



A Primer for Understanding Oklahoma's School Funding System

- 2nd Edition

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Policy Handbook



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Introduction

This paper is intended to provide a fuller, and hopefully in some ways simpler, understanding of Oklahoma's school formula funding system than is provided by a mere description of the system. It is a significantly revised and rewritten version of an 1889 Institute publication with the same title from 2015,¹ and represents an effort to simplify explanations, correct any errors, and update the discussion with changes in law since 2015. It is redesigned to provide a high-level, conceptual framework first and then to drill down, as gradually possible, into the actual mechanics of Oklahoma's school formula funding system.

Formula funding refers to yearly state-guaranteed minimum revenues for school districts that are determined by a formula based on state-defined student and district characteristics. These revenues are from both state and local sources. In 2020, \$4.2 billion (an average \$6,006 per enrolled Oklahoma student) of the total \$8.1 billion (\$11,576/student) spent by school districts flowed as a result of formula-defined funding.²

The State Department of Education's most thorough resource for learning about Oklahoma's school formula funding is the *Technical Assistance Document* (TAD), which is published yearly. It has been heavily relied upon as a resource for this document. The TAD is a manual written by individuals already immersed in school finance mainly for school district officials, who are familiar with the system, to get some idea of how much formula funding they can anticipate having in a given year. It is like a car repair manual that does not discuss the basics of how an engine works because this basic knowledge is assumed. The TAD serves its purpose very well, but it is not designed for someone new to school formula funding.³

This primer is intended to fill the void left between highly simplified power point presentations and the TAD. The TAD provides more detail than this paper in some areas. This document provides some better understanding and explores some of the underlying mathematics of formula funding that the TAD does not.

Oklahoma's school finance system has a reputation for complexity. Some of this is deserved. Overall, however, the formulas for determining state funding for each district are straightforward. The complexity results from: 1) the many pieces of information required by the formulas, 2) the number of school districts, each requiring unique information, 3) the fact that a district is funded using data from a prior fiscal year, 4) the role of local funding, 5) the plethora of sources of information and the timing of its availability relative to the school year, and 6) the backward engineering of key pieces of the school finance state funding formulas that the Oklahoma State Department of Education must perform.

It is not possible to explain school finance without a learner feeling lost at some point due to the volume of details. To help alleviate this problem, this paper begins with a summary of school finance facts and then provides an overview of how formula funding basically works. A fuller explanation of the formulas' full meaning and the meaning of some terms used must, of necessity, come later. The volume of information may seem daunting but it can be understood as the system is broken down and explained in the following pages.

Overview of Funding for Oklahoma's Common Schools

Over the course of the 2019-2020 school year (henceforth shortened to 2020 for simplicity), common schools spent a total of \$8.1 billion.⁴ *Some of this spending is double-counted.* For example, if one school district spends on behalf of another district, and then is reimbursed by the second district, both the original expenditure and the reimbursement are counted. Bond monies can be spent on a new building and sinking fund money could be used to pay off part of the bonds at the same time, also a double-count.

In fiscal year 2020, school districts received \$7.3 billion in new revenue even while maintaining substantial fund balances totaling \$2.8 billion, with almost \$1 billion of that in their general funds.⁵ A breakdown of sources of common school revenue by level of government is shown in Table 1. As will become obvious below, the state effectively appropriates a good deal of the local revenue as part of formula funding for school districts (about \$1.5 billion in 2020). In other words, the state directly determined about \$5 billion (76 percent of the \$6.5 billion state and local total) of common school revenues between various appropriations, dedicated state revenues, and what are effectively mandated property taxes, in 2020.

Table 1: Sources of Common School Revenue (2020 School Year)

	Amount	Percent of Total
District County (Local)	\$ 3,068,826,551.70	42.0%
State	\$ 3,465,095,084.08	47.5%
Federal	\$ 765,874,013.52	10.5%
Total	\$ 7,299,795,649.30*	

*Includes only current-year revenue (excludes fund balances of \$2.8 billion)
Source: 2020 - OCAS - School District Revenue Report (endnote 5), author calculations

It should be noted that the numbers just cited in the previous paragraph are not an all-inclusive accounting of total expenditures on public education in Oklahoma. Only spending at the district level is reported. Not even Oklahoma State Department of Education expenditures are included. Other state agencies such as the lottery, horse racing, and state land and tax commissions expend resources for the support of programs in the common schools. Portions of those agencies' administrative costs could rightly be counted toward total common school education spending in the state. The actual total compared to that officially reported can be considerably different, especially if one includes changes in the unfunded liabilities of the teachers' retirement system.⁶ Such a comprehensive accounting has not been undertaken for the purposes of this paper.

Table 2 (next page) shows state-sourced revenue that supported formula funding. In 2020, this amounted to 39.4 percent of total revenue for common schools. Part of this, 6.3 percent of total revenue, comes from state taxes that are dedicated to school funding but that are not part of the state's appropriated aid. About 9.7 percent of the total in Table 1, or \$705 million of total revenue to districts, was state funding that did not

count toward formula funding. Much of this is claimed for such expenses as teacher health insurance and textbooks.⁷

Table 2: State Formula Funding for Common Schools (2020)⁸

	Amount	Percent of Total of All Funds Revenue
State Appropriated	\$ 2,400,649,534.42	32.9%
Dedicated Sources	\$ 457,944,225.47	6.3%

On average, Oklahoma common schools directly spent \$11,576 per student with only 43 percent of this going to instruction in 2020. Balko, a district with only 149 students in Beaver County spent the most per student at \$58,638, with 18 percent of this on instruction. A very large percentage of this, however, was spent on new buildings and land. The Keys school district in Cimarron County, with only 13 students and spending nothing on buildings, spent \$54,047 per student with 54 percent spent on instruction. The Lone Star district in Creek County, with 931 students, spent the least per student at \$7,233 with 61 percent of this on instruction. Fifteen charter schools spent less per student than Lone Star and only four of these devoted a lower percentage to instruction than Lone Star. Of the 25 lowest-spending districts on a per-student basis, only five were traditional public school districts.⁹

Basic State Funding Formula Calculations

Conceptually, it is helpful to understand a basic principle of state formula funding for school districts before jumping into the math. The state finances a substantial share of public education spending in Oklahoma, with much of this spending *not* determined by formula funding. The underlying purpose

of formula funding is to guarantee that school districts have a *minimum* of funding based on: 1) how much money districts can raise on their own, 2) the types and ages of students that happen to populate a given district, and 3) each district's geographical circumstances. The formulas can be thought of as defining the size of a funding cup for each district (how much money to which the district is entitled). Each district fills its individually sized cup partially, some fuller than others, with its own property tax and other designated revenues. The state finishes filling the custom-sized formula-defined cup with state aid.

Determining the Size of a District's Cup (Total Formula Funding)

First, consider the basic final calculations that determine the minimum total funding that a school district receives. At their simplest, and for most districts, but not all, there are only two basic calculations that must be made. The first calculation is merely a district's student count multiplied by a per-student dollar amount. This can be thought of as the minimum amount the state's formula system considers necessary for a district's daily operations and student instruction. The second calculation is an allotment for transportation. These are then added together. Here are the two calculations, which are figured for every individual school district:

- 1 #Students x Total Formula Funding Factor = Total Formula-defined Operations Funding
- 2 #Students entitled to ride a bus x Density Factor x \$1.39 (Transportation Factor) = Transportation Formula Funding

This is *highly* over-simplified in that every element in the two calculations needs to be broken down and explained. Thus, the need for the rest of this primer. Nonetheless, it is useful to look at these calculations for a handful of districts, as shown in Table 3.

Table 3: Basic Formula Funding Calculations, Select Districts – FY 2020¹⁰

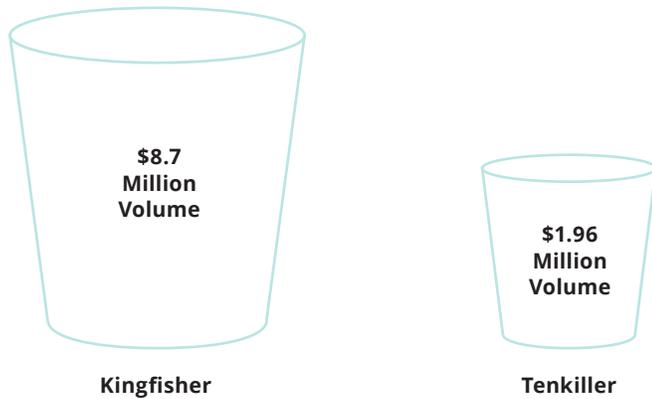
District	MINIMUM OPERATIONS		+	TRANSPORTATION AID			=	TOTAL FORMULA FUNDING [†]
	Student Count	X Total Funding Factors		Students Transport Eligible	X Density Number	X Transportation Factor		
Nashoba	129.22	\$3,581.44		52	\$167	\$1.39		\$474,854
Tenkiller	541.48	\$3,581.44		241	\$62	\$1.39		\$1,960,048
Tulsa Arts & Sciences*	732.83	\$3,581.44		0	\$0	\$1.39		\$2,624,587
Hollis	1,124.24	\$3,581.44		103	\$167	\$1.39		\$4,050,307
Prague	1,590.76	\$3,581.44		630	\$64	\$1.39		\$5,753,256
Dove Science Academy*	2,182.25	\$3,581.44		0	\$0	\$1.39		\$7,815,597
Kingfisher	2,412.83	\$3,581.44		533	\$75	\$1.39		\$8,696,971
Ada	4,566.46	\$3,581.44		1,909	\$33	\$1.39		\$16,442,068
Mustang	18,827.31	\$3,581.44		7,765	\$33	\$1.39		\$67,785,062
Epic One on One Virtual*	26,867.92	\$3,581.44		0	\$0	\$1.39		\$96,225,843
Oklahoma City	65,200.00	\$3,581.44		10,077	\$33	\$1.39		\$233,972,120

* Charter School

† Totals are **not** equal to formula funding provided by the state, but show the minimum funding to which a district is entitled under formula calculations. Any error is due to rounding.

Figure 1: Two Formula-determined Cup Sizes

Not to scale. Based on Table 3.



Several questions about Table 3 and the formulas above should occur to the reader:

- 1 The first column in the table, a student count, shows fractions of students. How is that possible?
- 2 While the other districts' student counts are not commonly reported in the news, Oklahoma City's is generally reported at fewer than 40,000, but the number in the table is much higher than that. How?
- 3 Only one number is reported in the second column yet it is labeled "factors" in the plural. What gives?
- 4 Where does that "factors" number come from? That number in the second column doesn't vary across districts, but in the formulas above, only its name is given. Why?
- 5 What determines the transport eligible number and why is it a whole number where the other includes fractions?
- 6 Why are there zeroes in the charter schools' transportation columns?
- 7 Why does that density number associated with transportation change across districts?
- 8 Why is the transportation factor explicit (\$1.39) in both the formulas and the table while the other funding factor(s) is not explicit in the formula?

Here are the short answers to each of these questions:

- 1 It is not an actual count of enrollment, but is a complex count first based on an average enrollment number called Average Daily Membership (ADM), which is an average of a district's daily enrollment count during instruction days. It results in fractions since it is an average.
- 2 The ADM number is inflated by "weights" applied to individual students where many, often most, of the students are counted as more than one. The count is also inflated by district characteristics.
- 3 There are actually two funding factors. They are reverse-engineered by the State Department of Education. *This requires explaining almost everything else before explaining the funding factors in any detail.* One factor is called the Foundation Aid Factor and the other is called the Salary Incentive Aid Factor. The names are

anachronisms, and for most districts, splitting their calculation would be unnecessary, but for determining the state's share of formula funding for each district, the two "types" of funding must be separated.

- 4 Both of the individual funding factors vary from year to year depending on state appropriations and actual revenues from a variety of sources. Nevertheless, the same factor amounts are applied to all the districts in a given year.
- 5 This is a head-count of the number of students that live at least 1.5 miles from their assigned school campus, which makes them eligible for a free bus ride to school.
- 6 By law, traditional school districts must provide transportation. Charter schools are not, though some do, and they receive state transportation aid funding accordingly.
- 7 The lower a school district's student population density, the higher the value, due to the need to drive farther. This number is determined by a table in statute that has not been changed in many years.
- 8 The transportation funding factor is determined by statute but has not changed in many years. It is a constant applied to all districts. As explained in the answer to question 4), the other funding factor's elements vary from year to year.

Given their straightforward answers, questions 5), and 8) will only be touched on below, but the other questions need significant further explanation. This is where the complexity begins to enter the picture.

An explanation of the funding factors, likely many readers' first question, must wait. They cannot be understood for what they are without first understanding the other elements of formula funding.

Filling the Cup (Determining State Aid)

As noted earlier, formula funding depends on a number of revenue sources. Once the size of a school district's formula funding cup is determined using funding factors and an inflated student count, the shares of local versus state funding must be determined. For now, only the basic calculations will be discussed and illustrated for the same handful of districts as in Table 3. But, the explanation requires introducing a little complexity in the funding factors.

Oklahoma's formula funding consists of three parts. These are:

- 1 Transportation Aid
- 2 Foundation Program
- 3 Salary Incentive Program

Another way to put this is that every district has *three cups* that must be filled. Transportation Aid is entirely state funded. That is, the state exclusively fills that cup. Statewide, its \$26 million total in 2020 constituted only one percent of the state's share of formula funding, only 0.6 percent of total formula funding, and only 0.3 percent of districts' total spending. Transportation Aid only constitutes about ten percent of schools' total statewide spending on transportation.

The Foundation and Salary Incentive Programs' totals are both determined using the same student count as in Table 3, which is why they can be combined in a table like that. However, where

Table 3 combines the Foundation Aid and Salary Incentive Factors to illustrate the minimum size of a funding cup for districts, the cups must be separated because different money sources at the local level are used to partially fill them. The Foundation Aid and Salary Incentive Funding Factors will be discussed in more detail below, but for now, it is sufficient to point out that the two factors' values shown in Table 4 (\$1,825.84 for the Foundation Aid Factor and \$1,755.60 for the Salary Incentive Factor) sum to the total in Table 3 (\$3,581.44).

Figure 2: Filling Two Cups

Not to scale. Based on Table 4.

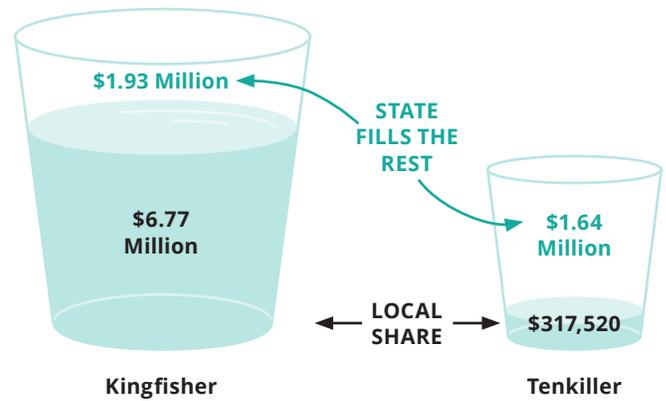


Table 4: State Share Formula-Funding Calculations – FY 2020¹¹

District	FOUNDATION AID (if < 0, then 0)			+	SALARY INCENTIVE AID (if < 0, then 0)			+	TRANSPORTATION AID (From Table 3)	=	TOTAL STATE AID
	Student Count	X Foundation Aid Factor	- Total Chargeables	Student Count	X Salary Incentive Factor	- Expected Property Tax Revenue					
Nashoba	129.22	\$1,825.84	\$98,391.71	129.22	\$1,755.60	\$88,633.64		\$12,071	\$287,839		
Tenkiller	541.48	\$1,825.84	\$212,217.02	541.48	\$1,755.60	\$105,303.04		\$20,769	\$1,642,527		
Tulsa Arts & Sciences*	732.83	\$1,825.84	\$0.00	732.83	\$1,755.60	\$0.00		\$0	\$2,624,587		
Hollis	1,124.24	\$1,825.84	\$834,598.34	1,124.24	\$1,755.60	\$402,372.90		\$23,909	\$2,813,336		
Prague	1,590.76	\$1,825.84	\$1,661,935.04	1,590.76	\$1,755.60	\$679,955.02		\$56,045	\$3,411,366		
Dove Science Academy*	2,182.25	\$1,825.84	\$0.00	2,182.25	\$1,755.60	\$0.00		\$0	\$7,815,597		
Kingfisher	2,412.83	\$1,825.84	\$8,973,233.30	2,412.83	\$1,755.60	\$2,362,165.58		\$55,565	\$1,929,364		
Ada	4,566.46	\$1,825.84	\$3,607,562.04	4,566.46	\$1,755.60	\$2,083,728.62		\$87,556	\$10,750,778		
Mustang	18,827.31	\$1,825.84	\$20,959,782.69	18,827.31	\$1,755.60	\$10,816,758.40		\$356,181	\$36,008,521		
Epic One on One Virtual*	26,867.92	\$1,825.84	\$0.00	26,867.92	\$1,755.60	\$0.00		\$0	\$96,225,843 [†]		
Oklahoma City	65,200.00	\$1,825.84	\$70,587,576.19	65,200.00	\$1,755.60	\$42,801,637.14		\$462,232	\$119,582,907 [†]		

* Charter School

[†] Totals do **not** reflect penalties (discussed below)

The state's share of Foundation Program funding is called Foundation Aid. Many states' school funding formulas at least partly consist of some part characterized as "foundation." There is nothing in the name other than to distinguish it from other parts of the formula and to realize that this is likely historically the oldest part of the formula structure, which is complex partly because it has been pieced together by different legislatures over decades.

As can be seen in Table 4, the student count is multiplied by the Foundation Aid Factor, but then an amount called "Total Chargeables" is subtracted. These "chargeables" are previous-year totals of various *locally-raised dedicated taxes*, including a *portion of property tax revenue* (explained in more detail below). The difference is called the state's Foundation Aid (or Net Foundation Aid) for the district – an amount of funding sent to the district by the state. If the chargeables are enough to cause a district's calculation to have a negative value, that district receives no Foundation Aid. The Kingfisher district, shown in Table 4, along

with 78 other districts (see Appendix A for a list of these districts), received no Foundation Aid funding from the state in 2020 for this reason. Charter schools have no independent taxing authority. Therefore, they have no chargeables, as shown in Table 4.

The state's share of Salary Incentive Program funding is called Salary Incentive Aid. The same student count as that used in Table 3 is multiplied by the Salary Incentive Factor. A share of *locally-raised property tax revenue* separate from that included in the Foundation Aid calculation is subtracted. This determines the state's Salary Incentive Aid funding sent to the district. Forty school districts have enough property wealth that they receive no Salary Incentive Aid from the state (see Appendix A for the list of districts).

NOTE: The Salary Incentive Aid calculation shown in Table 4 is mathematically equivalent to how the state performs the calculation, but is *not* done the state's way for purposes of conceptual clarity. The state publishes a Salary Incentive Aid Factor (\$87.78 in 2020) that must be

multiplied by 20 to obtain the “Salary Incentive Factor” (87.78 x 20 = \$1,755.60) in Table 4. This will be further explained in a later section.

The sum of Salary Incentive Aid, Foundation Aid, and Transportation Aid constitutes Total State Aid for each district under formula funding (Salary Incentive Aid + Foundation Aid + Transportation Aid = Total State Aid). Only two districts, Balko and Peckham, received no formula funding from the state at all in 2020. This was due to penalty deductions, which will be discussed near the end of this primer as they are a minor part of the overall calculations statewide.

For two of the districts in Table 4, Epic One on One and Oklahoma City, the numbers from the table do not accurately reflect the amount of formula funding received from the state. This is due to *penalty adjustments* that similarly impacted the Balko and Peckham districts and that subtract from state aid to specific districts for various reasons, such as having excessive administrative costs or excessive fund balances.

Detailed Descriptions of Formula Funding Components

The basic calculations shown above are fairly simple, and initially seem straightforward, but many issues have not been addressed, such as the inflated student counts and where the funding factors come from. There is also the issue of the chargeables. A lot of information from several different sources has to be brought together to calculate the amounts school districts receive in state formula funding each year. An exhaustive explanation of how and when every element comes together is beyond the scope of this paper. However, some of the information that is particularly relevant to school finance needs further explanation, as illustrated by the eight questions above. Most of those questions, and more, will be answered in this section.

What’s with the Student Count? (Weighted Average Daily Membership)

Although the bulk of any school’s costs are associated with salaries and, therefore, staffing needs, schools around the nation are often funded on a student count and characteristic basis. This makes sense because staffing needs are generally determined by the number of students and their specific needs. Oklahoma determines formula funding in this way.

Counting students seems a straightforward task of counting heads. However, the number of heads often changes from day to day. Enrollment on day one of a school year is not likely to be the same every day for the rest of the school year. Attendance varies to an even greater extent. Different grade levels require different levels of instructional intensity. Students in very low grades require a great deal of personal attention. Students in higher grades require more course options and often more equipment in the classroom. Individual students vary in their abilities and educational needs, too, regardless of their grade level.

As a result of these complications, students are counted on a “weighted,” “average daily membership,” and “average daily attendance” basis. “Average Daily Membership” (ADM) is the sum over a given period of time of the number of students enrolled in a school district each instruction day divided by the number of instruction days. Enrollment is not the same as ADM. Enrollment

is a number for a specific day. ADM is average enrollment over a series of days (ADM = The Sum of Every Individual Instruction Day’s Enrollment Totals ÷ Number of Instruction Days).

For formula funding calculation purposes, the ADM count for a district is adjusted based on several criteria, including:

- 1 The numbers of students in each grade,
- 2 Numbers of students that fall into various categories (bilingual, special needs, etc),
- 3 District categories (small or sparsely populated), and
- 4 Teacher experience.

Once each of these adjustments is made, an inflated total student count, called Weighted Average Daily Membership (WADM) results. How each of these adjustments is made is described below.

Grade Weight

To account for grade populations’ funding needs in a district, ADM is broken down into numbers per grade level. On a grade-level basis under Oklahoma’s system, fourth, fifth, and sixth graders are individually counted as a single student. Students at every other grade level are counted as slightly more than a single student (except for part-time pre-kindergarteners). That is, students at all other grade levels are weighted, counting as more than one. These weights are determined in law and reproduced in Table 6. The legislature has not changed them significantly since before 1998.¹² Applying these weights for each student in a district and summing the values results in a total called Grade Weighted ADM or, in this primer, Grade WADM.

Table 5: Grade Weights for Determining Weight Average Daily Membership (WADM)¹³

Grade	Weight
Early Childhood/Prekindergarten 3 ¹⁴	1.2
Early Childhood/Prekindergarten (1/2 Day)	0.7
Early Childhood/Prekindergarten (Full Day)	1.3
Kindergarten (1/2 Day)	1.3
Kindergarten (Full Day)	1.5
1 st – 2 nd Grades	1.351
3 rd Grade	1.051
4 th – 6 th Grades	1.0
7 th – 12 th Grades	1.2
Out of Home Placement (OHP) 1 ¹⁵	1.5
OHP 2	1.8
OHP 3	2.3
OHP 4	3.0

Note that a single student in first grade counts as a little more than one-and-a-third units of WADM. A full-day kindergartner counts as 1.5 units of WADM. A half-day kindergartner, at 1.3 units of WADM, counts almost as much as a full-day kindergartner at 1.5. But, a half-day pre-kindergartner, at 0.7 units of WADM, counts just a little more than half of a full-day pre-kindergartner (1.3) for WADM purposes. The reason for the inconsistency in counting half-day kindergarten and pre-kindergarten is not

clear. Also note that all of the grade weights from pre-kinder-garden through first grade are higher than for high school. This is opposite the pricing pattern seen in private schools' price schedules.

Student Category Weight

Students are also separately weighted on the basis of various individual characteristics or categories as defined by the legislature and unchanged since at least 1998.¹⁶ These characteristics impact ability to learn and, therefore, staffing needs. These weights are additive. That is, whatever grade weighting applies to a student, these weights are added on top. So, a child classified with "learning disabilities" receives an additional weighting of 0.4. "Vision impaired" is given a substantial weight of 3.8. "Speech impaired" is weighted at 0.05. "Gifted" receives a weight of 0.34. "Bilingual" and "economically disadvantaged" (anyone eligible for the federal free/reduced-price lunch program) each are weighted at 0.25. Student category weights are determined by statute as shown in Table 6. Using these values, a total weighting can be calculated for each of the categories, such as a gifted total weight and economically disadvantaged total weight.

Table 6: Student Category Weights¹⁷

Student Characteristic	Weight
Learning Disabilities	0.40
Hearing Impaired	2.90
Vision Impaired	3.80
Multiple Disabilities	2.40
Speech Impaired	0.05
Intellectual Disability	1.30
Emotionally Disturbed	2.50
Orthopedic Impairment	1.20
Other Health Impairment	1.20
Autism	2.40
Traumatic Brain Injury	2.40
Deaf-Blind	3.80
Special Ed Summer Program	1.20
Gifted	0.34
Bilingual	0.25
Economically Disadvantaged	0.25

These weights can accumulate for a single student. So, a low-income child in eighth grade whose first language is not English, has emotional problems, and has a physical impairment, could be counted as 5.4 students for WADM purposes as follows: (eighth grade) 1.2 + (economically disadvantaged) .25 + (bilingual) .25 + (emotionally disturbed) 2.5 + (physically impaired) 1.2 = 5.4.

School District Characteristic Weight

Student-count weighting is also assigned on the basis of school district size or sparsity of student population. Many districts do not benefit from either of these weights because they do not meet the criteria to do so. The size and sparsity weights are two

different weights and they are mutually exclusive. If a district gets one, it does not get the other, though a district is entitled to the larger of the two. The weight based on size (based on number of students) is called the "Small School District Weight" in law and it is common for the weight to be more simply called the small school weight in conversation.¹⁸ The sparsity weight is called the "Sparsity-Isolation Weight" in law and is often referred to as the isolation weight.¹⁹

Small School Weight

The small school weight only applies to school districts with a current-year ADM count less than 529. In 2021, 193 school districts had an ADM count below 529.²⁰ Many of these, however, receive the sparsity weight, instead. The small school weight is mathematically calculated with this formula:

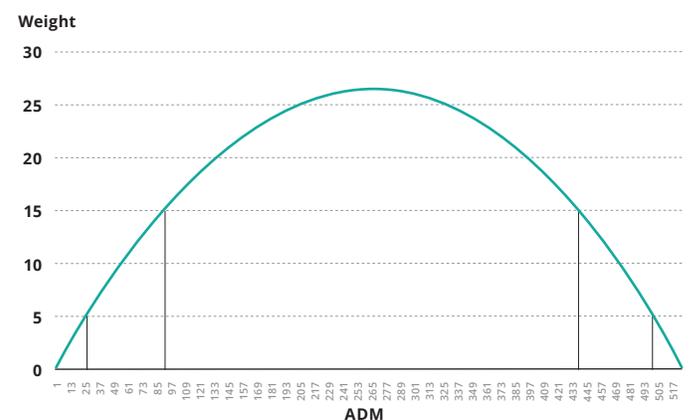
$$\text{Small School Weight} = [(529 - \text{ADM})/529] \times .2 \times \text{ADM}$$

Rearranged algebraically, it can be seen that this is a formula for an inverted parabola:

$$\text{Small School Weight} = (105.8 \times \text{ADM} - .2 \times \text{ADM}^2)/529$$

The small school weight formula is engineered so that at ADMs of 0 and 529, the weight equals zero; the weight is 0.19962 at an ADM of 1 and at an ADM of 528; the weight is 0.39849 at an ADM of 2 and at an ADM of 527. As seen in the graph, ADMs equidistant from the end-points produce the same weighting, and so on, creating the pattern shown in Figure 4. The maximum value of the small district weight is 26.45 at an ADM of 264.5. In 2020, this was worth \$94,729 (26.45 x \$3,581.44).

Figure 3: How the Small School District Weight Varies with District ADM²¹



Sparsity-Isolation Weight

The sparsity weight can apply to any district with an area greater than the statewide average for school districts (currently 137.36023 square miles) and an ADM per square mile (called areal density) less than one-quarter of the statewide average (currently 2.5; i.e., fewer than 2.5 ADM per square mile).²² Districts with fewer than 529 students are eligible to receive the sparsity weight. However, a district eligible for both weights receives only the larger of the two. The sparsity weight can be much higher than

the maximum value of the small school weight (26.45). In fact, the Felt school district in Cimarron County had an ADM of 83.89 and an isolation weight of 98.15. The sparsity weight alone made up 44 percent of that district's WADM in 2020.²³

The sparsity weight is far more complex to calculate than the small school weight. Total ADM for a district is split into ADMs for three grade ranges: pre-kindergarten through fifth grade (EC-5), sixth through eighth grades (6-8), and ninth through twelfth grades (9-12). Then, three separate calculations are made as follows:

$$\text{EC-5 Cost Factor} = [74 / (\text{ADM}_{\text{EC-5}} + 23) + .85] \times \text{ADM}_{\text{EC-5}} = \text{CF}_5$$

$$\text{6-8 Cost Factor} = [122 / (\text{ADM}_{\text{6-8}} + 133) + .85] \times \text{ADM}_{\text{6-8}} = \text{CF}_8$$

$$\text{9-12 Cost Factor} = [292 / (\text{ADM}_{\text{9-12}} + 128) + .78] \times \text{ADM}_{\text{9-12}} = \text{CF}_{12}$$

These results are summed and the sum's proportional increase over ADM is multiplied by how many percent larger than 137.36023 square miles is the district (not to exceed 100 percent). Then, this result is multiplied by total ADM. The final result is the sparsity weight. Mathematically, this is:

$$\text{Sparsity Weight} = ((\text{CF}_5 + \text{CF}_8 + \text{CF}_{12}) / \text{ADM}) - 1 \times ((\text{Area} - 137.36023) / 137.36023) \times \text{ADM}$$

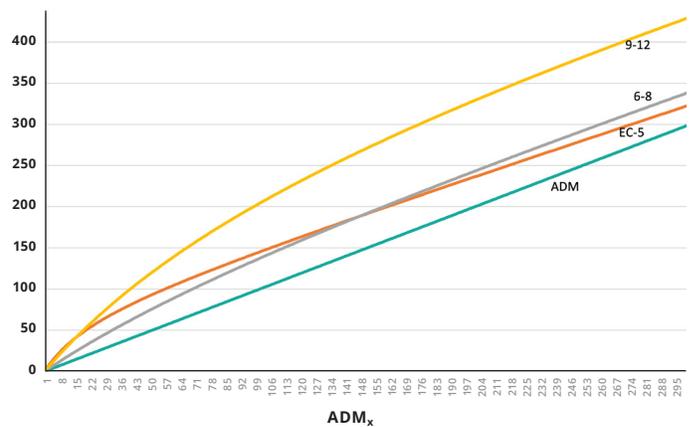
Obviously, the higher the sum of the cost factors the higher the sparsity weight. Also, the greater a district's area above 137.36023 square miles (with nothing above twice that state average area counting), the higher the sparsity weight. ADM has a push-pull effect on the calculation.

Notice that each of the cost factor calculations (CF_5 , CF_8 , and CF_{12}) essentially just calculates an adjusted ADM for each grade range. If the adjusted ADM sum is equal or less than actual total ADM, the sparsity weight will equal zero since the ratio of the adjusted sum to actual ADM will be less than one.

The sparsity weight is engineered to favor low-student-count and geographically large, sparsely populated districts. It is designed to yield less weighting for districts as their student counts rise, holding area constant. Because of the different parameter values in each of the three cost factor equations, a different actual ADM for each grade range determines whether that grade range contributes to a sparsity weight. For grades EC-5, any ADM below 470 contributes to a sparsity weight. For grades 6-8, the ADM must be under 680. For grades 9-12, the ADM must be under 1,199 in order to contribute to the sparsity weight.²⁴ Values higher than these subtract from a district's potential sparsity weight.

Given the number of variables, the sparsity weight's series of calculations does not lend itself to a pictorial display. However the behavior of the individual cost factors for each grade range as their respective ADMs vary are illustrated in Figure 4. As can be seen, even accounting for the fact that the grades 9-12 factor includes four grades and the 6-8 factor only includes three, high school is much more heavily weighted than the other grades in the sparsity formula.

Figure 4: Sparsity Weight Cost Factors²⁵



Teacher Experience and Degree Index Weight

The final component of WADM is the weighted teacher experience/degree index weight calculation. This calculation financially rewards districts whose teachers are, on average, more experienced and/or more highly educated than teachers in the state as a whole. Every teacher in the state is assigned an index value as shown in Table 9. Note that, except for the last experience increment, a teacher's index value increases by 0.1 with each additional three years of experience and by 0.2 with each additional degree above the bachelor's level.

Table 7: Teacher Experience & Education Index Values²⁶

Years of Experience	Bachelor's Degree	Master's Degree	Doctorate
0-2	.7	.9	1.1
3-5	.8	1.0	1.2
6-8	.9	1.1	1.3
9-11	1.0	1.2	1.4
12-15	1.1	1.3	1.5
Over 15	1.2	1.4	1.6

A weighted average state teacher index value is calculated for the entire state by summing all the weights for each teacher and dividing by the number of teachers. In 2020, this value was 1.0794.²⁷ The same average is calculated for each district using its teachers' weights to determine a weighted average district teacher index value. If the district's average is *equal to or lower* than the state's, then the district receives no additional WADM on this basis. Many districts fall into this category. Otherwise, a district receives WADM using this formula:

$$\begin{aligned} \text{Weighted Teacher WADM} = & \\ & (\text{Weighted Average District Teacher} - \\ & \text{Weighted Average State Teacher}) \times .7 \times \\ & (\text{Grade Weighted ADM} + \\ & \text{Economically Disadvantaged ADM})^{28} \end{aligned}$$

The teacher weight is clearly intended as an incentive to retain and pay highly experienced and educated teachers, with special

encouragement for districts with high numbers of economically disadvantaged students. A hypothetical example of how the teacher weight is computed is provided in Appendix B in order to aid the reader’s understanding.

Total WADM

As shown in Table 8 below, total WADM for a district is calculated by adding the grade WADM, the weights for each of the pupil categories, the applicable size or sparsity weight, and the teacher experience weight. No two school districts have the same weights assigned because each and every district is uniquely financed for its particular student and teacher circumstances. More than anything else, the WADM calculation is meant to capture these unique differences and minimally fund accordingly.

IMPORTANT CAVEAT: For many years, the WADM used to calculate a school district’s formula funding has been based on the highest of it latest three years’ WADM counts, meaning that in 2020, a district could be funded based on its 2018, 2019, or 2020 WADM count, whichever was highest. Beginning with the 2022-2023 school year (FY 2023), districts will be funded on their current-year WADM counts. Thus, for FY 2020, total WADM for funding purposes is different from actual WADM for that year.

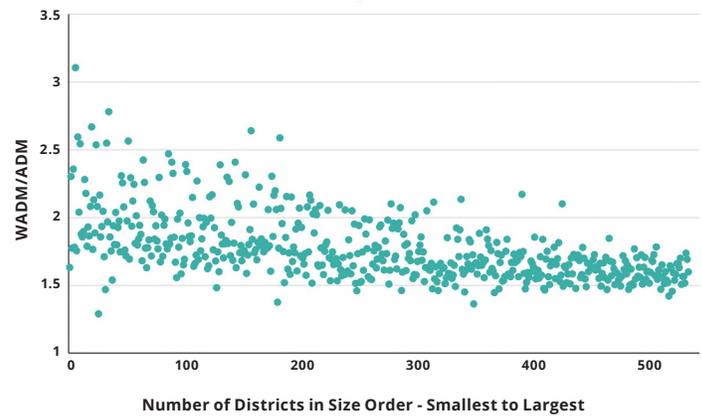
The state produces reports with detailed weight information for each school district every year. The detail weight information for 2020 funding purposes for the districts shown in Tables 3 and 4 can be found in Table 8. Note that the Total WADM numbers coincide with the Student Count numbers in Tables 3 and 4.

Given that student category weights can potentially so inflate the student count, one might think it common to see WADM counts exceed actual (often called “raw”) ADM counts by a factor of three or four. Actually, in 2020 only 82 of all school districts and charters receiving formula funding had an actual current-year WADM to ADM ratio greater than two; only one district’s WADM/ADM ratio exceeded three. On the other hand, only 26 had a WADM/ADM ratio of 1.5 or less, which means that for the vast majority of districts, the average student was weighted between 1.5 and 2. In the state as a whole, the WADM/ADM ratio equaled about 1.6.³⁰ Table 9 and Figure 5 show how district WADM/ADM ratios tend to fall with district size, partly since small school districts receive the small school or sparsity weights.

Table 9: School District Average WADM/ADM Ratios by Size (based on 2021 current-year values)³¹

Size by ADM	Number of Districts	Total ADM	Average WADM/ADM Ratio
1 – 200	104	12,658	1.96
200 – 300	97	23,795	1.88
300 – 500	107	41,626	1.76
500 – 1,000	105	73,715	1.66
1,000 – 4,000	101	183,820	1.62
4,000 – 10,000	12	73,315	1.54
10,000 – 41,000	14	278,081	1.62

Figure 5: WADM/ADM Ratio Comparison, All Districts (2021)³²



Total WADM Statewide

Table 10(next page) contains the same detailed weight information for the state as a whole as Table 8 does for the sample districts except that the student category weights are broken down to some extent. This is the same breakdown used on district detail weight sheets from which Table 8 is derived. Note

Table 8: WADM Breakdowns, Select Districts (FY 2020 values for funding purposes)²⁹

District	ADM	+	Grade (net of ADM)	+	Student Category	+	Small	+	Sparsity	+	Teacher	=	TOTAL WADM
Nashoba	53.61		11.50		40.66		9.64		13.80 †		9.65		129.22
Tenkiller	295.22		60.87		132.09		26.09 †		0.00		27.21		541.48
Tulsa Arts & Sciences*	445.02		89.00		198.81		0.00		0.00		0.00		732.83
Hollis	544.36		108.85		272.16		0.00		195.97 †		2.90		1,124.24
Prague	1,033.27		210.89		346.60		0.00		0.00		0.00		1,590.76
Dove Science Academy*	1,290.99		254.01		637.25		0.00		0.00		0.00		2,182.25
Kingfisher	1,517.71		296.04		568.99		0.00		0.00		30.09		2,412.83
Ada	2,598.61		510.88		1,181.92		0.00		0.00		275.05		4,566.46
Mustang	12,341.84		2,358.01		4,127.46		0.00		0.00		0.00		18,827.31
Epic One on One Virtual*	16,784.23		3,150.09		6,933.60		0.00		0.00		0.00		26,867.92
Oklahoma City	38,194.14		7,699.61		19,306.25		0.00		0.00		0.00		65,200.00

* Charter School

† Designates higher of sparsity versus small school weights

NOTE: “Student Count” in Tables 3 and 4 is the same as “Total WADM” in this table.

that the small school, sparsity, and teacher experience weights, as complex as they are to understand and calculate, contribute little to overall total WADM. The biggest contributors to WADM, after ADM, are the Grade, Special Education, and Economically Disadvantaged weights, respectively. Statewide, the weights inflate WADM over raw ADM by 64 percent.

Table 10: Statewide 2020 Detail Student Weight Information (Funding Purposes)³³

Weight Category	Contribution to Total WADM	Percent of Total WADM	Percent of ADM
ADM	715,168.93	61.0%	
Grade	137,329.93	11.7%	19.2%
Special Education	129,309.50	11.0%	18.1%
Gifted	29,095.84	2.5%	4.1%
Bilingual	22,570.25	1.9%	3.2%
Summer Program	600.00	0.05%	0.08%
Economically Disadvantaged	110,959.25	9.5%	15.5%
Small School	4,001.13	0.3%	0.6%
Isolation (Sparsity)	12,862.28	1.1%	1.8%
Teacher Index	10,572.31	0.9%	1.5%
Total WADM	1,172,469.42	100%	163.9%

What Are Chargeables?

Certain locally-sourced taxes are counted toward a district's Foundation Program funding. That is, they are the first thing to fill up part of a district's Foundation Program funding cup. As with the Kingfisher district, if the chargeables overflow the cup, the district gets no Foundation Aid. There is nothing significant in this fact other than this is how the system has evolved over time as the legislature has historically responded to intermittent pressures to increase school funding as well as calls for funding equity across districts. Table 11 shows the amounts of the chargeables for each of the districts featured in Tables 3 and 4. Each chargeable is then briefly explained.

Table 11: Sample Districts' Foundation Aid Chargeables (FY 2020 Calculations)³⁴

District	Ad Valorem	+	Country 4-Mill Levy	+	School Land Earnings	+	Gross Production Tax	+	Motor Vehicle	+	R.E.A. Tax	=	TOTAL CHARGEABLES
Nashoba	70,773.96		3,201.75		6,195.00		0.00		0.00		18,221.00		98,391.71
Tenkiller	85,400.77		23,594.25		43,819.00		0.00		0.00		59,403.00		212,217.02
Tulsa Arts & Sciences*	0.00		0.00		0.00		0.00		0.00		0.00		0.00
Hollis	334,007.59		65,496.75		83,001.00		823.00		219,624.00		131,646.00		834,598.34
Prague	559,122.29		247,668.75		152,749.00		137,464.00		395,582.00		169,349.00		1,661,935.04
Dove Science Academy*	0.00		0.00		0.00		0.00		0.00		0.00		0.00
Kingfisher	1,894,456.80		586,012.50		226,975.00		5,515,262.00		583,809.00		166,718.00		8,973,233.30
Ada	1,604,471.04		344,379.00		386,035.00		261,697.00		996,433.00		14,547.00		3,607,562.04
Mustang	8,862,069.69		1,895,253.00		1,682,547.00		4,150,637.00		4,223,423.00		145,853.00		20,959,782.69
Epic One on One Virtual*	0.00		0.00		0.00		0.00		0.00		0.00		0.00
Oklahoma City	34,953,706.44		8,561,682.75		7,467,953.00		325,529.00		19,277,695.00		1,010.00		70,587,576.19

* Charter Schools - these have no chargeable (i.e., tax income).

The *Ad Valorem* chargeable refers to the amount of potential current-year revenue from a 15-mill property tax that all districts assess called the Certification of Need levy.³⁵ The amount of the chargeable is based on an assessed property value and the tax rate of the district. Actual revenues vary from the chargeable amount due to delinquencies, late collections, and other issues. Almost all districts actually charge a rate slightly more than 15 mills. They are allowed to do so because the original 15-mill tax, defined by the state constitution, was applied to residential personal property (essentially, contents of homes). All but a few districts have stopped assessing residential personal property and are allowed to charge some extra millage to make up the difference.³⁶

The *County 4-Mill Levy* refers to an anachronistic tax from Oklahoma's Jim Crow days for funding "separate" schools.³⁷ This tax's revenue is apportioned among all districts in a county on an Average Daily Attendance basis. However, only 75 percent (3 mills) of prior-year revenue from this tax is counted toward the Foundation Aid calculation's chargeables.³⁸

School Land Earnings references prior year proceeds from the state's federal trust lands. Federal trust land is land granted to Oklahoma by the federal government upon statehood. Revenues that accrue from land still owned by the state and revenues from investment earnings that result from investing the proceeds of land sales are distributed to school districts.³⁹ These earnings, from the state's land office, are distributed to districts on an Average Daily Attendance basis.⁴⁰

Gross Production Tax refers to prior year proceeds from the state's gross production tax, a tax on the extraction of gas, oil, and other minerals in the state. This is often called a severance tax in other states. A portion of the proceeds from each county are returned to the counties for distribution to independent (K-12) school districts on an Average Daily Attendance, basis.⁴¹ The fact that K-6 and K-8 districts do not receive this distribution makes little difference since the loss is made up by state aid, although depending on geographic location, the lack of a share in gross production tax can mean a substantial loss. That tax is substantial enough that it causes some independent districts to be entirely self-funded.

Motor Vehicle Tax refers to prior year proceeds from a portion of the state's motor vehicle tax. Like the gross production tax, this

only accrues to independent school districts. The state defines the distribution, which is not dependent on respective district or county collections, though it flows from the state through county treasuries.⁴²

R.E.A. Tax references a Rural Electrification Association cooperative tax, a property tax on rural electric cooperatives that is distributed to districts proportionally on the basis of the number of miles of transmission lines in each district served.⁴³

In the state as a whole, the guaranteed foundation total (before chargeables under the Foundation Aid calculation) in 2020 amounted to \$2,140,741,566. Net Foundation Aid after chargeables were subtracted amounted to \$1,019,405,874.⁴⁴ Table 12 shows total statewide chargeables for 2020. Surprisingly, the gross production tax contributed the second lowest amount. After property taxes, motor vehicle taxes contributed more than twice as much revenue to districts than any one of the other sources.

Table 12: Total 2020 Statewide Chargeables for Calculating Foundation Aid⁴⁵

Chargeable	Amount
Ad Valorem	\$587,698,842.24
County 4 Mill Levy	\$110,591,508.75
School Land Earnings	\$100,031,979.00
Gross Production	\$103,560,732.00
Motor Vehicle	\$250,188,448.00
R.E.A Tax	\$44,107,211.00
Total Chargeables	\$1,196,178,720.99

Although several of the distributions to school districts that count against their state Foundation Aid are distributed on an attendance basis rather than a membership basis, this makes no real difference in the total amount of money most school districts have to spend. Only school districts that are fully or nearly fully funded by the chargeables, like the Kingfisher district, and receive little or no Foundation Aid would be affected by changing the basis on which these various revenue sources are distributed to districts. Such districts will be discussed further below.

What about “Expected Property Tax Revenue” in Salary Incentive Aid?

Except for charter schools, all school districts receive revenue from property taxes that count toward school district formula funding. These are:

- **Certification of Need** 15 mills *(+, if the county does not tax residential personal property)*
- **County Levy** 5 mills
- **Emergency Levy** 5 mills
- **Local Support Levy** 10 mills
- **County 4-mill Levy** 3 mills *(75 percent of 4 mills count toward formula)*

Three-quarters of revenue from the County 4-mill levy constitutes a chargeable under Foundation Aid. The revenue that should result from the full 15(+) mills of the Certification of Need levy is another chargeable under Foundation Aid. It is the revenue that should result from the other 20 mills of property tax made up of the County, Emergency, and Local Support levies that constitutes the “Expected Property Tax Revenue” under the

Salary Incentive Aid calculation in Table 4. It is the first thing to go into the salary incentive part of a district’s funding cup, and like chargeables, if it overflows the cup, the district receives no Salary Incentive Aid from the state.

In law, these various property tax levies appear to be optional depending on votes of the people or their representative bodies. In fact, they are not optional. All districts/counties are taxing at the maximum, and school boards have no real discretion either to reduce rates or to raise rates any further.

If the 15-mill chargeable under the Foundation Aid computation were truly 15 mills and did not allow for additional millage due to the phase-out of residential personal property taxes, and if that property were similarly treated by the other 20 mills that count toward Salary Incentive Aid, the ratio between the two property tax totals under each formula funding program would be 0.75 (15 ÷ 20). The actual ratio is 0.81 (Dividing the state’s total Ad Valorem chargeable [\$587,698,842.24] by the state’s total expected property tax under salary incentive [\$726,120,755.36] yields a ratio equal to 0.81).⁴⁶

Transportation Aid - Briefly

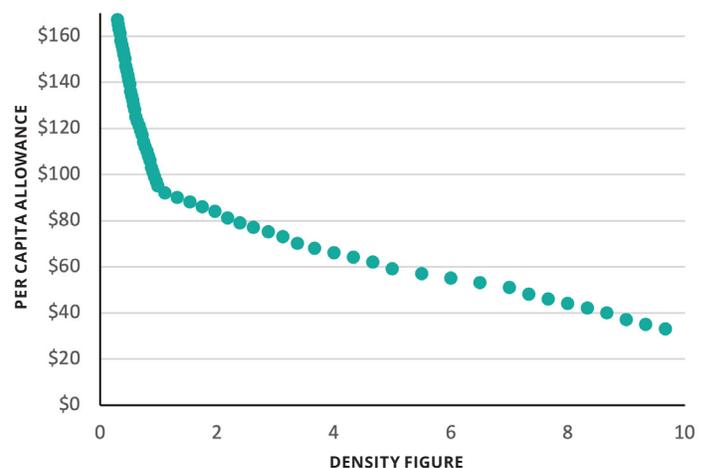
Transportation Aid is simple to compute and understand because it only has three elements: 1) the number of students eligible to ride; 2) a district per capita density number; and 3) the transportation cost factor, defined in law and fixed at \$1.39 for many years. Each of these is fairly simple to explain.

As noted above, a student is eligible to ride a bus if the student lives 1.5 miles or more from school. A daily count of these students who are transported is averaged over the number of instruction days, and rounded to obtain a number called Average Daily Haul (ADH).

The density factor is called a “per capita allowance.” Its value is expressed as a dollar amount and is defined in statute. This allowance varies from \$33 for the most densely populated districts to \$167 for the least densely populated. There are 62 density/allowance combinations.⁴⁷

Although the actual table of ADH density and associated per capita amounts is not reproduced here, the values from the table are plotted in Figure 6. At an ADH density of about 1.1 (1.1 eligible students per square mile), the per capita allowance rises more rapidly as density falls. The reason for this is not obvious.

Figure 6: Graphical Representation of the Per Capita Transportation Allowance⁴⁸



Where Do the Funding Factors Come From?

Many of the formula funding calculations are complex, and this primer has not delved deeply into where all the data to perform the calculations come from (for the most part, they are self-reported by districts and counties, subject to audit). The most mysterious elements of the funding formula, however, are the funding factors – the Foundation and Salary Incentive Aid Factors – the ones that totaled \$3,581.44 in 2020. That dollar amount is not determined by statute the way the \$1.39 transportation factor and density-determined per capita amounts are. In fact, there is nothing in statute that describes precisely how the major funding factors are calculated. What’s more, they float, as seen in Table 13. Different estimates come out during a fiscal year for interim funding distributions, and then final amounts are determined at the end of the year.

Table 13: Foundation Aid Factor Plus Salary Incentive Aid Factor Totals, 2012-2021⁴⁹

Year	Total Foundation & Salary Incentive Aid Factors	Year	Total Foundation & Salary Incentive Aid Factors
2012	\$3,040.20	2017	\$3,005.60
2013	\$3,035.00	2018	\$3,032.20
2014	\$3,032.00	2019	\$3,435.76
2015	\$3,075.80	2020	\$3,581.44
2016	\$3,034.60	2021	\$3,390.98

Total State Foundation Aid versus Total State Salary Incentive Aid

At the local level, Foundation Program funding is supported by 15 mills of property tax (ignoring adjustments for private personal property) while Salary Incentive Program funding is supported by 20 mills of property tax. For whatever historical and/or traditional reason or reasons, these relative mill levels are used to determine how the state’s appropriation to public schools for formula funding purposes is split between these two formula programs.

Taking FY 2020 as an example, a total of \$2,404,587,089 was available for distribution as Foundation, Salary Incentive, and Transportation Aid using the formulas. Of this total, Transportation Aid amounted to \$26,068,986, leaving \$2,378,518,103 for Foundation Aid, which totaled \$1,019,405,874, and Salary Incentive Aid, which totaled \$1,359,112,229. Taking the ratio of Foundation Aid to Salary Incentive Aid in 2020, the following result is obtained:

$$\$1,019,405,874 \div \$1,359,112,229 = 0.75$$

This is the same value of the ratio when one takes the 15 mills for the Foundation Program and divides it by the 20 mills of the Salary Incentive Aid program:

$$15 \div 20 = 0.75$$

And in fact, when discussing the state’s split between the Foundation and Salary Incentive Programs, state funding experts often talk about it as a 3/7’s versus 4/7’s split. This split is derived

from the relative contributions of property tax mills devoted to the Foundation Program (15 mills) and the mills devoted to the Salary Incentive Program (20 mills) to the 35 mill total devoted to both programs combined. That is:

$$\begin{aligned} \text{Foundation Program split} &= 15/35 = 3/7 \\ \text{Salary Incentive Program split} &= 20/35 = 4/7 \end{aligned}$$

All this is to say that the first thing to recognize about how the Foundation and Salary Incentive funding factors are calculated is that they are engineered to precisely create this 3/7 versus 4/7 split of the state’s total formula funding appropriated aid net of aid for transportation, which results in a total statewide Foundation Aid to Salary Incentive Aid ratio of 0.75, as seen in Table 14.

Table 14: The Relationship between Total State Foundation Aid and Total State Salary Incentive Aid⁵⁰

Year	Total State Foundation Aid to Districts (3/7)	Total State Incentive Aid to Districts (4/7)	Foundation/ Incentive Ratio (3/7 ÷ 4/7 = 3/4 = .75)
2015	\$791,127,157	\$1,056,569,575	0.749
2016	\$770,826,819	\$1,027,467,640	0.750
2017	\$766,414,278	\$1,023,271,560	0.749
2018	\$781,489,601	\$1,042,775,084	0.749
2019	\$962,799,560	\$1,283,404,723	0.750
2020	\$1,019,405,874	\$1,359,112,229	0.750

Exactly how the factors are engineered to result in these total ratios can only be speculated on, but it is, no doubt, a resource-intensive, time-consuming, iterative process that requires initial best guesses, testing to see if the totals resolve correctly, and then trying again. For example, 79 districts received no Foundation Aid money from the state in 2020. Forty of these districts received no Salary Incentive Aid funding from the state that year. Depending on how chargeable values and property values change, the lists of districts not receiving state funds under one or both of the formula elements vary. The WADM counts for these districts must be netted out of the state’s total WADM to determine the actual factor amounts in order to engineer the results in Table 14. This is a “black-box” calculation that no one challenges, so this calculation is a given, and it would be impossible for someone outside the Oklahoma State Department of Education to determine the factor values for themselves.

More on the Salary Incentive Factor and the Salary Incentive Aid Calculation

The Foundation Funding Factor is easily conceptualized. It expresses a guaranteed minimum per WADM for a district (\$1,825.84 in 2020 – see Table 4). Multiplied by the district’s total WADM, this is the guaranteed minimum total funding for a district under the Foundation Program. Chargeables are subtracted, and any positive difference is the amount that the state makes up in

the form of Foundation Aid.

The actual calculations of Salary Incentive Aid demonstrated on calculation sheets the Oklahoma State Department of Education posts on its website do not seem as straightforward as for Foundation Aid, or as straightforward as has been presented in this primer thus far. For one thing, the Salary Incentive Funding factor is not expressed as a four-digit dollar amount as in Table 4 (\$1,755.60), but is expressed as a two-digit dollar amount (\$87.78), which is 1/20th of the four-digit amount. Why is it done this way?

The answer lies in the 20 mills of property tax that support the Salary Incentive Program at the local level. The official Salary Incentive Aid Funding Factor (\$87.78 in 2020) is best conceptualized as a guaranteed minimum of funding *per mill* per student. That is, for each mill of Salary Incentive property tax effort, the district is guaranteed \$87.78 of funding per student.

The fact that the Salary Incentive Aid Funding Factor involves a per-mill funding guarantee is now largely an anachronism, but probably harkens back to when there was some local discretion about whether to impose the County, Emergency, or Local Support levies (which sum to 20 mills) listed above. Though it is easiest to think in terms of the straightforward explanation for calculating Salary Incentive Aid that accompanies Table 4 above, with the Salary Incentive Funding Factor already multiplied by 20 (\$87.78 x 20 = 1,755.60), this is not how the calculation is actually done. Instead, That 20 mills has become an integral part of how the calculation of Salary Incentive Aid is conducted by the state, as will now be explained so that the state’s allocation sheets are understandable.

The first part of the calculation by the state is to multiply WADM by the actual Salary Incentive Funding Factor. As an example, the 2020 WADM from the Hollis school district (see Tables 3 and 4) is used here:

WADM		Salary Incentive Factor		Minimum Total Salary Incentive funding per mill
1,124.24	x	\$87.78	=	\$98,685.7872

The second part of the calculation by the state is to divide the total *assessed* value of the property in the district by 1,000. This is done to adjust the total assessed value for the application of a *millage* tax rate, where a mill is 1/1000th of one dollar’s-worth of property value. In the Hollis district’s case, this calculation is as follows:

District assessed property valuation				
\$20,118,645	÷	1,000	=	\$20,118.6450

The third part of the calculation is to take the difference between the two earlier calculations:

$$\$98,685.7872 - \$20,118.6450 = \$78,567.1422$$

Finally, to get the Hollis district’s Salary Incentive Aid from the state, the last result above is multiplied by 20 and rounded:

$$\$78,567.1422 \times 20 = \$1,571,343$$

In a single equation, the state’s calculation looks like this:

$$[(1,124.24 \times \$87.78) - (\$20,118,645 \div 1,000)] \times 20 = \$1,571,343$$

Note: Parentheses added for emphasis

The calculation in Table 4 simply uses the distributive property of multiplication to break up the calculation differently in order to explain the system more intuitively:

$$1,124.24 \times (\$87.78 \times 20) - (\$20,118,645 \div 1,000) \times 20 = \$1,571,343$$

Note: Parentheses added for emphasis

This is the same as:

$$1,124.24 \times \$1,775.60 - \$402,372.90 = \$1,571,343$$

The two italicized numbers are the “Salary Incentive Factor” and the “Expected Property Tax Revenue” numbers in Table 4. Unfortunately, the way the state calculates Salary Incentive Aid makes it more difficult to explain the system, but there is no functional difference between the two mathematical methods.

The Funding Factors’ Relationship to Each Other

Because the chargeables under the Foundation Aid calculation can change significantly over time with oil prices and production (gross production tax) and new construction (ad valorem – i.e., property – tax), the ratio of guaranteed foundation funding per WADM (\$1,825.84 in 2020) to guaranteed incentive funding per WADM (\$78.87 x 20 = \$1,755.60 in 2020) not only deviates from equaling .75, but also changes from year to year as shown in Table 15. Though the state’s appropriation, net of transportation aid, is always split into 3/7 and 4/7 proportions for Foundation and Salary Incentive Aid, respectively, guaranteed foundation funding is always higher than guaranteed incentive funding and the proportions vary significantly from year to year.

Table 15: The Relationship between Guaranteed Foundation and Salary Incentive Funding⁵¹

Year	Guaranteed Foundation Funding per WADM	Guaranteed Incentive Funding per Mill per WADM x 20	Ratio: Foundation/ Incentive
2008	\$1,616.00	\$1,573.00	1.027
2012	\$1,601.00	\$1,462.20	1.095
2014	\$1,574.00	\$1,458.00	1.080
2016	\$1,592.00	\$1,442.60	1.104
2018	\$1,573.00	\$1,459.20	1.078
2020	\$1,825.84	\$1,755.60	1.040
2021	\$1,718.78	\$1,672.20	1.028

One More Formula Issue – Penalties

School districts can have state aid reduced under certain circumstances. In the state as a whole, penalties play only a small role in determining state aid, and individual districts are little affected by them as well, partly because districts can generally

easily avoid them. The state can, at most, reduce aid to districts. It cannot confiscate local property tax revenues or any of the other dedicated revenues designated as chargeables. In 2020, \$958,361 in penalties (0.04 percent of total net state aid) were assessed. Most districts suffered no penalties and for those that did, the penalties were small. Because they are so minor, penalties will receive only a cursory explanation here. Dollar amounts below come from the statewide detailed calculation sheet.

OCAS Noncompliance Penalty

OCAS stands for Oklahoma Cost Accounting System. Districts must be in compliance with reporting protocols regarding costs. If a district is not compliant, it loses increasing percentages of monthly payments of state aid until it does comply.⁵² The total statewide OCAS noncompliance penalty in 2020 was a mere \$79,406. All but \$327 of this was assessed against the Gans district and was 3.8 percent of the district total net state aid.

Per Pupil Revenue Exceeds 150 Percent of State Average Penalty

A district with this much revenue likely receives no foundation or incentive aid, but it would receive transportation aid and other revenues from the state such as the textbook allotment, which are not included in the aid formulas. These funds can be tapped for the penalty.⁵³ The per pupil revenue calculation is complicated, but total penalties amounted to only \$114,806 in 2020.

Administrative Cost Penalty

Depending on the average daily *attendance* of a district, a certain percentage of all costs are allowed for central administration (school board, superintendent, and personnel administration and staff).⁵⁴ In 2020, \$764,149 was assessed against districts under this penalty. The bulk of this, \$530,527, was assessed against the Epic One on One Charter school. The penalty amounted to 0.6 percent of Epic One on One's total net state aid.

General Fund Carryover (Balance) Penalty

Depending on the "general revenues" (there are many revenue exclusions from this amount) of a school district, a maximum percentage of revenues to be retained at the end of the year is allowed. If retained funds are too high, they are essentially confiscated.⁵⁵ No district was assessed this penalty in 2020.

Class Size Penalty

Maximum class sizes for various grades are specified and penalties assessed if class sizes are too large. This penalty, along with those listed above, are explicitly listed on district and statewide detail calculation sheets.⁵⁶ The total statewide under this penalty for 2020 was zero, but this is due to the requirement having been relaxed due to state funding reductions. As of this publication, class size maximums are due to be enforced.

Other Penalties⁵⁷

There are a number of other penalties for which no separate listings appear in the statewide detail calculation sheets. These include:

- Per Pupil Revenue Exceeds 300 Percent of State Average Penalty
- Maintenance of Effort Penalty (Failure to Maintain Spending on Special Education)
- Minimum Teacher Salaries Penalty
- Noncertified Teacher Penalty
- Delinquent Personnel Reports Penalty
- Noncompliance Penalty on Late Audits Penalty
- Penalty for Too Few School Days or Hours
- Gifted and Talented Penalty (Failure to spend enough on gifted and talented)
- State Student Record System Noncompliance Penalty.

The basic cause for these penalties is self-explanatory. There are various, often complex methods for determining their values, but they are so minor in their financial impacts that they are not worth spending a great deal of effort to understand.

Sources of Funding that Fall outside the Formulas

Already described above are the funding sources that count toward state formula funding. These include the 15(+)-mill Certification of Need levy, 5 mills of the 15-mill County levy, 3 mills of a separate County 4-mill levy, the 5-mill Emergency levy, the 10-mill Local Support levy, the gross production tax, school land earnings, part of the motor vehicle tax, and the R.E.A. tax. These, along with a specific "Financial Support of Schools" appropriation from the state, make up the sources of formula funding. There are other sources of revenue for districts, however. Recall that while total formula-driven funding in 2020 amounted to \$4.2 billion, total revenue for school districts amounted to \$7.3 billion.

25 Percent of 4-mill County Tax

The state constitution is quite specific that only 75 percent of the 4-mill County Tax counts toward foundation funding. This means 25 percent of the tax (1 mill of 4 mills) is free and clear to the districts. That is, it does not count against their state aid. For the 2020 fiscal year, the 4-mill county tax totaled \$153.96 million, statewide. Of this, \$38.49 million fell outside of the formulas.⁵⁸

5-mill Building Fund Levy

Every district can, with the permission of voters, levy a property tax of up to 5 mills to be used for building facilities and equipment.⁵⁹ Under this levy, exact revenues in 2020 are not known, but revenues to the Building Fund to which the 5-mill levy contributes amounted to \$203.25 million statewide.⁶⁰ Unlike the other levies already discussed, school districts have complete discretion over the rate as long as it does not exceed 5 mills, although they do not have complete discretion over how the money is spent.

Sinking Fund Millage

Sinking funds are for the purpose of paying back bonds, a form of government borrowing that is mostly issued for constructing school buildings. In bond elections for approval of the bonds and the property tax to pay them back, voters are told an approximate millage that will result from the issuance of the bonds. However, in order to keep the risks low for investors and interest rates correspondingly low, there is no limit put on sinking fund millage. In the event of a large drop in property values, millage is allowed to rise to whatever level is necessary to make bond payments. Thus, there is no specific rate associated with this property tax. It amounted to \$820.88 million in district revenue in 2020.⁶¹

State Appropriation for Health Insurance (Flexible Benefit Allowance)

For 2020, districts received \$502.7 million from the state under this category.⁶²

State Textbook Funds

For 2020, the usual sum of \$33 million was appropriated for textbooks statewide. Money is passed to school districts at the rate of \$55 per unit of average daily *attendance* (ADA). The amount is pro-rated if the appropriation is otherwise insufficient to reach \$55 per ADA.⁶³ Given that ADA in 2020 was 660,313, the per-ADA distribution must have been about \$50.

Other State Appropriations

In 2020, besides formula funding for schools at \$2.4 billion, \$503 million for health insurance, and \$33 million in textbook funding, the state appropriated \$3.2 million to a fund to help with school consolidation, \$12 million to early childhood education, \$12 million for a reading program, \$11 million for alternative education programs, almost \$10 million for student assessments, and many other relatively minor appropriations. In total, the Teacher Retirement System was appropriated over \$40 million; although this does not contribute to actively running schools, it is part of the cost of the education system. Total appropriations to the Department of Education for common education in 2020 amounted to \$3.2 billion.⁶⁴

School District Funding Sources and Shares

With 542 school districts and charter schools spread all over a diverse state, the mixes of district revenues and expenditures are not going to be the same. This paper has mostly been about revenue sources associated with the state's formula funding system, although school districts receive a significant amount of funding from other sources. One source is the federal government, which subsidizes school meals and funds school programs for children whose families have modest incomes. Although the bulk of federal funding has little to do with funding education directly, they are justified as making disadvantaged children ready and able to learn.

Another source of funds for school districts actually serves mostly to defray costs of optional activities that are often only tangentially related to education. Sporting events, for example, result in revenues to districts from ticket sales. Some district revenues, such as charges for workbooks, simply defray costs.

Some state funding is aimed at providing education system personnel with specific benefits that might or might not otherwise be offered by any particular district. School districts, for example, have no discretion over the flexible benefit allowance. They have little discretion over the use of special reading funds, for example, yet districts are credited with these funds as revenues just the same as if they were general revenue funds over which the districts have wide discretion.

Table 16 (next page) shows a breakdown of school funding for the districts shown in Tables 3 and 4, plus a few. The table fails to account for some distinctions that would be good to make. There just is not room. District and county taxes, for example, include the sinking fund and building fund revenues. For some districts, these can be significant. Nonetheless, this breakdown allows the careful observer to notice several things. First, note that the charter school gets more than just formula funding. Charters can benefit from other appropriations for state education programs, including the flexible benefit allowance. Charter schools also receive significant funding from the federal government.

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Table 16: Select School Districts' Revenue Sources and Spending per Student (2020)⁶⁵

District	District & County Taxes	District Fees, Sales, & Other	State Dedicated & Appropriated Formula Funds	Other State Funding	Federal Funding	Total Revenue	Revenue per Current-Year ADM
Nashoba	\$181,057.20	\$41,790.85	\$368,325.67	\$4,838.85	\$61,932.47	\$657,945.04	\$12,636
	27.5%	6.4%	56.0%	0.7%	9.4%	100.0%	
Tenkiller	\$259,305.37	\$233,706.03	\$1,977,768.26	\$20,203.72	\$1,095,215.11	\$3,586,198.49	\$14,131
	7.2%	6.5%	55.1%	0.6%	30.5%	100.0%	
Tulsa Arts & Sciences*	\$0.00	\$146,927.57	\$2,773,814.45	\$24,406.92	\$289,458.76	\$3,234,607.70	\$7,386
	0.0%	4.5%	85.8%	0.8%	8.9%	100.0%	
Hollis	\$1,026,020.66	\$337,794.07	\$3,658,689.08	\$127,162.06	\$475,883.90	\$5,625,549.77	\$10,852
	18.2%	6.0%	65.0%	2.3%	8.5%	100.0%	
Prague	\$2,216,537.43	\$637,691.56	\$4,789,283.35	\$189,328.55	\$2,726,228.69	\$10,559,069.58	\$10,320
	21.0%	6.0%	45.4%	1.8%	25.8%	100.0%	
Dove Science Academy*	\$0.00	\$722,499.98	\$8,665,452.26	\$88,894.09	\$1,297,090.18	\$10,773,936.51	\$8,339
	0.0%	6.7%	80.4%	0.8%	12.0%	100.0%	
Kingfisher	\$7,185,026.13	\$1,071,816.79	\$9,286,123.29	\$237,228.18	\$1,444,975.14	\$19,225,169.53	\$12,769
	37.4%	5.6%	48.3%	1.2%	7.5%	100.0%	
Ada	\$7,537,837.56	\$1,392,139.14	\$14,419,773.94	\$424,005.75	\$2,625,650.39	\$26,399,406.78	\$10,353
	28.6%	5.3%	54.6%	1.6%	9.9%	100.0%	
Deer Creek	\$37,594,672.88	\$4,252,435.19	\$19,755,467.76	\$532,955.53	\$1,887,218.86	\$64,022,750.22	\$9,324
	58.7%	6.6%	30.9%	0.8%	2.9%	100.0%	
Mustang	\$42,020,547.21	\$9,492,879.52	\$51,704,094.70	\$1,189,532.50	\$5,319,418.02	\$109,726,471.95	\$8,888
	38.3%	8.7%	47.1%	1.1%	4.8%	100.0%	
Jenks	\$67,961,486.04	\$13,500,117.32	\$46,385,061.39	\$1,453,661.36	\$7,596,945.97	\$136,897,272.08	\$10,943
	49.6%	9.9%	33.9%	1.1%	5.5%	100.0%	
Epic One on One Virtual*	\$0.00	\$35,111,070.93	\$102,731,599.88	\$971,288.96	\$5,523,301.06	\$144,337,260.83	\$8,350
	0.0%	24.3%	71.2%	0.7%	3.8%	100.0%	
Tulsa	\$201,834,864.16	\$33,135,018.85	\$156,669,893.28	\$5,141,882.60	\$51,989,309.42	\$448,770,968.31	\$12,695
	45.0%	7.4%	34.9%	1.1%	11.6%	100.0%	
Oklahoma City	\$155,031,037.55	\$12,430,107.08	\$176,246,916.70	\$5,444,895.16	\$65,642,957.37	\$414,795,913.86	\$11,700
	37.4%	3.0%	42.5%	1.3%	15.8%	100.0%	

The districts in Table 16 are listed by size, smallest to largest. It is difficult to notice much of a pattern, except that per-student funding appears to be higher in some districts mainly because of federal funding. These are districts that tend to have a high proportion of students with low incomes, which draws more federal funding.

Charter Schools

Although charter schools are legally public schools, and have the same obligations to serve all types of students as traditional public school districts, their public funding is mostly limited to formula funding. Charter schools are not governmental entities. They have no taxing power. Thus, only formula funding is available to them. It also means they do not receive any locally sourced dollars. All their funding sourced in Oklahoma comes from the state because, as has been noted above, charter schools have no chargeables as sources of funding under Foundation Aid, and they have no property tax revenue for purposes of calculating Salary Incentive Aid. Thus, every unit of WADM attending a charter school is funded at the full value of the Foundation Aid and Salary Incentive Funding Factors as illustrated in Table 4. The only caveat is if any penalties are assessed, as with the Epic One on One charter school.

Note from Table 16 that charter schools are also eligible for various appropriated state funds that fall outside the formulas, as well as federal funds. As with public schools, charter schools that serve a large number of low-income students can receive a good deal of federal funding.

When a new charter school is newly established, it receives an initial distribution of funding from the state at the beginning of a school year, just like every other school district. However, a WADM count will not have been established. Therefore, the law enacted for this purpose has specified that the enrollment count of a new charter school from August of that year should be inflated at a rate of 1.333, to account for anticipated weights. Later in the year, after WADM counts have been established, actual WADM is used and interim payments to the charter are adjusted accordingly. In 2021, funding factors totaled to \$3,390.98, making each enrollee worth \$4,520.18 (1.333 x \$3,390.98) on the year if the 1.333 WADM inflation factor held for the year. The initial payments to schools, made in September, are 18 percent of a district's entitlement.⁶⁶ For a new charter school in September 2020, this would have been \$813.63 (.18 x \$4,520.18) per August-enrolled student.

NOTE: In the future, when districts are no longer funded on the highest of the most recent three-year WADM counts, the funding factor total will increase

above what it otherwise would have been, at least slightly increasing the amount of new charter school initial payments. Given the degree to which funding factors vary, however, the degree of change, up or even down, cannot be predicted.

Beginning in FY 2022, charter schools will also be eligible for “redbud” grants intended to bring them closer to funding parity with traditional school districts. This is explained in the next section.

New Funding Equalization Measure Starting FY 2022

During the 2021 legislative session, Senate Bill 229 was passed and signed into law. After a transition period, it dedicates 75 percent of the state’s marijuana sales tax to “redbud school grants.” These grants are made outside of the formula structure already described, but are designed to provide for a minimal level of equalization of funding from the single mill of the County 4-mill Levy that is not included in the chargeables and the 5-mill Building Fund Levy. Neither of these revenue streams currently count toward formula funding and thus, are not equalized across districts. Charter schools, not having any local tax revenues of their own, are especially affected by this lack of equalization.

The new law specifies that total revenues statewide from 1 mill of the County 4-Mill Levy and the previous year’s 5-mill Building Fund Levy are to be divided by total ADM in the state from all districts. This calculates an average per-ADM revenue from these two funding sources that the law calls the “statewide average baseline local funding per student.” The same calculation for each district (called the “nonchargeable millage per student”) is compared to the statewide average and, if it is less than the statewide average, the state makes up the difference with a “redbud grant” equal to the difference between the two averages multiplied by the district’s ADM. Virtual charter schools are not given the grants, but since charter schools have no local tax revenue, their grants are likely to be substantial.

Suppose redbud grants had existed, in full, in 2020. A single

mill of the County 4-mill Levy was worth \$38 million statewide that year. Revenue from the 5-mill Building Levy is not separated in state reports, but in 2019, one mill of the County 4-mill Levy was worth about \$37 million. Multiplying this last number by five yields an approximation for how much the 5-mill Building Levy generated statewide in 2019, as much as \$184 million. Adding this total to the 2020 single mill revenues from the County 4-mill Levy yields a statewide total for redbud grant purposes of \$223 million. Averaged over a 2020 ADM of 699,737, the result is \$318.40. Any district with revenues falling under that average would have received a grant to make up the difference for each of the district’s ADM. Charter schools (except virtual charters) would have received the full amount per ADM. A charter school with 300 ADM would have received over \$95,000.⁶⁷

Conclusion

In round numbers, about 42 percent of school district revenues in 2020 came from local sources, 47.5 percent from the state, and 10.5 percent from the federal government. Of the \$7.3 billion in total revenue, \$2.4 billion, or 32.9 percent, was in the form of state formula aid to districts. Another \$427 million in state dedicated funds, 6.3 percent of the total, counted toward the formula. District and county property taxes effectively appropriated by the state provided almost \$1.5 billion (20.2 percent of total revenue) of their \$4.2 billion in formula-driven funding.

Given the fact that, in the state as a whole, 58 percent of funding flowing to school districts flows as a result of the formulas, in some ways it is surprising that more attention is not devoted to the 42 percent of funding that does not flow through formulas. Part of the reason for this is that the funding not flowing through formulas has so many different sources, each with a different set of criteria to determine the amount of funding to which a district is entitled. For example, one of the largest sources of funding outside of the formulas is federal funding for disadvantaged students. It, however, constitutes only three percent of districts’ total revenue in 2020.

Appendix A: Oklahoma's Rich Districts in 2020

Table A-1: The 79 Districts That Received No State Foundation Aid and the 40 That Received no Salary Incentive Aid in 2020

District	County	ADM	District	County	ADM
Alex*	Grady	318.41	Lindsay	Garvin	1,222.16
Aline-Cleo*	Major	130.78	Lomega*	Kingfisher	223.24
Alva	Woods	1,029.06	Luther	Oklahoma	774.09
Amber-Pocasset	Grady	489.45	Maple*	Canadian	186.65
Arnett*	Ellis	169.48	Medford*	Grant	279.53
Balko*	Beaver	149.00	Minco	Grady	546.71
Banner*	Canadian	299.85	Moss	Hughes	259.70
Billings*	Noble	70.37	Mulhall-Orlando	Logan	225.34
Boise City	Cimarron	317.59	Ninnekah	Grady	524.99
Bray-Doyle*	Stephens	307.89	Oakdale*	Oklahoma	683.51
Burlington*	Alfalfa	132.56	Okarche*	Kingfisher	390.26
Calumet*	Canadian	291.57	Okeene	Blaine	328.02
Calvin	Hughes	151.04	Peckham*	Kay	96.98
Canton*	Blaine	63.27	Pioneer-Pleasant Vale*	Garfield	506.17
Cashion*	Kingfisher	631.74	Pond Creek-Hunter	Grant	336.82
Cherokee	Alfalfa	419.57	Pryor*	Mayes	2,728.80
Cheyenne	Roger Mills	348.36	Reydon*	Roger Mills	114.99
Chouteau-Mazie	Mayes	828.53	Ringwood	Major	371.29
Cimarron	Major	259.20	Riverside*	Canadian	156.65
Cleora*	Delaware	130.92	Rush Springs	Grady	506.51
Coalgate	Coal	639.26	Seiling*	Dewey	454.31
Covington-Douglas*	Garfield	272.98	Sharon-Mutual	Woodward	229.10
Cushing*	Payne	1,760.88	Shattuck	Ellis	359.41
Deer Creek-Lamont*	Grant	140.51	Shidler	Osage	233.01
Dover*	Kingfisher	147.86	Springer*	Carter	211.85
Elmore City-Pernell	Garvin	510.46	Straight*	Texas	39.20
Fairview	Major	789.88	Stroud*	Lincoln	791.96
Fargo	Ellis	243.61	Stuart	Hughes	255.16
Forgan	Beaver	133.98	Sweetwater*	Roger Mills	127.94
Fort Supply*	Woodward	135.39	Taloga*	Dewey	91.12
Freedom	Woods	46.99	Thackerville	Love	276.21
Frontier*	Noble	367.67	Timberlake	Alfalfa	288.37
Geary*	Blaine	320.50	Tuttle	Grady	1,956.38
Hammon*	Roger Mills	259.65	Velma-Alma	Stephens	462.66
Hennessey	Kingfisher	877.82	Vici	Dewey	314.10
Keyes*	Cimarron	25.32	Watonga	Blaine	757.36
Kildare*	Kay	111.27	Waynoka*	Woods	223.73
Kingfisher	Kingfisher	1,505.65	White Oak	Craig	34.04
Kiowa*	Pittsburg	293.04	Wynnewood	Garvin	707.91
Leedey	Roger Mills	211.37			
			Total ADM		33,608.96
			Average ADM		425.43

*Also received no State Incentive Aid

Note: The Keyes district's ADM is from 2019 as actual ADM in 2020 was unavailable. The district no longer exists.

Appendix B: A Hypothetical Teacher Experience Weight Calculation

Suppose we have a hypothetical very small school district with teachers in positions as shown in the following table. This is purely hypothetical. Table B-1 shows each teacher’s position, years of experience, and degree level. The index value on the right comes from assigned experience/degree weights determined in law and reflected in Table 7 above.

Table B-1: Hypothetical Faculty that Qualifies for Teacher Weight

Teacher	Position	Experience (years)	Degree	Index Value
A	Pre-kindergarten	1	Bachelor’s	.7
B	Kindergarten	12	Bachelor’s	1.1
C	Kindergarten	8	Bachelor’s	.9
D	Special Ed	4	Bachelor’s	.8
E	1st Grade	21	Bachelor’s	1.2
F	2nd Grade	24	Bachelor’s	1.2
G	3rd Grade	8	Bachelor’s	.9
H	4th Grade	14	Bachelor’s	1.1
I	5th Grade	23	Bachelor’s	1.2
J	6th Grade	15	Bachelor’s	1.1
K	English/Counselor	11	Bachelor’s	1.0
L	History & Geography	17	Bachelor’s	1.2
M	US History/Athletics	16	Bachelor’s	1.2
N	Science	10	Bachelor’s	1.0
O	Mathematics/Technology	19	Bachelor’s	1.2
P	English/Reading	28	Master’s	1.4
Q	Spanish/Library	12	Bachelor’s	1.1
R	Athletics/Speech	6	Bachelor’s	.9
S	Special Ed	12	Bachelor’s	1.1
T	Mathematics/Technology	4	Bachelor’s	.8
U	Agriculture	15	Master’s	1.3
V	Athletics	18	Bachelor’s	1.2
W	Government/Athletics	13	Master’s	1.3
X	English/Speech/Reading	20	Bachelor’s	1.2

This hypothetical district has a teacher experience/degree index of 1.0875 (the average of the individual teachers’ index values). The state’s overall average was 1.0794.⁶⁸ Note that very few teachers can have fewer than 8 years’ experience if the district is to have a chance of qualifying for the teacher experience weight which, recall, is calculated as follows:

$$\begin{aligned} \text{Weighted Teacher WADM} = & \\ & (\text{Weighted Average District Teacher} - \\ & \quad \text{Weighted Average State Teacher}) \times .7 \times \\ & (\text{Grade Weighted ADM} + \\ & \quad \text{Economically Disadvantaged ADM}) \end{aligned}$$

The difference between the district index value and the state’s is 0.0081 (1.0875 - 1.0794). This difference is “discounted” to 70 percent of its actual value by the formula when computing the weight. Then it is multiplied by the sum of grade-weighted ADM and educationally disadvantaged ADM. This hypothetical district has a grade-weighted ADM of 374.26 and a relatively low economically disadvantaged weight of 25.75. The result is:

$$.0081 \times .7 \times (374.26 + 25.75) = 2.268$$

In 2020, 2.268 of WADM was worth \$8,122.71 (2.268 x \$3,581.44). The modest payoff is due to: 1) the state’s floating experience/degree index, 2) the high degree of teacher experience required to obtain this weight at all, and 3) the discounting of the local/state index difference. If this hypothetical district’s student population were 63 percent economically disadvantaged (the state’s average), then the economically disadvantaged ADM would be about 48. As a result, the teacher experience/degree index weight would contribute \$8,574.73.

- 1 Byron Schlomach, *A Primer for Understanding Oklahoma's School Funding System*, 1889 Institute Policy Handbook, July 2015, https://secureservercdn.net/198.71.233.110/qkm.4a8.myftpupload.com/wp-content/uploads/2020/01/1889_School-Finance-Primer.pdf.
- 2 Total spending includes all spending, including food services, enterprise operations, and community services, all of which are ancillary services but that the educational establishment regularly argues are integral to providing education. As pointed out in a later section, some of the spending in the total is double-counted, but it would be impractical to attempt to account for this in an overview. Figures based on author calculations using total October 1, 2019 enrollment and 2020 – OCAS – Expenditure Summary File – No Exclusions, Oklahoma State Department of Education document, December 23, 2020, https://sdedweb01.sde.ok.gov/OCAS_Reporting/docs/ExpenditureSummaryWithoutExclusions2020.pdf.
- 3 The main sources relied upon in the research and writing of this document include:
Oklahoma School Finance: Technical Assistance Document, Financial Services Division, Oklahoma State Department of Education, January 2021, <https://sde.ok.gov/sites/default/files/documents/files/FY%202021%20TAD%20Web%20copy%20%281%29.pdf>.
Renee McWaters, Executive Director, Office of State Aid, Financial Services Division, Oklahoma Department of Education, interview, May 19, 2015. Subsequent emails, Summer, 2021.
Detail Weight Information for 2020: Final Allocation, Oklahoma State Department of Education, June 4, 2020, <https://sde.ok.gov/sites/default/files/documents/files/2020%20Detail%20Weights%20B17012FV%20060420%20All%20Districts.pdf>.
State Aid Allocation, 2019-2020: Tentative Final State Allocation, Oklahoma State Department of Education, June 4, 2020, <https://sde.ok.gov/sites/default/files/documents/files/2020%20Calc%20B17004W%20060420%20All%20Districts.pdf>.
- 4 2020 – OCAS – School District Expenditures – No Exclusions, Oklahoma State Department of Education, December 23, 2020, p. 14, https://sdedweb01.sde.ok.gov/OCAS_Reporting/docs/ExpenditureSummaryWithoutExclusions2020.pdf.
The All Funds Object Total is reported.
- 5 2020 – OCAS – School District Revenue Report, Oklahoma State Department of Education, December 23, 2020, p. 4, https://sdedweb01.sde.ok.gov/OCAS_Reporting/docs/RevenueReportFromOcasStatewide2020.pdf.
- 6 Anderson, Steve, “Public School Results at Elite Prep-School Prices,” *Perspective* 17:1 (January 2010) pp. 4-7.
- 7 2020 – OCAS – School District Revenue Report
Oklahoma School Finance: Technical Assistance Document, Financial Services Division, Oklahoma State Department of Education, January 2021, p. 10, <https://sde.ok.gov/sites/default/files/documents/files/FY%202021%20TAD%20Web%20copy%20%281%29.pdf>, author calculations.
- 8 2020 – OCAS – School District Revenue Report, author calculations.
- 9 Based on data from, 2020 – OCAS – District Expenditures Report (includes all expenditures, no exclusions, available for each individual district, Oklahoma State Department of Education, author calculations, October 5, 2021, https://sdedweb01.sde.ok.gov/OCAS_Reporting/Districts.aspx.
- 10 Data from *State Aid Allocation, 2019-2020: Tentative Final State Allocation*, Oklahoma State Department of Education, June 4, 2020, <https://sde.ok.gov/sites/default/files/documents/files/2020%20Calc%20B17004W%20060420%20All%20Districts.pdf>.
- 11 Data from *State Aid Allocation, 2019-2020: Tentative Final State Allocation*.
- 12 The earliest bill that could be found that made a modest change in grade weights was HB 1657 in 1998. Most of the weights pre-date that bill. See “Oklahoma Session Laws – 1998, Section 204,” Oklahoma State Courts Network, Bill Section 5, <http://www.oscn.net/applications/oscn/DeliverDocument.asp?CiteID=369343>.
- 13 Oklahoma Statutes, Subsection B, Paragraph 1 of Title 70, §18-201.1.
- 14 Three-year-olds with Individualized Education Programs (IEPs).
- 15 Out of Home Placement refers to students remanded to juvenile programs. Districts only act as entities for money to pass through to cover the costs of these individuals' ongoing educations. The overall amounts are small and since this represents a pass-through for districts, these weights are ignored for further discussion purposes.
- 16 See endnote 12.
- 17 Oklahoma Statutes, Subsection B, Paragraph 2 of Title 70, §18-201.1.
- 18 Oklahoma Statutes, Subsection B, Paragraph 3(a) of Title 70, §18-201.1.
- 19 Oklahoma Statutes, Subsection B, Paragraph 3(b) of Title 70, §18-201.1
- 20 Author's count using *Detail Weights – Statewide, 2020-2021*, Oklahoma State Department of Education, November 4, 2020, <https://sde.ok.gov/sites/default/files/FY20%20Detail%20Weights.pdf>.
- 21 Graph based on author's calculations.
- 22 Oklahoma Statutes, Subsection B, Paragraph 3(a) of Title 70, §18-201.1.
Oklahoma School Finance: Technical Assistance Document, p. 18.
- 23 Author's calculation. *Detail Weights – Statewide: 2019-2020*. The Felt district was funded in 2020 on its 2018 WADM.
- 24 Author's calculations.
- 25 Graph based on author's calculations.
- 26 Oklahoma Statutes, Title 70, §18-201.1 (B) (4).
- 27 See “State Aid Teacher Index” webpage, Oklahoma State Department of Education, <https://sde.ok.gov/state-aid-teacher-index>. One must download an excel spreadsheet for the 2019-2020 school year.
- 28 Oklahoma Statutes, Title 70, §18-201.1 (B) (4).
- 29 *Detail Weight Information for 2020: Final Allocation*, Oklahoma State Department of Education, <https://sde.ok.gov/sites/default/files/documents/files/2020%20Detail%20Weights%20B17012FV%20060420%20All%20Districts.pdf>.
- 30 WADM/ADM ratios based on author calculations using *Detail Weights – Statewide, 2020-2021*.
- 31 WADM/ADM ratios based on author calculations using *Detail Weights – Statewide, 2020-2021*.
- 32 WADM/ADM ratios based on author calculations using *Detail Weights – Statewide, 2020-2021*.
- 33 *Detail Weight Information for 2020: Final Allocation*.
- 34 *FY 2020 Final State Aid Calculation Sheets*.
- 35 Oklahoma Constitution, Article 10, Section 9 (a).
- 36 *Oklahoma School Finance: Technical Assistance Document*, p. 2.
- 37 *Oklahoma School Finance: Technical Assistance Document*, p. 3.
- 38 Oklahoma Constitution, Article 10, Section 9 (b).
- 39 “History of the Trust” webpage, Commissioners of the Land Office, State of Oklahoma, <https://clo.ok.gov/agency/history/>.
- 40 *Oklahoma School Finance: Technical Assistance Document*, p. 7.
- 41 *Oklahoma School Finance: Technical Assistance Document*, p. 6.
- 42 *Oklahoma School Finance: Technical Assistance Document*, p. 7.

- 43 *Oklahoma School Finance: Technical Assistance Document*, p. 7.
- 44 *State Aid Allocation, 2019-2020: Tentative Final State Allocation*.
- 45 *State Aid Allocation, 2019-2020: Tentative Final State Allocation*.
- 46 *State Aid Allocation, 2019-2020: Tentative Final State Allocation*. Author calculations.
- 47 Oklahoma Statutes, Subsection D, Paragraph 2 of Title 70, §18-200.1. "State Aid formula – 1997-98 and thereafter."
- 48 Author's plot using values from Oklahoma Statutes, Subsection D, Paragraph 2(b) of Title 70, §18-200.1
- 49 "History of the Formula Factors 1992 through 2021" webpage, Oklahoma State Department of Education, <https://sde.ok.gov/sites/default/files/Final%20Formula%20Factors%20%281992%20-%202021%29web%206.17.2021.pdf>.
- 50 Author calculations using *State Aid Allocation* sheets from FY 2015 – FY 2020. These can be obtained at <https://sde.ok.gov/notice-allocation>.
- 51 "History of the Formula Factors 1992 through 2021" webpage. Author calculations
- 52 *Oklahoma School Finance: Technical Assistance Document*, p. 35.
- 53 *Oklahoma School Finance: Technical Assistance Document*, p. 29-30.
- 54 *Oklahoma School Finance: Technical Assistance Document*, p. 41.
- 55 *Oklahoma School Finance: Technical Assistance Document*, p. 37-40.
- 56 Byron Schlomach, *A Primer for Understanding Oklahoma's School Funding System*, p. 20.
- 57 *Oklahoma School Finance: Technical Assistance Document*, p. 28.
- 58 *2020 – OCAS – School District Revenue Report*, p. 4.
- 59 Oklahoma School Finance: Technical Assistance Document, p. 3.
- 60 *2020 – OCAS – School District Revenue Report*, p. 1.
- 61 *2020 – OCAS – School District Revenue Report*, p. 2.
- 62 *Oklahoma School Finance: Technical Assistance Document*, p. 10.
- 63 *Oklahoma School Finance: Technical Assistance Document*, p. 9.
- 64 *Oklahoma School Finance: Technical Assistance Document*, p. 10.
- 65 *2020 – OCAS – School District Revenue Report*, Oklahoma State Department of Education, October 6, 2021 for each district in the table. Available at https://sdeweb01.sde.ok.gov/OCAS_Reporting/Districts.aspx.
- 66 *Oklahoma School Finance: Technical Assistance Document*, p. 11.
- 67 SB 229, 2021, 58th Legislature, 1st regular session, http://webserver1.lsb.state.ok.us/cf_pdf/2021-22%20ENR/SB/SB229%20ENR.PDF.
- 68 "State Aid Teacher Index" webpage, FY 2020.



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