. In other words, a student in Esmeralda relative to a student in Clark County would require somewhere between 146 to 176 percent more resources to adjust for the diseconomies of small-scale operations experienced in Esmeralda.

The final determination of what that scale adjustment should be is a policy decision for the state legislature. We used the FAS to run a simulation using the California scale adjustment profile (the 10th most aggressive scale profile) instead of the New York scale adjustment profile just to illustrate the range of variations. Although the relative cost of Esmeralda versus Clark County was 2.46 using the New York scale profile, the relative cost of these two districts using the California profile was 1.51. In other words, the California scale profile would be associated with a 51 percent differential cost compared with a 146 percent differential cost between Esmeralda and Clark County. These comparisons show how aggressive the current *Nevada Plan* scale parameters are relative to other states.

Recommendations for Funding Special Education

This section focuses on recommendations to improve the way Nevada currently funds special education services.

Documenting How Special Education Is Funded

Recommendation 6—Document the Current Approach to Funding Special Education

If Nevada decides to maintain its current approach to funding special education, it will need to document fully and in detail the processes and procedures currently being used to allocate special education units to districts and charter schools. We asked representatives of the Nevada Department of Education (NVDOE) for documentation and little concrete information was forthcoming. There seemed to be conflict among the NVDOE representatives as to whether the original assignment of units was based on total enrollment (special and non-special education combined) or total enrollment of students identified as eligible for special education services (whether we included or excluded gifted students). Our analysis also showed wide variations in the number of special education pupils per unit across districts, regardless of whether or not we included gifted students in the count. At the very least, this suggests a weak link between

special education student needs, even counted in the crudest of ways (i.e., with simple counts), and unit allocation funding for special education services. Documentation of the procedures for allocating special education units to districts should not only be made readily available but should be based on a respectable assessment of the relative needs of students being served. If the unit approach is to be retained, the unit values need to be more precisely defined in the documentation, and the elements (e.g., average compensation levels of licensed special education staff) included in determining these values should be calculated using updated data.

Establish One or More Panels to Consider Special Education Funding Policy Recommendations

Recommendation 7—Consider One of the Four Special Education Funding Options: Flat Funding, Pupil Weights by District, Pupil Weights by Grouped Average Identification and Classification Rates, and Census-Based Funding

Flat Funding and Pupil Weights. The state should consider one of the four options proposed by AIR in the context of its policy objectives for serving special education students. Three of the options provide simple approaches that maintain fiscal neutrality and explicitly acknowledge the differential costs of serving students with disabilities based on an objective national source of data. The pupil weights proposed in two pupil weight options should be updated through careful study that could be undertaken by the state to examine how much is being spent on special education services and how these expenditures are allocated among students by disability or other need category. These objective data on student services could be used to develop weights that are unique to Nevada and that reflect the differences in the service models and organization of these special education services across the diverse groups of districts within the state. Such analysis could follow the structure of the DSA model in which staffing and expenditure data are grouped according to district size/density (i.e., the well-known five groupings of districts used in the DSA).

Census-Based Approach. The fourth option that a state panel could study further is the viability of employing a census-based approach to special education funding combined with a contingency fund to help support the costs of services for severely disabled children and who require extraordinarily high-cost services. Compared with the flat grant or weighted pupil approach, the census-based approach greatly reduces, if not eliminates, any incentives for overidentifying children with disabilities and for inappropriately classifying them into high-cost disability categories. It also creates incentives for more inclusive approaches to serving students with disabilities in the *least restrictive environment* and in finding creative ways through funding flexibility to ameliorate learning deficits through RTI or pre-referral services (i.e., services that occur prior to identification of a child as eligible for special education).

A Contingency or Risk Management Fund. A second part of a census-based funding approach involves the establishment of a contingency fund (a risk-management fund, if you will) that

reduces the likelihood that one or a few high-cost children with disabilities could cause excessive financial strain or even bankruptcy on small districts that may be less able to absorb such costs. An example of how this might look is presented in Chapter 4 (see the section "Census-Based Model Combined With a Catastrophic Aid Program"). The panel we recommend would explore ways of setting aside state or federal funds that may be used to support these contingency programs and determine how evaluating specific high-cost students would be conducted by districts, what the eligibility guidelines are for applying for additional support from the contingency fund, and the amount of funding districts would receive for educating students with various high-cost disabilities.

Maintenance of Effort. The expert panel should also explore possible combinations of these four options if it is deemed appropriate and assessing the cost implications for each of these for the maintenance-of-effort (MOE) requirements imposed by the federal IDEA law. All of these options for a new funding model for special education may have implications for the MOE provisions of the federal law governing special education funding. There are exceptions to the MOE provisions that involve tracking of student as well as faculty populations at the local level. Legitimate reductions in identification rates of children and voluntary retirements or departures of more for less experienced staff are two possibilities.[94] Hold-harmless provisions can also provide protection for local districts against MOE violations, but this will require additional funding from the state to support such provisions.

Recommendation 8—Separate Funding for Gifted Students

We recommend that funding for gifted and special education students be separated to follow the federal IDEIA law supporting funding for students with disabilities. This division of the funding approach between gifted and students with disabilities would follow the existing federal law, which is primarily focused on the latter category of students. Moreover, this approach would permit analysis and funding priorities to differentiate between these diverse groups of students. The variation in the identification of gifted students across districts found in Chapter 4 (see the section "The Impact of Adding Gifted Students") also suggests quite varied approaches to defining what constitutes a gifted student. It would seem more productive to provide districts with the flexibility to identify gifted students in a way that reflects the diversity and unique talents that exist in almost any student population. Giftedness can reveal itself in a multitude of ways, and currently there is no literature of which we are aware that provides any solid data on what the additional costs are to educate a gifted child.

Recommendation 9—Integration of Special Education Into the DSA

Rather than treating special education funding as a separate revenue stream, special education could be integrated into the DSA model in the same manner as we have suggested for low-

[94] For more exceptions to MOE, visit http://www.asha.org/advocacy/federal/EffortReqsIDEA2004FAQs/

income and English language learner students. This could make use of district-by-district or grouped weights using as a starting point the weights presented from the SEEP study. Eventually, Nevada's own weights could be developed via the proposed project in Recommendation 2. An appropriate set of weights could be built into the FAS model described earlier in this report, and the funding set aside for special education could be integrated into the Basic Support Guarantee funding per pupil.

Recommendation 10—Assessing the Costs of Serving Students With Disabilities

Further work on special education should be done to obtain an estimate of how much districts are spending to educate students with disabilities and/or gifted students. The importance of this is to assess the extent to which federal, state, and local funds are providing even minimally sufficient funds to support services and to ascertain the patterns of variation in resources to serve students with varying disabilities. Such data could support developing more accurate weights for various categories of students and how these weights may vary across larger and smaller districts within the state.

General Recommendations

Recommendation 11—Create Incentives to Promote Student Attendance

The weighted pupil enrollment in the current *Nevada Plan* is determined by a single count day at the end of September. We recommend that Nevada policymakers consider some alternatives to the current "single count day" approach to determining the enrollment on which school funding allocations are based.

One option would be to establish multiple days through the course of the school year for counting students. This would allow the state to adjust funding through the course of the year to reflect changes in enrollment over time. As indicated in Chapter 2, many states count enrollments at multiple points during the school year. For example, New Mexico counts children on the 40th, 80th, and 120th day of the year based on when each district begins its own school year. Later count days in the year can be used as the basis for projecting enrollments for the coming year and for adjusting initial distributions of funds for changing enrollments.

Another option would be to move toward counting students on the basis of average daily attendance (ADA), which is another alternative used by a number of states as indicated in Chapter 2. By basing funding on ADA, you create an incentive for districts to find ways of maintaining and or increasing enrollments—the notion being students cannot learn if they are not in school. The other benefit to an ADA system is that it tracks enrollment more closely and would permit the state to make adjustments to fiscal distributions more frequently during the school year.

Recommendation 12—Hold Districts Harmless and Phase in Changes Slowly Over Time

In all of the recommendations for the DSA and Special Education Funding, we have offered some new directions for the State of Nevada. Changes in the way funds are distributed even if applied in a way that is fiscally neutral for the state has significant implications for individual districts. Under the current system of school funding, some districts are receiving more and some less funding than they might get under a more equitable arrangement. For those currently receiving more (less) funding, improvements in equity involve a leveling down (up) of resources.

Such changes in resources cannot be made overnight and they have implications for existing programs and students. With this in mind, we strongly recommend using a phase-in of any selected funding alternative over a three to five-year period. A phase-in period provides local decision makers with an opportunity to carry out any changes (additions or losses) in resources in a thoughtful manner to reduce the severity of the impact on existing programs and students being served. Although losses of resources are of most concern here, even increases in resources take time to allow for appropriate planning on how to use existing resources most effectively and how to minimize the impact on current student populations.

One way to accomplish this phasing in of change is to hold districts that incur losses under the new funding regime harmless and only provide increases to those districts that gain under the new formula. This will require that additional investments in education be concentrated in those districts that are currently under funded. In our analyses in Chapter 4, we have provided hold-harmless cost estimates in each case associated with alternative approaches to funding. The Funding Adjustment Simulator (FAS), which we have provided the state, also calculates hold-harmless amounts for any option that the state might choose while using the simulator.

With all of this in mind, we offer a word of warning that for the state to move toward a more equitable system of school finance, it will require that policymakers set a realistic and firm time schedule for implementation of the new funding policies. Otherwise, there is no guarantee that the new recommendations will ever be achieved. Hold-harmless provisions are intended as temporary and not permanent fixes.

Recommendation 13—Review How Categorical Funding Might Be Used More Flexibly

Many states, including California, are seriously considering the implementation of new weighted student funding formulas that focus on directing resources equitably to local school districts to capture differences in the factors affecting educational costs. While improving the equity by which funds are distributed to district, this approach also increases the flexibility of how these funds are used in contrast to the approach implied by categorical funding, which tends to be targeted to specific student populations. Tied to this greater flexibility also is greater accountability for results. Rather than focusing efforts on the compliance mentality that

emphasizes tracking exactly how dollars are targeted to specific student populations, the accountability focuses on outcomes broken down into more detailed categories of student need. We therefore recommend that a panel be convened to review how existing categorical funding might be used more flexibly with greater accountability in place tied to improvement in outcomes for specific subpopulations of students. The suggested review could lead to a consolidation of some categorical funding that might be subsumed within the Basic Support Guarantee, providing greater flexibility on how this funding is used linked to stronger accountability for achieving results.

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Appendixes

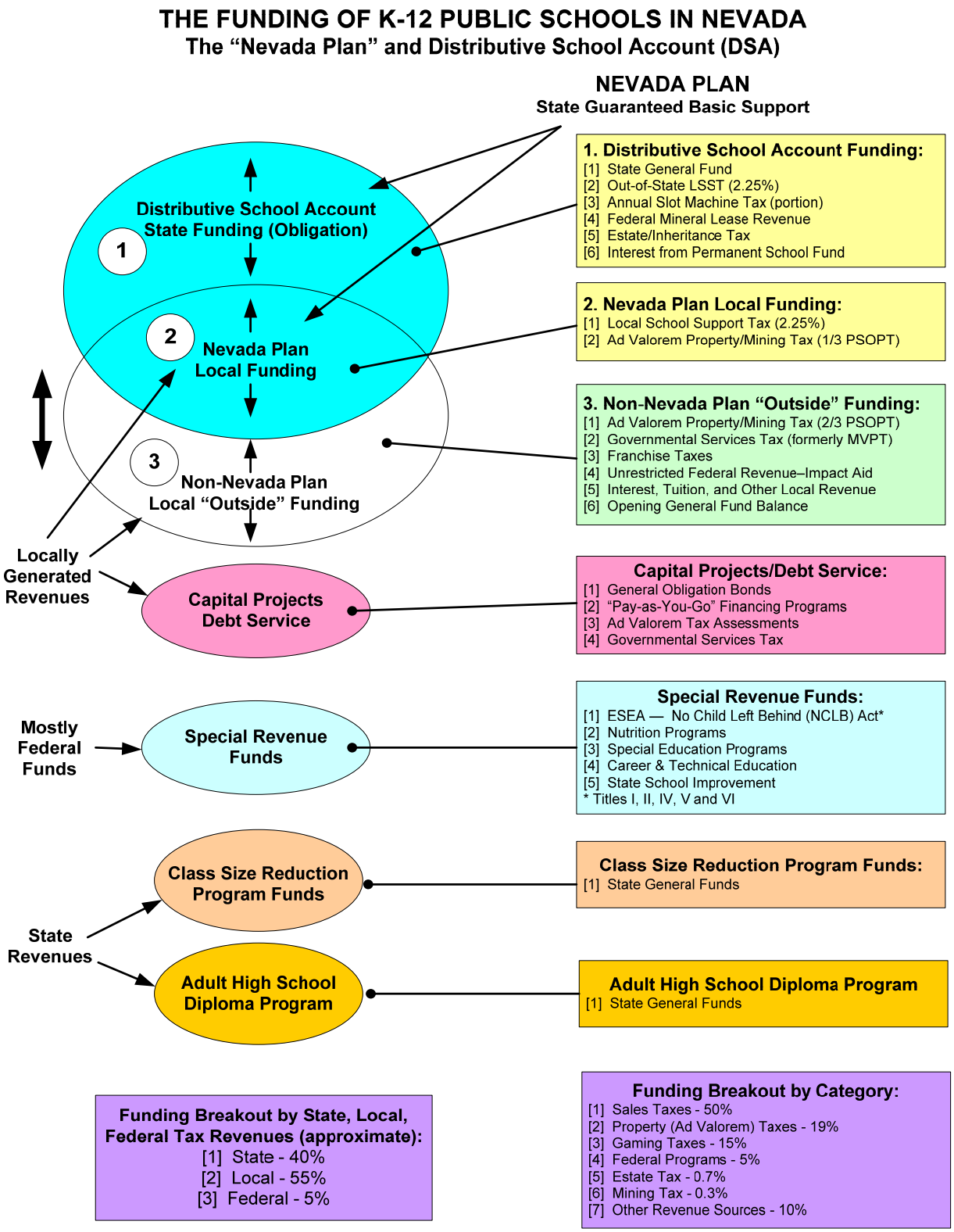
Appendix A—District Groupings in the Distributive School Account (DSA) Model

Table A.1. District Groupings From the DSA		
School District	**Group**	**Group Description**
Carson City	1	Centralized
Churchill	1	Centralized
Douglas	1	Centralized
Lyon	1	Centralized
Elko	2	Rural
Humboldt	2	Rural
Nye	2	Rural
Lander	2	Small
White Pine	2	Small
Lincoln	3	Small
Mineral	3	Small
Pershing	3	Small
Storey	3	Small
Esmeralda	4	Very Small
Eureka	4	Very Small
Clark	5	Large
Washoe	5	Large

Appendix B—Teacher Allotment Table in Distributive School Account (DSA) Model

ELEMENTARY Attendance Areas				SECONDARY Attendance Areas			
Enrollment Ranges		Factor: 0>136 Divisor: 136>300,000		Enrollment Ranges		Factor: 0>136 Divisor: 136>300,000	
Greater Than or Equal to	Less Than or Equal to	Teacher Allotments	Number AAs in Range	Greater Than or Equal to	Less Than or Equal to	Teacher Allotments	Number AAs in Range
0	0.3	-					
0.40	12	1.0	7	- 0.00001	0.0001	-	
13	27	2.0	10	0.001	45	5.0	3
28	44	4.0	7	46	65	6.0	3
45	65	6.0	2	66	104	9.0	2
66	88	8.0	4	105	145	11.0	8
89	135	9.0	9	146	190	13.0	2
136	189	15.00	6	191	260	14.00	2
190	230	16.00	2	261	450	15.00	3
231	999	17.00	14	451	999	17.00	11
1,000	2,999	18.25	9	1,000	2,799	19.00	10
3,000	9,999	18.25	2	2,800	9,999	19.50	2
10,000	50,000	18.25	1	10,000	50,000	20.25	1
50,001	300,000	18.50	1	50,001	300,000	21.50	1

Appendix C—State and Local Revenue Sources in Nevada



Appendix D—Special Education Policies and Programs by State

Alabama

Some additional funding is provided for catastrophic expenditures and preschool special education. Grade divisors in the Foundation Program are adjusted to provide additional teaching units for special education. The grade-level divisors are adjusted by a weight of 2.5 applied to 5 percent of ADM count.

Alaska

Vocational education, special education (except intensive special education), gifted/talented education, and bilingual/bicultural education are block funded. A district must file a plan with the department indicating the special needs services that will be provided, Section 14.17.420(2)(b), to qualify for special needs funding.

Arizona

Funding is provided through 11 weighted categories per the "Weights for Special Education Programs" table. Additional M&O budget capacity could be given if district/charter is eligible for federal impact aid revenues.

Weights for Special Education Programs

Hearing Impairment	4.771
K–3	0.060
English Language Learners (ELL)	0.115
MD-R, A-R, and SMR-R (2)	6.024
MD-SC, A-SC and SMR-SC (3)	5.833
Multiple Disabilities Severe Sensory Impairment	7.947
Orthopedic Impairment (Resource)	3.158
Orthopedic Impairment (Self-Contained)	6.773
Preschool-Severe Delayed	3.595
ED, MIMR, SLD, SLI, & OHI (4)	0.003
Emotionally Disabled (Private)	4.822
Moderate Mental Retardation	4.421
Visual Impairment	4.806

Arkansas

In 2004, the Arkansas General Assembly reformulated public school funding at the direction of the Arkansas Supreme Court to devise a funding system to assure school "adequacy." Although Arkansas Special Education funding based on weighted averages had been abolished in the mid-1990s, this approach was actually reconsidered during the discussions of school funding adequacy for special populations, including students with disabilities, ELLs, students in Alternative Learning Environments, and high-poverty students.

Ultimately, the funding adequacy needs of these special populations were addressed through categorical funding systems providing state aid in addition to that provided through the basic Foundation Formula. For special education, the General Assembly increased the funding levels of existing state line-item appropriations to reimburse districts for specific types of excess costs associated with providing services. These include annual targeted Catastrophic Occurrences aid for individual high-cost/high-need students, reimbursement for residentially placed students, and reimbursement for students with disabilities receiving extended school year services.

California

California provides $3.1 billion in state funding for special education programs for individuals with exceptional needs. The special education funding model apportions state aid to local educational agencies (LEAs based on their ADA; the per-ADA funding rates are recomputed annually). The funding model is based on the assumption that, over reasonably large geographic areas, the incidence of disabilities is relatively uniformly distributed. The model also provides funding adjustments to compensate for those areas in which there are concentrations of special education students with high-cost, low-incidence disabilities. Funding for special education may be apportioned directly to an LEA or to the administrative unit of the special education local plan area (SELPA) with which it is affiliated. Entitlements are calculated by multiplying the SELPA's base funding rate by the prior-year funded K–12 ADA for each school district, county office of education, and charter school in the SELPA). Funding is adjusted for changes in ADA.

Colorado

Special Education

(Article 20 of Title 22, CRS)

The State Exceptional Children's Act (ECEA) outlines administrative unit (school districts and boards of cooperative educational services) responsibilities for providing special education programs for children with disabilities. The Act recognizes the need to provide educational opportunities to all children and the benefits of providing a continuum of services in the least restrictive environment.

In budget year 2010–11, Colorado administrative units will serve approximately 83,000 students with disabilities, or about 10 percent of the total pupil enrollment. Administrative units will provide services to children between the ages of 3 and 21 who, by reason of one or more of the following conditions, are unable to receive reasonable benefit from general education: long-term physical impairment or illness, significant limited intellectual capacity,

significant identifiable emotional disorder, specific learning disability, or speech or language impairment.

State ECEA funding of special education programs for children with disabilities is $127.4 million for budget year 2010–11.

- Five hundred thousand dollars is available to administrative units specifically for costs incurred for children with disabilities who live in eligible facilities within their boundaries, and for whom (a) parental rights have been relinquished by the parents; (b) parental rights have been terminated by the court; (c) parents are incarcerated; (d) parents cannot be located; (e) parents reside out of state, but the Department of Human Services has placed the children within the boundaries of the administrative unit; or (f) the children are legally emancipated.
- Four million dollars will be available for grants to administrative units for reimbursement of high costs incurred in providing special education services in the preceding school year. High costs are defined as the costs incurred by an administrative unit above a threshold amount.

The remaining amount will be distributed as follows:

- Administrative units will receive $1,250 for each child reported by the administrative unit on December 1 of the previous year.
- Administrative units will receive up to an additional $6,000 for each child reported on its previous December 1 count with the following disabilities: vision disability, hearing disability, deaf-blind, significant identifiable emotional disability, autism, traumatic brain injury, multiple disabilities, and significant limited intellectual capacity. This amount will be prorated based on the amount of the remaining appropriation.
- State ECEA moneys can be used to pay for the salaries of special education instructional and support personnel, purchased services (including tuition payments to other administrative units and eligible facilities), supplies, and equipment.

In budget year 2010–11, the total special education costs will equal roughly $825 million. State funding covers roughly 15.4 percent of special education costs; federal funding covers an additional 28.3 percent of these costs; and local sources of funding cover the remaining 56.3 percent of the costs.

Connecticut

Since 1995–96, the state's primary contribution to general special education is through the Education Cost Sharing (ECS) formula described under **Description of Formula**. The ECS foundation reflects the cost of regular education and general education. In addition, the students used in the ECS grant determination include both regular education and special education.

The state also supports extraordinary special education costs through its Excess Costs grant, which funds 100 percent of student-based special education costs in excess of established thresholds. For children affected by state agencies, for example, foster students and judicial placements, the state pays in excess of the district's prior year average cost per student (including regular and special education). For all other special education placements, the state pays 100 percent of the costs in excess of 4.5 times the prior year's average cost per student (including regular and special education). These grants may be proportionately reduced to stay within the legislatively approved appropriation.

Delaware

Funding is provided through instructional units. Units for 12 categories are provided, ranging in size from 4 pupils per unit to 15 pupils per unit.

The state is phasing in a needs-based funding system for special education students. Funding is based on three categories: basic, intensive, and complex, with unit sizes of 8.4, 6.0, and 2.6.

Florida

In Florida, services for Exceptional Student Education (ESE) students (students identified as gifted and students identified as disabled) are funded through the FEFP. Exceptional education services for most students are funded through the ESE Guaranteed Allocation. For those ESE students requiring the most intensive services, funding is weighted by cost factors in accordance with level of need. Please see Section 1011.62 (1)(e), F.S., for an outline of the funding model for ESE programs. Approximately 88 percent of the total expenditures for students with disabilities are funded through state and local programs.

Since July 1, 2000, approximately 95 percent of ESE students have generated base funding at the same level as nondisabled students. These students are reported under basic programs 111 (Grades PK–3 basic with ESE services), 112 (Grades 4–8 basic with ESE services), or 113 (Grades 9–12 basic with ESE services). These programs have the same cost factors as basic programs 101, 102, and 103. A portion of funding for students in these programs is generated by multiplying the base student allocation by the program cost factor. For 2010–11, the base student allocation is $3,623.76. The approximate base weighted funding amounts generated by students in basic programs for 2010–11 are as follows:

Grades PK–3 Basic	$3,946.27	($3,623.76 x 1.089)
Grades 4–8 Basic	$3,623.76	($3,623.76 x 1.000)
Grades 9–12 Basic	$3,736.10	($3,623.76 x 1.031)

To fund exceptional education and related services (including therapies) for these students, an Exceptional Student Education Guaranteed Allocation was established by the Legislature in addition to the basic funding. The guaranteed allocation is a fixed amount provided each district. For the current school year (2010–11), the ESE Guaranteed Allocation appropriation is $980,571,070.

For the remaining 5 percent of students with disabilities (those with the most intense needs), funding is determined using a matrix of services. Consistent with the services identified on the individual educational program (IEP), matrices are completed by checking all the services that will be provided to the student. Students with the two highest matrix ratings (254 and 255) generate base weighted funding as follows:

Support Level 4 (254)	$12,766.51	($3,623.76 x 3.523)
Support Level 5 (255)	$17,883.26	($3,623.76 x 4.935)

The ESE matrix of services consists of five support levels and five domains: curriculum and learning environment, social/emotional behavior, independent functioning, health care, and communication. See “Use of the Exceptional Student Education Matrix of Services” at http://fldoe.org/ese/pdf/matrixnu.pdf/.

Georgia

Funding is provided through foundation program for six weighted categories for special education. The weights range from 2.3960 to 5.8253, depending on the type of disability and service and program provided to the pupil.

Special Education Category	Weight
Category I	2.3960
Category II	2.8189
Category III	3.5193
Category IV	5.8253
Category V	2.4597

Hawaii

State funding for special education increased dramatically between fiscal year (FY) 2000 and FY 2008, primarily because of a federal court decree. Hawaii's public school system also receives federal funding for special education as part of the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004.

State funding within the statewide school district is weighted per student, based on a comprehensive special education database. This database tracks every special education student, school-by-school, with information from each student's IEP. The relative intensity of specially designed instruction for each student is then weighted according to the following categories, identifying the number of hours per week of special instruction or supports needed:

- Intermittent support
- Targeted support
- Sustained support
- Intensive support

The information is compiled in the special education database, and state resources are allocated school-by-school based on the weighted calculations. The functionality of this

database has been looked upon by other school districts as a state-of-the-art implementation of technology to track special education needs and weighted resource allocation, particularly for the size of the Hawaii statewide public school district, which ranks as one of the top 10 largest school districts in the nation.

Idaho

The foundation program provided salaries and benefits (employer obligations for retirement and FICA) of ancillary personnel (special education teachers, psychologists, psychological examiners, therapists, and social workers) through an instructional staff allowance ratio of 0.1 per support unit.

Pupil Weights for Special Education Programs

The state formula shifts 6 percent of K–6 ADA and 5.5 percent of 7–12 ADA to exceptional child ADA, which generally provides school districts and charter schools with additional support units.

Computation of Exceptional Education Support Units

Average Daily Attendance	Attendance Divisor	Minimum Units Allowed
14 or more	14.5	1 or more as computed
12–13.99	–	1
8–11.99	–	.75
4–7.99	–	.5
1–3.99	–	.25

Illinois

There are six state grants for funding special education. These are as follows:

Funding for Children Requiring Special Education Services—85 percent of funding based on district ADA and 15 percent based on low-income counts reported in General State Aid.

Special Education—Personnel Reimbursement: Grants are calculated at $9,000 per full-time professional certified worker and $3,500 per full-time noncertified worker.

Special Education—Private Tuition: Prior year costs are reimbursed based on the difference between $4,500 and a district's per-capita tuition costs per pupil in excess of $4,500 plus a second per-capita tuition charge.

Special Education—Summer School: Provides grants based on multiple formulas to assure educational services through the summer.

Special Education—Transportation: Described above under Transportation.

Special Education—Orphanage: Reimburses districts for the cost of special education services to children residing in state-owned facilities and with foster families. Any costs not covered by the current year appropriation must be covered by future years' appropriations.

Indiana

Does not apply.

Iowa

Three levels of additional pupil FTE weighting, 0.72, 1.21, or 2.74, are available for students with IEPs. Which additional weighting applies to the student is determined by the level of services required on the IEP for special education instructional staff or supplemental aids and other services in the areas of required curriculum modification, specially designed instruction, amount of school personnel support and least restrictive environment (LRE) efforts, and amount of supplementary aid or assistance necessary, including assistive technology, instructional associates, or specialized transportation.

Kansas

State provides 80 percent of special education transportation costs: $25,850 ($26,500 in 2007–08) estimated in categorical aid per instructional unit is also provided. That amount is paid on

all certificated education teachers while paraprofessionals are paid .4 or $10,340 (10,600 in 2007–08) per full-time paraprofessional.

Kentucky

Special Education is funded through an **Exceptional Child Add-on** to Kentucky's base funding mechanism. The base funding formula is determined based on the district's average daily attendance multiplied by a guaranteed amount per child established by the Kentucky General Assembly in the State's biennial budget. The Exceptional Child Add-on also uses this guaranteed amount per child. Kentucky's formula assigns one of three weights to each of the disability categories. Students with a Speech Language disability only have a weight of 0.24; disability categories of Orthopedically Impaired, Other Health Impaired, Specific Learning Disability, Developmentally Delayed and Mild Mental Disability have a weight of 1.17; and disability categories of Hearing Impaired, Visually Impaired, Emotional Behavior Disability, Deaf Blind, Multiple Disabilities, Autism, Traumatic Brain Injury, and Functional Mental Disability have a weight of 2.35. The total count of students for each of these weight categories are summed and that categories total of children ages 5 through 20 is multiplied by its weight as noted above. The product of each category's assigned weight multiplied by its child count is then multiplied by the guaranteed base amount in the biennial budget. When these three products are combined, that is the amount of the district's Exceptional Child Add-on funds.

Louisiana

Add-on weights—based on student characteristics recognizing the extra cost of instruction for certain categories of students or classes.

Special Education Students

Other Exceptionalities (150 percent)

Gifted and Talented (60 percent)

Maine

The state subsidizes 100 percent of approved Essential Programs and Services special education costs for all nonminimum subsidy-receiving school districts.

Maryland

A funding level per special education student is calculated by taking 74 percent of the per-pupil amount established in the Foundation Program. The FY 2011 funding level is $264 million.

Nonpublic placement is a program by which the state shares in the cost of placing students with disabilities in nonpublic special education schools when no program is available for them in the public schools. The state pays 70 percent of the cost of students placed over 300 percent of the excess cost of Special Education students.

Massachusetts

The Chapter 70 foundation budget includes an assumed special education percentage of enrollment and the corresponding costs are factored into the aid calculations. A separate "circuit breaker" program reimburses districts for 40 percent of special education instructional costs in excess of four times the prior year's state average foundation budget—$38,636 in FY 2011.

Pupil Weights for Special Education Programs

In-district: The foundation budget includes an assumed full-time equivalent (FTE) special education enrollment of 3.75 percent of total nonvocational enrollment, 4.75 percent of vocational enrollment. For each assumed FTE, the special education in-district foundation budget rate is $23,098.

Out-of-district: The foundation budget includes an assumed full-time equivalent special education enrollment of 1 percent of total nonvocational enrollment. For each assumed FTE, the special education out-of-district foundation budget rate is $24,128.

Michigan

A long-standing Michigan court case (known as *Durant*) regarding special education cost reimbursement was settled in 1997. It requires that the state reimburses special education instructional costs at a rate of 28.6138 percent and special education transportation costs at a rate of 70.4165 percent. The foundation payments (described earlier) for special education pupils go toward meeting this obligation.

Minnesota

Special education aid through FY 2007 was based on expenditures in the second prior year (base year). State special education aid for FY 2007 was based on expenditures in FY 2005. Beginning in FY 2008, special education aid is based on expenditures in the current year. State special education aid for FY 2008 is based on expenditures in FY 2008.

Several additional changes to the special education formulas took place in FY 2008. Transition Disabled Aid, which equaled $8.8 million in FY 2007, was rolled into special education aid in FY 2008. Transition programs for students with disabilities provides for transitional career and technical (vocational) experiences/programs that provide career exploration, healthy work attitudes, specific career and academic knowledge, and job skills for students with disabilities. Transition programs for students with disabilities serves students who meet state disability eligibility criteria and who have IEPs that include work-based learning and require extra interventions not provided in regular work-based learning programs.

Lastly, FY 2008 is the first year that districts receive Bus Depreciation Aid for busses purchased after 7/1/05 and used for the majority of the time providing special transportation services.

The special education Initial Aid equals the sum of the following amounts computed using base year data:

Salary—68 percent of the salary of each essential staff providing direct instructional and related services to students (special education, transition disabled, and alternative delivery of specialized instructional services programs)

Contracted Services—52 percent of the amount of a contract for instruction and services that are supplemental to a district's education program for students with disabilities. Fifty-two percent of the difference between the amount of the contract and the general education

revenue of the district for that pupil for the fraction of the school day the student receives services that are provided in place of services of the district's program (both special education, transition disabled, and alternative delivery of specialized instructional services programs). For transition disabled programs only, 52 percent of the cost of vocational evaluation.

Supplies and Equipment

Special education and alternative delivery of specialized instructional services programs—47 percent of the cost of supplies and equipment not to exceed an average of $47 per student with a disability.

Transition disabled programs—47 percent of the cost of supplies not to exceed an average of $47 per student with a disability. Forty-seven percent of the cost of equipment.

Travel—For transition disabled programs only, 47 percent of the costs of necessary travel between instructional sites by transition program teachers.

Bus Depreciation—100 percent of the cost of regular busses over 8 years and type III busses over 5 years that are used the majority of time providing special transportation services.

Transportation—100 percent of the cost of special transportation services.

A school district's special education aid equals its initial special education aid computed as per the formula above times the ratio of the state total special education aid to the state total initial special education aid plus aid adjustments for serving nonresident special education students.

The state total special education revenue for FY 2008 through FY 2011 is set in state law. For FY 2008, FY 2009, FY 2010, and FY 2011, it is $694.1 million, $719.5 million, $735.7 million, and $787.6 million, respectively. The state total special education aid for FY 2012 and later fiscal years, the state total special education aid equals:

The state total special education aid for the preceding fiscal year, times

The program growth factor, times

The greater of one, or the ratio of the state total Average Daily Membership (ADM) for the current fiscal year to the state total ADM for the preceding fiscal year.

The program growth factor is 1.046 for FY 2012 and later fiscal years.

The link to Minnesota's special education formula is:
https://www.revisor.leg.state.mn.us/statutes/?id=125A.76

Special Education Excess Cost Aid:

For FY 2008 and later years, a district excess cost aid equals 75 percent of the difference between the district's unreimbursed special education cost and 4.36 percent of the district's general education revenue.

The state total excess cost aid equals $110.6 million in FY 2008, and $110.9 million in FY 2009, $110.8 in FY 2010 and $110.9 in FY 2011. For FY 2012 and later years, the state total excess cost aid equals:

The state total special education excess cost aid for the preceding fiscal year times

The program growth factor times

The greater of one, or the ratio of the state total ADM for the current fiscal year to the state total ADM for the preceding fiscal year.

The program growth factor is 1.02 for FY 2012 and later years.

A school district's special education excess cost aid equals its initial special education excess cost aid computed as per the formula above times the ratio of the state total special education excess cost aid to the state total initial special education excess cost aid.

The link to Minnesota's special education excess cost formula is as follows:
https://www.revisor.leg.state.mn.us/statutes/?id=125A.79

Mississippi
Funding is based on agency approval of the teacher units and certification and experience of the approved teacher. Five separate offices in the department have a role in the application in program approval criteria and allocation of special education teacher units.

Missouri
State Special Education aid is now included in the Basic State Aid to districts. When a district's count of students with an IEP exceeds the state threshold, currently at 13.7 percent of the district's ADA, the excess is weighted at .75 and added to the district's ADA calculation in the overall weighted average daily attendance.

Montana
Included in the BASE aid program (see Description of Formula). Block grants are based on number of pupil units and require a $1 for $3 local match. Additional reimbursement (40 percent for unusually high special education costs are provided to eligible districts).

Nebraska
Special Receipts Allowance includes district specific special education, state ward, and accelerated or differentiated curriculum program receipts from the most recently available complete data year.

Nevada
Allocations of special education funding vary widely among school district based primarily on needs and applications. Funding support is set in terms of number of regular and discretionary units, with each unit valued at $39,768 for 2011. Students per unit range from a low of 47.6 in Pershing County School District to a high of 155.4 students per unit in Clark County School District.

New Hampshire
See Description of the Formula. Also, Catastrophic Aid for high-cost students. The state pays 100 percent of cost above 10 times the state average current expenditure per pupil, and 80 percent of the cost between 3.5 and 10 percent the state average.

New Jersey
Through the new funding formula, the state has adopted a census-based method of funding for special education. This approach bases the aid allocation on each district's total enrollment. Using this method, special education needs are projected by multiplying the excess cost of educating special education students by the statewide average classification rate, which is then multiplied by the district's total enrollment. Two thirds of this cost is included in the district's adequacy budget, where it is funded through equalization aid. One third of this cost is provided as categorical aid to the district (regardless of district wealth). This ensures that all districts receive some amount of special education aid.

In determining the actual "excess" cost for special education, the Department used audited expenditure data from fiscal year 2006. The term "excess cost" refers to the costs in addition to the base cost for education for all pupils. In addition to allocating the costs for special education expenditure lines, a portion of the general education budget was also attributed to special education to account for the special education costs for students that are mainstreamed for at least some portion of the day. This adjustment was based on the percentage of time special

education students spent in regular classrooms according to the data collected from districts pursuant to federal reporting requirements.

New Mexico
State aid is provided through five weighted categories included in the foundation program.

Pupil Weights for Special Education Programs

Special education students are funded under the basic program units with additional weightings as follows:

Categories	**Weight**
Class A Programs: specially trained teacher travels from class to class or school to school to assist teachers, students and gifted on a part-time basis.*	.7
Class B Programs: specially trained teacher operates a resource room and assists gifted.*	.7
Class C Programs: special classroom instruction for moderately handicapped and gifted.	1.0
Class D Programs: full-time special classroom instruction for severely handicapped students and aged 3- and 4-year-old handicapped.	2.0
* Weighted classroom units.	

Special education also is funded for related services ancillary to providing special education, the number of full-time-equivalent certified or licensed ancillary service and diagnostic service personnel multiplied by the cost differential factor 25.0.

New York

Foundation Aid is paid for general education and special education students with students with disabilities receiving additional weightings as specified in the following table.

Pupil Weights for Foundation Aid

Category	Weight
Pupils with handicapped conditions in special class 60% or more or the school day in either public school or BOCES Program.	1.41
Pupils with handicapping conditions in special class 20% or more of the school week or receiving consultant teacher services a minimum of 2 hours per week.	1.41
Students moving from a restricted placement into a general education setting.	.50

A High-Cost Excess Cost formula provides wealth-equalized aid, in addition to Foundation Aid, for students in very high-cost programs in districts or BOCES. A Private Excess Cost formula provides equalized reimbursement for tuition expenses above a basic contribution for public students placed in state-operated or private schools for students with disabilities.

North Carolina

State-allocated aid for handicapped students on the lesser of April first headcount or 12.5 percent of total ADM.

North Dakota

Special education funding is provided through a factor in the main funding formula based on the total number of students in average daily membership. There also are factors for preschool students on IEPs and extended-year special education programs. These factors generate approximately 70 percent of the special education funding provided by the state. The remainder of the funding is set aside at the state level to reimburse school districts with extremely high-cost special education students. Where students are placed by external agencies for purposes other than education, districts are reimbursed for allowable costs exceeding the state average cost per pupil. Educational placements are reimbursed for allowable costs exceeding four times the state average cost per pupil. Transportation and equipment are not included in allowable costs.

Ohio

Special education: included in the EBM using a weighted student count based on disability category.

Oklahoma

The State Aid formula currently has 12 Weighted Pupil Categories related to Special Education.

Pupil Weights for Special Education Programs

Categories	**Weight**
Vision Impaired	3.80
Learning Disabilities	0.40
Hearing Impaired	2.90
Mentally Retarded: (Educable Mentally Handicapped and Trainable Mentally Handicapped)	1.30
Emotionally disturbed	2.50

Multiple handicapped	2.40
Physically handicapped	1.20
Speech Impaired	0.05
Deaf and Blind	3.80
Special Education summer program	1.20
Autism	2.40
Traumatic Brain Injury	2.40

Oregon

Two types of funding are provided in addition to the general education funding for special education students. An additional weight of 1.0 is identified for special education students and the "High-Cost Disability Grant" for disabled students whose annual IEP costs exceed $30,000. Please see the High-Cost Disability Grant description earlier.

Pennsylvania

Special Education Funding for School Districts

Each school district receives the amount it received for the 2008–09 school year.

Contingency Fund

A special education contingency fund allocation equal to 1 percent of the special education appropriation is available to school districts.

CORE Services Funding to Intermediate Units

An amount equal to 5 percent of the special education appropriation is provided to intermediate units to maintain core services.

Institutionalized Children's Program

Funding is provided to intermediate units to maintain the Institutionalized Children's Program.

Rhode Island

Does not apply.

South Carolina

Handicapped children are weighted according to the following specific classifications contained in the foundation program.

Pupil Weights for Special Education Programs

Categories	**Weights**
Educable mentally handicapped	1.74
Learning disabilities	1.74
Trainable mentally handicapped	2.04
Emotionally handicapped	2.04
Orthopedically handicapped	2.04
Visually handicapped	2.57
Hearing handicapped	2.57
Speech handicapped	1.90
Homebound pupils	2.10
Autism	2.57

South Dakota

Special education aid calculation is similar to the general education aid formula in that the student counts utilized within the funding formula are based on both fall enrollment and December child count. Based on the counts and primary student disabilities reported, a district's total "need" or total state-local funding is determined. The state-local share of these district need is based on the local property valuation. The local share is calculated using a tax levy of $1.20/$1,000 of assessed valuation (AV). A district is authorized by SD statute to utilize a maximum levy of $1.40/$1,000 AV for their special education fund. Funding for special education may be limited when levying less than $1.20/1000 AV or if the district is determined to have an ending fund balance that exceeds a statutorily defined limit.

South Dakota districts can also apply to an extraordinary cost fund for additional funding for special education students with costly needs. Applications are reviewed by committee and may not necessarily be approved. In recent years, the fund has distributed approximately $4.5 million in additional aid to districts based on need.

Tennessee

Supported by a 75 percent state share, identified and served special education students receive additional weighting in the Classroom Component of the BEP formula. The weights were based on the caseload allocations as follows:

Option 1	91
Option 2	73
Option 3	46
Option 4	25
Option 5	15
Option 6	2
Option 7	10
Option 8	6
Option 9	0
Option 10	10

Texas

For the portion of the day students are served in approved programs, the adjusted allotment is multiplied by a weight varying from 1.7 to 5.0, depending on the instructional arrangement used. Additional funding equal to the adjusted basic allotment multiplied by 1.1 is also provided for students who are served in a mainstream instructional arrangement. A special education student who resides in a care and treatment facility and who receives his or her instruction on a local school district campus in a district other than the district in which the student's parent or guardian resides is eligible for a funding weight of 4.0, if the student does not reside in a state supported living center. If a similarly situated special education student resides in a state supported living center, the student is eligible for a funding weight of 2.8.

Pupil Weights for Special Education Programs

Category	**Weight**
Homebound	5.0
Hospital class	3.0
Speech therapy	5.0
Resource room	3.0
Self-contained, mild and moderate, regular campus	3.0
Self-contained, severe, regular campus	3.0
Off home campus	2.7
Non-public day school	1.7
Vocational adjustment class	2.3
(Above categories based on FTEs)	
Mainstream students (Based on ADA)	1.1

Utah

A foundation program provides weighted categories for children with disabilities.

Purpose: To provide educational services for students with disabilities as required by federal and state law. **Example:** Special Ed personnel, texts, supplies. **Formula:** Per WPU, which is the greater of the average of Special Education (Self-Contained and Resource) ADM over the previous five years (which establishes the "foundation" below, which the current year WPU can never fall) or prior year Special Education ADM plus weighted growth in Special Education ADM. Weighted growth is determined by multiplying Special Education ADM from two years prior by the percentage difference between Special Education ADM two years prior and Special Education ADM for the year prior to that, subject to two constraints: the Special Education ADM values used in calculating the difference cannot exceed the "prevalence" limit of 12.18 percent of total district ADM for their respective years; and if this measure of growth in Special Education exceeds current year growth in Fall Enrollment, growth in Special Education is set equal to growth in Fall Enrollment. Finally, growth is multiplied by a factor of 1.53. This weight is intended to account for the additional cost of educating a special education student; it is not, however, based specifically on an empirical analysis of the cost of special education relative to "regular" education in Utah. **Law:** 53A-15-301, 302, 303, 303.5, 304, 305, 53A-17a-111; R277-750. **Contact:** Sandra Cox. **Data:** Membership audit report (September 1); Fall Enrollment audit report (November 1). Below is a description of the Special Education Add On, Extended Year for the Severely Disabled, Preschool, Self-Contained, and State Programs in Utah.

SPECIAL EDUCATION—EXTENDED YEAR FOR SEVERELY DISABLED

To provide a longer school year for those students with disabilities whose regression over school breaks is so severe that an inordinate amount of time is necessary to recoup previous learning. **Formula:** Per WPU, this is derived from aggregate hours of extended year educational service. **Law:** 53A-17a-112; R277-750, 751. **Contact:** Karl Wilson. **Data:** Special survey administered by Sandra Cox (September 1; revised survey for summer 2004 due October 15).

SPECIAL EDUCATION—PRESCHOOL

To provide preschool educational services for children with disabilities from ages 3 through 5 as required by federal law. **Formula:** Per WPU, this equals special education preschool enrollment (aged 3 through 5, excluding 5-year-old special education students enrolled in kindergarten) as of December 1 multiplied by 1.46. Overall state growth in this program cannot exceed 8 percent annually, so funds remaining after the allocation have equaled the growth limit are

prorated among districts experiencing growth in excess of eight percent. **Law:** 53A-17a-112; R277-750. **Contact:** Sandra Cox. **Data:** Clearinghouse file (December 15)—S2 record.

SPECIAL EDUCATION—SELF-CONTAINED

To compensate for the higher cost of providing more extensive educational services to students who are in a self-contained setting (enrolled in special education for 180 minutes or more each day). Unlike resource students, self-contained students do not generate a "regular" WPU. **Formula:** Per WPU, this equals Self-Contained ADM from two years prior. **Law:** 53A-17a-111; R277-750. **Contact:** Sandra Cox . **Data:** Membership audit report (September 1).

SPECIAL EDUCATION—STATE PROGRAMS

To support districts and charter schools in serving special education students whose extensive needs cost the district more than $15,000 per student. **Formula:** 100 percent through RFP process. If the total amount approved exceeds the appropriation, grants are prorated. **Distribution:** One lump sum upon approval by State Director of Special Education. **Law:** 53A-17a-112; R277-750.

Pupil Weights for Special Education Programs

Students with disabilities are funded with a base plus growth dollar amount averaging ADM over the prior five years. Below is a description of the Special Education Add On, Extended Year for the Severely Disabled, Preschool, Self-Contained, and State Programs in Utah.

Vermont

On average, 60 percent of the costs of special education are reimbursed for each district. There are several pieces to the system. Basically it operates like insurance, districts submit detailed expenditure reports (claims) indicating how much was spent on special education each year. Approved student costs above $50,000 are reimbursed at 90 percent. Most other allowed special education costs are reimbursed at a rate that varies each year between 56 and 58 percent.

Virginia

Funding for special education provides for the state share of salary costs of instructional positions generated based on staffing standards for special education. (The Virginia legislature identifies 14 categories of disability, each with a maximum allowable student to teacher ratio. The number of students in each division who fall into each of the 14 categories determines the number of teachers for which the state will share the funding costs.) Each special education student is counted in her respective school and up to three disabilities per student may be recognized for calculating instructional positions for funding. Once the number of funded teachers is determined, it is multiplied by the state-specified salary to determine the total salary cost, which is funded on a per-pupil basis. The additional per-pupil special education funds are shared between the state and local school divisions according to a school division's Composite Index of local ability to pay.

Washington

The special education formula provides funding for students ages 0–5 at 115 percent of the basic education amount per student. Funding is provided for students age K–21 at 93.09 percent of the basic education funding amount. A district will receive funding based upon reported number of age K–21 special education students up to a maximum level of 12.7 percent of the reported basic education population. In addition a safety net process is in place to award additional funding for districts with students costing above 2.3 of the state average prior year APPE.

West Virginia

An allowance is provided for advanced placement at 1.0 percent of the state average per pupil state aid times the number of students enrolled in advanced placement, dual credit, and international baccalaureate programs.

Although not a part of the Public School Support Program, a provision is included in WVC §18-20-5 that requires the State to make an appropriation to the Department of Education to be distributed to the county boards in accordance with State Board Policy to support children with high acuity needs that exceed the capacity of the school district to provide with available funds. Each county board is required to apply to the State Superintendent for receipt of this funding in a manner set forth by the State Superintendent that assesses and takes into account varying acuity levels of the exceptional students.

Wisconsin

Special education is funded by a combination of state, local, and federal monies. State categorical aids assist with the costs of providing special education and related services. This includes reimbursement for teachers and teacher aides, physical and occupational therapists, speech/language therapists, special education directors, school psychologists, social workers, school nurses, school counselors, and special transportation. Staff must hold appropriate licensure to be eligible for reimbursement.

School districts, cooperative educational service agencies, county children with disabilities education boards, and 2r charter schools that operate programs for children with disabilities are reimbursed for special education costs in the year after costs are incurred. Funds are appropriated through the state budget process. Recipient agencies must complete the Special Education Fiscal Report program, PI-1505-SE.

There are 11 major areas of state aid to school districts, CCDEBs, and CESAs that provide programs for Special Education children:

Early childhood

Other health impaired or orthopedically impaired

Cognitively disabled

Hearing impairment

Visual disability

Speech and language disability

Emotional disturbance

Learning disability

School age parents

Homebound instruction

Cross categorical

Wyoming

The state reimburses 100 percent of a school district's approved special education costs.

Appendix E—Low-Income/At-Risk Policies and Programs by State

Alabama
Funding for at-risk students are calculated based on the number of free and reduced-price applications and the number of students scoring at lower levels of required tests. Funds are also provided for additional education services for high school students failing portions of the high school graduation exam.

Alaska
Does not apply.

Arizona
Does not apply.

Arkansas
Does not apply.

California
Economic Impact Aid (EIA) is a state categorical program that provides supplemental funds, kindergarten through Grade 12, to support the following: (1) additional programs and services for English language learners (ELLs) and (2) compensatory education services for educationally disadvantaged students. Funding is allocated based on a district per pupil rate times the sum of: 1 Prior year English Learner count, 2 Current year Title I Formula child count, and 3 Weighted Concentration Factor.

Colorado
The following is the list of programs under Colorado Revised Statutes, which are classified as Compensatory Education. The Revised Statutes are available at: http://www2.michie.com/colorado/lpext.dll?f=templates&fn=fs-main.htm&2.0

Art. 20. Education of Exceptional Children, 22-20-101 to 22-20-117.
Art. 23. Education of Migrant Children, 22-23-101 to 22-23-107.
Art. 24. English Language Proficiency Act, 22-24-101 to 22-24-106.
Art. 25. Colorado Comprehensive Health Education Act, 22-25-101 to 22-25- 110.
Art. 26. Gifted and Talented Students, 22-26-101 to 22-26-108.
Art. 27.5. Before- and After-School Dropout Prevention Programs, 22-27.5-101 to 22-27.5-106.
Art. 28. Colorado Preschool Program Act, 22-28-101 to 22-28-113.
Art. 29. Character Education, 22-29-101 to 22-29-106.

Connecticut
Does not apply.

Delaware
Academic Excellence instruction units are provided on the basis of one unit per 250 pupils enrolled and funds are also provided for extra time for students at risk of not meeting state standard in core content areas.

Florida
There is no comparable program existing at this time.

Georgia
A weight of 1.3136 is provided for students in remedial education programs; a weight of 1.5938 is provided for students in alternative education programs.

Hawaii
More than 50 percent of Hawaii public school students require more educational resources, including at least 31 percent economically disadvantaged; 3 percent with English language difficulties; 5 percent special education; and 13 percent with multiple special needs.

Within the Hawaii statewide school district, the weighted student formula allocates state funding to schools for economically disadvantaged students, based on the federal free and reduced-price lunch classifications, that are similarly used for federal Title I grants. The economically disadvantaged weight is 0.10 per student at this time.

Idaho

Does not apply.

Illinois

Grants for low-income students have been a part of the GSA formula since FY 1999. Grants are based on a district's concentration ratio of low-income students. This ratio is the three-year average of students in the district who received services through Medicaid or Food Stamps divided by the Average Daily Attendance of the most recent school year. In FY 2011, the district concentration ratio (DCR) is calculated as the average number of students receiving Medicaid or Food Stamps in FYs 2007, 2008, and 2009 divided by the 2009–10 ADA.

Districts with a DCR $\leq$ 15 percent receive a flat grant of $355 per pupil.

Districts with a DCR > 15 percent receive per pupil grants based on the following curvilinear formula: [2,700 X (DCR) ^{2} + 294.25] X 3 year average.

Indiana

Does not apply.

Iowa

Formula supplementary weighting is provided for at-risk programs and alternative schools and is determined partially on the percentage of pupils enrolled in Grades 1–6 eligible for free and reduced-price meals in a school district and partially on the budget enrollment of the school district. In addition, spending authorization for returning dropout and dropout prevention programs is funded on the basis of 25 percent or more from the combined district cost of the school district and up to 75 percent through modified allowable growth approved by the School Budget Review Committee. Modified allowable growth is an increase in budget authority, requested by the district, and is funded with balance on hand or a local property tax levy.

Kansas

Funding for At-Risk Students

Additional funding is provided for at-risk students. \The formula is based on the number of students qualifying for free meals with the additional weight set at 0.456 for 2011. In addition, additional funds are available for high-density, medium density, and nonproficient at-risk students. High Density Weighting: Districts in which their students on free meals exceed 50 percent of their total enrollment, or a density of 212.1 student per square mile and a free lunch percentage of at least 35.1 percent and above also use the 0.10 factor per at-risk student. Medium Density: Districts with enrollments of at least 40 percent but less than 50 percent use a factor of 0.06 for each at-risk student. A small amount is also given to schools based on the students not on free meals who are nonproficient on state assessment tests. Students not eligible for free meals but who score below proficient in reading or mathematics on the state assessments are weighted 0.0465.

Kentucky

Discontinued for all practical purposes in 1990.

Louisiana

Does not apply. We do have additional funding for At-Risk Students:

Add-on weights—based on student characteristics recognizing the extra cost of instruction for certain categories of students or classes.

At-Risk Students (22 percent): Students who have limited English proficiency who are not contained in the at-risk weight based on the free and reduced-price lunch criteria are added to the At-Risk

At-Risk Students are those students receiving free and reduced-price lunch.

Maine

The state provides additional subsidies for all children eligible for free or reduced-price lunches in each LEA based on a 1.15 pupil weighting.

Maryland

A funding level per student who is eligible for free and reduced-price meals (FRPM) is calculated by taking 97 percent of the per-pupil amount established in the Foundation Program. The FY 2011 funding level is approximately $1 billion.

Massachusetts

Each low-income pupil generates an extra increment of $2,561 to $3,167 in foundation budget dollars.

Michigan

In 2011, the Michigan legislature appropriated approximately $309 million for compensatory education (At-Risk). The Formula is 11.5 percent of the district's per-pupil foundation allowance times the number of free school meals claimed by the district. The appropriation is capped at $309 million.

Minnesota

Compensatory education revenue is included in the general education revenue program. Funding is based on building-level concentration of students eligible for free and reduced-priced lunches as of October 1 of the previous fiscal year. Students eligible for reduced-price lunches are weighted at 0.5 and students eligible for free lunches are weighted at 1.0. If the adjusted free and reduced-price lunch count is at least 80 percent of the building's enrollment, the compensatory revenue equals $2,825 times the adjusted free and reduced-price lunch count. The rate per adjusted count decreases proportionately as the concentration of eligible students decreases (e.g., one half of this amount for a school with an adjusted eligible count equal to 40 percent of building enrollment).

Pupil Weights for Compensatory Education

Definition of Category	Weight
Free and Reduced-Price Lunch	Variable weighting 0.0 to 0.6, depending on concentration of free and reduced-price lunch–eligible pupils in the building. Applies only to compensatory revenue calculation

Mississippi

MAEP has an at-risk component that is based on 5 percent of the Base Student Cost times the number of free lunch participants on October 31 of the previous year.

Missouri

State aid for students at-risk of completing their K–12 education is included in the Basic State Aid to districts. When a district's count of students eligible for free or reduced-price lunch exceeds the state threshold, currently at 32 percent of the district's ADA, the excess is weighted at .25 and added to the district's ADA calculation in the overall weighted average daily attendance.

Montana

Does not apply.

Nebraska

Poverty Allowance is calculated by taking the lesser of the maximum poverty allowance designated by the district or by the calculated amount based on the number of low-income students (progressive percentages between .05 and .30 multiplied by students qualified for free lunches/milk or low-income children under 19 years of age living in a household having an annual adjusted gross income equal to or less than the maximum household income that would allow a student from a family of four people to be a free lunch or free milk student, whichever is greater).

Nevada

Does not apply.

New Hampshire

No response provided.

New Jersey

The following three categories of aid are based on measures of district and student wealth. For aid purposes, low-income (“at-risk”) counts are based on the number of students eligible for the federal free and reduced-priced lunch programs.

At-Risk Equalization Aid

Aid for low-income students is primarily provided through equalization aid. As noted earlier, low-income students generate an additional weight (ranging from 0.47 to 0.57) when determining the adequacy budget. In districts with a low-income concentration lower than 20 percent, each at-risk student receives a weight of 0.47. This weight gradually increases as the at-risk concentration increases to a maximum weight of 0.57 for districts with an at-risk concentration greater than or equal to 60 percent.

At-Risk Security Aid

As described in the "Security Aid" section earlier, each at-risk student generates an additional categorical allocation for a district, where the per-pupil amount received increases with the district's at-risk concentration. In FY 2011, the maximum security aid per pupil was $412 per at-risk student in a district with an at-risk concentration of at least 40 percent.

Preschool

The SFRA includes full state funding for all at-risk 3- and 4-year-olds to attend full-day preschool programs in every district. In districts with the DFG designations "A" or "B" or those in "CD" districts that also have an at-risk concentration of at least 40 percent, funding is intended for all resident 3- and 4-year-olds, regardless of income.[1] In all other districts, funding is intended for all at-risk resident 3- and 4-year-olds.

Because of recent budgetary constraints, the state's plan to expand the preschool program as defined in the SFRA was not realized in FY 2011. Although some amount of Preschool Education Aid (PEA) was provided to each district that received early childhood aid under the previous funding law, the SFRA calculation was only applied to about 20 percent of those receiving aid. Other districts' aid allocations were based on prior year aid allocations, with some adjustments.

[1] District Factor Groups (DFGs) are based on a socioeconomic index of each school district's community characteristics. The index is grouped into the following eight categories, listed from lowest to highest: A, B, CD, DE, FG, GH, I, J). For more information about the DFGs and the factors that are used to calculate the index, please go to the following website: http://www.state.nj.us/education/finance/sf/dfg.shtml

New Mexico

Does not apply.

New York

See pupil need index in Description of Formula.

North Carolina

North Carolina has two categories of funding specifically for remediation and students at risk of failing. These categories are as follows:

At-risk Student Services/Alternative Schools—This funding allocates one School Safety Officer per High School and the remaining funds are allocated 50 percent based on ADM and 50 percent based on poverty with a minimum of two teachers and two instructional support positions.

Disadvantaged Student Supplemental Funding

Distribute resources based on a prescribed delivery option … reduction of class size.

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 as follows:

If low wealth percent (per low wealth supplemental funding formula) is > or equal to 90 percent, one teacher per 20.5 students:

If low wealth % is > 80% but < 90%, one teacher per 20 students

If low wealth % is < 80%, one teacher per 19.5 students

If an LEA received DSSF funds in FY 2005–06, one teacher per 16 students. These 16 LEAs will not receive less funding than they received in FY 2005–06.

Step 3: Convert the teaching positions to dollars by using the state average teacher salary (including benefits).

North Dakota

Does not apply.

Ohio

An index is applied to several components to adjust the district amount based on demographic characteristics of resident population.

Oklahoma

Pupils who qualify and participate in a free and reduced-price lunch program: 0.25.

Oregon

Oregon funds students in Pregnant and Parenting Programs at a weight of 1.0, students in poverty at .25, neglected and delinquent students at .25, and students in foster care at .25 in addition to the students' general education ADM.

Pennsylvania

There is a Poverty Supplement in the Basic Education Funding formula. It is described earlier.

Rhode Island

Does not apply.

South Carolina

State appropriated $136,163,204 for 2010–11.

Pupil Weights for Compensatory Education

Definition of Category	Weight
Grades 1–12 pupils who fail to meet statewide standards in reading, writing, and mathematics or who do not meet first-grade readiness test standards	0.26 Compensatory 0.114 Remediation

South Dakota

Does not apply.

Tennessee

Funding is generated in the Classroom Component of the BEP with a state share of 75%. Based on 1:15 class size reduction for Grades K–12, estimated at $509.46 per identified at-risk ADM. Funded at 100 percent at-risk.

Texas

Funding is provided for 20 percent of the adjusted allotment per pupil eligible to receive free or reduced-price lunches under the National School Lunch Program (NSLP). A funding weight of 2.41 is applied to each full-time equivalent student who is pregnant and is receiving compensatory education services. School districts and charter schools that do not participate in the NSLP may participate in an alternative reporting program to deliver compensatory education funding for income eligible students.

Pupil Weights for Compensatory Education

Definition of Category	Weight
Pupils who qualify and participate in a free or reduced-price lunch program (per ADA)	0.25
Pupils who are pregnant (per FTE)	2.41

Utah

Does not apply.

Vermont

Part of the student count weighting system provides an additional 25 percent for students from families receiving food stamps. Also, certain costs for students who need support services but are not eligible for special education are covered by the special education reimbursement system.

Pupil Weights for Compensatory Education

Students aged 6–17 from families receiving food stamps are given an additional weight of 25 percent.

Students for whom English is not the pupil's primary language are given an additional 20 percent weight.

Virginia

At-Risk Program

State payments for at-risk students are disbursed to school divisions based on the estimated number of federal free lunch participants in each division to support programs for students who are educationally at-risk. Funding is provided as a percentage add-on to Basic Aid to support the

additional costs of educating at-risk students. A local match based on the district's Composite Index of local ability to pay is required.

Washington

A learning assistance program is available to students identified as deficient in basic skills. Allocations are based on the number of students in Grades K–12 qualifying for free and reduced-price lunch (FRPL). Districts with a percentage over 40 percent FRPL or over 20 percent qualifying for English language services receive an additional amount based upon their percentage over 40 percent. The funding rate is $282.13 per FRPL student.

West Virginia

No specific funds are provided for compensatory education.

Wisconsin

Does not apply.

Wyoming

Compensatory Education now falls under other programs such as extended day, tutorial system for Saturday school, and a Summer School program, which are grant programs outside of the block grant.

Appendix F—Weights for Low-Income/At-Risk Students by State

Table F.1. States Using a Form of Pupil Weighting for Low-Income Education/At Risk Students

State	*Eligible*	*Weight*
Alabama	F&RL + low test scores	
California	Per Pupil Rate (ELL + #Title I + Weighted Concentration Factor)	
Georgia	Students in remedial education programs	1.3136
	Students in alternative education programs	1.5938
Hawaii	F&RL	0.10 per pupil
Indiana	F&RL	0.4974 Adjusted
Iowa	F&RL grades 1-6 + Budget Enrollment	≥25% Combined District Cost + <75% Modified Allowable Growth
Kansas	Free Meals	0.456
	High Density = Free Meals >50% ENR or 212.1 stdt/sq miles & FL≥35.1%	0.10
	Med Density = Free Meals 40–50%	0.06
	Low test scores ≠ Free Meals	0.0465
Kentucky	FL	0.15
Louisiana	F&RL	0.22
Maine	F&RL	1.15
Maryland	F&RM	0.97
Massachusetts	Per low-income pupil	$2,561 to $3,167
Michigan	Free Meals	0.115
Minnesota	F&RL	Variable weighting 0.0–0.6, depending on concentration of F&RL-eligible pupils in the building. Applies only to compensatory revenue calculation
Mississippi	FL	0.05
Missouri	F&RL > 32%	0.25
Nebraska	Low Income (0.05–0.30*F&RL/Milk) or <19 years w/household income ≤F&RL Family of Four Average	Poverty Allowance

New Hampshire	F&RL <12%	$431 (wgt 0.13)
	F&RL 12%–23.99%	$863 (wgt 0.25)
	F&RL 24%–35.99%	$1725 (wgt 0.5)
	F&RL 36%–47.99%	$2588 (wgt 0.75)
	F&RL ≥48%	$3450 (wgt 1.0)
New Jersey	F&RL <20%–≥60% + Wealth	0.47–0.57
North Carolina	Students at risk of failing & disadvantaged ---Low Wealth >80% & <90% --Low Wealth <80% --DSSF(=2005–06)	1 Teacher/20 pupils 1 Teacher/19.5 pupils 1 Teacher/16 pupils
Oklahoma	Those who qualify and participate in F&RL	0.25
Oregon	Students in Pregnant & Parenting Programs	1.0
	Students in poverty	0.25
	Neglected and delinquent students	0.25
	Students in foster care	0.25
South Carolina	Grades 1–12 pupils who fail to meet statewide standards in reading, writing, and mathematics or who do not meet first-grade readiness standards readiness test standards	0.26 Compensatory 0.114 Remediation
Texas	F&RL	0.20
	Pupils who are pregnant (per FTE)	2.41
Vermont	Students aged 6–17 from families receiving food stamps	0.25
Washington	F&RL >40%	$282.13/ pupil

Note: F&RL = federal free and reduced-price lunch; F&RM= free and reduced-price meals; DSSF= disadvantaged student supplemental funding.

Appendix G—English Language Learner Policies and Programs by State

Alabama
State allocations for ESL students are provided according to the ESL student count in the prior year.

Alaska
Bilingual/bicultural education is block funded in the foundation program.

Arizona
Weight included in basic state aid calculations to provide additional funds. In FY 2011, the weight is 0.115.

Arkansas
6-20-2305 School funding: (3)(A) Beginning with the 2007–08 school year, funding for students who are identified as English language learners shall be $293 for each identified English-language learner. (B) Funding for English language learners shall be distributed to school districts for students who have been identified as not proficient in the English language based upon a state-approved English proficiency assessment instrument.

California
California does not provide funding specifically for bilingual education but does provide more than $50 million for instructional support and coordination of services for students enrolled in Grades 4–8 and identified as English language learners. In addition, districts may use compensatory education funding (see earlier to address needs of English language learners).

Colorado

See "Compensatory Education."

Connecticut

Each district is entitled to receive a portion of the total amount appropriated according to the ratio of the number of eligible pupils in the district as compared with the total number of eligible pupils in the state. Grant eligibility is limited to districts with schools containing 20 or more students with the same dominant language other than English. Those English language learners who are eligible under the Bilingual grant are included in the Education Cost Sharing (ECS) formula described under **Description of Formula**.

Delaware

LEP no longer funded as separate program; now collapsed into State Fiscal Stabilization Funds.

Florida

English for Speakers of Other Languages (ESOL) programs are funded with a program weight of 1.147.

Georgia
The formula includes a weight of 2.5337 for students in the ESOL program.

Hawaii
Within the Hawaii statewide school district, state funding for the English Language Learners (ELL) program is included as part of the weighted student formula, and is allocated to schools that have those populations of students, based on a weight of 0.2373 per ELL student at this time.

Idaho
The state distributed $5.29 million based on the number of Limited-English Proficient (LEP) students (approximately $290 per student) and $750 thousand in grants to school districts whose LEP students failed to meet adequate yearly progress in mathematics or reading.

Illinois
The Bilingual Education grant program reimburses current year costs for programs that provide five or more class periods of bilingual / English as a Second Language instruction per week. Grants are determined by the size of the student population, amount and intensity of instruction, and the availability of appropriated funds.

Indiana
Does not apply.

Iowa
Students identified as limited English proficient are assigned an additional pupil FTE weighting of .22. The supplementary weighting may be assigned for up to four years. A school district may apply to the School Budget Review Committee for an adjustment to budget authority for the cost to continue providing the program beyond the four years of weighting.

Kansas
State aid is weighted at 0.395 per eligible pupil, based on the full-time equivalency enrollment of bilingual students receiving services.

Kentucky
Bilingual Education no longer applies. The new laws under No Child Left Behind Act of 2001 are as follows:
Title III: Language Instruction for Limited English Proficient (LEP and Immigrant Students)
Students with limited English proficiency come with diverse histories, traditions, and varied educational experiences. The term *limited English proficient* used in the state is defined in Title IX of the No Child Left Behind Act under the General Provisions Part A, Section 9101. Definition. The term *immigrant children and youth* is defined as specified in Part C, General Provisions, Section 3301.

Louisiana
Any local school system employing a Foreign Language Associate shall receive a supplemental allocation from BESE of $20,000 per teacher not to exceed a total of 300 teachers in the program. During FY 2010–11, there are 260 foreign language associate teachers within the 69 school districts.

First-year Foreign Association Teachers receive an installation incentive of an additional $6,000; second- and third-year teachers receive a retention incentive of an additional $4,000.

Maine
The state provides additional subsidies for all ESL children base on weightings 1.525–1.70, depending upon the number of eligible children in each LEA.

Maryland
A funding level per LEP student is calculated by taking 99 percent of the per pupil amount established in the Foundation Program. The FY 2011 funding level is $151 million.

Massachusetts
Each limited-English pupil generates an extra increment of between $590 and $2,153 in foundation budget dollars.

Michigan
The current year state appropriation for Bilingual Education is $2.8 million. The funds are paid out on a per-pupil basis and are to be used solely for the instruction of pupils with limited English-speaking ability. Eligible programs include instruction in speaking, reading, writing, and the comprehension of English.

Minnesota
Revenue for limited English proficiency (LEP) programs is included in the general education revenue program. Students who have generated five or more ADM in Minnesota public schools before the start of the current school year are not eligible to be counted for LEP revenue calculations. Students in Grades 4–12 who were enrolled in a Minnesota public school when the

Test of Emerging Academic English (TEAE) was administered during the prior year are not eligible unless they scored below the state cutoff score on the TEAE. For districts with at least one but fewer than 20 eligible LEP students, funding is based on 20 students. Basic LEP revenue equals $700 times the eligible LEP average daily membership served. Districts where the concentration of LEP students is 11.5 percent or greater receive an additional $250 per eligible LEP student. In districts where the concentration is lower, the concentration allowance is reduced proportionately (e.g., $125 in a district with a 5.75 percent concentration).

Mississippi
Does not apply.

Missouri
Effective in 2006–07, state money is now included in the Basic State Aid to districts. When a district's count of Limited English Proficient students exceeds the state threshold, currently at 0.90 percent of the district's ADA, the excess is weighted at .60 and added to the district's ADA calculation in the overall weighted average daily attendance.

Montana
The state does not fund a bilingual education program.

Nebraska
Limited English Proficiency (LEP)-Allowance is calculated by taking the lesser of the maximum LEP allowance designated by the school district or a calculation based on the number of LEP students.

Nevada
Does not apply.

New Hampshire
See Description of the Formula.

New Jersey
Aid for LEP students is provided through equalization aid. Students that are enrolled in qualifying programs are given an additional weight when determining the adequacy budget. For a student who is LEP, but not low income, the weight is 0.5 (in addition to the base cost and grade-level weights). For a student who is both LEP and low income, the weight is 0.125 (reduced to account for duplicative resources provided through the at-risk weight).

New Mexico
Full-time equivalent pupils weighted .5 in state aid formula.

New York
See pupil need index in Description of Formula. In addition, there is a separate Bilingual Education grant of $12.5 million.

North Carolina
The state funds a supplemental allotment for Limited English Proficient Students.
Eligible LEAs/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 ADM of the LEA/charter school. Funding is provided for up to 10.6 percent of ADM.

FORMULA: Calculate 3-Year Average Headcount

- Most current years available weighted twice (50%)
- Two previous years weighted once (25%)

Base Allocation
Each eligible LEA/charter school receives the minimum of one teacher assistant position.

- 50% of the funds (after calculating the base) will be distributed based on the concentration of limited English proficient students within the LEA.
- 50% of the funds (after calculating the base) will be distributed based on the weighted three-year average headcount.

North Dakota
Funding for students with limited English skills is provided through factors in the main funding formula. Factors are based on assessment level.

Ohio
Funding in the Evidence Based Model is provided for limited English proficient students based on a 100:1 student : teacher ratio, adjusted for the wealth of the district.

Oklahoma
Weighted in the equalizing formula at 0.25.

Oregon
Students served in programs for ELLs are eligible to receive weighting of .50 in addition to the students' general education ADM.

Pennsylvania
There is an English Language Learner Supplement in the Basic Education Funding formula. It is described earlier.

Rhode Island

The Student Language Assistance Investment fund targets state resources to assist students who require additional language educational services. Distribution is based on a district's proportion of limited English proficiency students. Funding under this program is approximately $31.7 million.

South Carolina
No state appropriation.

South Dakota
Does not apply.

Tennessee
Receives a 70 percent state share with funding generated from the Instructional Component of the BEP.
ELL Teachers—1 per 30 identified and served ELL students
ELL Translators—1 per 300 identified and served ELL students

Texas
State aid is 10 percent of the adjusted allotment per pupil enrolled in a bilingual or special language program.

Utah
The state distributes block grant funds to school districts and charter schools in three categories:

- Interventions for Student Success Block Grant—$15,000,000
- Family Literacy Centers—$1,764,000

The Interventions for Student Success Block Grant is to improve academic performance of students who do not meet performance standards as determined by Utah Performance Assessment System for Students (U-PASS) test results. Interventions must be consistent with a district or charter plan approved by the local school board and the plan must specify intended results. For example, remedial classes, supplies, texts, personnel. Funds are distributed 71 percent proportional to the number of Basic Program WPUs; 6 percent distributed equally among all districts and charters; and 23 percent proportional to the number of ELLs.

Vermont
English language learning students are weighted an additional 20 percent in the pupil count formula.

Virginia
English as a Second Language (ESL)
State SOQ funds are provided to support school divisions providing the necessary educational services to children not having English as their primary language. The funding supports the salary and benefits cost of instructional positions at a standard of 17 positions per 1,000 ESL

students. This cost is shared between the state and local school divisions according to a division's Composite Index of local ability to pay and contributes toward the required local effort.

Washington
A transitional bilingual program provides funds to school districts to implement bilingual education programs. Allocations are based upon the headcount of pupils served in the program. The funding rate for the 2001–11 school year is $885.91 per pupil.

West Virginia
The PSSP includes a provision that provides supplemental funding for programs for limited English proficient students where the cost of the program in a particular district exceeds the district's capacity to provide the program with the funds that the district has available. The statute does not require any specific amount of funding to be appropriated, but any funds so appropriated in any year must be distributed to the various districts in a manner that takes into account the varying proficiency levels of the students and the capacity of the district to deliver the needed programs. Districts are required to apply for the funds that are available in accordance with the provisions contained in State Board policy.

Wisconsin
Bilingual/Bicultural Education Aid is funded as a categorical aid; brief information is contained in the Categorical Aid chart.

Wyoming
The funding model provides a 1.0 teacher FTE position for every 100 ELL students.

Appendix H—Weights for English Language Learners (ELL) Students by State

Table H.1. States Using a Form of Pupil Weighting for English Language Learner

State	*Eligible*	*Weight*
Alabama	Based on prior year ESL allocations	
Alaska	Bilingual/bicultural education	Block funded
Arizona	Weight included in basic state aid calculations	0.115
Arkansas	State aid appropriated for identified ELLs	$293 per pupil
California	Funding provided for instructional support and coordination of services for students enrolled in Grades 4–8 identified as English language learners	Total $50,000,000
Connecticut	Eligible pupils in district / eligible pupils in state. Limited to districts with schools containing 20 or more students with same dominant language other than English	
Florida	English for Speakers of Other Languages program	1.147
Georgia	Students in ESOL program	2.5337
Hawaii	Funding per ELL student	0.2373
Idaho	$5.29 million statewide for Limited-English Proficient students Grants to districts whose LEP students failed to meet adequate yearly progress in mathematics or reading.	$290 per pupil $750,000
Illinois	ELL/Bilingual Students	Reimbursable
Indiana	Complexity Index includes LEP factor	N/A
Iowa	Additional pupil FTE weight for LEP students	0.22
Kansas	Additional funding for full-time bilingual students	0.395 per pupil
Kentucky	Limited English Proficient	0.96
Louisiana	BESE supplemental allocation per Foreign Language Associate teacher, not to exceed 300 teachers in the program	$20,000 per teacher
Maine	Additional subsidies for all ESL children, based upon number of eligible children in each LEA	1.525-1.70
Maryland	Funding level per LEP student	99% of per pupil amount established in the Foundation Program
Massachusetts	Extra increment of foundation budget dollars for limited-English pupils	$590–$2,153 per pupil
Michigan	Funds are distributed on a per LEP student	Total $2,800,000

Minnesota	LEP	$700 per pupil
	LEP ≥ 11.5%	Additional $250 per pupil
	LEP <11.5%	Pro rata reduction (earlier)
	For districts with less than 20 LEP, funding is based on 20 students	
Missouri	If a district's ELL > state threshold	0.60
Nebraska	Adjustment for limited English proficiency students	N/A
New Hampshire	Students with a ELL	$675 per pupil
New Jersey	LEP students	0.5
	LEP & low-income students	0.125
New Mexico	Full-time equivalent pupils	0.50
New York	Bilingual Education Grant See Need Index for ELL	1.25 million
North Carolina	Eligible LEAs/charter schools must have ≥ 20 students with limited English proficiency or ≥ 2.5% of the ADM of the LEA/charter school. Funding provided for ≤ 10.6% of ADM.	
North Dakota	LEP students	wgt N/A
Oklahoma	Weighted in the equalizing formula	0.25
Oregon	Students served in programs for ELL	0.50
Rhode Island	Distribution is based on a district's proportion of limited English Proficiency students	Total $31,700,000
Tennessee	Funding is generated in the Instructional Component of the Basic Education Program	
Texas	Pupils enrolled in Bilingual or Special Language Program	0.10
Utah	ELL & Bilingual students	
Vermont	English Learning students	0.20
Washington	Bilingual education program funds are based on the headcount of pupils served	$885.91 per pupil
West Virginia	LEP students LEP & low-income students	Grant varies
Wisconsin	Bilingual/Bicultural Education Aid is funded as categorical aid	

Appendix I—Density/Sparsity of Small Schools by State

Alabama
Does not apply.

Alaska
The formula is weighted in favor of the small, isolated sites.

Arizona
Districts with fewer than 600 average daily memberships (ADM) are considered small and receive special weightings. If they are also isolated, they receive additional weightings. In addition, if they have fewer than a 100 student count, they are eligible to budget for a small schools adjustment. This small schools adjustment is paid directly from the local tax payer through the primary property tax.

Arkansas
6-20-601 Qualifications for receiving isolated funding: (a) As used in this section, "isolated school district" means a school district that meets any four of the following five criteria: (1) There is a distance of 12 miles or more by hard-surfaced highway from the high school of the district to the nearest adjacent high school in an adjoining district; (2) The density ratio of transported students is less than 3 students per square mile of area; (3) The total area of the district is 95 sq. mi. or greater; (4) Less than 50% of bus route miles is on hard-surfaced roads; and (5) There are geographic barriers such as lakes, rivers, and mountain ranges which would impede travel to schools that otherwise would be appropriate for consolidation, cooperative programs, and shared services. (b) An isolated school district shall be eligible to receive isolated funding if: (1) The district's budget is prepared by the local district with Department of Education approval; (2) The district has an ADM of less than 350; and (3) The district meets the minimum standards for accreditation of public schools prescribed by law and regulation. (c) Any school district designated as an isolated school district for the 1996-1997 fiscal year that used geographic barriers as one (1) of the 4 criteria necessary to receive isolated funding shall be allowed to continue to use geographic barriers as a criterion for future allocations of isolated funding. (2) There shall be 2 categories of isolated funding: (A) Category I isolated funding shall be provided to all school districts that qualify under this section; and (B) Category II isolated funding shall be further provided to those school districts that qualify under this section and have an ADM density ratio of less than 1.2 students per square mile and shall be calculated at 50% of Category I funding.

6-20-603 Continued support of isolated school districts: (a) Upon the effective date of consolidation, annexation, or reorganization, the districts listed in statute… shall become

isolated school areas for the sole purpose of receiving isolated funding and shall have a per student isolated funding amount as provided in legislation. (b) Each school year, state financial aid in the form of isolated funding shall be provided to school districts containing an isolated school area in an amount equal to the prior-year three-quarter ADM of the isolated school area multiplied by the per student isolated funding amount for the isolated school areas as set forth under column "C" of subsection (a) of this section. (c) A school district may not receive isolated funding under this section for an isolated school area if the prior year three-quarter ADM of the isolated school area exceeds 350. (d) A school district receiving isolated funding for an isolated school area shall expend the funds solely for the operation, maintenance, and support of the isolated school area. (e) A school district or isolated school area that may qualify under other law to receive additional state aid because its ADM is less than 350 shall not be eligible to receive funding under this section except that a district qualifying under other law for such aid and qualifying for funds under this section may elect to receive funds under this section in lieu of aid under the other law. (i) (1) Except as provided under § 6-20-604(g), a school district eligible to receive isolated funding under this section shall continue to receive partial funding even if all or part of an isolated school is closed. (2) If all or part of an isolated school in a school district is closed, the school district shall receive funding based on the prior year's three-quarter ADM of the isolated school or the part of the isolated school that remains open.

6-20-604 Additional funding: (b) A school district shall receive special needs funding if the school district meets the requirements of subsections (c), (d) or (e) of this section, and if: (1) The school district was consolidated or annexed or received an annexed school under § 6-13-1601 et seq.; (2) The local board of directors by majority vote determines that the isolated school is so isolated that to combine its operation to 1 district campus would be impractical or unwise; and (3) The isolated school or district: (A) Filed an affidavit of isolated school status with the state board during the consolidation or annexation process and the facts of the affidavit are verified by the state board or its designee, to meet the requirements of § 6-20-601; (B) Filed an affidavit of isolated school status with the state board after the consolidation or annexation process or August 12, 2005, and the facts of the affidavit are verified by the state board or its designee to meet the requirements of § 6-20-601; or (C) Filed an affidavit of isolated school status with the state board after the consolidation or annexation process or August 12, 2005, and the facts of the affidavit are verified by the state board or its designee to meet the requirements of § 6-20-601 but for the ADM requirements 350 students or fewer. (f) A school district shall receive an amount equal to 5% of the foundation funding received by the school district under § 6-20-2305(a)(2) based on the three-quarter ADM of the school district if the school district has a: (1) Three-quarter ADM of less than 500 students; and (2) Density ratio of 2 students or less per square mile. (g) A school district eligible for special needs funding under this section shall continue to be eligible to receive isolated school funding

provided under § 6-20-603 but shall only receive funding under one (1) of the categories established under subsections (c)-(f) of this section. (h) (1) This section is contingent on the appropriation and availability of funding for its purposes. (2) (A) Undistributed funds under this section and § 6-20-603 allocated to a school district that is no longer eligible to receive the funding shall be distributed on an equal basis per school district to each remaining school district that is eligible to receive funds under subsections (c)-(e) of this section. (B) Funds distributed under subdivision (h)(2)(A) of this section shall be used by the school district only for transportation costs of the isolated schools in the school district.

California

For small school districts, California provides an optional alternative general purpose funding entitlement for necessary small schools. For an elementary school district that consists of a single school with less than 97 ADA and for each qualifying necessary small elementary school in a school district with less than 2,501 ADA, necessary small-school amounts are computed on the basis of either the school's ADA or the number of full-time teachers, whichever provides the lesser amount. For a high school district that consists of a single school or a single high school maintained by a unified school district with less than 287 ADA and for each qualifying necessary small high school in a district with less than 2,501 ADA, necessary small-school amounts are computed on the basis of either the school's ADA or the number of full-time-equivalent (FTE) certificated employees providing services in grades nine through 12, whichever provides the lesser amount. If the ADA is under 20 and the number of FTE certificated employees is less than four, however, the amount is computed on the number of FTE certificated employees.

Colorado

Does not apply.

Connecticut

There are no adjustments for population density or sparsity.

Delaware

Does not apply.

Florida

The FEFP recognizes the relatively higher operating cost of smaller districts due to sparse student population through a statutory formula in which the variable factor is a sparsity index. This index is computed by dividing the FTE of the district by the number of permanent senior high school centers (not exceeding three). By Appropriations Act proviso, participation is limited to districts of 20,000 or fewer FTE. Each eligible district's allocation is subject to an adjustment for relative wealth of the district. This adjustment is based on the per FTE value of the maximum discretionary levy in the district relative to the state average. If the district value per FTE exceeds the state average, then the sparsity entitlement is negatively adjusted by an amount equal to the district's FTE multiplied by the per FTE amount by which the district's maximum discretionary value per FTE exceeds the state average. However, no district shall have a sparsity wealth adjustment that would cause the district's total potential funds per FTE to be less than the state average. This supplement is limited to $35,754,378 statewide for the 2010–11 fiscal year.

Georgia

No additional funds are allotted to sparsely populated areas except as might occur in the pupil transportation.

Hawaii

Within the statewide school district, the weighted student formula includes a factor to adjust state funding for small schools. Enrollment thresholds are established upper bounds for elementary, middle, and high schools. An allocation based on a "sliding scale formula" is calculated for schools that have student counts that are below the enrollment thresholds. The total amount of funds needed for the sliding scale adjustment are reduced from the total WSF funds available, requiring no additional state funding, only a reallocation of existing funding.

The enrollment ranges and sliding scale formula (*) are as follows:

Elementary schools	0–300 students	-0.0010 X + 0.030
Middle schools	0–450 students	-0.0010 X + 0.045
High schools	0–750 students	-0.0006 X + 0.045
Grades K–8 schools	0–450 students	-0.0010 X + 0.045
Grades K–12 schools	0–750 students	-0.0006 X + 0.045
Grades 7–12 schools	0–750 students	-0.0006 X + 0.045

* Where "X" is equal to a school's enrollment.

Idaho

Support Unit allotments vary according to educational level and school district size. Generally, smaller school districts and charter schools will receive more funding per ADA than larger school districts and charter schools. School districts with fewer than 40 support units receive an additional 0.5 FTE of instructional staff and an additional 0.5 FTE of administrative staff. School districts with less than 20 support units receive an additional 0.5 FTE of instructional staff. Remote and necessary schools may petition state board of education for special consideration.

Illinois

Does not apply.

Indiana

Small schools grant applies to school corporations and does not apply to charter schools. For schools with an ADM of less than 1,700, the formula allows a $192 per ADM for complexity index over 1.2 and $91 per ADM for complexity index above 1.1 and less than 1.2.

If a school corporation has an ADM of fewer than 1,700 and a complexity index greater than 1.1 and fewer than 1.2, the school receives the lesser of: 1,700 minus the 2009–10 or 2010–11 ADM or $91, multiplied by the 2009–10 (for 2010) or the 2010–11 ADM (for 2011). If a school corporation has an ADM of fewer than 1,700 and a complexity index of greater than 1.2, the school receives the lesser of: 1,700 minus the 2009–10 ADM (for 2010) or 2010–11 (for 2011) or $192 multiplied by the 2009–10 (for 2010) or the 2010–11 ADM for 2011.

Iowa

The state does not have a factor for density/sparsity within the formula but does have additional funding for districts that share teachers and programs. Additional pupil FTE is provided for .48 of the time that pupils attend classes in another school district, attend classes taught by a teacher jointly employed by two or more school districts, or attend classes taught by a teacher who is employed by another school district. The weighting for sharing whole grades is .1. There is also supplementary weighting of .1 provided for a school district that establishes a regional academy to which two or more other districts send high school students. The total amount or supplementary weighting provided for a regional academy cannot exceed the equivalent of 30 additional pupils and is guaranteed a minimum of 15 additional pupils. There is also supplementary weighting of .05 for providing or utilizing courses over the Iowa Communications Network (ICN), and there is supplementary weighting for resident students who attend classes in a community college—.46 for arts and science courses and .70 for career and technical courses.

Kansas

It is a linear transition formula ranging from 100 students up to 1,622 students. The low enrollment weight of districts having enrollments of 100 or fewer is $3,993.42 per pupil. Each

change of one pupil changes the low enrollment weight down or up inversely to the enrollment change. High enrollments, above 1,622, are weighted an additional 0.03504 times the BSAPP.

Kentucky
Does not apply.

Louisiana
Add-on weights—based on student characteristics recognizing the extra cost of instruction for certain categories of students or classes.

Economy of Scale up to 20 percent (for districts with fewer than 7,500 students).

Maine
Additional state subsidies are provided to geographically isolated districts, small administrative units, and island schools.

Maryland
Does not apply.

Massachusetts
Does not apply.

Michigan
For districts with a pupil count of fewer than 1,550 and 4.5 or fewer pupils per square mile, Michigan uses a three-year-average pupil count in the calculation of their state school aid if it benefits the district. This softens the fiscal impact that declining enrollment has on these mostly rural districts. Also, Michigan has a small amount of categorical funding for small, geographically isolated districts. Several of these are island districts not accessible by a bridge.

Minnesota
Districts with secondary schools having fewer than 400 pupils in Grades 7–12, or elementary schools having fewer than 140 pupils in Grades K–6, located in isolated areas receive sparsity revenue in the general education formula. The amount of revenue for secondary pupils varies as a function of the number of pupils, the distance to the nearest high school, and the attendance area. The amount of revenue for elementary pupils varies as a function of the number of pupils enrolled in schools located 19 or more miles from the nearest elementary school.

Mississippi
Does not apply.

Missouri
There is no specific adjustment for density/sparsity of small schools. However, districts are paid on the greater of the second preceding year's Weighted Average Daily Attendance, the first preceding year's Weighted Average Daily Attendance, or an estimate of the current year's

Weighted Average Daily Attendance. This provision helps districts with declining student counts as well as those with increasing student counts.

There is a small school grant for districts with an average daily attendance, including summer school, no greater than 350. The $15 million appropriation is distributed in two parts. One part of $10 million is distributed equally per average daily attendance for the eligible districts. The second part of $5 million is distributed on a tax-rate weighted average daily attendance basis to the eligible small districts with a tax rate for general school purposes equal to or greater than the state performance levy of $3.43.

Montana
There is no specific mechanism for funding small schools or adjusting for sparseness. The basic entitlement is applied at the same rate to budgets for any size of district, so smaller schools receive proportionally more relevant to their size.

Nebraska
The only time sparsity is included in the formula is when calculating the local choice adjustment. This adjustment does not apply to sparse or very sparsely populated school districts.

Nevada
Guarantee is based on number of school district attendance areas in which educational services must be provided due to distances involved. This constitutes adjustment for rural and urban area characteristics.

New Hampshire
Does not apply.

New Jersey
Does not apply.

New Mexico
Schools with fewer than 200 elementary and junior high school pupils, districts with fewer than 200 or 400 senior high school pupils, districts with 10,000 ADM, but fewer than 4,000 ADM per high school, and districts with fewer than 4,000 total ADM all qualify for additional aid.

New York
Sparsity is a factor in calculating the Pupil Need Index. Sparsity is considered a factor in school districts operating Grades K–12 with fewer than 25 pupils per square mile. This sparsity factor is not exclusive to “small schools”; enrollment does not specifically affect a district’s eligibility for such aid. Sparsity also potentially affects the Transportation Aid ratio of a school district. School districts’ enrollment from the year prior to the base year is subtracted from 21 and then that difference is divided by 317.88. The minimum is 0. This sparsity factor is added to the district’s

selected sharing ratio to determine the State Sharing Ratio for Transportation Aid for each school district.

North Carolina
A special allotment is paid for isolated school populations.

North Dakota
Elementary schools that serve fewer than 50 students, at least 15 percent of whom would need to travel more than 15 miles to attend another school have their weighting factor increased by 25 percent. High schools that serve fewer than 35 students, at least 15 percent of whom would need to travel more than 15 miles to attend another school, have their weighting factor increased by 25 percent.

Ohio
Exceptions and minimums in the evidence-based model (EBM) component calculations for small school districts (those with fewer than 418 students).

Oklahoma
Density factor is accounted for in transportation supplement. School district size of 529 or less is weighted in the State Aid formula with the Small School District Weight.

Oregon
Students in a qualified small school receive an extra weight based on grade level, average grade size, and distance to the nearest school. The weight is based on the size of each school, not the size of the district. To qualify as a small elementary school, the school must have been in the same location since 1995 and qualified as a small school in 1995 (elementary) and in 2009 (high school). Elementary schools also must be remote – more than 8 miles from the nearest school. If small high schools become larger than the allowable size as the result of a merger, the new, larger school receives the combined weight for four years following the merger.

Pennsylvania
There is no specific subsidy component for density/sparsity of small schools.

Rhode Island
Does not apply.

South Carolina
No state appropriation.

South Dakota
The small school adjustment, effective for the 2007-08 school year, is the successor to a "small school factor" that was in place previously. The "small school factor" used a formula to add

additional “phantom” students to a district’s average daily membership, with the smallest districts receiving funds for up to 20 percent more students.

Starting in 2007-08, South Dakota uses a “small school adjustment” that provides an additional $847 per student for districts with enrollments of fewer than 200. Districts with enrollments between 200 and 600 receive “small school adjustment funds” based on the number of students in the system, calculated using a straight-line formula.

South Dakota also has a “sparsity” factor that provides additional funding to small, isolated school districts. Districts must meet several criteria to qualify, for example, the district must have less than 0.5 students per square mile, and have land area in excess of 400 square miles and the district’s high school must be further than 15 miles away from another public school district attendance center. The formula adds up to $123,750 per year for the state’s most isolated schools.

Tennessee
Does not apply.

Texas
The basic allotment is increased by a percent proportional to the difference between a district’s ADA and 1,600 ADA. The percent increase is greater for districts having more than 300 square miles. Districts having below 130 ADA use a minimum ADA depending on actual ADA, grades taught, and the distance to the nearest school.

The state also provides a midsized school district adjustment that is applicable to school districts with between 1,600 and 5,000 ADA. Since 2009–10, this adjustment is applicable to districts that are subject to the recapture of local tax revenue.

Utah
Additional WPUs are provided for Necessarily Existent Small Schools—up to 7,649 Weighted Pupil Units ($19,711,473 in FY 2010–11). The additional WPUs are provided for necessary, existent, small schools below 160 ADM for elementary schools (including kindergarten at a weighting of 0.55 per ADM); or below 300 ADM for one- or two-year secondary schools; or below 450 ADM for three-year secondary schools; or below 550 ADM for four-year secondary schools; or below 600 ADM for six-year secondary schools. See Necessarily Existent Small Schools description and Administrative Rule R277-445 on the Utah State Office of Education website.

Vermont
Categorical grants are paid to schools in school districts with average grade sizes of 20 students or smaller. The smaller the average grade size the larger the grant. This helps to lower the remaining spending per pupil and thus the district’s homestead tax rate.

Virginia

The Appropriation Act specifies that a minimum number of instructional positions will be maintained on a divisionwide basis, regardless of the school division's population. This includes a minimum of 51 professional instructional and aide positions, one gifted professional instructional position, and six occupational and special education professional instructional and aide positions per 1,000 students included in the ADM.

Washington
Additional instructional units of 7.2 are provided per 1,000 (K–3) students in the basic education formula for those districts that can demonstrate that they have hired additional teachers in these grades.

West Virginia
Districts are divided into the following four groups based on student net enrollment per square mile:

Sparse	–	Less than 5 students per sq. mile
Low	–	5 to less than 10 students per sq. mile
Medium	–	10 to less than 20 students per sq. mile, and
High	–	20 or more students per sq. mile

These groupings are utilized in calculating the allowances for salaries and transportation in order to provide more funding for the rural districts.

Wisconsin
The state's 2007–09 biennial budget enacted this categorical aid program. The statutory provision for this aid program is found in s. 115.436, Wis. Stats. Districts that have 725 or fewer members, whose membership is less than 10 members per square mile of district's geographic area and have at least 20 percent of its membership qualify for free or reduced-price lunch under the National School Lunch program will receive $300 per pupil. The 2010–11 appropriation for Sparsity Aid is $14.9 million.

Wyoming

School adjustments:

For all schools with 49 or fewer ADM, resource with one assistant principal position plus one FTE teacher position for every seven students for all staff;

For all schools within a district comprised of less than 243 total K–12 ADM and notwithstanding all other teacher resources, resource each school with a minimum of 1.0 core teacher at every grade with reported ADM, plus 20 percent of core teachers for elementary specialist teachers and 33 percent of core teachers for middle and high school specialist teachers;

Minimum of 6.0 teachers for elementary schools greater than 49 ADM;
Minimum of 8.0 teachers for middle schools with greater than 49 ADM;
Minimum of 10.0 teachers for high schools with greater than 49 ADM.

*For K–6 school, resource as elementary school;
*For a 5–8 or 6/7–9 school, resource as a middle school;
*For a K–7, K-8 or K–9 school, resource K–5 teachers as elementary school and remaining teachers as middle school, and resource all other staff resources at the highest grade prototype;
*For K–12 school, resource K–5 teachers as elementary, 6–8 teachers as middle school, 9–12 as high school, and resource all other staff resources at the highest grade prototype;
*For 6/7–12 school, resource 6–8 teachers as middle school and 9–12 teachers as high school, and resource all other staff resources at the highest grade prototype.

Appendix J—Gifted and Talented Policies and Programs by State

Alabama
Does not apply.

Alaska
Gifted/Talented education is block funded in the foundation program.

Arizona
There is no special equalization formula increase dependent upon the gifted and talented school enrollments.

Arkansas
6-20-2208: (c) Each school district shall expend state and local revenues on gifted and talented programs in an amount equal to 0.15 of the foundation funding amount of $6,023 for fiscal year 2010–11 multiplied by 5 percent of the school district's ADM for the previous year only on gifted and talented programs in accordance with rules promulgated by the state board.

California
California provides about $44 million for gifted and talented education programs. However, LEAs that receive the funds may use them for any educational purpose. Funding is based on each LEA's proportionate share of gifted and talented education programs funding in 2008–09.

Colorado
See "Compensatory Education."

Connecticut
Does not apply.

Delaware
Program now collapsed into academic excellence units.

Florida
Please see the response for "Special Education."

Georgia
A weight of 1.6686 is provided for students in programs for the gifted.

Hawaii
In past years, the Hawaii state public school system funding included a categorical program for gifted and talented education. With the implementation of the weighted student formula effective beginning fiscal/school year 2006–07, the categorical program for gifted and talented education was folded into the amounts subject to weights. In past years, because of the subjectivity of defining gifted and talented students across the state, the gifted and talented characteristic is had not been previously weighted. However, the 2010 Committee on Weights recommended, and the Board of Education approved, the additional of a weight for gifted and talented (G/T students, effective SY 2011–2012). Because identification of G/T students is still largely subjective, the Committee on Weight's recommended that an estimate of 3 percent of a school's total population be used to determine the number of potentially G/T students at any given school. This equates to a weight of 0.0265 at this time .

Idaho
The ADA of gifted and talented students is included in the elementary and secondary ADA, which earns Support Units. A portion is shifted to the ADA of the Exceptional Child Program and earns Support Units. The state also distributed $500 thousand based on total enrollment and the number of identified G/T students, to be used for teacher in-service. The state distributed an additional $500 thousand based on Grade 12 enrollment to be used to train teachers to provide advanced learning opportunities for students.

Illinois
Does not apply.

Indiana
Program encourages school corporations to develop high-ability programs. The Gifted and Talented Education program includes allocating technical assistance funds to local schools for high-ability students, and organizing and developing a state infrastructure of resources and communication for high-ability programs (2007).

Iowa
A portion of the district cost per pupil in the foundation formula is earmarked for the gifted and talented program. Fifty-five dollars per pupil is incorporated in the regular program cost for 2010–11 to fund 75 percent of the gifted and talented program budget. The local district must provide the remaining 25 percent of the budget, or just over $18 per pupil for 2010–11.

Kansas
Does not apply. Paid under the special education reimbursement schedule.

Kentucky
Entitlement/Formula Driven/Flow-Through Grant Award

A. Criteria for Recipient Eligibility

704 KAR 3:285 Section 9 (4) requires districts to employ properly certified personnel to administer and teach in the program, submit an annual local district gifted education year-end report, submit a summative evaluation of the program and student progress, and to comply with all sections of 704 KAR 3:285. Grant awards are based on funding units reflecting district population at the end of the year preceding the prior year. For 2010–11, funding was reduced, resulting in a 1.4 percent cut to all districts.

B. General Purpose or Intended Use of Funds

Seventy-five (75) percent of a district's gifted education allocation is used to employ properly certified personnel for direct services to students who are identified as processing demonstrated or potential ability to perform at an exceptionally high level in general intellectual aptitude, specific academic aptitude, creative or divergent thinking, psychosocial or leadership skills, or in visual or performing arts. Additional uses of state funds for gifted education may include consultation services, counseling services, differentiated study experiences, professional development focused on the needs and services for gifted and talented students, instructional resources to assist teachers in differentiating services, or other appropriate resource services as specified in 704 KAR 3:285, Programs for the Gifted and Talented.

C. Application Process

Submission of a local district's Comprehensive Improvement Plan with approved budget and a local district year-end report (Infinite Campus), summative evaluation and year-end MUNIS expenditure report are considered application for continued funding.

D. Recipient Reporting Requirements

Each local district must submit an end-of-year summative evaluation report, quarterly MUNIS expenditure reports and update student data in Infinite Campus.

Louisiana
Add-on weights—based on student characteristics recognizing the extra cost of instruction for certain categories of students or classes.

Gifted and Talented (60 percent)

Maine
The state subsidizes approved EPS gifted and talented costs.

Maryland
Funding provides support to two initiatives: The Maryland Summer Centers for Gifted and Talented Students, and expenses for Maryland participants in the world-level competition of DestiNation ImagiNation. The Maryland Summer Centers Program provides unique summer enrichment opportunities for gifted and talented students in the areas of the sciences, humanities and social sciences, the arts, engineering, mathematics, creative writing, and technology. All programs funded must adhere to accepted tenets of gifted and talented education program design, service delivery, and evaluation, and must support Achievement Matters Most goals; the National Association for Gifted Children (NAGC) Program Standards; and Maryland's Learning Goals. The DestiNation ImagiNation grant provides for the expenses of Maryland state-level winners who compete at the world finals level (2007).

Massachusetts
Does not apply.

Michigan
No state funds are currently appropriated in this category.

Minnesota
Gifted and talented revenue is included in the general education revenue program. A district's gifted and talented revenue equals $12 per weighted ADM. It must be used only to identify gifted and talented students, provide educational programs for gifted and talented students, or provide staff development for teachers to best meet the needs of gifted and talented students.

Mississippi
Teacher units are added for each approved program gifted and talented students; the funding amount is based on the certification and experience of each teacher.

Missouri
Expenditures for gifted education were included in the calculation of the state adequacy target. There is no targeted state aid for Gifted Education. The state adequacy target is multiplied by the district's total weighted average daily attendance.

The law was modified to include a penalty for reduction in gifted programs at the local level, effective 7-13-2009:

If a school district experiences a decrease in its gifted program enrollment of more than 20 percent from its 2005–06 gifted enrollment in any years governed by this subsection, an amount equal to the product of the percent reduction in the district's gifted program enrollment multiplied by the funds generated by the district's gifted program in 2005–06 school year shall be subtracted from the district's current year payment amount.

Montana
Legislature provided $246,982 for a state grant distribution to school districts for Gifted and Talented programs in 2010–11.

Nebraska
Does not apply.

Nevada
Does not apply.

New Hampshire
Does not apply.

New Jersey
Resources for gifted and talented students are included in the state's model district that is used to calculate each district's adequacy budget. Although there is no additional aid category, it should be assumed that the costs for gifted and talented students are included in districts' adequacy budgets, which are funded through equalization aid.

New Mexico
See "Special Education."

New York
Gifted and Talented Aid was consolidated into Flex Aid in 2005–06, and Flex Aid has subsequently been consolidated into Foundation Aid.

North Carolina
State allocates funding based on 4 percent of total Average Daily membership per LEA.

North Dakota
$800,000 is appropriated for the 2009–11 biennium for gifted and talented programs.

Ohio
A component of the EBM contains funding for gifted education in the following four areas: coordinators, intervention specialists, identification, and professional development.

Oklahoma
Weighted in the equalizing formula at 0.34.

Oregon
Does not apply.

Pennsylvania
Gifted students are classified as part of exceptional students and are included in special education funding.

Rhode Island
Does not apply.

South Carolina
For 2010–11 the state appropriated $26,628,246.

South Dakota
Does not apply.

Tennessee
Gifted and Talented students, identified and served under the special education umbrella, are offered accelerated grade levels and course content when indicated. In addition, secondary students may apply as juniors and seniors for consideration to attend the state funded Governor's Schools held during the summer at institutions of higher education in Tennessee.

Texas
Gifted and talented students generate additional funding equivalent to 12 percent of the adjusted basic allotment. Eligibility for this funding is limited to a maximum of 5 percent of students in ADA.

Utah
A categorical appropriation is provided for gifted and talented students; for 2010–11 the amount is $1,903,454. Each school district and charter school receives its share of funds in the proportion of its number or WPUs for Grades K–12 and necessarily existent small schools.

Vermont
No special provisions in the funding system.

Virginia
State provides additional payment through the Standards of Quality (SOQ) Program for Gifted Education to support the cost of one instructional position per 1,000 students in ADM. This cost is shared between the state and local school divisions according to a division's Composite Index

of local ability to pay. Because gifted and talented funding is an SOQ account, its local match contributes toward the division's required local effort.

Washington
A program for highly capable students is funded in an amount equal to 2.314 percent of the school district enrollment multiplied by $400.32.

West Virginia
Gifted and talented students are not specifically funded through the funding formula.

Wisconsin
Gifted and Talented Education is funded as a categorical aid; brief information is contained in the Categorical Aid chart.

Wyoming
The funding model provides $29.19 per ADM for gifted and talented.

Appendix K—National Center for Education Statistics (NCES) Locale Definitions

Locale	Definition
City	
Large	Territory inside an urbanized area and inside a principal city with population of 250,000 or more
Midsize	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000
Small	Territory inside an urbanized area and inside a principal city with population less than 100,000
Suburb	
Large	Territory outside a principal city and inside an urbanized area with population of 250,000 or more
Midsize	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000
Small	Territory outside a principal city and inside an urbanized area with population less than 100,000
Town	
Fringe	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area
Distant	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area
Remote	Territory inside an urban cluster that is more than 35 miles from an urbanized area
Rural	
Fringe	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
Distant	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
Remote	Census-defined rural territory that is more than 25 miles from an urbanized area and also is more than 10 miles from an urban cluster

Source: Office of Management and Budget. (2000). Standards for defining metropolitan and micropolitan statistical areas—Notice. *Federal Register, 65*, no. 249.

Appendix L—Description of the NCES Comparable Wage Index (CWI)

The CWI measure used in this study is based on an analysis updating and extending Taylor and Fowler's 2006 analysis of the Comparable Wage Index (CWI). The CWI measures the prevailing wage for college graduates in 800 U.S. labor markets. The baseline estimates (for 1999) come from a regression analysis of the individual earnings data from the 2000 U.S. Census. Taylor and Fowler(2006) used data from the Bureau of Labor Statistics' Occupational Employment Survey (OES) to extend the baseline estimates of the CWI and provide annual index values for 1997 through 2005.

The 800 labor markets used to estimate the CWI are based on "place-of-work areas" as defined by the Census Bureau for the 2000 Census. Census place-of-work areas are geographic regions designed to contain at least 100,000 persons. The place-of-work areas do not cross state boundaries and generally follow the boundaries of county groups, single counties, or Census-defined places (Ruggles et al., 2003). Counties in sparsely populated parts of a state are clustered together into a single Census place-of-work area. Each labor market in the CWI is either a single place-of-work area or a cluster of the place-of-work areas that comprise a metropolitan area. Whenever possible, Taylor and Fowler (2006) aggregated place-of-work areas in metropolitan areas to correspond to Core Based Statistical Areas (CBSAs). Place-of-work areas that straddled more than one CBSA were treated as separate labor markets. After the aggregation, there were 800 CBSAs or place-of-work areas in the 2000 Census and thus 800 labor markets for analysis.

The index predicts annual wage and salary earnings for college graduates across 800 U.S. labor markets using a model including age, age squared, the amount of time worked, and a series of indicator variables for gender, race, educational attainment, occupation, and industry. In addition, the estimation includes an indicator variable for each labor market area. This analysis uses the same definition of labor markets as in Taylor and Fowler's original 2006 CWI and again incorporates random effects by state.

Appendix M—Description of Basic Support Ratio (BSR) Calculations

The following provides a summary of some of the details on how the BSR calculations are applied. The BSR is determined using previously audited or released data on historical salaries and expenditure costs in each district. The districts are clustered into groups based on their enrollment and locality (arguably to group districts facing similar operating cost structures), and a pupil-weighted average for each group's salary and expenditure costs is calculated.[95]

Rather than using district-by-district averages, the BSR is calculated using average compensation levels and operating expenditures for each of the five groupings of districts from the very small (i.e., Esmeralda and Eureka) to the very largest (Clark and Washoe) of districts in the state. Projected weighted student enrollments, licensed teaching and administrative staff salaries and benefits, teacher-to-administrative ratios are contained in DSA 1 (the Student Enrollment and Staffing Module). The assigned number of teachers per district is contained in the Teacher Allotment Table, which links FTE teacher allotments to enrollment size groupings referred to as Attendance Areas. These Attendants Areas are geographic locations within which schools are treated the same in terms of the assignment of teachers and are intended to capture differences in the required number of teachers for various sized schools. The data from these two modules are input into DSA 5 (the Licensed Staff Allotment and Expense Module) to calculate the group average-weighted teacher and administrator salaries, which are used to determine each district's total salary and benefits costs, based on weighted enrollments. The transportation and operational costs from DSA 4 (Expenditure Data Module) and the classified staff and benefits costs from DSA 1 are input through DSA 6 (the Other Operating Expense Module) to calculate group average operational expenses, which are used to determine total operational costs based on weighted enrollments. The total salary costs from DSA 5 and total operational costs from DSA 6 are then plugged through DSA 7 (Basic Support Level Ratio Module) to determine district total per pupil expenditures. The BSR is calculated by dividing each district's per pupil expenditures by the state average per pupil expenditures to achieve the relative ratio.

[95] Throughout our discussion of the DSA and cost adjustments, we will refer to pupil-weighted averages, which means that each unit within the average is weighted by the number of pupils in that unit. The reason we do this is to ensure equity allocations are based on pupils as the unit of analysis. It treats or weights each pupil equally in any calculations that are made.