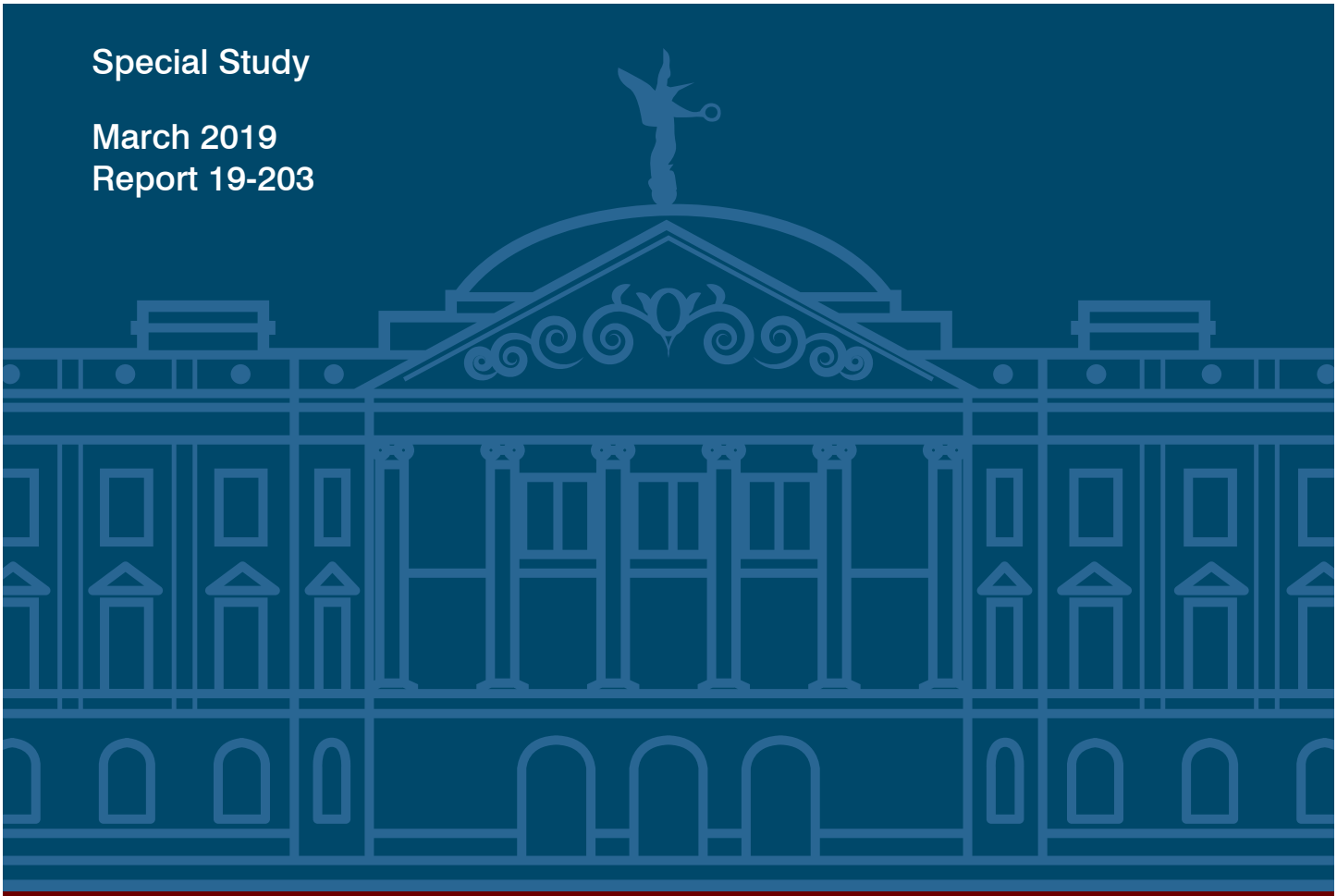
Arizona School District Spending
Fiscal Year 2018

Special Study

March 2019
Report 19-203



A Report to the Arizona Legislature

Lindsey A. Perry
Auditor General

ARIZONA Auditor General
Making a Positive Difference

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March 1, 2019

Members of the Arizona Legislature

The Honorable Doug Ducey, Governor

I am pleased to present our report, *Arizona School District Spending, Fiscal Year 2018*, prepared in response to the Arizona Revised Statutes §41-1279.03 requirement to determine the percentage of every dollar Arizona school districts spend in the classroom. The report analyzes instructional spending as well as noninstructional spending, which includes administration, plant operations, food service, transportation, student support, and instruction support. It also includes analyses of revenues and nonoperational spending, which includes the acquisition of capital assets, interest, and programs outside the scope of preschool through grade 12 education. Further, the report contains a 2-page summary for each district and the State showing their performance on various financial and student measures and graphical summaries of their operational trends. To provide a quick summary for your convenience, I am also including a copy of the Report Highlights.

In fiscal year 2018, Arizona districts spent 54 percent of available operating dollars on instruction—the second consecutive increase in the instructional spending percentage in 14 years. However, since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.6 percentage points, while the percentages spent on all other operational areas have increased. Between fiscal years 2017 and 2018, districts' operational spending increased by $119 million with $82 million of the increase spent on instruction. With the additional instructional spending, between fiscal years 2017 and 2018, the State's average teacher salary increased from $48,372 to $48,951. Compared to national averages, in fiscal year 2018, Arizona districts spent approximately $3,500 less per pupil and allocated their resources differently, spending a lower percentage of resources on instruction and administration and a greater percentage on all other operational areas.

Although factors outside a district's control—such as district size, type, and location—can affect its efficiency, some districts operate efficiently and have lower costs despite these factors, while others do not. As a result, there are wide ranges of costs within peer groups of similar districts. Our performance audits of school districts have identified practices efficient districts use, as well as practices that make other districts less efficient.

Finally, as part of the electronic version of this report available on our website, I am pleased to present for the second year a Microsoft Excel data file, which contains the numbers and other information presented in the graphics on the school district and State summary pages.

My staff and I will be pleased to discuss or clarify items in the report.

Sincerely,

Lindsey Perry, CPA, CFE
Auditor General


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Report Highlights
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CONCLUSION: In fiscal year 2018, Arizona districts spent 54 percent of available operating dollars on instruction—the second consecutive increase in the instructional spending percentage in 14 years. However, since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.6 percentage points, while the percentages spent on all other operational areas have increased. Between fiscal years 2017 and 2018, districts' operational spending increased by $119 million with $82 million of the increase spent on instruction. With the additional instructional spending, between fiscal years 2017 and 2018, the State's average teacher salary increased from $48,372 to $48,951. Although factors outside a district's control—such as district size, type, and location—can affect its efficiency, some districts operate efficiently and have lower costs despite these factors, while others do not. Finally, Arizona school districts spent about $3,500 less per pupil than the national average and allocated their resources differently, spending a lower percentage of resources on instruction and administration and a greater percentage on all other operational areas.

Instructional spending increased slightly to 54 percent but remains lower than highest level spent since monitoring began in 2001

In fiscal year 2018, Arizona districts spent 54 percent of their available operating dollars on instruction, representing the second consecutive increase in 14 years—In fiscal year 2018, Arizona school districts spent 54 percent of available operating dollars on instruction. This is a slight increase over the 53.8 percent spent on instruction in fiscal year 2017 and the second consecutive increase in the instructional spending percentage in 14 years. In fiscal year 2001, Arizona districts spent 57.7 percent of available operating dollars on instruction. Then in fiscal year 2002, districts began receiving Classroom Site Fund monies intended to increase instructional spending. Soon after, in fiscal years 2003 and 2004, the State's instructional spending percentage reached its highest level at 58.6 percent. However, the percentage of resources spent on instruction then declined nearly every year between fiscal years 2004 and 2016, before increasing slightly by 0.3 percentage points in fiscal year 2017 and by an additional 0.2 percentage points in fiscal year 2018 to 54 percent.

District operational spending increased $119 million between fiscal years 2017 and 2018 with $82 million of the increase spent on instruction—Between fiscal years 2017 and 2018, Arizona school districts'

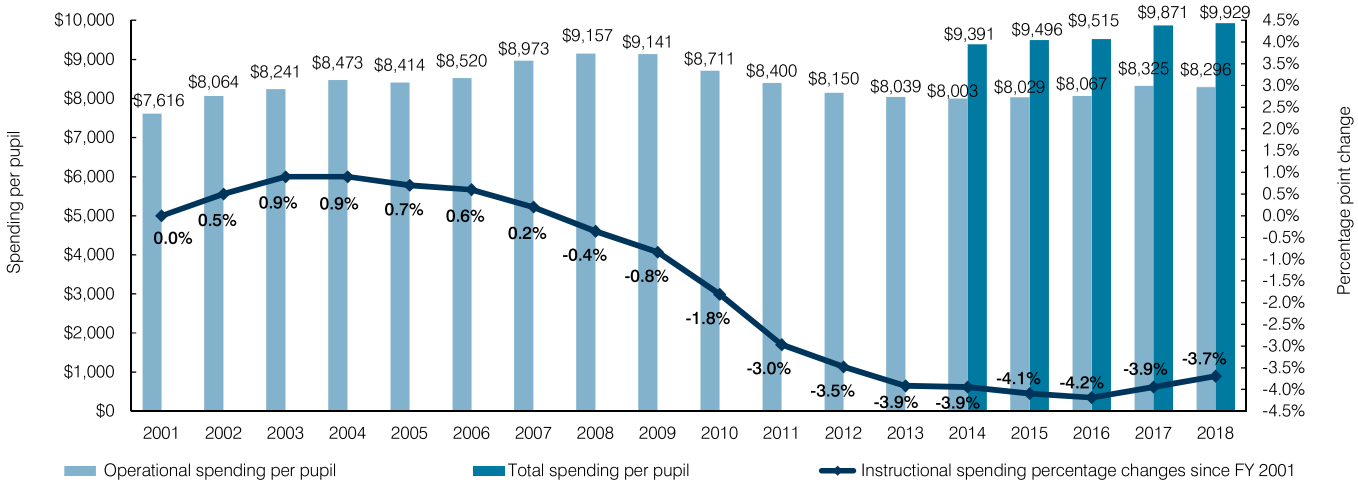
Comparison of expenditures by operational area, in total and per pupil
Fiscal years 2016 through 2018

	2016		2017		2018	
	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil
Instruction	$3,757,466,481	$4,145	$3,958,363,889	$4,377	$4,040,764,088	$4,480
Administration	730,535,703	806	763,609,229	844	775,898,361	860
Plant operations	851,357,174	939	884,032,443	977	891,276,937	988
Food service	375,997,915	415	381,401,751	422	382,924,905	425
Transportation	329,849,846	364	344,766,680	381	349,886,767	388
Student support	573,359,632	633	614,408,571	679	624,968,437	693
Instruction support	403,105,191	444	416,864,985	461	416,309,009	462
Total	$7,021,671,942	$7,746	$7,363,447,548	$8,141	$7,482,028,504	$8,296

operational spending increased by approximately $119 million, or $155 per pupil. The increase between fiscal years 2017 and 2018 may have been larger had it not been for fiscal year 2017 spending likely including unspent fiscal year 2016 Proposition 123 monies. In May 2016, voters passed Proposition 123, which provides school districts with additional resources each year. Those additional resources totaled approximately $262 million in fiscal year 2016, approximately $263 million in fiscal year 2017, and approximately $264 million in fiscal year 2018. Between fiscal years 2017 and 2018, districts increased spending on most operational areas, with the majority of the increased spending on instruction, which resulted in a slight increase in the State-wide instructional spending percentage. With the additional instructional spending in fiscal year 2018, districts increased the State's average teacher salary from $48,372 to $48,951. Additionally, districts employed a total of 101 additional teachers, which resulted in a slight reduction in the State's students per teacher ratio.

Despite a slight increase between fiscal years 2017 and 2018, percentage of resources spent on instruction remains lower than in most prior years—Since fiscal year 2001, after controlling for inflation, Arizona school districts' operational spending per pupil has increased 8.9 percent, from $7,616 ($5,374 unadjusted) in fiscal year 2001 to $8,296 in fiscal year 2018. Although districts spent a similar amount per pupil in fiscal year 2018 as they did in fiscal year 2004 when adjusted for inflation, districts spent only 54 percent on instruction in fiscal year 2018 compared to 58.6 percent in fiscal year 2004, which was the peak percentage since monitoring began. Since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.6 percentage points. At the same time, the percentage of available operating dollars spent on all other operational areas has increased. At a State level, the decline in the instructional spending percentage between fiscal years 2004 and 2018 is indicative of fewer actual dollars being spent on instruction. After controlling for inflation, total per pupil spending decreased $177 per pupil, or 2.1 percent, between fiscal years 2004 and 2018. At this same time, spending on instruction decreased an even greater amount, $483 per pupil, or 9.7 percent, while spending on all other operational areas increased or remained relatively steady.

Arizona's operational and total spending per pupil and change in instructional spending percentage since fiscal year 2001 (inflation adjusted to fiscal year 2018 dollars)
Fiscal years 2001 through 2018



Districts spent at widely differing levels and operated at varying degrees of efficiency

Districts spent at widely differing levels—In fiscal year 2018, as in prior years, there was a wide range in total per pupil operational spending among Arizona districts. Even when excluding Arizona's very small districts, which have highly variable spending patterns, fiscal year 2018 spending by district ranged from $6,494 per pupil to $19,740 per pupil. Districts also varied greatly in their nonoperational spending, which includes costs incurred to acquire capital assets, interest, and programs such as adult education and community service that are outside the scope of preschool through grade 12 education. In fiscal year 2018, after excluding Arizona's very small districts, nonoperational spending by district ranged from $246 per pupil to $12,024 per pupil.

Arizona's school-district-funding formula provides similar districts with a similar amount of basic funding. However, after basic funding, districts may receive additional revenues through various funding formulas that are designed to offset

expected higher costs. For example, districts receive additional monies for special needs students and if they are located in isolated areas or have more experienced teachers. Districts may also qualify for federal impact aid or State or federal grants, and some districts may also receive monies as a result of a desegregation agreement or court order, a small school adjustment, or a voter-approved budget override.

Wide range of costs among similar districts indicates potential for improved efficiency at some districts— Although a district's efficiency can be affected by its size, type, and location, wide ranges of costs among districts grouped by these factors indicate that some districts have achieved lower costs than other districts of similar size, type, and location. Our performance audits have identified a variety of efficient and inefficient district practices. For example, more efficient districts monitored performance measures, used staffing formulas, had energy conservation plans, maximized the use of free federal food commodities, limited waste by closely monitoring meal production, and adjusted bus routes to ensure that buses were filled to at least 75 percent of capacity. In contrast, less efficient districts had costly benefit packages and higher noninstructional staffing levels, operated schools far below designed capacity, did not monitor energy consumption, had poorly written vendor contracts, and paid bus drivers for time not spent working.

Cost variance examples

- A very large, urban, unified district spent $583 per pupil for administration; another spent $929 per pupil.
- A medium-sized, rural, unified district spent $3.11 per square foot for plant operations; another spent $12.91 per square foot.
- A medium-sized, rural, unified district spent $2.88 per meal; another spent $5.20 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; 1 district spent $5.30 per mile, and the other spent $9.63 per mile.

Districts that operate efficiently allocate more of their resources to instruction— Districts that operate efficiently have more dollars available to spend on instruction. Our performance audits of individual districts have found that efficient districts—those that perform better than their peers on performance measures of operational efficiency—tend to have higher instructional spending percentages. The broader analysis conducted across all districts for this report showed a similar result. When performance measures were compared across all districts in each efficiency peer group, districts that outperformed their peers tended, on average, to spend higher percentages of available operating dollars on instruction.

Operational efficiency can impact districts' financial stress levels— This report assesses 6 district-level measures that provide information on district finances, identify potential problems, and suggest the need for possible corrective action. In fiscal year 2018, 6 districts were found to have a high financial stress level, 25 a moderate level, and 176 a low level. Having a high or moderate financial stress level can be a sign that a district has inefficient operations. However, there are many districts with a low financial stress level that also operated inefficiently compared to their peers. These districts often had access to additional resources not typically available to most districts, such as desegregation monies or federal impact aid monies, that allowed them to operate inefficiently and contributed to their lower financial stress levels. Therefore, even those districts found to have a low financial stress level may need to take additional actions to operate efficiently or address other areas of concern. This financial stress assessment does not reflect changes that may have occurred during the current fiscal year; for example, if a district experienced a significant drop in student enrollment but did not make appropriate changes to its spending.

Number of districts by overall financial stress level Fiscal year 2018

Stress level	Number of districts
High stress	6
Moderate stress	25
Low stress	176

Arizona school districts spent less overall and spent differently than districts nationally

Arizona school districts spent less than national averages in nearly all operational areas— In fiscal year 2018, Arizona school districts spent approximately $3,500 less per pupil than the 2016 national average (most recent national data available). This lower spending is seen in instruction, as well as every noninstructional operational area except student support, which was similar to the national average. Arizona districts spent a similar amount in nonoperational areas compared to the national average, spending less per pupil on land and buildings and interest and more on equipment and other programs, such as adult education and community service programs that are outside the

scope of preschool through grade 12 education.

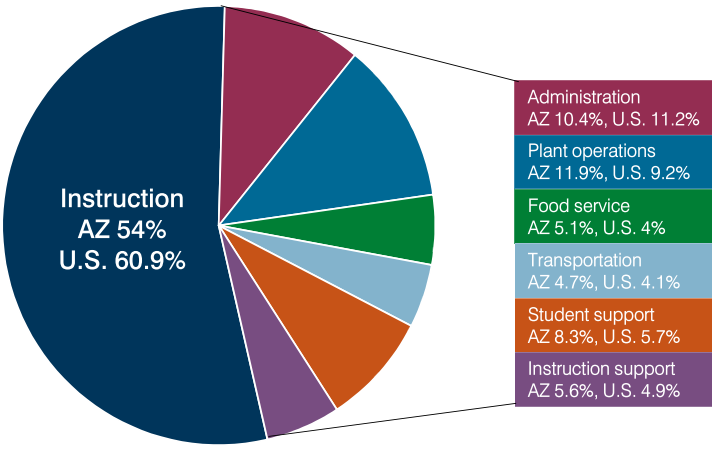
Compared to national averages, Arizona school districts received a greater percentage of their revenues from federal sources and a smaller percentage from State and local sources. Federal revenues comprised a greater percentage of Arizona school district revenues, in part because Arizona school districts received more federal dollars per pupil than the national average, but primarily because Arizona school districts received fewer revenues per pupil overall.

Arizona school districts allocated their resources differently than national averages—Compared to national averages, Arizona school districts spent a lower percentage of their available resources on instruction and administration and a greater percentage on all other operational areas. In fiscal year 2018, Arizona districts spent 54 percent of available operating dollars on instruction, 6.9 percentage points below the national average of 60.9 percent. Many factors may account for Arizona's lower percentage of instructional spending, one of which is average teacher salary. Compared to the fiscal year 2017 national average (most recent year national data available), Arizona's average teacher salary was $48,372 that year, while the national average was $59,660. Part of the reason for Arizona's lower average teacher salary may be due to Arizona's teachers having fewer years of experience, on average, when compared with the national average. Compared to the fiscal year 2016 national average (most recent year national data available), Arizona's teachers averaged 11 years of experience that year, while the national average was 13.7 years of experience. Another factor that may account for Arizona's lower percentage of instructional spending is class size. In fiscal year 2017, Arizona's class size was 18.5 students per teacher compared to the national average of 16 students per teacher. The relatively low instructional spending percentage was not the result of high administration costs because Arizona districts allocated a slightly smaller percentage of resources for administration than the national average. However, Arizona districts allocated a larger percentage of resources to all the other operational areas.

Comparison of Arizona and U.S. per pupil spending by area
Fiscal years 2018 (Arizona) and 2016 (U.S.)

Spending by area	Arizona average 2018	National average 2016	Difference
Instruction	$ 4,480	$ 7,211	$ (2,731)
Administration	860	1,328	(468)
Plant operations	988	1,093	(105)
Food service	425	470	(45)
Transportation	388	483	(95)
Student support	693	676	17
Instruction support	462	580	(118)
Total operational	**8,296**	**11,841**	**(3,545)**
Land and buildings	827	898	(71)
Equipment	409	214	195
Interest	228	348	(120)
Other	169	157	12
Total nonoperational	**1,633**	**1,617**	**16**
Total per pupil spending	**$ 9,929**	**$ 13,458**	**$(3,529)**

Comparison of Arizona and U.S. spending by operational area
Fiscal years 2018 (Arizona) and 2016 (U.S.)



Individual district information

In addition to the State-wide information discussed earlier, this report also contains 2-page summaries of each district's performance on various financial and student measures, including operational and nonoperational spending, operational efficiency measures compared to peer averages, student test scores, revenues by source, graphical summaries of each district's operational trends, and a financial stress assessment.

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INTRODUCTION AND OBJECTIVES

Arizona Revised Statutes §41-1279.03 requires the Auditor General to monitor school districts to determine the percentage of every dollar spent in the classroom by a school district and conduct performance audits of Arizona's school districts. This report, the 18th annual report analyzing school district spending, has 2 main objectives:

- It analyzes State-wide operational spending trends in instruction and 6 noninstructional categories—administration, plant operations, food service, transportation, student support, and instruction support—since monitoring began in fiscal year 2001. It also identifies differences between district peer groups' spending within Arizona and compares Arizona and national spending levels. This report also analyzes nonoperational spending and revenues both within Arizona and between Arizona and the nation.[1]

- It presents a 2-page summary of the State's performance on various financial and student achievement measures, including trend information, and 2-page summaries for each of Arizona's school districts. Specifically, each district's expenditure information, including instructional and noninstructional spending, and operational efficiency measures are compared with State averages and averages of efficiency peer groups, which include either districts of similar size, type, and location or, for evaluating transportation programs, districts with similar numbers of miles per rider and locations. In addition, each district's percentage of students who passed State assessments and student and teacher measures are compared with State averages and averages of a student achievement peer group, which includes districts with similar poverty rates and of similar type and location. The district pages also include revenue information and a financial stress assessment based on 6 district-level measures of resources and financial management practices.

The appendices provide lists of districts in each efficiency and student achievement peer group (Appendix A, see pages a-1 through a-18); reference information, including definitions, sources, and methodology (Appendix B, see pages b-1 through b-12); and graphic representations of cost ranges by efficiency peer group for administration, plant operations, food service, and transportation (Appendix C, see pages c-1 through c-3).

The information used to prepare this report was not subjected to all the tests and confirmations that we would normally perform during an audit. However, to help ensure that information used in this report was complete and reasonable, we performed certain quality control procedures, such as year-to-year comparisons of district-reported data and interviews with school district officials about anomalies and variances. Additionally, we reviewed the reasonability of changes in related measures, such as whether a district's square footage increased after opening a new school.

We express our appreciation to the Superintendent of Public Instruction and the staffs of the Arizona Department of Education, the Arizona School Facilities Board, the County Treasurers' offices, and the Arizona public school districts for their cooperation and assistance during this study.

[1] Nonoperational spending includes costs incurred to acquire capital assets (such as purchasing or leasing land, buildings, and equipment), interest, and programs such as adult education and community service that are outside the scope of preschool through grade 12 education.

Instructional spending increased slightly to 54 percent but remains lower than highest level spent since monitoring began in 2001

Instructional spending percentage increased slightly, representing the second increase in 14 years

Instruction

Salaries and benefits for teachers and instructional aides; costs related to instructional supplies, such as pencils, paper, and workbooks; instructional software; athletics; cocurricular activities, such as band or choir; and tuition paid to private institutions.

In fiscal year 2018, Arizona school districts spent 54 percent of available operating dollars on instruction.[2] This is a slight increase over the 53.8 percent spent on instruction in fiscal year 2017 and the second consecutive increase in the instructional spending percentage in 14 years. Specifically, in fiscal year 2001, districts spent 57.7 percent of available operating dollars on instruction. Then in fiscal year 2002, districts began receiving Classroom Site Fund (CSF) monies intended to increase instructional spending.[3] Soon after, in fiscal years 2003 and 2004, the State's instructional spending percentage reached its highest level during this 18-year period at 58.6 percent. However, the percentage of resources spent on instruction then declined nearly every year between fiscal years 2004 and 2016, before increasing slightly by 0.3 percentage points in fiscal year 2017 and by an additional 0.2 percentage points in fiscal year 2018 to 54 percent.

District operational spending increased $119 million between fiscal years 2017 and 2018 with $82 million of the increase spent on instruction

As shown in Table 1 on page 4, between fiscal years 2017 and 2018, Arizona school districts' operational spending increased by approximately $119 million, or $155 per pupil. The increase between fiscal years 2017 and 2018 may have been larger had it not been for fiscal year 2017 spending likely including unspent fiscal year 2016 Proposition 123 monies. In May 2016, voters passed Proposition 123, which provides school districts with additional resources each year. Those additional resources totaled approximately $262 million in fiscal year 2016 and approximately $263 million in fiscal year 2017. Because the monies were not available to districts until after the vote, it is likely that a large portion of the monies available in fiscal year 2016 were not spent that year and instead were carried forward into fiscal year 2017. In fiscal year 2018, districts received approximately $264 million in Proposition 123 monies. Proposition 123 monies are comingled with other district monies and are not separately identifiable from other district monies. Therefore, it cannot be determined whether and how the Proposition 123 monies were spent. Additionally, there was no requirement that districts had to spend these monies on instruction,

[2] Available operating dollars are those used for a district's day-to-day operations. This operational spending excludes costs associated with acquiring capital assets (such as purchasing or leasing land, buildings, and equipment), interest, and programs such as adult education and community service that are outside the scope of preschool through grade 12 education.

[3] In November 2000, voters passed Proposition 301, which increased the State-wide sales tax to provide additional resources for education programs. Under statute, these monies, also known as Classroom Site Fund monies, may be spent for specific purposes, primarily increasing teacher pay.

Table 1
Comparison of expenditures by operational area, in total and per pupil
Fiscal years 2016 through 2018

	2016		2017		2018	
	Total	Per pupil	Total	Per pupil	Total	Per pupil
Instruction	$3,757,466,481	$4,145	$3,958,363,889	$4,377	$4,040,764,088	$4,480
Administration	730,535,703	806	763,609,229	844	775,898,361	860
Plant operations	851,357,174	939	884,032,443	977	891,276,937	988
Food service	375,997,915	415	381,401,751	422	382,924,905	425
Transportation	329,849,846	364	344,766,680	381	349,886,767	388
Student support	573,359,632	633	614,408,571	679	624,968,437	693
Instruction support	403,105,191	444	416,864,985	461	416,309,009	462
Total	$7,021,671,942	$7,746	$7,363,447,548	$8,141	$7,482,028,504	$8,296

Source: Auditor General staff analysis of district-reported accounting data and Arizona Department of Education student membership data for fiscal years 2016 through 2018.

and districts had the option of using the monies for operational or capital purposes.[4] Between fiscal years 2017 and 2018, districts increased spending on most operational areas, with the majority of the increased spending on instruction. Specifically, districts spent approximately $82 million, or $103 per pupil, more on instruction in fiscal year 2018 than in fiscal year 2017, which resulted in a slight increase in the State-wide instructional spending percentage.

Table 2
Comparison of average teacher salary, teacher full-time equivalents (FTEs), and students per teacher
Fiscal year 2017 versus 2018

	2017	2018	Increase/ (Decrease)
Average teacher salary	$48,372	$48,951	$579
Teacher FTEs	48,727	48,828	101
Students per teacher	18.5	18.4	(0.1)

Source: Auditor General staff analysis of district-reported accounting data, district-reported teacher FTEs, and Arizona Department of Education student membership data for fiscal years 2017 and 2018.

As shown in Table 2, districts increased the State's average teacher salary by $579, or 1.2 percent, to $48,951. This increase was reflective of the additional instructional spending in fiscal year 2018, as well as additional monies provided to districts with the intention of increasing the average teacher salary by 1.06 percent.[5] Additionally, districts employed a total of 101 additional teachers, which resulted in a slight reduction in the State's students per teacher ratio.

[4] Capital purchases are those costs associated with acquiring capital assets such as purchasing or leasing land, buildings, and equipment or purchasing certain supplies, including textbooks, library books, and instructional aids.

[5] Laws 2017, Ch. 305, §33, required the Arizona Department of Education to allocate $34 million to school districts and charter schools with the intention of increasing, by 1.06 percent, the salary of each teacher who taught at an Arizona school district or charter school during fiscal year 2017 and who would be teaching at a school district or charter school in fiscal year 2018. The salary increase was required to supplement and not supplant any salary increase that the district or charter would have provided to the teacher for fiscal year 2018, prior to the allocation. School districts requested approximately $28 million of the $34 million allocation.

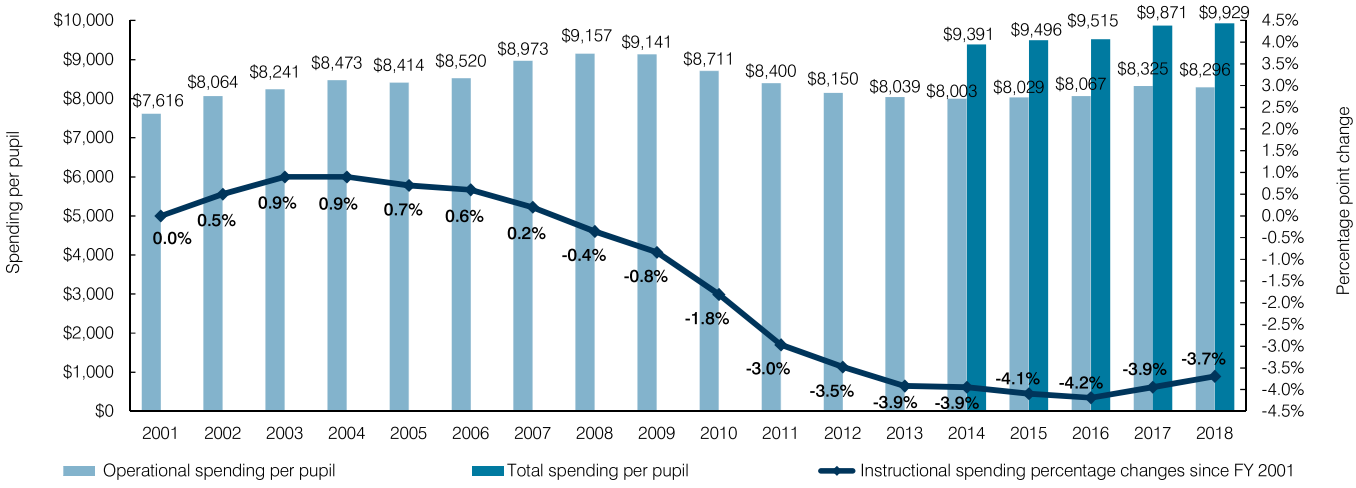
Despite a slight increase between fiscal years 2017 and 2018, percentage of resources spent on instruction remains lower than in most prior years

Although the State's instructional spending percentage increased slightly in fiscal year 2018, the percentage remains lower than in prior years. Since its peak in fiscal year 2004, the instructional spending percentage has declined 4.6 percentage points. At the same time, the percentage of available operating dollars spent on all other operational areas has increased.

Percentage of resources spent on instruction has declined overall—As shown in Figure 1, since fiscal year 2001, after controlling for inflation, Arizona school districts' operational spending per pupil has increased 8.9 percent, from $7,616 ($5,374 unadjusted) in fiscal year 2001 to $8,296 in fiscal year 2018. As discussed earlier, districts began receiving CSF monies in fiscal year 2002, which contributed to a $448 per pupil increase and a 0.5 percentage point increase to the State-wide instructional spending percentage. The instructional spending percentage reached its peak in fiscal years 2003 and 2004, but then, between fiscal years 2004 and 2016, the percentage of resources spent on instruction declined, both during times when operational spending decreased as well as times when it increased. Although districts spent a similar amount per pupil in fiscal year 2018 as they did in fiscal year 2004 when adjusted for inflation, districts spent only 54 percent on instruction in fiscal year 2018 compared to 58.6 percent in fiscal year 2004, which was the peak percentage since monitoring began.

Figure 1

Arizona's operational and total spending per pupil[1] and change in instructional spending percentage since fiscal year 2001 (inflation adjusted to fiscal year 2018 dollars)
Fiscal years 2001 through 2018



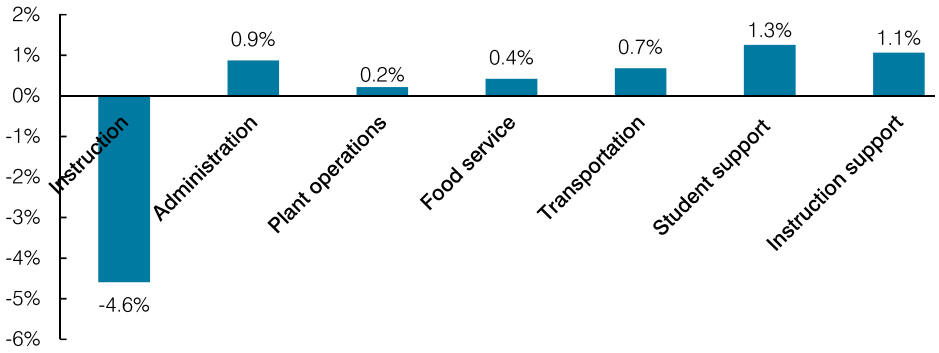
[1] Total spending per pupil was not presented prior to the fiscal year 2015 report. For that report, we validated the nonoperational portion of total spending for fiscal years 2014 and 2015. Therefore, total spending per pupil is presented for only fiscal years 2014 through 2018.

Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2018 dollars and Arizona Department of Education student membership data for fiscal years 2001 through 2018.

District spending shifted from instruction to other areas—Since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.6 percentage points. As shown in Figure 2 on page 6, at the same time, the percentage of available operating dollars spent on all other operational areas has increased. The impact of a declining instructional spending percentage varies depending on the cause of the decline. For example, by not operating efficiently in noninstructional areas, a school district will have a lower instructional spending percentage and will have fewer dollars to spend on instruction. This can result in having less money available to increase teacher salaries, maintain or reduce class sizes, continue special programs, or offer new programs.

On the other hand, all else being equal, a district that receives and spends additional revenues that are specifically earmarked for purposes outside instruction, such as National School Lunch Program monies, will also have a lower instructional spending percentage, but it will not spend less on instruction because of having received these monies.

Figure 2
Percentage point change in spending by operational area
Fiscal year 2004 versus 2018



Source: Auditor General staff analysis of district-reported accounting data for fiscal years 2004 and 2018.

There may be reasons that noninstructional costs necessarily increased at specific districts. For example, increases in a district's poverty rate or the percentage of students with special needs could increase student support services costs because many of these services are directed toward these student populations. Additionally, some district officials have stated that they believe food costs have increased since fiscal year 2004 because of implementation of the nutrition standards required by the federal Healthy, Hunger-Free Kids Act of 2010. This act, which took effect in fiscal year 2013 and which some districts implemented early, established more stringent nutritional requirements that include an increase in the amount of fruits, vegetables, and whole grains included in meals.

Some operational spending changes may be due to revisions in expenditure-reporting requirements or clarifications. Effective July 1, 2007, the Uniform Chart of Accounts for Arizona School Districts was revised to comply with changes made to the federal chart of accounts issued by the National Center for Education Statistics, which revised how some expenditures should be classified. The instruction support area was revised to include some costs that previously had been classified as administration. This revision accounts for some of the increase in instruction support services. Additionally, a revision to the Uniform Chart of Accounts for Arizona School Districts effective July 1, 2015, added detailed reporting of some costs based on newly provided federal guidance. That revision did not change how expenditures are classified but may have resulted in districts reviewing and more accurately reporting related expenditures, which may have increased their administrative costs while decreasing costs in other operational areas.

However, other increases to noninstructional areas may have been more within districts' control. For example, between fiscal years 2004 and 2018, Arizona school districts added 22.9 million square feet of building space—a 19 percent increase—despite a student enrollment increase of only 6 percent during this same period. This increased the State-wide square footage per student from 138 to 156 square feet. On an inflation-adjusted basis, as shown in Table 3 on page 7, districts managed to keep per pupil plant operation costs steady, in part because a large amount of the additional square footage may have cost less due to some of it likely being underused. For example, our performance audits have identified school districts that built additional schools when they already had low-capacity usage rates at their existing schools, districts that built new schools or added square footage to existing schools in anticipation of increased student enrollment that did not ultimately materialize, and districts that rebuilt existing schools with much larger facilities when no substantial student growth was expected. Audits have also identified districts with substantial, long-term excess building capacity that did not take timely or adequate action to reduce the excess capacity. Although decisions to close schools can be difficult and painful, these decisions are important because school district funding is based primarily on the number of students enrolled, and not at all on the amount of square footage maintained.

State-level decline in instructional spending percentage indicative of fewer dollars being spent on instruction—At a State level, the decline in the instructional spending percentage between fiscal years 2004 and 2018 is indicative of fewer actual dollars being spent on instruction. As shown in Table 3, after controlling for inflation, total per pupil spending decreased $177 per pupil, or 2.1 percent, between fiscal years 2004 and 2018. At this same time, spending on instruction decreased an even greater amount, $483 per pupil, or 9.7 percent, while spending on all other operational areas increased or remained relatively steady. Therefore, on a State-wide basis, it does not appear that the decline in instructional spending was due to an increase in monies required to be spent outside instruction, but rather represents districts shifting monies from instruction to other operational areas.

Table 3
Comparison of per pupil expenditures by operational area (inflation adjusted to fiscal year 2018 dollars)
Fiscal year 2004 versus 2018

	2004	2018	Increase/ (Decrease)
Instruction	$4,963	$4,480	$(483)
Administration	803	860	57
Plant operations	996	988	(8)
Food service	400	425	25
Transportation	338	388	50
Student support	591	693	102
Instruction support	382	462	80
Total	$8,473	$8,296	$(177)

Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2018 dollars and Arizona Department of Education student membership data for fiscal years 2004 and 2018.

Within Arizona, districts spent at widely differing levels and operated at varying degrees of efficiency

Districts spent at widely differing levels

In fiscal year 2018, as in prior years, there was a wide range in total per pupil operational spending among Arizona districts. Even when excluding Arizona's very small school districts, which have highly variable spending patterns, fiscal year 2018 operational spending by district ranged from $6,494 per pupil to $19,740 per pupil. As shown in Table 4, on average, the 30 highest-spending districts spent $13,650 per pupil, $6,468 more than the $7,182 the 30 lowest-spending districts spent per pupil. The districts with the highest and lowest per pupil spending also differed in certain characteristics, with the highest-spending districts generally being smaller, rural districts with higher poverty rates.

Districts also varied greatly in their nonoperational spending. Nonoperational spending includes costs incurred to acquire capital assets (such as purchasing or leasing land, buildings, and equipment), interest, and programs such as adult education and community service that are outside the scope of preschool through grade 12 education. In fiscal year 2018, after excluding Arizona's very small districts, nonoperational spending by district ranged from $246 per pupil to $12,024 per pupil. Large nonoperational spending differences between districts, as well as year-to-year differences for the same district, are to be expected because nonoperational spending includes costs for building schools and large equipment purchases that generally do not occur every year.

Table 4
Comparison of operational spending per pupil for Arizona's highest- and lowest-spending districts
Fiscal year 2018

	Highest-spending districts' average[1]	Lowest-spending districts' average[1]	Difference
Instructional spending percentage	46.1%	54.6%	
Total operational spending	$13,650	$7,182	$6,468
Instruction	6,293	3,921	2,372
Administration	1,974	812	1,162
Plant operations	2,192	837	1,355
Food service	688	406	282
Transportation	849	310	539
Student support	984	536	448
Instruction support	670	360	310

[1] Dollar amounts shown are averages of the 30 highest and 30 lowest per pupil operational spending districts in Arizona, excluding very small districts.

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data and Arizona Department of Education student membership data.

Arizona's school-district-funding formula provides similar districts with a similar amount of basic funding. However, after basic funding, districts may receive additional revenues through various funding formulas that are designed to offset expected higher costs. For example, districts receive additional monies for high school students and special needs students. Districts also receive additional funding if they have fewer than 600 students, are located in isolated areas, or have more experienced teachers. Additionally, districts receive transportation funding based on a

formula that primarily uses the number of miles traveled to transport students. Districts may also qualify for federal impact aid or State or federal grants. Federal impact aid monies are provided to districts that have been impacted by the presence of tax-exempt federal lands, and State and federal grants are often provided to districts with higher poverty rates and are generally for specific purposes. Some districts may also receive tax credit monies and donations, monies from voter-approved budget overrides, monies as a result of a desegregation agreement or court order, or monies from a small school adjustment. See Appendix B, page b-2, for more detailed revenue source descriptions.

Table 5
Comparison of revenue sources per pupil for Arizona's highest- and lowest-spending districts
Fiscal year 2018

Revenue source[1]	Highest-spending districts' average[2]	Lowest-spending districts' average[2]	Difference
Federal impact aid	$3,420	$ 2	$3,418
Federal grants	2,188	968	1,220
Transportation funding	1,396	298	1,098
Small school adjustment	618	0	618
Additional budgetary funding	1,704	1,292	412
Desegregation	185	3	182
Voter-approved budget overrides	346	301	45
Tax credits	35	44	(9)

[1] See Appendix B, page b-2, for description of each listed revenue source.

[2] Dollar amounts shown are averages of the 30 highest and 30 lowest per pupil operational spending districts in Arizona, excluding very small districts.

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting and budget data and Arizona Department of Education student membership and budget data.

The highest-spending districts, on average, received more monies than the lowest-spending districts, primarily from federal impact aid, federal grants, and transportation funding. As shown in Table 5, on average, the 30 highest-spending districts received $3,418 more per pupil in federal impact aid, $1,220 more per pupil in federal grants, and $1,098 more per pupil in transportation funding than the 30 lowest-spending districts. To a lesser extent, the highest-spending districts also received more monies through the small school adjustment and additional budgetary funding, and because of desegregation agreements or court orders, than the lowest-spending districts. The difference in spending was not primarily caused by differences in the amount of voter-approved budget overrides or tax credit monies received.

Wide range of costs among similar districts indicates potential for improved efficiency at some districts

Within Arizona, a district's efficiency can be affected by its size, type, and location. For example, administrative costs per pupil are associated with district size. That is to say larger districts tend to have lower administrative costs per pupil, primarily because of their economies of scale and abilities to spread some costs over more students. As district size increases, administrative costs per pupil tend to decrease. Additionally, a district's type can impact its plant operations and food service costs. For example, because high schools generally have more square footage per student and different types of building space than elementary schools, they typically have higher plant operation costs per pupil. Similarly, food costs per meal may be higher for districts serving high school students because of larger meal portions. Finally, location is an important factor affecting a district's cost per mile. For example, in fiscal year 2018, the average cost per mile for urban districts traveling between 231 and 290 miles per rider was $4.47, while rural districts traveling a similar range of miles per rider averaged $3.35 per mile. Rural district buses likely travel on roads with higher speed limits and travel greater distances between stops, thereby traveling more miles in less time. This would result in lower salary and benefit costs per mile.

Although a district's efficiency can be affected by its size, type, and location, wide ranges of costs among districts grouped by these factors indicate that some districts have achieved lower costs than other districts of

similar size, type, and location (see textbox). Appendix C (see pages c-1 through c-3) shows graphic representations of these cost ranges by efficiency peer group for administration, plant operations, food service, and transportation. Districts at the high end of the various cost ranges should work toward improving their operational efficiency. Doing so could allow more monies to be directed to instruction. Our performance audits of school districts have identified opportunities for improved efficiency at many districts. Additionally, these audits have identified a number of practices efficient districts use, as well as practices that make other districts less efficient. For example:

Cost variance examples

- A very large, urban, unified district spent $583 per pupil for administration; another spent $929 per pupil.
- A medium-sized, rural, unified district spent $3.11 per square foot for plant operations; another spent $12.91 per square foot.
- A medium-sized, rural, unified district spent $2.88 per meal; another spent $5.20 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; 1 district spent $5.30 per mile, and the other spent $9.63 per mile.

More efficient districts:

- Monitor performance measures to identify areas for improvement (see textbox below).
- Use staffing formulas.
- Effectively use county services or partner with other local schools or governments.
- Have energy conservation plans and limit excess building space, including closing schools when necessary.
- Monitor food prices, maximize the use of food commodities provided by the U.S. Department of Agriculture, and modify menus appropriately.
- Limit food waste by using student input and daily production and usage information to determine meal production.
- Limit overtime and unproductive time by having employees perform other duties.
- Plan bus routes to ensure, where possible, the buses are filled to at least 75 percent of capacity.
- Ensure fuel pumps are secure, monitor fuel usage, and limit bus idling to lower costs.

Performance measures

- Students per administrative position.
- Cost per square foot.
- Building capacity utilization.
- Cost per meal.
- Meals per labor hour.
- Cost per mile and per rider.
- Bus capacity utilization.

Less efficient districts:

- Have costly benefit packages and higher noninstructional staffing levels.
- Operate schools far below designed capacity, fail to close schools when necessary, or close schools but do not fully reduce related positions.
- Fail to adjust staffing and salary levels based on similar districts' staffing and salary levels and market surveys.
- Spend more on meals and conference travel for employees and governing board members.
- Lack a preventative maintenance plan to maintain buildings and school buses.
- Have poorly written vendor contracts and fail to monitor vendors' performance and billing.
- Set meal prices too low to ensure program self-sufficiency.
- Fail to identify best prices, including failing to use or ineffectively using purchasing consortiums.
- Have excessive food waste due to poor inventory rotation and monitoring or overproducing meals.
- Operate universal free meal programs without a sufficient number of students eligible for federally reimbursed free and reduced-price meals.
- Pay bus drivers for time not spent working between routes.
- Rely on gas stations for fuel and do not negotiate discounts.
- Do not monitor or adjust bus routes for efficiency.

Districts that operate efficiently allocate more of their resources to instruction

Districts that operate efficiently have more dollars available to spend on instruction. Performance audits of individual Arizona districts have found that efficient districts—meaning districts that perform better than their peers on performance measures of operational efficiency—tend to have higher instructional spending percentages. The broader analysis conducted across all districts for this report showed a similar result. When performance measures were compared across all districts in each efficiency peer group, districts that outperformed their peers tended, on average, to spend higher percentages of available operating dollars on instruction. This result indicates that districts should be paying close attention to their efficiency in noninstructional areas not only to demonstrate good stewardship of public monies, but also to devote a higher percentage of their resources to instruction, which may impact student achievement.

Operational efficiency can impact districts' financial stress levels

In addition to impacting instructional spending, a district's operational efficiency can also impact its financial stress level. This report assesses 6 district-level measures over a 3-year period (see textbox) that provide information on district finances, identify potential problems, and suggest the need for possible corrective action. Although reviewing these measures alone cannot cover all possible financial problems a district may have, it can raise awareness on key measures that impact financial stress. Further, having an overall high financial stress level does not mean a district is "going out of business," but rather that the district may need to change the way it operates, find additional resources, or make some difficult spending decisions in the near future. District decision makers should consider additional information in conjunction with this analysis, such as their districts' operational efficiency as described in this report, to plan for and react to financial stress conditions. Additionally, this financial stress assessment considers measures for fiscal years 2016 through 2018. Therefore, it will not reflect changes that may have occurred during the current fiscal year; for example, if a district experienced a significant drop in student enrollment but did not make appropriate changes to its spending.

Financial stress assessment measures

- Change in number of district students.
- Operating and capital overspending.
- Spending increase election results.
- Operating reserve percentage.
- Years of capital reserve held.
- Financial and internal control status.

Table 6
Number of districts by overall financial stress level
Fiscal year 2018

Stress level	Number of districts
High stress	6
Moderate stress	25
Low stress	176

Source: Auditor General staff analysis of district financial stress measures.

As shown in Table 6, in fiscal year 2018, 6 districts were found to have a high financial stress level, 25 a moderate level, and 176 a low level. Having a high or moderate financial stress level can be a sign that a district has inefficient operations. For example, when reviewing the districts determined to have a high or moderate financial stress level and after excluding very small districts, which as previously noted have highly variable spending patterns, 16 of the remaining 24 districts operated inefficiently compared to their peers. However, there are many districts with a low financial stress level that also operated inefficiently compared to their peers. These districts often had access to additional resources not typically available to most districts, such as desegregation monies or federal impact aid monies, that allowed them to operate inefficiently and contributed to their lower financial stress levels. Therefore, even those districts found to have a low financial stress level may need to take additional actions to operate efficiently or address other areas of concern.

Compared to national averages, Arizona school districts spent less per pupil overall and spent monies differently

Arizona school districts spent less than national averages in nearly all operational areas

As shown in Table 7, in fiscal year 2018, Arizona school districts spent approximately $3,500 less per pupil in total than the 2016 national average—the most recent year for available national data. Arizona's lower spending occurred in operational rather than nonoperational areas. This lower operational spending is seen in instruction, as well as every noninstructional operational area except student support, which was similar to the national average. It is interesting to note that 64 Arizona districts spent more than the national per pupil operational average. Forty-three of these are very small districts (i.e., less than 200 students), and almost all of them received additional monies from a small school adjustment. Seventeen of the 64 districts received federal impact aid monies as a result of their location on tax-exempt federal lands.

Table 7
Comparison of Arizona and U.S. per pupil spending by area
Fiscal years 2018 (Arizona) and 2016 (U.S.)

Spending by area	Arizona average 2018	National average 2016	Difference
Instruction	$ 4,480	$ 7,211	$ (2,731)
Administration	860	1,328	(468)
Plant operations	988	1,093	(105)
Food service	425	470	(45)
Transportation	388	483	(95)
Student support	693	676	17
Instruction support	462	580	(118)
Total operational	**8,296**	**11,841**	**(3,545)**
Land and buildings	827	898	(71)
Equipment	409	214	195
Interest	228	348	(120)
Other	169	157	12
Total nonoperational	**1,633**	**1,617**	**16**
Total per pupil spending	**$ 9,929**	**$ 13,458**	**$(3,529)**

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, Arizona Department of Education student membership data, and National Center for Education Statistics *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2015-16*, December 2018.

As shown in Table 7, Arizona districts' nonoperational spending was similar to the national average. Arizona districts spent less per pupil on land and buildings and interest and more on equipment and other programs, such as adult education and community service that are outside the scope of preschool through grade 12 education.

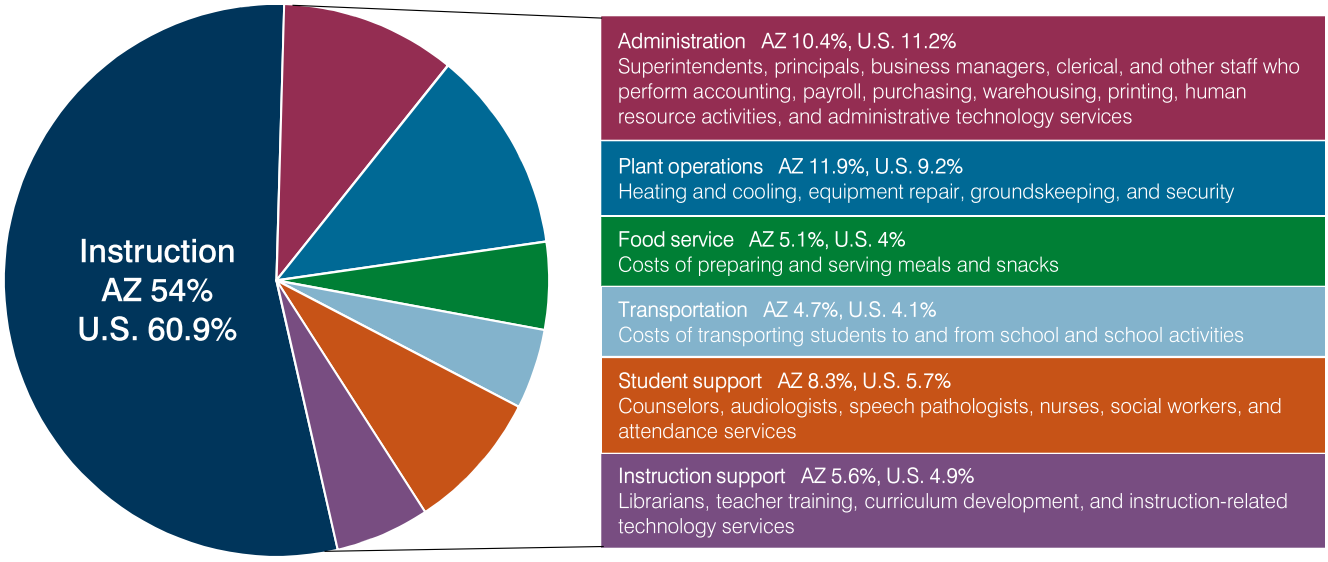
Compared to national averages, Arizona school districts received a greater percentage of their revenues from federal sources and a smaller percentage from State and local sources. In fiscal year 2018, 13 percent of Arizona

school district revenues were from federal sources, and 87 percent were from State and local sources. Arizona's percentages were similar in fiscal year 2016, which was the most recent year for available national data. In fiscal year 2016, school districts nation-wide received 8 percent of their revenues from federal sources and 92 percent from State and local sources. Compared to other states, Arizona school districts had the 5th highest percentage of revenues coming from federal sources. Federal revenues comprised a greater percentage of Arizona school district revenues, in part because Arizona school districts received more federal dollars per pupil than the national average, but primarily because Arizona school districts received fewer revenues per pupil overall.

Arizona school districts allocated their resources differently than national averages

Compared to national averages, Arizona school districts spent a lower percentage of their available resources on instruction and administration and a greater percentage on all other operational areas. As shown in Figure 3, in fiscal year 2018, Arizona districts spent 54 percent of available operating dollars on instruction, 6.9 percentage points below the most recent national average of 60.9 percent. Many factors may account for Arizona's lower percentage of instructional spending, one of which is average teacher salary. Compared to the fiscal year 2017 national average (the most recent year for available national data), Arizona's average teacher salary was $48,372 that year, while the national average was $59,660. Part of the reason for Arizona's lower average teacher salary may be due to Arizona's teachers having fewer years of experience, on average, when compared with the national average. Compared to the fiscal year 2016 national average (the most recent year for available national data), Arizona's teachers averaged 11 years of experience that year, while the national average was 13.7 years of experience. Another factor that may account for Arizona's lower percentage of instructional spending is class size. Compared to the fiscal year 2017 national average (the most recent year for available national data), Arizona districts averaged 18.5 students per teacher that year, while the national average was 16 students per teacher.

Figure 3
Comparison of Arizona and U.S. spending by operational area
Fiscal years 2018 (Arizona) and 2016 (U.S.)



Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data and National Center for Education Statistics *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2015-16*, December 2018.

The relatively low instructional spending percentage was not the result of high administration costs because Arizona districts allocated a slightly smaller percentage of resources for administration than the national average. However, Arizona districts allocated a larger percentage of resources to all the other operational areas. For

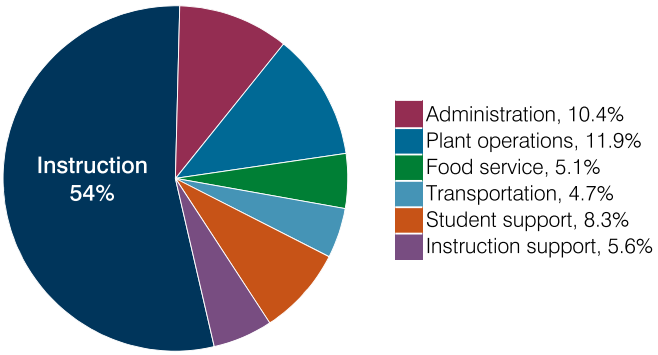
example, plant operations may have consumed a greater percentage of resources, in part because Arizona districts spent more on supplies, which are primarily for energy. As noted earlier, performance audits of Arizona districts have identified the potential for improved efficiency and cost savings in plant operations.

State of Arizona

Total operational spending[1]: $7,482,028,504
Number of districts: 236
Students attending: 901,876
Number of schools: 1,376

OPERATIONAL EFFICIENCY

Spending by operational area



Efficiency measures

Operational area	Measure	2016	2017	2018
Administration	Cost per pupil	$806	$844	$860
	Students per administrative position	67	67	66
Plant operations	Cost per square foot	$6.10	$6.30	$6.34
	Square footage per student	154	155	156
Food service	Cost per meal	$2.81	$2.88	$3.02
Transportation	Cost per mile	$3.72	$3.84	$4.05
	Cost per rider	$1,092	$1,198	$1,301

Per pupil spending

Spending by area	State 2016	State 2017	State 2018	National average 2016
Instruction	$4,145	$4,377	$4,480	$ 7,211
Administration	806	844	860	1,328
Plant operations	939	977	988	1,093
Food service	415	422	425	470
Transportation	364	381	388	483
Student support	633	679	693	676
Instruction support	444	461	462	580
Total operational	**7,746**	**8,141**	**8,296**	**11,841**
Land and buildings	621	691	827	898
Equipment	400	424	409	214
Interest	216	236	228	348
Other	153	161	169	157
Total nonoperational	**1,390**	**1,512**	**1,633**	**1,617**
Total per pupil spending	**$9,136**	**$9,653**	**$9,929**	**$13,458**

[1] See Appendix B for sources and methodology.

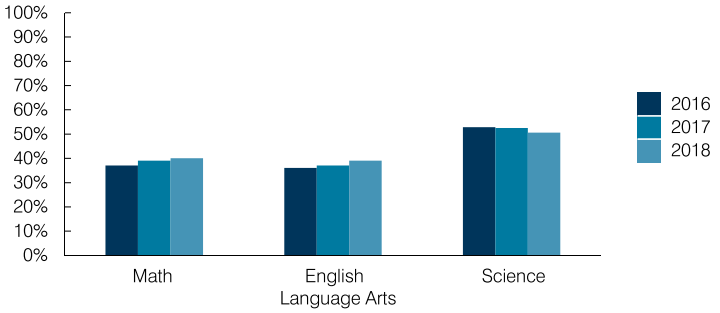
STUDENT ACHIEVEMENT, STUDENT AND TEACHER MEASURES, AND REVENUES

ADE-assigned school letter grades

Grade	Number of schools [2]	Percentage of schools
A	311	25%
B	396	31%
C	393	31%
D	141	11%
F	28	2%

[2] Excludes schools for which letter grades were not published by ADE. See Appendix B for more information.

Students who passed State assessments



Student and teacher measures

Measure	2016	2017	2018
Attendance rate	N/A	94%	94%
Graduation rate	80%	78%	N/A
Poverty rate	22%	19%	N/A
Special education population	N/A	12%	12%
Students per teacher	18.6	18.5	18.4
Average teacher salary	$46,384	$48,372	$48,951
Amount from Prop 301	$5,315	$5,840	$6,411
Average years of teacher experience	11.0	11.3	11.4
Percentage of teachers in first 3 years	20%	19%	19%

Per pupil revenues

Revenues by source	State 2017	State 2018	National average 2016
Federal	$1,318	$ 1,317	$ 1,112
State	3,831	4,011	6,327
Local	4,443	4,592	6,035
Total per pupil revenues	**$9,592**	**$ 9,920**	**$13,474**
Select revenues from common sources			
Equalization formula funding	$5,503	$ 5,585	N/A
Grants	1,185	1,241	N/A
Donations and tax credits	89	90	N/A

Select 2018 revenues from less common sources	Amount received range per pupil Min	Amount received range per pupil Max	Number of districts receiving
Desegregation	$ 98	$ 2,070	17
Small school adjustment	383	29,794	50
Federal impact aid	5	16,899	48
Voter-approved levy increases	2	16,050	132

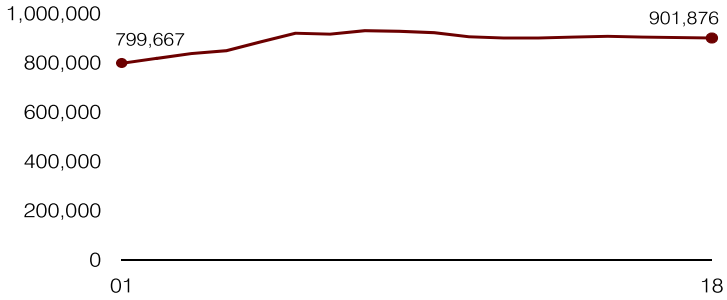
State of Arizona—page 2

Instructional spending percentage

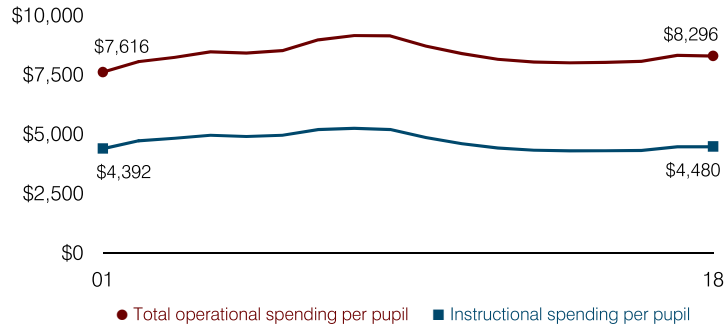
Year:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Percentage:	57.7	58.2	58.6	58.6	58.4	58.3	57.9	57.3	56.9	55.9	54.7	54.2	53.8	53.8	53.6	53.5	53.8	54.0

TRENDS AND FINANCIAL STRESS ASSESSMENT
Fiscal years as indicated

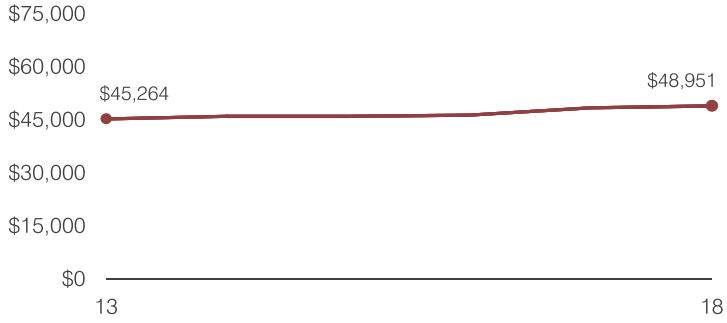
Students attending



Total operational and instructional spending per pupil (inflation adjusted to 2018 dollars)



Average teacher salary

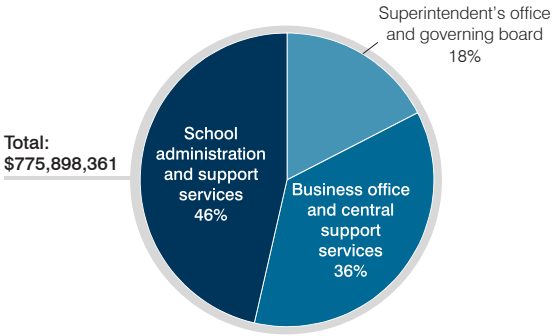


Financial stress assessment

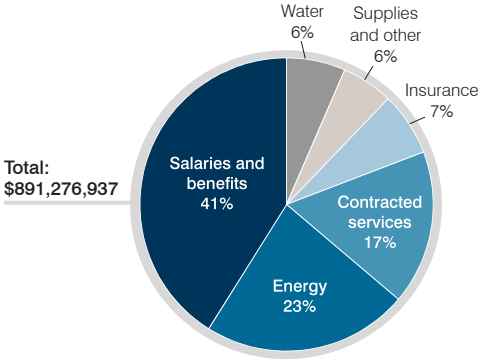
	Number of districts		
Overall financial stress level:	176	25	6
Measure: 2016 through 2018			
Change in number of district students	154	38	15
Spending exceeded operating/capital budgets	183	11	13
Spending increase election results	75	6	13
Operating reserve percentage, Trend	175	8	24
Years of capital reserve held	146	51	10
Current financial and internal control status	144	45	4
Low	Moderate	High	

OPERATIONAL SPENDING DETAIL
Fiscal year 2018

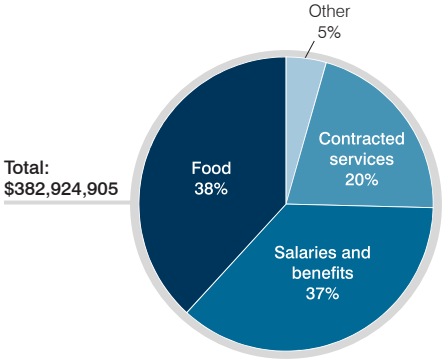
Administrative spending by category



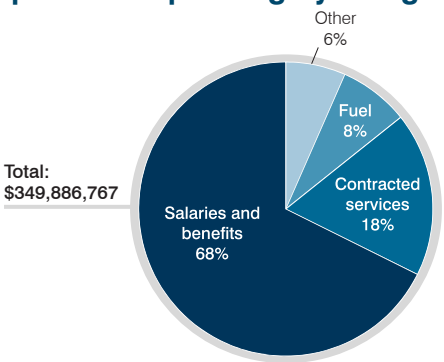
Plant operations spending by category



Food service spending by category



Transportation spending by category



APPENDIX A

This appendix lists the 207 districts organized into operational efficiency, transportation efficiency, and student achievement peer groups. Table 8 (see pages a-1 through a-4) presents districts organized into operational efficiency peer groups based on district size, type, and location. Within each operational efficiency peer group, the districts are listed in order of their fiscal year 2018 instructional spending percentages. Table 9 (see pages a-5 through a-11) presents districts organized into transportation efficiency peer groups based on miles per rider and district location. Within each transportation efficiency peer group, the districts are listed in order of their overall efficiency measure that equally considers fiscal year 2018 cost per mile and cost per rider. Some districts in both efficiency groups are excluded from their peer average because extreme values in their costs would skew the peer average. Table 10 (see pages a-12 through a-18) presents districts organized into student achievement peer groups based on district type, poverty, and location. Within each student achievement peer group, the districts are listed in order of the percentage of their students who passed State assessments on the fiscal year 2018 Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) test and the fiscal year 2018 Arizona's Instrument to Measure Standards (AIMS) test.

Table 8
Districts grouped by operational efficiency peer group and ranked by instructional spending percentage
Fiscal year 2018

Peer group					
Number	Description	District name	Instructional spending percentage	District name	Instructional spending percentage
1	Very large unified and union high school districts in cities and suburbs	**Peer group average**	**56.8%**		
		Chandler USD	61.6	Dysart USD	56.1
		Gilbert USD	61.1	Mesa USD	55.4
		Deer Valley USD	59.8	Scottsdale USD	54.4
		Paradise Valley USD	58.5	Phoenix UHSD	53.3
		Peoria USD	56.8	Tucson USD	51.1
2	Large unified and union high school districts in cities and suburbs	**Peer group average**	**53.4%**		
		Glendale UHSD	57.8	Flagstaff USD	53.0
		Higley USD	57.8	Tolleson UHSD	52.9
		Amphitheater USD	53.7	Vail USD	52.6
		Tempe UHSD	53.4	Sunnyside USD	51.0
		Marana USD	53.3	Yuma UHSD	48.8

Table 8 continued

Peer group					
Number	Description	District name	Instructional spending percentage	District name	Instructional spending percentage
3	Medium-large and medium unified and union high school districts in cities and suburbs	**Peer group average**	**53.5%**		
		Tanque Verde USD	58.0	Agua Fria UHSD	53.5
		Lake Havasu USD	56.5	Cave Creek USD	53.3
		Humboldt USD	56.1	Apache Junction USD	53.0
		Catalina Foothills USD	54.8	Prescott USD	51.4
		Queen Creek USD	54.7	Fountain Hills USD	50.4
		Buckeye UHSD	54.6	J.O. Combs USD	50.4
		Flowing Wells USD	54.5	Casa Grande UHSD	46.5
		Sierra Vista USD	54.5		
4	Large and medium-large unified and union high school districts in towns and rural areas	**Peer group average**	**52.5%**		
		Safford USD	65.0	Santa Cruz Valley USD	51.5
		Show Low USD	58.7	Douglas USD	51.1
		Snowflake USD	56.8	Payson USD	49.7
		Sahuarita USD	55.9	Chino Valley USD	49.6
		Maricopa USD	53.5	Coolidge USD	49.0
		Florence USD	53.4	Chinle USD	48.0
		Kingman USD	52.1	Whiteriver USD	47.8
		Blue Ridge USD	51.9	Page USD	47.3
		Nogales USD	51.6		
5	Medium unified and union high school districts in towns and rural areas	**Peer group average**	**50.5%**		
		Pima USD	64.1	Round Valley USD	51.2
		Thatcher USD	60.6	Bisbee USD	51.0
		Morenci USD	60.4	Winslow USD	50.8
		Mingus UHSD	56.8	St. Johns USD	50.0
		Camp Verde USD	56.6	Globe USD	48.9
		Willcox USD	56.0	Wickenburg USD	48.5
		Williams USD	54.7	Window Rock USD	48.1
		Holbrook USD	54.0	Tombstone USD	46.5
		Saddle Mountain USD	53.5	Tuba City USD	43.7
		Benson USD	53.0	San Carlos USD	43.3
		Miami USD	53.0	Ganado USD	42.3
		Parker USD	52.4	Baboquivari USD	40.9
		Colorado River UHSD	52.3	Kayenta USD	40.6
		Sedona-Oak Creek Joint USD	52.3	Sanders USD	39.6
		Mammoth-San Manuel USD	52.1	Piñon USD	38.0
		Ft. Thomas USD	51.8		

Table 8 continued

Peer group					
Number	Description	District name	Instructional spending percentage	District name	Instructional spending percentage
6	Small unified and union high school districts in towns and rural areas	**Peer group average**	**48.3%**		
		Bagdad USD	55.0	Ash Fork Joint USD	49.9
		Colorado City USD	54.1	Antelope UHSD	48.6
		Ray USD	53.9	Gila Bend USD	46.6
		St. David USD	53.7	Hayden-Winkelman USD	46.5
		Littlefield USD	53.3	Duncan USD	45.5
		Ajo USD	52.9	Joseph City USD	44.6
		Heber-Overgaard USD	50.7	Santa Cruz Valley UHSD	41.6
		Superior USD	50.2	Grand Canyon USD	38.4
		Mayer USD	50.1	Red Mesa USD	34.6
7	Very large and large elementary school districts in cities and suburbs	**Peer group average**	**53.5%**		
		Kyrene ESD	62.3	Alhambra ESD	52.7
		Litchfield ESD	57.2	Tempe ESD	52.4
		Cartwright ESD	55.2	Roosevelt ESD	49.6
		Washington ESD	53.8	Glendale ESD	49.3
		Pendergast ESD	53.4	Yuma ESD	49.3
8	Medium-large and medium elementary school districts in cities and suburbs	**Peer group average**	**51.4%**		
		Liberty ESD	56.8	Laveen ESD	51.7
		Wilson ESD	56.2	Phoenix ESD	51.3
		Madison ESD	53.2	Casa Grande ESD	51.1
		Osborn ESD	53.0	Avondale ESD[2]	50.5
		Fowler ESD	52.9	Buckeye ESD	50.0
		Littleton ESD	52.5	Murphy ESD	48.4
		Union ESD	52.5	Balsz ESD	48.0
		Tolleson ESD	51.9	Creighton ESD	46.6
		Crane ESD	51.8	Riverside ESD	46.0
		Isaac ESD	51.7		
9	Medium-large and medium elementary school districts in towns and rural areas	**Peer group average**	**49.9%**		
		Bullhead City ESD	56.3	Somerton ESD	49.5
		Cottonwood-Oak Creek ESD	52.4	Gadsden ESD	48.8
		Palominas ESD	52.2	Nadaburg USD[1]	47.1
		Toltec ESD	51.9	Altar Valley ESD	45.8
		Mohave Valley ESD	49.5	Eloy ESD	45.1
10	Small elementary school districts in towns and rural areas	**Peer group average**	**53.7%**		
		Red Rock ESD	64.4	Sacaton ESD	51.3
		Clarkdale-Jerome ESD	59.9	Oracle ESD	50.7
		Palo Verde ESD	55.8	Santa Cruz ESD	50.0
		Naco ESD	55.4	Beaver Creek ESD	49.9
		Continental ESD	54.5	Stanfield ESD	44.8
		Arlington ESD	54.2		

Table 8 concluded

Peer group					
Number	Description	District name	Instructional spending percentage	District name	Instructional spending percentage
11	Very small school districts	**Peer group average**	**50.5%**		
		Blue ESD	78.1	Patagonia ESD	49.9
		Hillside ESD	65.8	Patagonia UHSD	49.9
		Double Adobe ESD	62.9	Picacho ESD	49.8
		Bonita ESD	61.9	Topock ESD	49.5
		Crown King ESD	59.9	Bicentennial UHSD	49.3
		Cochise ESD	59.5	Solomon ESD	49.3
		Sonoita ESD	59.5	Owens-Whitney ESD	49.1
		Aguila ESD	58.3	Elfrida ESD	48.8
		Alpine ESD	58.3	Sentinel ESD	48.7
		Yucca ESD	56.4	Skull Valley ESD	47.9
		McNary ESD	55.5	Wellton ESD	47.5
		Valley UHSD	55.5	Mohawk Valley ESD	46.6
		Congress ESD	55.0	Seligman USD	46.6
		San Fernando ESD	54.9	Vernon ESD	46.5
		Valentine ESD	54.3	Tonto Basin ESD	45.5
		Kirkland ESD	54.0	Bouse ESD	44.7
		Morristown ESD	53.5	Concho ESD	44.6
		Maine Consolidated SD	53.3	McNeal ESD	44.4
		Pine Strawberry ESD	53.0	Salome Consolidated ESD	44.0
		Pearce ESD	52.3	Wenden ESD	43.3
		Hyder ESD	52.1	Hackberry ESD	42.5
		Fredonia-Moccasin USD	51.7	Peach Springs USD	42.0
		Yarnell ESD	51.3	Quartzsite ESD	40.5
		Paloma ESD	51.2	Apache ESD	39.7
		Young ESD	51.1	Mobile ESD	38.3
		Cañon ESD	50.9	Bowie USD	36.4
		Pomerene ESD	50.2	Ash Creek ESD	36.1
		San Simon USD	50.2	Cedar USD	35.4

[1] Although a unified school district, Nadaburg USD was included in a group with elementary school districts because it did not have any high school students in fiscal year 2018.

[2] Revised 4/24/19.

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, fiscal year 2018 Arizona Department of Education student membership data, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Table 9
Districts grouped by transportation efficiency peer group and ranked by cost per mile and cost per rider
Fiscal year 2018

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-1	Districts in cities and suburbs traveling less than 165 miles per rider	**Peer group average**	**$7.19**	**$1,106**
		Littleton ESD	5.30	745
		Crane ESD	5.16	820
		Tempe ESD	5.09	955
		Fowler ESD	5.71	1,003
		Flowing Wells USD	6.57	1,168
		Glendale ESD	6.44	1,240
		Creighton ESD	8.00	1,019
		Cartwright ESD	7.94	1,129
		Alhambra ESD	8.20	1,116
		Murphy ESD	10.00	1,167
		Madison ESD	9.63	1,247
		Laveen ESD	8.25	1,658
T-2	Districts in cities and suburbs traveling 165-230 miles per rider	**Peer group average**	**$5.91**	**$1,232**
		Catalina Foothills USD	3.57	461
		Riverside ESD	2.99	776
		Litchfield ESD	3.68	875
		Sunnyside USD	4.10	891
		Pendergast ESD	6.00	1,201
		Roosevelt ESD	7.26	960
		Osborn ESD	6.81	1,166
		Avondale ESD[1]	6.15	1,331
		Isaac ESD	7.52	1,626
		Phoenix ESD	8.19	1,739
		Union ESD	8.75	1,939
		Tolleson ESD	12.29	1,908

Table 9 continued

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-3	Districts in cities and suburbs traveling 231-290 miles per rider	**Peer group average**	**$4.47**	**$1,248**
		Sierra Vista USD	3.75	995
		Apache Junction USD	3.59	1,066
		Queen Creek USD	4.30	905
		Tempe UHSD	3.89	1,087
		Buckeye ESD	3.71	1,205
		Kyrene ESD	4.06	1,158
		Higley USD	4.47	1,113
		Wilson ESD	4.88	1,147
		Washington ESD	5.18	1,264
		Deer Valley USD	5.10	1,342
		Chandler USD	5.12	1,404
		Tolleson UHSD	5.61	1,703
		Balsz ESD	7.73	1,831
T-4	Districts in cities and suburbs traveling 291-365 miles per rider	**Peer group average**	**$3.72**	**$1,330**
		Tanque Verde USD	3.15	1,047
		J.O. Combs USD	3.49	1,023
		Cave Creek USD	2.86	1,285
		Humboldt USD	3.25	1,154
		Marana USD	3.23	1,245
		Peoria USD	3.74	1,261
		Liberty ESD	3.50	1,353
		Casa Grande ESD	3.59	1,332
		Fountain Hills USD	3.40	1,444
		Agua Fria UHSD	3.88	1,336
		Amphitheater USD	3.99	1,440
		Gilbert USD	4.38	1,338
		Vail USD	3.51	1,649
		Mesa USD	4.70	1,555
		Dysart USD	5.17	1,483

Table 9 continued

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-5	Districts in cities and suburbs traveling more than 365 miles per rider	**Peer group average**	**$3.90**	**$1,931**
		Prescott USD	3.24	1,500
		Yuma ESD	3.46	1,401
		Buckeye UHSD	3.33	1,601
		Paradise Valley USD	3.62	1,513
		Flagstaff USD	3.85	1,473
		Scottsdale USD	4.63	1,570
		Lake Havasu USD	4.44	1,969
		Yuma UHSD	4.19	2,140
		Casa Grande UHSD	3.69	2,735
		Tucson USD	4.50	2,761
		Glendale UHSD	6.16	2,579
		Phoenix UHSD	N/A	1,011
T-6	Districts in towns and rural areas traveling less than 245 miles per rider	**Peer group average**	**$3.96**	**$721**
		Red Rock ESD	1.31	175
		Gadsden ESD	3.99	295
		Somerton ESD	3.33	535
		Colorado City USD	3.70	611
		Safford USD	3.54	650
		Toltec ESD	3.95	608
		Sahuarita USD	3.33	731
		Whiteriver USD	2.98	801
		Clarkdale-Jerome ESD	4.17	620
		Thatcher USD	4.23	712
		Chino Valley USD	3.72	812
		Pima USD	4.50	851
		Bullhead City ESD	4.75	845
		Maricopa USD	3.86	1,022
		Nogales USD	5.01	842
		San Carlos USD	6.89	965
		Eloy ESD	4.11	1,502
		Morenci USD	NR	1,181

Table 9 continued

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-7	Districts in towns and rural areas traveling 245-335 miles per rider	**Peer group average**	**$3.35**	**$1,057**
		Littlefield USD	2.32	582
		Beaver Creek ESD	2.62	736
		Mammoth-San Manuel USD	2.73	724
		Mohave Valley ESD	2.44	858
		Continental ESD	3.08	747
		Santa Cruz Valley USD	3.29	902
		Ft. Thomas USD	3.37	938
		Palo Verde ESD	3.42	996
		Cottonwood-Oak Creek ESD	4.14	832
		Superior USD	3.05	1,188
		Mingus UHSD	3.43	1,157
		Miami USD	4.80	1,202
		Benson USD	3.54	1,771
		Window Rock USD	5.26	1,502
		Sedona-Oak Creek Joint USD	4.67	1,689
		Globe USD	NR	2,138
		Snowflake USD	NR	1,419
T-8	Districts in towns and rural areas traveling 336-420 miles per rider	**Peer group average**	**$3.03**	**$1,225**
		Heber-Overgaard USD	2.22	1,092
		Gila Bend USD	2.79	876
		Stanfield ESD	2.70	1,033
		Blue Ridge USD	2.94	974
		Bisbee USD	3.02	1,001
		Show Low USD	2.68	1,142
		Altar Valley ESD	2.50	1,232
		Ganado USD	2.99	1,062
		Nadaburg USD	2.47	1,301
		Kingman USD	2.60	1,311
		Camp Verde USD	4.01	1,012
		Saddle Mountain USD	3.02	1,565
		St. David USD	3.18	1,520
		Grand Canyon USD	2.92	1,663
		Payson USD	3.90	1,501
		Parker USD	4.40	1,761
		Sacaton ESD	5.80	1,753
		Naco ESD	13.31	6,266

Table 9 continued

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-9	Districts in towns and rural areas traveling 421-545 miles per rider	**Peer group average**	**$2.62**	**$1,457**
		Round Valley USD	2.51	614
		Tombstone USD	1.99	1,200
		Palominas ESD	2.20	1,240
		Winslow USD	2.50	1,128
		Williams USD	2.44	1,267
		Arlington ESD	2.57	1,262
		Chinle USD	2.90	1,234
		Oracle ESD	2.54	1,464
		Bagdad USD	1.70	2,019
		Wickenburg USD	2.13	1,895
		Coolidge USD	3.28	1,276
		Florence USD	3.15	1,385
		Hayden-Winkelman USD	3.36	1,599
		Ajo USD	3.39	1,729
		Douglas USD	2.97	2,322
T-10	Districts in towns and rural areas traveling more than 545 miles per rider	**Peer group average**	**$1.95**	**$1,572**
		Antelope UHSD	1.05	938
		Duncan USD	1.39	1,045
		St. Johns USD	1.44	1,371
		Ash Fork Joint USD	1.47	1,599
		Santa Cruz ESD	2.48	791
		Holbrook USD	1.56	1,559
		Willcox USD	1.90	1,486
		Baboquivari USD	2.42	1,134
		Colorado River UHSD	2.42	1,474
		Red Mesa USD	2.43	1,650
		Ray USD	2.41	1,700
		Mayer USD	2.53	1,637
		Joseph City USD	1.84	2,340
		Sanders USD	2.94	1,697
		Page USD	2.84	2,056
		Kayenta USD	3.42	1,798
		Piñon USD	3.22	2,068
		Tuba City USD	3.37	2,434
		Santa Cruz Valley UHSD	3.69	2,768

Table 9 continued

Peer group				
Number	Description	District name	Cost per mile	Cost per rider
T-11	Very small districts	**Peer group average**	**$1.94**	**$1,614**
		McNary ESD	0.68	381
		Yarnell ESD	0.80	480
		Owens-Whitney ESD	0.49	762
		Aguila ESD	0.86	623
		Bonita ESD	1.13	758
		Double Adobe ESD	1.07	840
		Skull Valley ESD	1.32	649
		Vernon ESD	1.12	834
		Paloma ESD	1.47	794
		San Simon USD	0.87	1,292
		Congress ESD	1.36	897
		Cochise ESD	1.72	617
		Valentine ESD	1.83	609
		Alpine ESD	0.38	1,824
		Topock ESD	2.14	521
		McNeal ESD	1.35	1,205
		Pearce ESD	1.24	1,303
		Sonoita ESD	1.26	1,375
		Concho ESD	1.19	1,504
		Bowie USD	0.73	1,903
		Picacho ESD	2.44	537
		Bicentennial UHSD	1.24	1,697
		Cañon ESD	2.32	801
		Bouse ESD	2.13	1,055
		Morristown ESD	2.04	1,493
		Quartzsite ESD	2.45	1,163
		Young ESD	3.35	449
		Hillside ESD	1.34	2,126
		Fredonia-Moccasin USD	2.77	1,066
		Hyder ESD	2.18	1,691
		Kirkland ESD	1.64	2,223
		Seligman USD	1.88	2,086
		Elfrida ESD	2.44	1,804
		Apache ESD	1.46	2,751
		Salome Consolidated ESD	3.87	840
		Patagonia ESD	1.57	2,906
		Patagonia UHSD	1.57	2,906
		Wenden ESD	3.60	1,410
		Sentinel ESD	1.68	3,046
		Ash Creek ESD	1.54	3,353

Table 9 concluded

Peer group		District name	Cost per mile	Cost per rider
Number	Description			
T-11 (concluded)	Very small districts	Cedar USD	3.41	2,021
		Maine Consolidated SD	3.40	2,084
		Wellton ESD	3.92	1,736
		Pomerene ESD	4.40	1,362
		Mohawk Valley ESD	2.34	3,219
		Tonto Basin ESD	2.18	3,802
		Pine Strawberry ESD	3.69	2,986
		Valley UHSD	2.75	4,502
		Mobile ESD	3.24	4,252
		Hackberry ESD	3.53	7,866
		Solomon ESD	2.42	NR
		Peach Springs USD	NR	NR

[1] Revised 4/24/19.

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, fiscal year 2018 Arizona Department of Education transportation route reports, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Table 10
Districts grouped by student achievement peer group and ranked by percentage of students who passed State assessments
Fiscal year 2018

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
1	Unified school districts with poverty rates less than 9 percent in cities and suburbs	**Peer group average**	**60%**	**58%**	**73%**
		Catalina Foothills USD	71	67	79
		Vail USD	65	61	80
		Cave Creek USD	62	62	77
		Higley USD	62	60	73
		Queen Creek USD	62	56	68
		Tanque Verde USD	54	55	76
		Fountain Hills USD	51	54	66
		Gilbert USD	53	52	65
2	Unified school districts with poverty rates of 9 to 16 percent in cities and suburbs	**Peer group average**	**46%**	**45%**	**58%**
		Chandler USD	58	56	69
		Scottsdale USD	58	56	65
		Deer Valley USD	55	55	69
		Prescott USD	45	49	62
		Paradise Valley USD	45	47	58
		Peoria USD	49	42	51
		Marana USD	40	39	55
		Dysart USD	38	39	47
		Flagstaff USD	34	35	51
		J.O. Combs USD	35	31	47
3	Unified school districts with poverty rates greater than 16 percent in cities and suburbs	**Peer group average**	**38%**	**39%**	**50%**
		Lake Havasu USD	46	43	60
		Amphitheater USD	40	43	55
		Humboldt USD	38	43	55
		Mesa USD	43	39	54
		Sierra Vista USD	39	43	48
		Apache Junction USD	31	29	42
		Tucson USD	29	30	39

Table 10 continued

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
4	Unified school districts with poverty rates less than 19 percent in towns and rural areas	**Peer group average**	**29%**	**32%**	**44%**
		Morenci USD	44	43	67
		St. David USD	44	49	57
		Chino Valley USD	34	40	60
		Grand Canyon USD	38	40	50
		Sahuarita USD	39	43	45
		Bagdad USD	25	35	59
		Saddle Mountain USD	42	29	45
		Duncan USD	30	32	52
		Maricopa USD	34	34	43
		Sedona-Oak Creek Joint USD	29	37	41
		San Simon USD	30	34	42
		Florence USD	26	30	47
		Seligman USD	27	29	27
		Littlefield USD	25	26	29
		Coolidge USD	14	14	27
		Superior USD	12	18	16
		Bowie USD[1]	7	11	-
		Blue ESD[1, 3]	-	-	-
5	Unified school districts with poverty rates of 19 to 25 percent in towns and rural areas	**Peer group average**	**35%**	**36%**	**50%**
		Snowflake USD	60	53	70
		Thatcher USD	51	48	70
		Heber-Overgaard USD	49	39	58
		Payson USD	38	43	62
		Round Valley USD	45	43	55
		Safford USD	46	40	50
		Willcox USD	39	37	50
		Fredonia-Moccasin USD	30	32	50
		Blue Ridge USD	30	34	42
		Santa Cruz Valley USD	31	32	41
		Kingman USD	31	31	41
		Wickenburg USD	32	30	41
		Ray USD	22	28	46
		Ajo USD	25	29	42
		Camp Verde USD	18	25	40
		Mammoth-San Manuel USD	18	27	34

Table 10 continued

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
6	Unified school districts with poverty rates of 26 to 32 percent in towns and rural areas	**Peer group average**	**32%**	**33%**	**40%**
		St. Johns USD	56	52	64
		Benson USD	53	50	62
		Ash Fork Joint USD	55	57	52
		Joseph City USD	44	53	47
		Show Low USD	40	39	63
		Flowing Wells USD[2]	35	39	46
		Williams USD	38	40	42
		Pima USD	25	35	51
		Young ESD[1, 3]	30	42	-
		Winslow USD	34	28	43
		Holbrook USD	29	30	44
		Bisbee USD	28	26	33
		Tombstone USD	27	25	34
		Page USD	23	21	37
		Sunnyside USD[2]	26	25	28
		Globe USD	18	26	31
		Hayden-Winkelman USD	18	24	17
		Ft. Thomas USD	19	16	15
		Gila Bend USD	5	8	11
7	Unified school districts with poverty rates greater than 32 percent in towns and rural areas	**Peer group average**	**22%**	**19%**	**26%**
		Colorado City USD	55	53	65
		Nogales USD	34	32	43
		Mayer USD	30	31	47
		Douglas USD	24	27	29
		Miami USD	22	21	34
		Chinle USD	29	21	23
		Parker USD	25	22	24
		Tuba City USD	24	13	23
		Window Rock USD	15	18	20
		Ganado USD	16	12	24
		Kayenta USD	17	15	19
		Baboquivari USD	17	16	14
		Piñon USD	15	11	21
		Whiteriver USD	15	10	17
		Red Mesa USD	17	13	12
		Sanders USD	9	11	20
		San Carlos USD	5	4	6

Table 10 continued

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
8	Union high school districts with poverty rates of 20 percent or less in cities and suburbs	**Peer group average**	**32%**	**32%**	**31%**
		Tempe UHSD	37	39	46
		Agua Fria UHSD	36	36	41
		Buckeye UHSD	42	28	30
		Tolleson UHSD	25	30	23
		Casa Grande UHSD	20	25	18
9	Union high school districts with poverty rates greater than 20 percent in cities and suburbs	**Peer group average**	**29%**	**25%**	**31%**
		Glendale UHSD	45	37	61
		Phoenix UHSD	22	21	21
		Yuma UHSD	21	16	11
10	Union high school districts with poverty rates of 20 percent or less in towns and rural areas	**Peer group average**	**22%**	**27%**	**15%**
		Patagonia UHSD	38	38	14
		Valley UHSD	20	29	25
		Bicentennial UHSD	8	13	7
11	Union high school districts with poverty rates greater than 20 percent in towns and rural areas	**Peer group average**	**17%**	**20%**	**18%**
		Mingus UHSD	25	22	19
		Colorado River UHSD	15	25	20
		Antelope UHSD	18	15	16
		Santa Cruz Valley UHSD	11	18	18
12	Elementary school districts with poverty rates less than 17 percent in cities and suburbs	**Peer group average**	**55%**	**54%**	**70%**
		Kyrene ESD	59	59	75
		Madison ESD	59	59	73
		Litchfield ESD	57	56	73
		Liberty ESD	43	42	58
13	Elementary school districts with poverty rates of 17 to 23 percent in cities and suburbs	**Peer group average**	**32%**	**32%**	**44%**
		Laveen ESD	41	35	57
		Avondale ESD	41	38	54
		Tempe ESD	40	37	46
		Casa Grande ESD	30	31	41
		Pendergast ESD	29	31	38
		Buckeye ESD	26	26	41
		Littleton ESD	24	28	40
		Union ESD	23	28	32

Table 10 continued

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
14	Elementary school districts with poverty rates of 24 to 32 percent in cities and suburbs	**Peer group average**	**33%**	**31%**	**46%**
		Crane ESD	44	40	56
		Yuma ESD	37	35	49
		Washington ESD	34	36	49
		Osborn ESD	38	28	45
		Glendale ESD	34	28	45
		Riverside ESD	28	33	43
		Tolleson ESD	28	30	46
		Fowler ESD	29	28	42
		Roosevelt ESD	24	22	33
15	Elementary school districts with poverty rates greater than 32 percent in cities and suburbs	**Peer group average**	**26%**	**23%**	**38%**
		Alhambra ESD	33	26	45
		Phoenix ESD	30	28	44
		Wilson ESD	31	26	41
		Cartwright ESD	27	25	40
		Balsz ESD	26	23	37
		Creighton ESD	26	23	35
		Isaac ESD	19	18	36
		Murphy ESD	19	17	26
16	Elementary school districts with poverty rates less than 16 percent in towns and rural areas	**Peer group average**	**37%**	**40%**	**58%**
		Congress ESD	70	60	82
		Clarkdale-Jerome ESD	46	53	82
		Yucca ESD[1]	56	61	-
		Palominas ESD	55	52	68
		Continental ESD	49	44	73
		Bonita ESD	47	42	61
		Hillside ESD[1]	37	58	-
		Owens-Whitney ESD[1]	42	50	-
		McNeal ESD	31	45	58
		Morristown ESD	45	37	48
		Elfrida ESD	30	37	59
		Nadaburg USD[3]	31	35	54
		Oracle ESD	27	18	57
		Beaver Creek ESD	22	21	55
		Skull Valley ESD[1]	20	40	-
		Paloma ESD	29	26	34
		San Fernando ESD[1]	15	25	-
		Stanfield ESD	19	14	27

Table 10 continued

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
17	Elementary school districts with poverty rates of 16 to 22 percent in towns and rural areas	**Peer group average**	**38%**	**38%**	**64%**
		Topock ESD	51	33	100
		Pine Strawberry ESD	55	47	75
		Mobile ESD[1]	45	73	-
		Solomon ESD	45	46	77
		Sonoita ESD	42	53	70
		Red Rock ESD	41	46	74
		Maine Consolidated ESD	47	38	75
		Pearce ESD	40	24	88
		Palo Verde ESD	41	43	58
		Hyder ESD	45	39	56
		Mohave Valley ESD	36	38	61
		Cottonwood-Oak Creek ESD	30	35	57
		Arlington ESD	42	30	47
		Toltec ESD	22	22	40
		Bouse ESD[1]	21	21	-
		Valentine ESD	8	14	12
		Crown King ESD[1]	-	-	-
18	Elementary school districts with poverty rates of 23 to 29 percent in towns and rural areas	**Peer group average**	**47%**	**43%**	**61%**
		Alpine ESD	74	61	78
		Hackberry ESD[1]	68	74	-
		Pomerene ESD	69	50	74
		Cochise ESD	57	41	67
		Mohawk Valley ESD	35	41	67
		Vernon ESD	30	47	62
		Ash Creek ESD[1]	54	38	-
		Patagonia ESD	29	34	58
		Altar Valley ESD	31	25	55
		Eloy ESD	20	20	27

Table 10 concluded

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
19	Elementary school districts with poverty rates of 30 to 33 percent in towns and rural areas	**Peer group average**	**29%**	**29%**	**38%**
		Santa Cruz ESD	51	58	84
		Tonto Basin ESD	54	48	82
		Aguila ESD	46	43	36
		Bullhead City ESD	31	29	50
		Cañon ESD	21	34	54
		Wellton ESD	26	26	42
		Gadsden ESD	27	26	26
		Picacho ESD	21	20	20
		Salome Consolidated ESD	14	15	24
		Naco ESD	17	15	19
		Sacaton ESD	12	9	15
		Peach Springs USD[1, 3]	-	-	3
20	Elementary school districts with poverty rates greater than 33 percent in towns and rural areas	**Peer group average**	**30%**	**30%**	**33%**
		Kirkland ESD	57	40	59
		Double Adobe ESD[1]	37	53	-
		Sentinel ESD[1]	43	38	-
		Concho ESD	32	38	48
		Somerton ESD	41	30	43
		Yarnell ESD[1]	36	31	-
		Quartzsite ESD	21	33	44
		Wenden ESD	16	17	7
		Cedar USD[3]	7	8	17
		McNary ESD	12	8	11
		Apache ESD[1]	-	-	-

[1] Scores are not shown because measure did not meet our criteria for reporting.

[2] Although urban districts, Flowing Wells USD and Sunnyside USD were included in groups with rural districts to better match poverty rates.

[3] Although unified school districts, Cedar USD, Nadaburg USD, and Peach Springs USD were included in groups with elementary school districts because they did not have any high school students take AzMERIT or AIMS in fiscal year 2018. In addition, Blue ESD and Young ESD were included in groups with unified school districts as they did have high school students who took the AzMERIT or AIMS in fiscal year 2018.

Source: Auditor General staff analysis of fiscal year 2018 Arizona Department of Education AzMERIT and AIMS data, fiscal year 2017 U.S. Census Bureau poverty rates, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Description of operational spending

Operational spending includes costs incurred for the District's day-to-day operations and includes the categories listed below. These categories follow Arizona's Uniform Chart of Accounts for school districts, which meets the requirements of the U.S. Department of Education's account classifications, providing us the ability to compare individual school districts' measures to peer districts' measures, Arizona's measures to national averages, and Arizona's measures over time. Operational spending includes instructional and noninstructional spending. The definition of instruction used in this report is based on the definition of "instruction" developed by the U.S. Department of Education's National Center for Education Statistics. Operational spending excludes costs associated with acquiring capital assets (such as purchasing or leasing land, buildings, and equipment), interest, and programs that are outside the scope of preschool through grade 12 education, such as adult education and community service programs.

Total operational spending includes instructional and noninstructional expenditures as shown below:

Instructional spending

- **Classroom personnel—**Salaries and benefits for teachers, teachers' aides, substitute teachers, graders, and guest lecturers.
- **General instructional supplies—**Paper, pencils, crayons, etc.
- **Instructional aids—**Textbooks, workbooks, instructional software, etc.
- **Activities—**Field trips, athletics, and co-curricular activities, such as choir or band.
- **Tuition—**Paid to out-of-State and private institutions.

Noninstructional spending

- **Administration—**Salaries and benefits for superintendents, principals, business managers, and clerical and other staff who perform accounting, payroll, purchasing, warehousing, printing, human resource activities, and administrative technology services; and other costs related to these services and the governing board.
- **Plant operations and maintenance—**Salaries, benefits, and other costs related to equipment repair, building maintenance, custodial services, groundskeeping, and security; and costs for heating, cooling, lighting, and property insurance.
- **Food service—**Salaries, benefits, food supplies, and other costs related to preparing, transporting, and serving meals and snacks.
- **Transportation—**Salaries, benefits, and other costs related to maintaining buses and transporting students to and from school and school activities.
- **Student support services—**Salaries and benefits for attendance clerks, social workers, counselors, nurses, audiologists, and speech pathologists; and other costs related to these support services to students.
- **Instruction support services—**Salaries and benefits for curriculum directors, special education directors,

teacher trainers, librarians, media specialists, and instruction-related IT staff; and other costs related to assisting instructional staff in delivering instruction.

Description of nonoperational spending

Nonoperational spending includes costs incurred to acquire capital assets (such as purchasing or leasing land, buildings, and equipment), interest, and programs, such as adult education and community service, that are outside the scope of preschool through grade 12 education, but excludes principal payments on bond debt. The following categories comprise nonoperational expenditures:

- **Land and buildings—**Expenditures for purchasing or leasing land and existing buildings, constructing and renovating school buildings, and improving school grounds.
- **Equipment—**Expenditures for purchasing or leasing initial, additional, and replacement equipment, such as furniture, vehicles, and technology-related hardware and noninstructional software.
- **Interest—**Expenditures for the interest on long- and short-term debt.
- **Other—**Expenditures for all remaining nonoperational spending—those primarily for adult education; community service programs for students, staff, or other community participants; and civic activities, such as parent-teacher association meetings, public forums, lectures, and clubs.[1]

Description of revenue sources

Arizona school districts receive revenues from local, State, and federal sources. In general, districts receive local and State revenues based on an equalization formula set by State law. This "equalization formula funding" provides the base funding for districts through locally levied property taxes and State-appropriated monies. Districts also receive State monies through additional statutory formulas, such as Classroom Site Funds (Proposition 301) and instructional improvement formulas. Some districts receive other local and State revenues as allowed by State law to provide funding for a small school adjustment, voter-approved budget override or bond, or activities required or permitted to comply with a federal desegregation court order or administrative agreement. Many districts also receive local, State, or federal monies through grants for specific purposes, such as providing meals and additional educational opportunities to students from low-income families. The following are descriptions for specific revenue sources discussed in this report or shown on State and district pages:

- **Equalization formula funding—**Basic formula funding for school districts provided by State law, calculated as the total of the base support level, transportation support level, and district additional assistance.
- **Federal impact aid—**Federal monies provided to districts that have been impacted by the presence of tax-exempt federal lands or the enrollment of students living on federal lands, such as military bases and reservations.
- **Grants—**Federal, State, and local monies that are generally provided for specific purposes, including programs targeted toward at-risk students and programs that distribute the majority of their monies based on poverty rates.
- **Transportation funding—**Monies for student transportation based on the State funding formula that uses primarily the number of miles traveled and secondarily the number of eligible students transported.
- **Additional budgetary funding—**Additional monies received through the State funding formula for relative costs associated with various classifications, including district size, type, and location, and numbers and types of special needs children.

[1] A district's governing board may provide academic and skill development for all citizens and furnish facilities for disseminating community-related services in accordance with Arizona Revised Statutes (A.R.S.) §§15-1141 and 15-1142, and may also permit the use of school facilities under its direction for civic activities as defined in A.R.S. §15-1105.

- **Small school adjustment—**Additional local and State monies for small districts, which are allowed by law to increase their expenditure budgets and levy monies without voter approval if their student enrollment is within the following prescribed numbers:
  - Grades K-8 with 125 or fewer students.
  - Grades 9-12 with 100 or fewer students.
- **Desegregation—**Additional local and State monies for districts, which are allowed by law to increase their expenditure budgets and levy monies without voter approval to comply with a court order or administrative agreement with the U.S. Department of Education's Office for Civil Rights.
- **Voter-approved budget overrides—**Additional local monies districts may levy through voter-approved increases to district expenditure budgets.
- **Voter-approved levy increases—**Additional local monies districts may levy through voter-approved tax increases related to budget overrides or the repayment of voter-approved bonds.
- **Tax credits—**Monies provided to districts in accordance with A.R.S. §43-1089.01, which allows taxpayers to claim credit—up to $200 per individual tax return or $400 per joint tax return—for fees paid or contributions made to a school for extracurricular activities or character education programs.
- **Donations—**Monies provided to districts to be used for purposes specified by donors or to reduce district taxes.
- **Proposition 123 funding—**Voter-approved funding that began in fiscal year 2016. One portion of Proposition 123 funding is a permanent increase to the base level used to calculate equalization formula funding. The other portion of Proposition 123 funding provides a temporary increase that is not included in the base level or equalization formula funding. Total State-wide Proposition 123 additional funding of $50 million is approved for each of fiscal years 2016 through 2020, and $75 million is approved for each of fiscal years 2021 through 2025.

Scope

All of the State's 236 school districts were included in calculating the fiscal year 2018 State-wide spending percentages and per pupil spending and per pupil revenue amounts. However, some districts were excluded from further analysis as follows:

- When calculating individual district instructional spending percentages, transporting districts, career and technical education districts (CTEDs), and accommodation districts were excluded. Transporting districts transport all of their students to other districts and, therefore, do not have expenditures in many of the operational areas, and CTEDs and accommodation districts often operate very differently than other districts and among themselves in terms of the services they provide and how they provide them.
- When analyzing State-wide trends in the efficiency of district operations, very small districts, i.e., those serving fewer than 200 students, transporting districts, CTEDs, and accommodation districts were excluded. Transporting districts, CTEDs, and accommodation districts often operate differently than most school districts in terms of the services they provide, the students they serve, and the programs they offer. Additionally, these districts and very small districts often have wide ranges of operational costs and, therefore, would distort the analysis of factors generally affecting districts of other types and sizes.

Sources and methodology

To analyze the most current revenue and expenditure data available for Arizona's districts, we obtained fiscal year 2018 school district Annual Financial Reports (AFRs) and Classroom Site Fund Narrative Results Summaries (CSF Narratives) from the Arizona Department of Education (ADE). In addition, all of the State's 236 school districts provided us with fiscal year 2018 accounting data. The information used to prepare this report was not

audited; however, it was subjected to certain quality control procedures to help ensure its completeness and reasonableness. For example, instead of auditing the districts' AFRs, CSF Narratives, and accounting data to the underlying district records, we performed analytical procedures using the financial data and interviewed school district officials about anomalies or variances. We corrected any data errors prior to calculating instructional spending percentages and other measures analyzed for, and presented in, this report. Additionally, we reviewed the reasonability of changes in related measures, such as whether a district's square footage increased after opening a new school.

Other information related to the analyses presented in this report was obtained from ADE, such as school district staffing levels, academic achievement indicators, bus mileage, and average daily membership counts; and from the Arizona School Facilities Board (SFB), such as square footage and number of schools. This information was adjusted as necessary, based on information obtained from districts or other sources. In addition, we obtained national-level financial data from the National Center for Education Statistics and district-level poverty rates and locations relative to population centers from the U.S. Census Bureau. In order to provide explanations for cost changes, we reviewed and analyzed historical spending and trends and identified efficient and inefficient operational practices from school district performance audits we conducted and interviews of school district staff. Where noted, we adjusted spending data to fiscal year 2018 dollars using the Consumer Price Index published by the U.S. Labor Department, Bureau of Labor Statistics, when analyzing historical spending and trends.

District peer groups

To compare the school districts' efficiency and effectiveness, we developed 3 types of district peer groups. The peer groups are presented in Tables 8, 9, and 10 in Appendix A beginning on pages a-1, a-5, and a-12, respectively.

- To compare districts' administration, plant operations, and food service cost measures relative to peer groups', we developed operational efficiency peer groups using district size, type, and location because these factors are associated with school districts' cost measures in these areas. This same peer group was used for revenue comparisons. The 6 district size categories are defined on page b-5. The 2 district type categories are elementary and high school/unified. We grouped union high school districts with unified districts because both districts serve high school students. The 2 location categories are cities/suburbs and town/rural areas. The U.S. Census Bureau classifies districts by distance and population density into 4 main categories: city, suburb, town, and rural. We grouped together districts located in city and suburban areas and grouped together districts located in town and rural areas. Considering these 3 factors, we created 11 operational efficiency peer groups to compare the efficiency of district operations in administration, plant operations, and food service operations. These peer groups are labeled 1 through 11, and each includes between 10 and 56 districts.

- To compare districts' transportation cost measures relative to peer groups', we developed transportation efficiency peer groups using locations and miles per rider because these factors are associated with school districts' transportation cost measures. We grouped together districts based on similar location and miles per rider using an average of historical miles per rider over the past 5 fiscal years. Considering these factors, we created 11 transportation efficiency peer groups to compare the efficiency of transportation operations. These peer groups are labeled T-1 through T-11, and each includes between 12 and 52 districts.

- To compare districts' academic indicators relative to peer groups', we developed student achievement peer groups using poverty rates, district type, and location. Considering these factors, we created 20 achievement peer groups to compare student achievement. These peer groups are labeled 1 through 20, and each includes between 3 and 19 districts.

State and individual district pages

The following describes the data sources, definitions, and methodology for the State page (see pages 16 and 17) and individual district pages (see pages 18 through 431). This information is organized into 6 sections: background information, such as the number of districts and schools; operational efficiency, such as instructional

and noninstructional spending and other efficiency measures; student and teacher measures, such as average teacher salary, ADE-assigned school letter grades, and the percentage of students passing State-wide assessments; revenues; financial assessment; and operational trends, such as instructional spending percentage and total operational and instructional spending per student. "N/A" indicates that information is not available, not applicable, or not appropriate to include because it could reveal personal information about a small number of district students. Further, we chose not to report the percentage of students who passed State assessments when the population of test takers was too small or providing the information could identify individual student results. "NR" indicates that we determined that the district's information is not reliable and is, therefore, not being reported or included in peer averages. Further, some districts are excluded from the peer average for certain efficiency measures because their extreme values would skew the peer average. Graphics with discontinuous trend lines indicate that data is not available, not applicable, not appropriate to include, or not reliable for particular years. All information is for fiscal year 2018 unless otherwise indicated. Because Patagonia ESD and Patagonia UHSD operate essentially as 1 district and comingle costs, the 2 districts' spending, revenues, and other efficiency measures are presented combined on each district's individual page in this report.

Background information

- **County—**Our analysis of ADE-provided county data. For district boundaries encompassing more than 1 county, the county in which the district office resides is presented.
- **Legislative districts—**Our analysis of school district and legislative district boundaries.
- **Location—**Our analysis of the National Center for Education Statistics' fiscal year 2016 urban-centric locale codes that use geocoding and population information to assign a designation based on proximity to population clusters. The 4 main categories are city, suburb, town, and rural.
- **Students attending/District size—**Our analysis of ADE-provided, school-district-reported attending ADM counts. ADM numbers are rounded to the nearest whole number. District sizes were categorized as follows:

Size	Students attending
○ Very large	20,000+
○ Large	8,000 to 19,999
○ Medium-large	2,000 to 7,999
○ Medium	600 to 1,999
○ Small	200 to 599
○ Very small	Fewer than 200

- **Number of schools—**Our analysis of ADE's ADM reports and SFB district-wide building reports.

Operational efficiency

- **Spending by operational area—**Our analysis of spending in each operational area divided by total operational spending, using district-reported accounting data and AFRs. The peer average instructional spending percentages were calculated by adding individual districts' instructional spending percentages and dividing by the number of districts in each peer group.
- **Efficiency measures relative to peer averages—**We compared a district's cost measures, such as cost per square foot, and other related measures, such as square footage per student, to its peer group averages. We identified whether the district's cost measures were very low/very high, low/high, or comparable to its peer averages, and indicated the determination by a color bar for each measure. Additionally, we used the individual measures to determine an overall assessment for each operational area. The efficiency measures and relativity to peer group averages are explained in more detail below. In addition, for the 56 very small districts, we provided comparative information but did not identify the relativity with a color bar because these districts' spending patterns are highly variable and result in less meaningful group averages. The peer

averages were calculated by averaging individual districts' numbers for each measure. Some districts were excluded from peer averages for certain efficiency measures because their extreme values would skew the peer average. The following criteria were used to determine the efficiency measures relative to peer averages:

- Green—Very low—Lower than the peer average by more than 15 percent.
- Blue—Low—Lower than the peer average by 5.01 to 15 percent.
- Yellow—Comparable—Within 5 percent of the peer average.
- Orange—High—Higher than the peer average by 5.01 to 15 percent.
- Red—Very high—Higher than the peer average by more than 15 percent.

Administration

- Cost per pupil: Our analysis of administrative costs divided by the number of students, using district-reported accounting data and ADE-provided ADM data.
- Students per administrative position: The number of students divided by the number of administrative full-time equivalent employees (FTEs), using ADE-provided ADM data and district-reported information on the *School District Employee Report*.
- Overall assessment: Administrative cost per pupil was compared to the peer group average.

Plant operations

- Cost per square foot: Our analysis of plant operations and maintenance costs divided by the total square footage, using district-reported accounting data and SFB-provided, district-wide building reports.
- Square footage per student: Our analysis of the total square footage divided by the number of students, using SFB-provided, district-wide building reports and ADE-provided ADM data.
- Overall assessment: Cost per square foot and square footage per student were compared to the peer group averages. The overall assessment for plant operations is based on cost per square foot and also considers the impact of the district having very high or very low square footage per student.

Food service

- Cost per meal: Our analysis of food service costs divided by the total number of meals served, using district-reported accounting data and AFRs. Total number of meals served is the sum of total lunches served, total breakfasts served divided by 2, total snacks served divided by 3, and total a la carte sales divided by the district's federal free lunch reimbursement rate in fiscal year 2018.
- Overall assessment: Cost per meal was compared to the peer group average.

Transportation

- Cost per mile: Our analysis of transportation costs divided by the total miles driven, using district-reported accounting data and ADE-provided transportation route reports.
- Cost per rider: Our analysis of transportation costs divided by the total eligible riders transported, using district-reported accounting data and ADE-provided transportation route reports.
- Overall assessment: Cost per mile and cost per rider were compared to the peer group averages. The overall cost measure for transportation equally considers how a district compares to its transportation peer group in cost per mile and cost per rider.

- **Per pupil spending**
  - District—Our analysis of fiscal years 2017 and 2018 operational and nonoperational costs divided by the

number of students, using district-reported accounting data and AFRs, and ADE-provided ADM data.

- Peer average—Our analysis of operational efficiency peer districts' per pupil expenditures. The peer group averages exclude districts with extreme or unreliable values and were calculated by averaging individual districts' per pupil expenditures in each operational and nonoperational area.
- State average—Our analysis of district-reported accounting data and AFRs, and ADE-provided ADM data. The State's per pupil amounts were calculated by dividing total expenditures in each operational and nonoperational area by the total number of students (ADM).
- National average—National Center for Education Statistics' fiscal year 2016 data, the most recently available national data.

Student achievement

- **ADE-assigned school letter grades—**ADE-assigned school letter grades obtained from the Arizona State Board of Education (SBE) as of December 2018.[2] The number of schools with letter grades may differ from the number of schools reported at the top of the individual district pages and State page because some schools did not receive letter grades due to insufficient data and because some schools share a campus and online schools may not have a campus. Additionally, this report does not include district letter grades because ADE did not assign district letter grades for fiscal year 2018.

- **Percentage of students who passed State assessments—**Our analysis of the Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) Math and English Language Arts test results obtained from ADE in December 2018 and the Arizona's Instrument to Measure Standards (AIMS) Science test results obtained from ADE in September 2018. The district and State-wide percentages were calculated by dividing the total number of students who passed State assessments—that is, those who scored proficient or highly proficient on AzMERIT or those who met or exceeded the State standards on AIMS Science—by the total number of students who took the tests. Test results were aggregated across grade levels and courses, as applicable. The peer group average percentages were calculated by adding individual districts' percentages of students who passed State assessments and dividing by the number of districts in each peer group. We chose not to report a district's percentage when the population of test takers was too small or providing the information could identify individual student results. Additionally, these districts' percentages were not included in peer group averages.

Student and teacher measures

- **Attendance rate—**School district attendance rates obtained from ADE in September 2018. The district- and State-level attendance rates were calculated by dividing the number of student attendance days by the number of student membership days. The peer average percentages were calculated by adding individual districts' attendance rates and dividing by the number of districts in each peer group.

- **Graduation rate—**For districts serving high school students, the fiscal year 2017 (the most recent year for available data) 4-year cohort graduation rates obtained from ADE in November 2018. The peer average percentages were calculated by adding individual districts' graduation rates and dividing by the number of districts in each peer group. The State average is the fiscal year 2017 graduation rate reported by ADE.

- **Poverty rate—**Our analysis of U.S. Census Bureau fiscal year 2017 (the most recent year for available data) *Small Area Income and Poverty Estimates* published in December 2018. District- and State-level poverty rates were calculated by dividing the number of children 5 to 17 years old who were living at or below the federal poverty level by the total number of children 5 to 17 years old living in the district or State. The peer average

[2] A.R.S. §15-241 requires ADE, subject to the final adoption by the SBE, to develop an annual achievement profile for every public school in the State based on an A through F scale. The system measures year-to-year student academic growth; proficiency in English Language Arts, Math, and Science; the proficiency and academic growth of English learners; indicators that an elementary student is ready for success in high school and that high school students are ready to succeed in a career or higher education; and high school graduation rates.

percentages were calculated by adding individual districts' poverty rates and dividing by the number of districts in each peer group.

- **Special education population—**Our analysis of ADE-provided, school-district-reported special education unduplicated attending ADM counts and ADE-provided, school-district-reported total ADM counts. The district- and State-level percentages were calculated by dividing special education ADM by total ADM, and the peer average percentages were calculated by adding individual districts' special education population percentages and dividing by the number of districts in each peer group.

- **Students per teacher—**Our analysis of ADE-provided ADM data and certified teacher FTEs as reported by districts on their CSF Narratives. The district- and State-level ratios were calculated by dividing total ADM by total certified teacher FTEs, and the peer average ratios were calculated by adding individual districts' student-teacher ratios and dividing by the number of districts in each peer group.

- **Average teacher salary—**Our analysis of total operational spending for certified teacher salaries (excluding salaries for substitute teachers) from district-reported accounting data and the total number of certified teacher FTEs from district-reported CSF Narratives. The average teacher salary is based on total salaries paid related to teaching duties, including Proposition 301 monies, but does not include any salaries paid for additional duties such as cocurricular activities and athletics. To help ensure the average teacher salary was reasonable, we performed certain quality control procedures, such as year-to-year comparisons of district-reported data and interviews with school district officials about anomalies and variances. The district- and State-level averages were calculated by dividing the total teacher salaries by the total certified teacher FTEs, and the peer averages were calculated by adding individual districts' average teacher salaries and dividing by the number of districts in each peer group.

- **Amount from Prop 301—**Our analysis of the total Proposition 301 (Classroom Site Fund) monies spent on teacher salaries and the total number of certified teacher FTEs from district-reported accounting data and CSF Narratives. The district- and State-level averages were calculated by totaling the Proposition 301 amount paid to teachers and dividing by the total certified teacher FTEs. The peer averages were calculated by adding individual districts' average teacher salary amounts from Proposition 301 monies and dividing by the number of districts in each peer group.

- **Average years of teacher experience—**Our analysis of district-reported certified teacher FTEs and years of experience obtained from ADE in September 2018. The years of experience includes the actual, uncapped number of years of experience for each certified teacher. The district- and State-level years of experience were calculated by dividing the total number of years of experience by the total certified teacher FTEs. The peer averages were calculated by adding individual districts' average years of experience and dividing by the number of districts in each peer group.

- **Percentage of teachers in first 3 years—**Our analysis of district-reported certified teacher FTEs and years of experience obtained from ADE in September 2018. The district- and State-level percentages were calculated by dividing the number of certified teachers in their first 3 years by the total number of certified teachers. The peer average percentages were calculated by adding individual districts' percentages of teachers in their first 3 years and dividing by the number of districts in each peer group.

Per pupil revenues

- District—Our analysis of fiscal years 2017 and 2018 revenues divided by the number of students, using district-reported accounting data and AFRs, and ADE-provided budget capacities, funding formulas, and ADM data.

- Peer average—Our analysis of peer districts' per pupil revenues. The peer group averages were calculated by averaging individual districts' per pupil revenues for federal, State, local, and each of the select common revenue sources. In the place of peer averages, for less common revenues, the number of peer districts in the peer group receiving monies from the revenue source is provided.

- State average—Our analysis of district-reported accounting data and AFRs, and ADE-provided budget capacities, funding formulas, and ADM data. The State's per pupil amounts were calculated by dividing total revenues for each source by the total number of students (ADM).
- National average—National Center for Education Statistics' fiscal year 2016 data, the most recently available national data.

Operational trends and spending detail

- **Instructional spending percentage—**Our analysis of district-reported accounting data and AFRs for fiscal years 2001 through 2018. Instructional spending is further described on page b-1.
- **Students attending—**Our analysis of ADE-provided, school-district-reported ADM counts for fiscal years 2001 through 2018.
- **Total operational and instructional spending per pupil—**Our analysis of fiscal years 2001 through 2018 district-reported accounting data and AFRs (inflation adjusted to fiscal year 2018 dollars) and ADM counts.
- **Average teacher salary—**Our analysis of average teacher salary for fiscal years 2013 through 2018. Average teacher salary is described in more detail on page b-8.
- **Efficiency trends—**Our analysis of administrative cost per pupil, plant cost per square foot and square footage per student, food service cost per meal, and transportation costs per mile and per rider for fiscal years 2013 through 2018. These cost measures are described in more detail on pages b-5 and b-6.
- **Operational spending detail—**Our analysis of spending by category divided by total spending in each operational area, using fiscal year 2018 district-reported accounting data.

Financial stress assessment

We developed 6 key local measures to determine Arizona districts' financial stress. We identified whether each of the district's measures presented a low, moderate, or high risk of financial stress and indicated the stress level by a color bar for each measure. In addition to the 6 key measures, we also determined an overall financial stress level based on the results of the 6 measures. Additionally, in determining a district's overall financial stress level, we considered whether the district was in receivership as described in A.R.S. §15-103.

- **Overall financial stress level—**The overall financial stress level equally considers each of the district's financial stress measures. This report uses the following terminology to describe the overall financial stress level:
  - High—Districts with 3 or more individual measures found to be at a high financial stress level. Although they do not have 3 or more individual measures found to be at a high financial stress level, we identified Cedar USD and Murphy ESD as having high overall financial stress levels because they were in receivership as of this report's issuance.
  - Low—Districts with no measures found to be at a high financial stress level and more than half of their measures found to be at a low financial stress level; and districts with 1 measure found to be at a high financial stress level and at least two-thirds of their measures found to be at a low financial stress level.
  - Moderate—Districts that were not designated as high or low as described above.
- **Change in number of district students—**Our analysis of ADE-provided ADM data for fiscal years 2016 through 2018 to determine the direction and extent of change in the number of district students from fiscal years 2016 through 2018. When analyzing the change in number of district students, we considered the relative size of the district based on the district size categories, described on page b-5. This report uses the following terminology to describe the change in the number of district students:

- Large decrease—Districts with decreases of:
  - Very small and small districts: 15 percent or more.
  - Medium and medium-large districts: 10 percent or more.
  - Large and very large districts: 5 percent or more.
- Moderate decrease—Districts with decreases of:
  - Very small and small districts: 5 to 14.99 percent.
  - Medium and medium-large districts: 3 to 9.99 percent.
  - Large and very large districts: 2 to 4.99 percent.
- Increase—Districts with increases of:
  - Very small and small districts: 5 percent or more.
  - Medium and medium-large districts: 3 percent or more.
  - Large and very large districts: 2 percent or more.
- Steady—Districts with increases or decreases of:
  - Very small and small districts: 4.99 percent or less.
  - Medium and medium-large districts: 2.99 percent or less.
  - Large and very large districts: 1.99 percent or less.
- Small school adjustment—Districts eligible for a small school adjustment in accordance with A.R.S. §15-949, as follows:[3]
  - Elementary school districts with 125 or fewer students.
  - Union high school districts with 100 or fewer students.
  - Unified school districts with 125 or fewer elementary or 100 or fewer high school students.

- **Spending exceeded operating/capital budgets—**Our analysis of districts' overspending of the Maintenance and Operation (M&O) and Unrestricted Capital Outlay (UCO) Funds for fiscal years 2016 through 2018, using district-reported budget limits and expenditure data obtained from ADE. When analyzing overspending, we excluded approved emergency overspending. In addition, we considered the amount and frequency of overspending. This report uses the following terminology to describe the operating and capital overspending:
  - Operating—Districts with overspending in their M&O Fund that occurred in more than 1 year.
  - Capital—Districts with overspending in their UCO Fund that occurred in more than 1 year.
  - Operating and capital—Districts with both operating and capital overspending.
  - Isolated—Districts with only 1 instance of overspending in their M&O or UCO Funds.
  - No overspending—Districts with no operating or capital overspending.
- **Spending increase election results—**Our analysis of election results for operating and capital budget overrides and bond authorizations from January 1, 2016 through December 31, 2018, obtained from Arizona counties and confirmed with independent reports of election results. In assessing this measure, we considered each override type's most recent election result. This report uses the following terminology to describe the spending-increase election results:
  - Voter-approved—Districts that received voter-approval in their most recent election for each override type and bond authorization sought.
  - Voter-rejected—Districts that did not receive voter-approval in their most recent election for each override type and bond authorization sought.

[3] Arizona law allows districts with 125 or fewer elementary or 100 or fewer high school students to increase their funding through a small school adjustment.

- Mixed election results—Districts that received voter-approval in their most recent election for some but not all override types or bond authorizations sought.
- No election held—Districts that did not hold any override or bond elections.

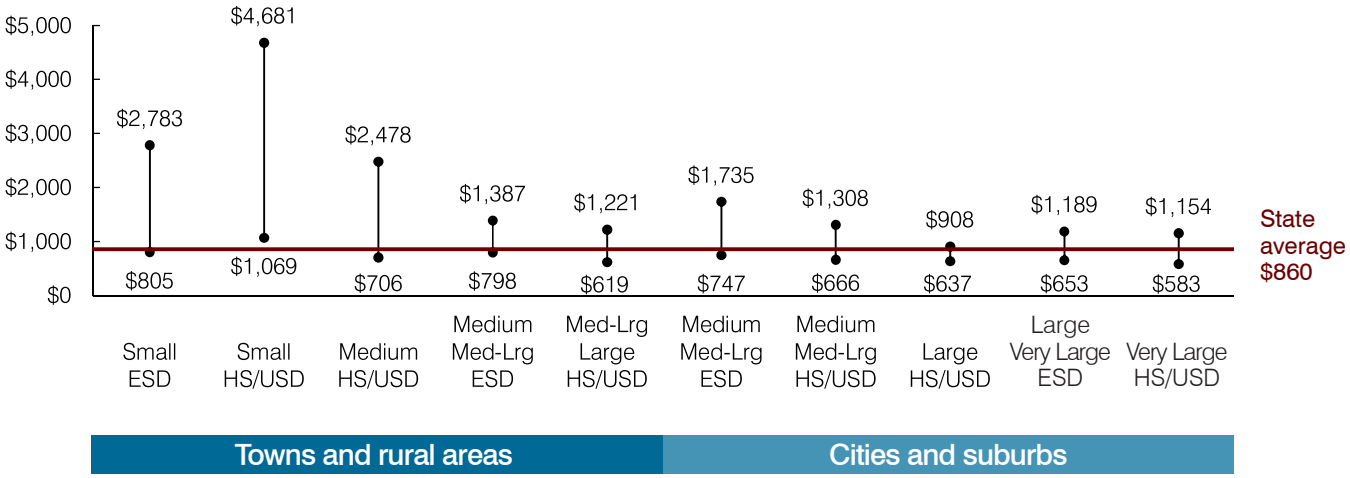
- **Operating reserve percentage—**Our analysis of each district's M&O Fund allowable budget balance carryforward for fiscal years 2016 through 2018 divided by the district's General Budget Limit for each year, using district-reported budget limit and expenditure data obtained from ADE. In assessing this measure, we considered the 3-year average operating reserve percentage and the direction of change in the reserve percentage. In addition, we considered the ending fund balance of the Impact Aid Fund that may affect the amount of operating reserve and fund balance some districts held in their M&O Fund. Lastly, we evaluated each school district that could not increase its property tax rate in fiscal year 2018 to obtain additional revenues to support their allowable operating reserve due to a frozen tax rate and the district's ending fund balances in its M&O and Impact Aid Funds as reported on its AFR filed with ADE. This report uses the following terminology to describe the operating reserve percentage:
  - Steady—Districts with reserve percentages that did not change more than 0.3 percentage points in total.
  - Increasing—Districts with reserve percentages that increased by 0.31 percentage points or more in total and did not decrease by more than 0.31 percentage points in any 1 year.
  - Decreasing—Districts with reserve percentages that decreased by 0.31 percentage points or more in total and did not increase by more than 0.31 percentage points in any 1 year.
  - Varying—Districts with reserve percentages that were not designated as steady, increasing, or decreasing as described above.
  - Impact Aid Fund reserve—Districts with adequate monies held in their Impact Aid Fund to compensate for their smaller operating reserves in their M&O Fund.
  - Frozen taxes, Unfunded—Districts with a frozen tax rate and negative balance in their M&O Fund and insufficient monies held in their Impact Aid Fund to support their allowable operating reserve.
- **Years of capital reserve held—**Our analysis of each district's total UCO Fund spending capacity for fiscal years 2016 through 2018 divided by the district's total adjusted District Additional Assistance for each year, using district-reported budget limit and expenditure data obtained from ADE. In assessing this measure, we considered the 3-year average capital reserve held and the ending fund balance of the Impact Aid Fund that may affect the amount of capital reserve some districts held in their UCO Fund. This report uses the following terminology to describe the years of capital reserve held:
  - More than 3 years—Districts with average capital spending capacity more than 3 times their average adjusted District Additional Assistance.
  - 1 to 3 years—Districts with average capital spending capacity of 1 to 3 times their average adjusted District Additional Assistance.
  - Less than 1 year—Districts with average capital spending capacity less than their average adjusted District Additional Assistance.
  - Impact Aid Fund reserve—Districts with adequate monies held in their Impact Aid Fund to compensate for their smaller capital spending capacity in their UCO Fund.
- **Current financial and internal control status—**Our analysis of district-submitted audited financial statements and related required reports for the most recently required fiscal year, generally 2017. This report uses the following terminology to describe the current financial and internal control status:
  - Compliant—Districts that substantially complied with the financial and internal control requirements prescribed in the *Uniform System of Financial Records for Arizona School Districts (USFR)*.
  - Marginally compliant—Districts that substantially complied with the financial and internal control requirements prescribed in the *USFR* but received notification to address existing deficiencies to continue to comply with the *USFR* in future years.

- Noncompliant—Districts that did not substantially comply with the financial and internal control requirements prescribed in the *USFR* or that have not submitted their most recently required audit.
- Not assessed—Districts that were not required by State or federal law to have an annual or biennial audit and did not otherwise choose to have an audit.

APPENDIX C

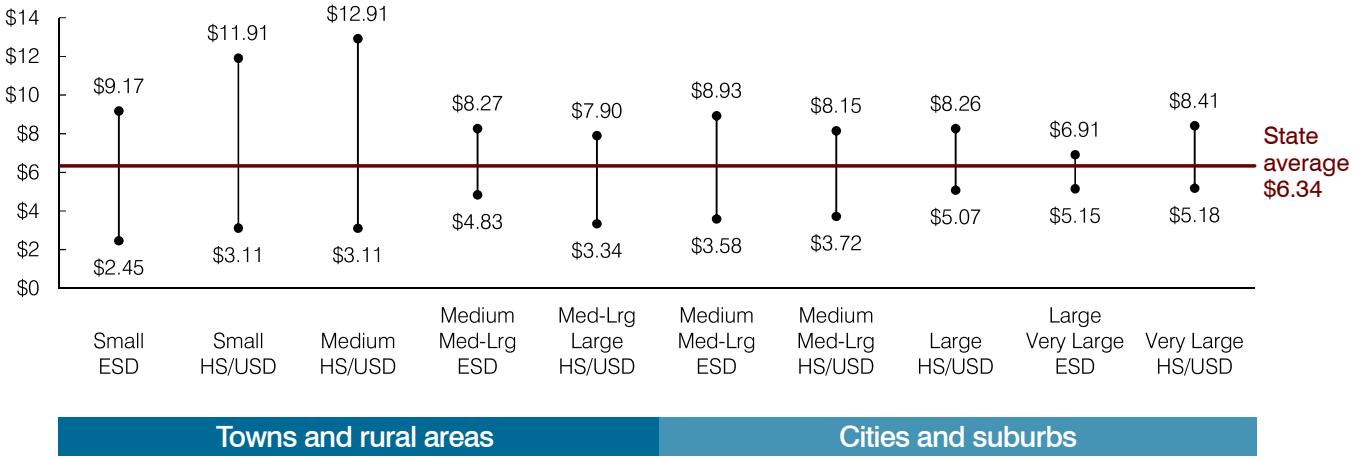
This appendix presents graphic representations of cost ranges by efficiency peer groups for administration, plant operations, food service, and transportation. Each figure shows the State average for the cost measures (e.g., administrative costs per pupil, plant operations costs per square foot, etc.), as well as the lowest and highest dollar amounts for each efficiency peer group. See Appendix B, page b-4, for more on how we developed district peer groups. Very small districts are not included in the figures because they have highly variable spending patterns making comparisons less meaningful. The wide ranges in costs within the efficiency peer groups indicate that some districts have achieved substantially lower costs than other districts with similar characteristics. Districts at the high end of the ranges should work toward improving their efficiency using performance measures and practices identified in Chapter 2, pages 9 through 12.

Figure 4
Range of administrative costs per pupil by efficiency peer group
Fiscal year 2018



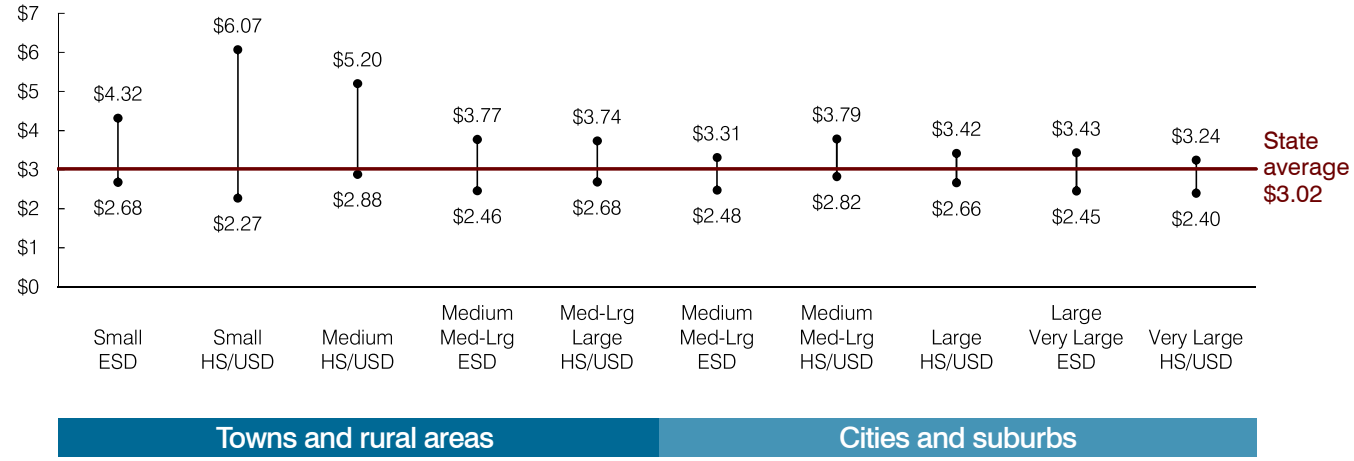
Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, fiscal year 2018 Arizona Department of Education student membership data, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 5
Range of plant operations costs per square foot by efficiency peer group
Fiscal year 2018



Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, fiscal year 2018 School Facilities Board square footage data, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 6
Range of food service costs per meal by efficiency peer group
Fiscal year 2018



Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting and meals-served data and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 7
Range of transportation costs per mile by efficiency peer group
Fiscal year 2018

Source: Auditor General staff analysis of fiscal year 2018 district-reported accounting data, miles driven, and riders transported and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.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