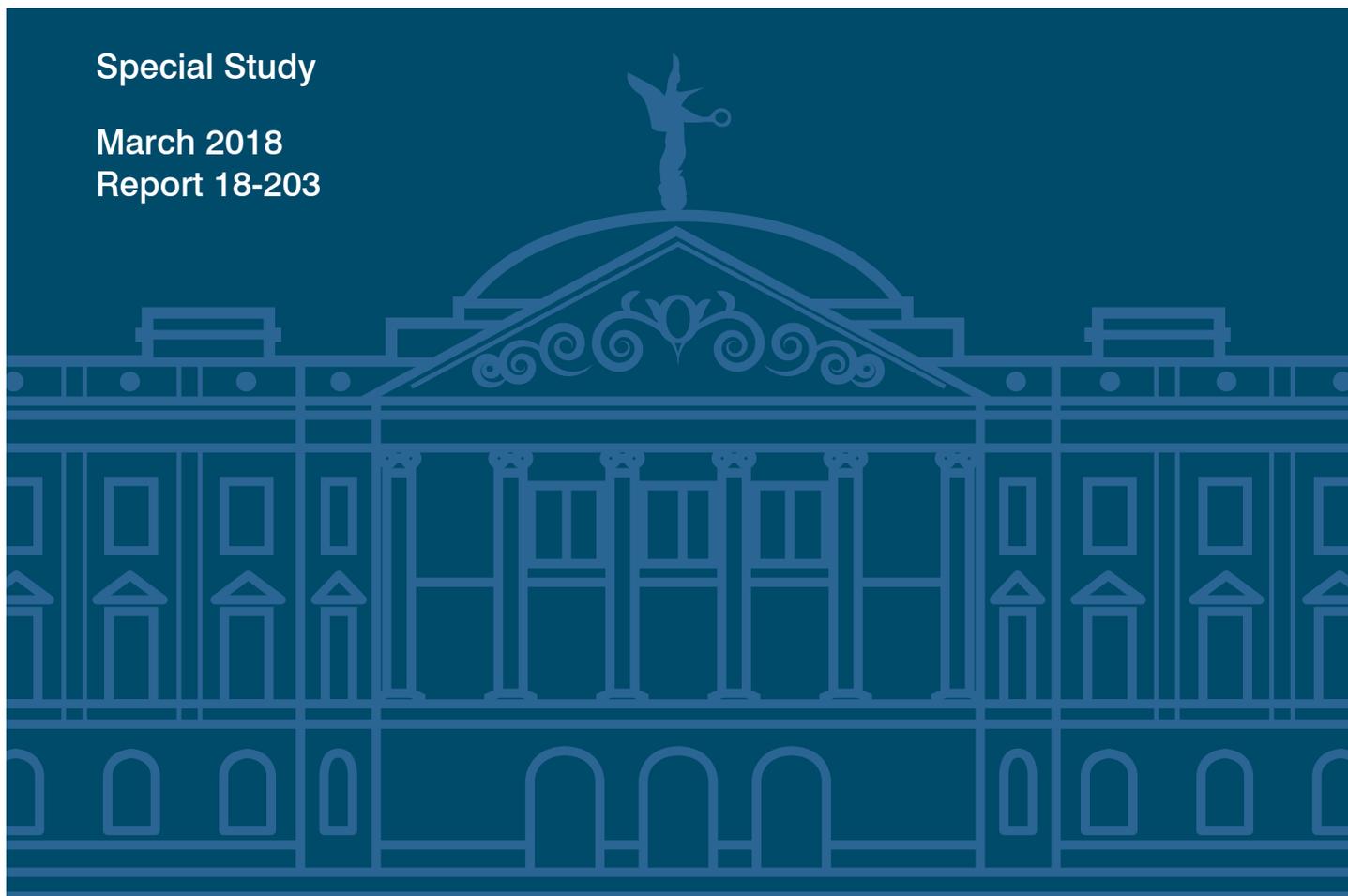


Arizona School District Spending Fiscal Year 2017

Special Study

March 2018
Report 18-203



A Report to the Arizona Legislature

Debra K. Davenport
Auditor General





The Auditor General is appointed by the Joint Legislative Audit Committee, a bipartisan committee composed of five senators and five representatives. Her mission is to provide independent and impartial information and specific recommendations to improve the operations of state and local government entities. To this end, she provides financial audits and accounting services to the State and political subdivisions, investigates possible misuse of public monies, and conducts performance audits and special reviews of school districts, state agencies, and the programs they administer.

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March 1, 2018

Members of the Arizona Legislature

The Honorable Doug Ducey, Governor

I am pleased to present our report, *Arizona School District Spending, Fiscal Year 2017*, 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 two-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 2017, Arizona districts spent 53.8 percent of available operating dollars on instruction—the first increase in the instructional spending percentage in 13 years. However, since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.8 percentage points, while the percentages spent on all other operational areas have increased. Due in part to Proposition 123, between fiscal years 2016 and 2017, districts' operational spending increased by \$341 million with \$200 million of the increase spent on instruction. With the additional instructional spending, between fiscal years 2016 and 2017, the State's average teacher salary increased from \$46,384 to \$48,372. Compared to national averages, in fiscal year 2017, Arizona districts spent approximately \$3,300 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 first time 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,

Debbie Davenport
Auditor General



Arizona School District Spending Fiscal Year 2017

CONCLUSION: In fiscal year 2017, Arizona districts spent 53.8 percent of available operating dollars on instruction—the first increase in the instructional spending percentage in 13 years. However, since its peak in fiscal year 2004, the State’s instructional spending percentage has declined 4.8 percentage points, while the percentages spent on all other operational areas have increased. Between fiscal years 2016 and 2017, districts’ operational spending increased by \$341 million with \$200 million of the increase spent on instruction. In May 2016, voters passed Proposition 123, which provided districts with approximately \$262 million of additional resources at the end of fiscal year 2016 and approximately \$263 million of additional resources in fiscal year 2017. With the additional instructional spending, between fiscal years 2016 and 2017, the State’s average teacher salary increased from \$46,384 to \$48,372. 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 \$3,300 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 53.8 percent, but remains lower than highest level spent since monitoring began in 2001

In fiscal year 2017, Arizona districts spent 53.8 percent of their available operating dollars on instruction, representing the first increase in 13 years—In fiscal year 2017, Arizona school districts spent 53.8 percent of available operating dollars on instruction. This is a slight increase over the 53.5 percent spent on instruction in fiscal year 2016 and the first increase in the instructional spending percentage in 13 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 to 53.8 percent.

District operational spending increased \$341 million between fiscal years 2016 and 2017 with \$200 million of the increase spent on instruction

—Between fiscal years 2016 and 2017, Arizona school districts’ operational spending increased by approximately \$341 million, or \$395 per pupil. Much of the increase in spending was the result of Proposition 123. 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 these monies were

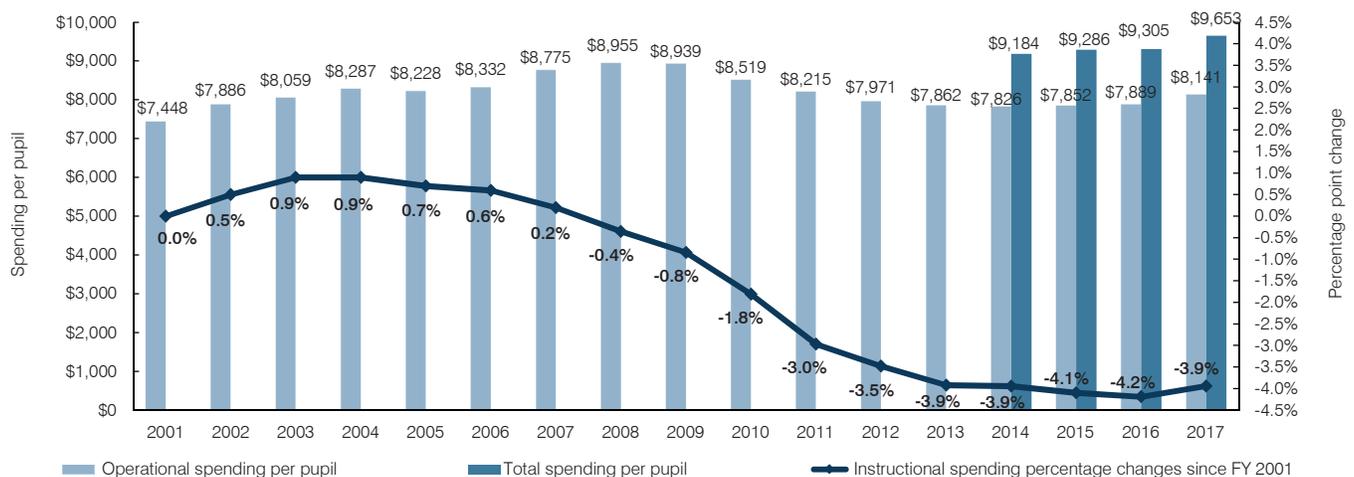
Comparison of expenditures by operational area, in total and per pupil Fiscal year 2016 versus 2017

	2016	2017	Total increase	Per pupil increase
Instruction	\$3,757,466,481	\$3,958,363,889	\$200,897,408	\$232
Administration	730,535,703	763,609,229	33,073,526	38
Plant operations	851,357,174	884,032,443	32,675,269	38
Food service	375,997,915	381,401,751	5,403,836	7
Transportation	329,849,846	344,766,680	14,916,834	17
Student support	573,359,632	614,408,571	41,048,939	46
Instruction support	403,105,191	416,864,985	13,759,794	17
Total	\$7,021,671,942	\$7,363,447,548	\$341,775,606	\$395

not spent in fiscal year 2016. 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, and districts had the option of using the monies for operational or capital purposes. Between fiscal years 2016 and 2017, districts increased spending in all operational areas, with the majority of the increased spending in instruction, which resulted in a slight increase in the state-wide instructional spending percentage. With the additional instructional spending in fiscal year 2017, districts increased the State's average teacher salary from \$46,384 to \$48,372. Additionally, districts employed a total of 211 additional teachers, which resulted in a slight reduction in the State's students per teacher ratio.

Despite a slight increase between fiscal years 2016 and 2017, 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 9.3 percent, from \$7,448 (\$5,374 unadjusted) in fiscal year 2001 to \$8,141 in fiscal year 2017. Although districts spent a similar amount per pupil in fiscal year 2017 as they did in fiscal year 2004 when adjusted for inflation, districts spent only 53.8 percent on instruction in fiscal year 2017 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 4.8 percentage points. At the same time, the percentage of available operating dollars spent in all other operational areas has increased. At a state level, the decline in the instructional spending percentage between fiscal years 2004 and 2017 is indicative of fewer actual dollars being spent on instruction. After controlling for inflation, total per pupil spending decreased \$146 per pupil, or 1.8 percent, between fiscal years 2004 and 2017. At this same time, spending on instruction decreased an even greater amount, \$477 per pupil, or 9.8 percent, while spending in 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 2017 dollars)
Fiscal years 2001 through 2017**



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

Districts spent at widely differing levels—In fiscal year 2017, 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 2017 spending by district ranged from \$6,175 per pupil to \$21,446 per pupil. Districts also varied greatly in their nonoperational spending, which includes costs incurred for the acquisition of 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 2017, after excluding Arizona's very small districts, nonoperational spending by district ranged from \$131 per pupil to \$11,308 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 \$597 per pupil for administration; another spent \$1,006 per pupil.
- A medium-sized, rural, unified district spent \$3.08 per square foot for plant operations; another spent \$12.47 per square foot.
- A medium-sized, rural, unified district spent \$2.71 per meal; another spent \$5.03 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; one district spent \$3.26 per mile, and the other spent \$9.01 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 six district-level measures that provide information on district finances, identify potential problems, and suggest the need for possible corrective action. In fiscal year 2017, 4 districts were found to have a high financial stress level, 39 a moderate level, and 164 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.

**Number of districts by overall financial stress level
Fiscal year 2017**

Stress level	Number of districts
High stress	4
Moderate stress	39
Low stress	164

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 2017, Arizona school districts spent approximately \$3,300 less per pupil than the 2015 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 more per pupil on equipment but less on land and buildings and interest, and a similar amount on 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 2017, Arizona districts spent 53.8 percent of available operating dollars on instruction, 6.9 percentage points below the national average of 60.7 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 2016 national average (most recent year national data available), Arizona's average teacher salary was \$46,384 that year, while the national average was \$58,353. 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 2016, Arizona's class size was 18.6 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.

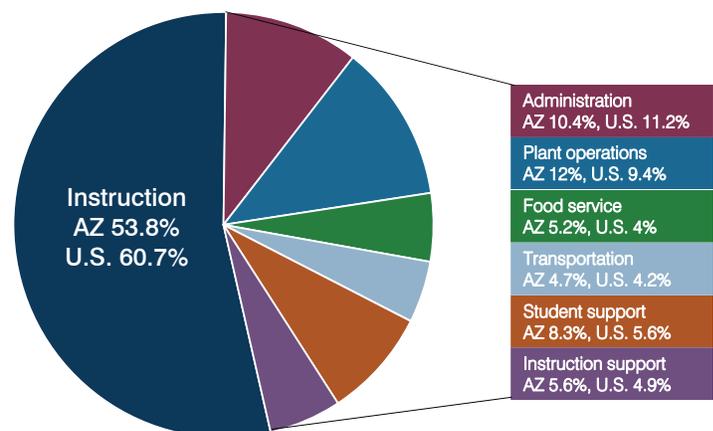
Comparison of Arizona and U.S. per pupil spending by area

Fiscal years 2017 (Arizona) and 2015 (U.S.)

Spending by area	Arizona average 2017	National average 2015	Difference
Instruction	\$ 4,377	\$ 6,953	\$(2,576)
Administration	844	1,277	(433)
Plant operations	977	1,078	(101)
Food service	422	459	(37)
Transportation	381	483	(102)
Student support	679	644	35
Instruction support	461	560	(99)
Total operational	8,141	11,454	(3,313)
Land and buildings	691	800	(109)
Equipment	424	207	217
Interest	236	347	(111)
Other	161	167	(6)
Total nonoperational	1,512	1,521	(9)
Total per pupil spending	\$ 9,653	\$ 12,975	\$(3,322)

Comparison of Arizona and U.S. spending by operational area

Fiscal years 2017 (Arizona) and 2015 (U.S.)



Individual district information

In addition to the state-wide information discussed earlier, this report also contains two-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 17th annual report analyzing school district spending, has two main objectives:

- It analyzes state-wide operational spending trends in instruction and six 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 two-page summary of the State's performance on various financial and student achievement measures, including trend information, and two-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 six 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 auditors would normally perform during an audit. However, to help ensure that information used in this report was complete and reasonable, auditors 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, auditors reviewed the reasonability of changes in related measures, such as whether a district's square footage increased after opening a new school.

The Auditor General and her staff express their 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 for the acquisition of 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 53.8 percent, but remains lower than highest level spent since monitoring began in 2001

In fiscal year 2017, Arizona school districts spent 53.8 percent of available operating dollars on instruction, representing a slight increase over the prior year and the first increase in 13 years.² Between fiscal years 2016 and 2017, Arizona school districts' operational spending increased by approximately \$341 million, or \$395 per pupil, and much of the increase in spending was the result of Proposition 123.³ Districts spent about \$200 million of the increase on instruction and increased the State's average teacher salary by \$1,988, to \$48,372. Additionally, districts employed 211 additional teachers between fiscal years 2016 and 2017. Despite the slight increase in the instructional spending percentage in fiscal year 2017, the percentage remains lower than in most of the prior years since monitoring began in fiscal year 2001. Since its peak in fiscal year 2004, the State's instructional spending percentage has declined 4.8 percentage points. At the same time, the percentage of available operating dollars spent in all other operational areas has increased.

Instructional spending percentage increased slightly, representing the first increase in 13 years

In fiscal year 2017, Arizona school districts spent 53.8 percent of available operating dollars on instruction. This is a slight increase over the 53.5 percent spent on instruction in fiscal year 2016 and the first increase in the instructional spending percentage in 13 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.⁴ Soon after, in fiscal years 2003 and 2004, the State's instructional spending percentage reached its highest level during this 17-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 to 53.8 percent.

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.

² Available operating dollars are those used for a district's day-to-day operations. This operational spending excludes costs associated with the acquisition of 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 May 2016, voters passed Proposition 123, which provides school districts with additional resources each year. In fiscal year 2016, districts were provided approximately \$262 million of additional resources, and in fiscal year 2017, approximately \$263 million.

⁴ 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.

District operational spending increased \$341 million between fiscal years 2016 and 2017 with \$200 million of the increase spent on instruction

As shown in Table 1, between fiscal years 2016 and 2017, Arizona school districts' operational spending increased by approximately \$341 million, or \$395 per pupil. Much of the increase in spending was the result of Proposition 123.

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. Unspent fiscal year 2016 Proposition 123 monies and additional fiscal year 2017 Proposition 123 monies were available to be spent starting at the beginning of fiscal year 2017 as school districts were aware of the amount of fiscal year 2017 monies they would be receiving in that year. 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, and districts had the option of using the

monies for operational or capital purposes.⁵

As shown in Table 1, between fiscal years 2016 and 2017, districts increased spending in all operational areas, with the majority of the increased spending in instruction. Specifically, districts spent approximately \$200 million, or \$232 per pupil, more in instruction in fiscal year 2017 than in fiscal year 2016, which resulted in a slight increase in the state-wide instructional spending percentage.

As shown in Table 2, with the additional instructional spending in fiscal year 2017, districts increased the State's average teacher salary by \$1,988, or 4.3 percent, to \$48,372.

Table 1
Comparison of expenditures by operational area, in total and per pupil
Fiscal year 2016 versus 2017

	2016	2017	Total increase	Per pupil increase
Instruction	\$3,757,466,481	\$3,958,363,889	\$200,897,408	\$232
Administration	730,535,703	763,609,229	33,073,526	38
Plant operations	851,357,174	884,032,443	32,675,269	38
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Student support	573,359,632	614,408,571	41,048,939	46
Instruction support	403,105,191	416,864,985	13,759,794	17
Total	\$7,021,671,942	\$7,363,447,548	\$341,775,606	\$395

Source: Auditor General staff analysis of district-reported accounting data and Arizona Department of Education student membership data for fiscal years 2016 and 2017.

Table 2
Comparison of average teacher salary, teacher full-time equivalents (FTEs), and students per teacher
Fiscal year 2016 versus 2017

	2016	2017	Increase/ (Decrease)
Average teacher salary	\$46,384	\$48,372	\$1,988
Teacher FTEs	48,516	48,727	211
Students per teacher	18.6	18.5	(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 2016 and 2017.

⁵ Capital purchases are those costs associated with the acquisition of capital assets such as purchasing or leasing land, buildings, and equipment or purchasing certain supplies including textbooks, library books, and instructional aids.

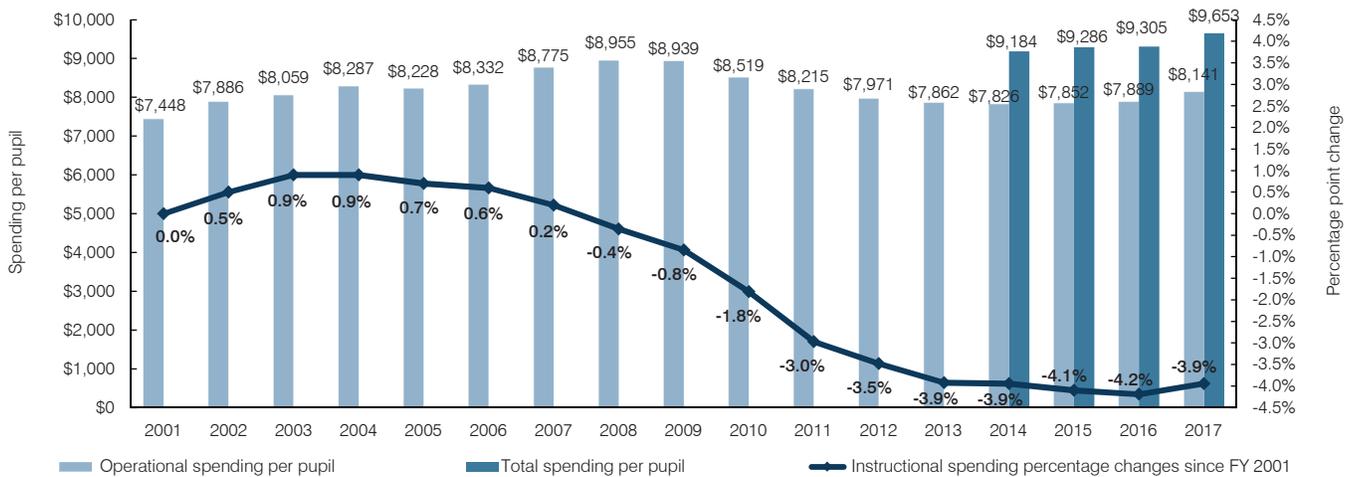
Additionally, districts employed a total of 211 additional teachers, which resulted in a slight reduction in the State’s students per teacher ratio.

Despite a slight increase between fiscal years 2016 and 2017, 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 2017, the percentage remains lower than in prior years. Since its peak in fiscal year 2004, the instructional spending percentage has declined 4.8 percentage points. At the same time, the percentage of available operating dollars spent in 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 9.3 percent, from \$7,448 (\$5,374 unadjusted) in fiscal year 2001 to \$8,141 in fiscal year 2017. As discussed earlier, districts began receiving CSF monies in fiscal year 2002, which contributed to a \$438 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. As stated earlier, in fiscal year 2017, districts increased operational spending as well as the percentage of resources spent on instruction. Although districts spent a similar amount per pupil in fiscal year 2017 as they did in fiscal year 2004 when adjusted for inflation, districts spent only 53.8 percent on instruction in fiscal year 2017 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 pupil¹ and change in instructional spending percentage since fiscal year 2001 (inflation adjusted to fiscal year 2017 dollars)
Fiscal years 2001 through 2017



¹ Total spending per pupil was not presented prior to the fiscal year 2015 report. For that report, auditors 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 2017.

Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2017 dollars and Arizona Department of Education student membership data for fiscal years 2001 through 2017.

District spending shifted from instruction to other areas—Since its peak in fiscal year 2004, the State’s instructional spending percentage has declined 4.8 percentage points. As shown in Figure 2, at the same time, the percentage of available operating dollars spent in 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 2017



Source: Auditor General staff analysis of district-reported accounting data for fiscal years 2004 and 2017.

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 2017, Arizona school districts added 22.6 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 155 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, Office of the Auditor General 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 2017 is indicative of fewer actual dollars being spent on instruction. As shown in Table 3, after controlling for inflation, total per pupil spending decreased \$146 per pupil, or 1.8 percent, between fiscal years 2004 and 2017. At this same time, spending on instruction decreased an even greater amount, \$477 per pupil, or 9.8 percent, while spending in 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 2017 dollars)
Fiscal year 2004 versus 2017

	2004	2017	Increase/ (Decrease)
Instruction	\$4,854	\$4,377	\$(477)
Administration	785	844	59
Plant operations	974	977	3
Food service	391	422	31
Transportation	331	381	50
Student support	578	679	101
Instruction support	374	461	87
Total	\$8,287	\$8,141	\$(146)

Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2017 dollars and Arizona Department of Education student membership data for fiscal years 2004 and 2017.



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

In fiscal year 2017, there was a wide range in per pupil spending among Arizona districts, partially because districts differ in certain characteristics, such as size, location, and poverty level. However, wide ranges in per pupil spending among districts with similar characteristics indicate the potential for improved efficiency at some districts.

Districts spent at widely differing levels

In fiscal year 2017, 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 2017 operational spending by district ranged from \$6,175 per pupil to \$21,446 per pupil. As shown in Table 4, on average, the 30 highest-spending districts spent \$13,362 per pupil, \$6,351 more than the \$7,011

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.

Table 4
Comparison of operational spending per pupil for Arizona’s highest- and lowest-spending districts
Fiscal year 2017

	Highest-spending districts’ average ¹	Lowest-spending districts’ average ¹	Difference
Instructional spending percentage	46.7%	54.0%	
Total operational spending	\$13,362	\$7,011	\$6,351
Instruction	6,239	3,783	2,456
Administration	1,927	772	1,155
Plant operations	2,072	832	1,240
Food service	655	393	262
Transportation	809	349	460
Student support	1,023	525	498
Instruction support	637	357	280

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 2017 district-reported accounting data and Arizona Department of Education student membership data.

Districts also varied greatly in their nonoperational spending. Nonoperational spending includes costs incurred for the acquisition of 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 2017, after excluding Arizona’s very small districts, nonoperational spending by district ranged from \$131 per pupil to \$11,308 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.

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 2017

Revenue source ¹	Highest-spending districts' average ²	Lowest-spending districts' average ²	Difference
Federal impact aid	\$3,205	\$2	\$3,203
Federal grants	2,326	834	1,492
Transportation funding	1,337	317	1,020
Small school adjustment	558	0	558
Additional budgetary funding	1,734	1,268	466
Desegregation	216	10	206
Voter-approved budget overrides	370	331	39
Tax credits	35	49	(14)

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 2017 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 \$3,203 more per pupil in federal impact aid, \$1,492 more per pupil in federal grants, and \$1,020 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 2017, the average cost per mile for urban districts traveling between 231 and 290 miles per rider was \$4.28, while rural districts traveling a similar range of miles per rider averaged \$2.98 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 potentially allow more monies to be directed to instruction. Office of the Auditor General 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 \$597 per pupil for administration; another spent \$1,006 per pupil.
- A medium-sized, rural, unified district spent \$3.08 per square foot for plant operations; another spent \$12.47 per square foot.
- A medium-sized, rural, unified district spent \$2.71 per meal; another spent \$5.03 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; one district spent \$3.26 per mile, and the other spent \$9.01 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 overproduction of 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 six 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.

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

As shown in Table 6, in fiscal year 2017, 4 districts were found to have a high financial stress level, 39 a moderate level, and 164 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, 22 of the remaining 31 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.

Table 6
Number of districts by overall financial stress level
Fiscal year 2017

Stress level	Number of districts
High stress	4
Moderate stress	39
Low stress	164

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



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

In fiscal year 2017, Arizona school districts spent approximately \$3,300 less per pupil than the 2015 national average—the most recent year for available national data. This lower spending occurred in operational rather than nonoperational areas. Arizona school districts also allocated their resources differently than national averages, spending a lower percentage of resources on instruction and administration and a greater percentage on all other operational areas.

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

As shown in Table 7, in fiscal year 2017, Arizona school districts spent approximately \$3,300 less per pupil in total than the 2015 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 62 Arizona districts spent more than the national per pupil operational average. Forty-four 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. Sixteen of the 62 districts received federal impact aid monies as a result of their location on tax-exempt federal lands.

As shown in Table 7, Arizona districts’ nonoperational spending was similar to the national average. Arizona districts spent more per

Table 7
Comparison of Arizona and U.S. per pupil spending by area
Fiscal years 2017 (Arizona) and 2015 (U.S.)

Spending by area	Arizona average 2017	National average 2015	Difference
Instruction	\$ 4,377	\$ 6,953	\$ (2,576)
Administration	844	1,277	(433)
Plant operations	977	1,078	(101)
Food service	422	459	(37)
Transportation	381	483	(102)
Student support	679	644	35
Instruction support	461	560	(99)
Total operational	8,141	11,454	(3,313)
Land and buildings	691	800	(109)
Equipment	424	207	217
Interest	236	347	(111)
Other	161	167	(6)
Total nonoperational	1,512	1,521	(9)
Total per pupil spending	\$ 9,653	\$ 12,975	\$(3,322)

Source: Auditor General staff analysis of fiscal year 2017 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 2014-15*, January 2018.

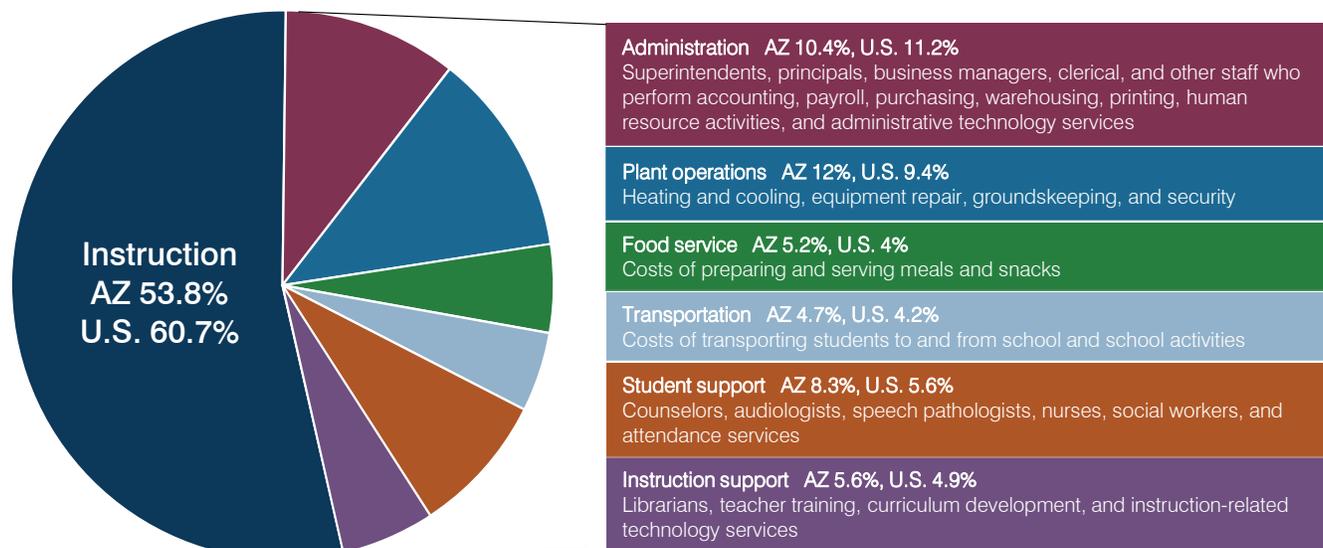
pupil on equipment but less on land and buildings and interest, and a similar amount on other programs, such as adult education and community service that are outside the scope of preschool through grade 12 education.

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 2017, 14 percent of Arizona school district revenues were from federal sources, and 86 percent were from state and local sources. Arizona’s percentages were the same in fiscal year 2015, which was the most recent year for available national data. In fiscal year 2015, 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 fifth 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 2017, Arizona districts spent 53.8 percent of available operating dollars on instruction, 6.9 percentage points below the most recent national average of 60.7 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 2016 national average (the most recent year for available national data), Arizona’s average teacher salary was \$46,384 that year, while the national average was \$58,353. 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 2016 national average (the most recent year for available national data), Arizona districts averaged 18.6 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 2017 (Arizona) and 2015 (U.S.)



Source: Auditor General staff analysis of fiscal year 2017 district-reported accounting data and National Center for Education Statistics *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014-15*, January 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 spending¹: \$7,363,447,548

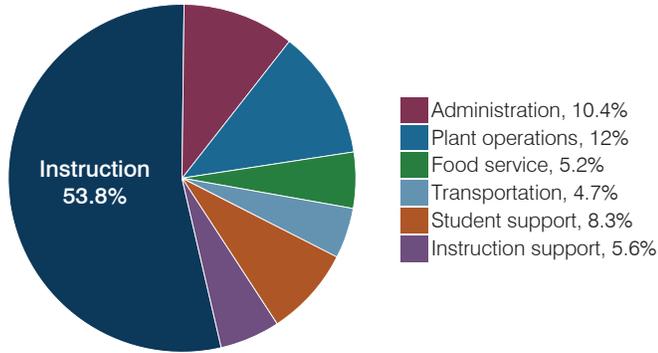
Number of districts: 236

Students attending: 904,453

Number of schools: 1,373

OPERATIONAL EFFICIENCY

Spending by operational area



Efficiency measures

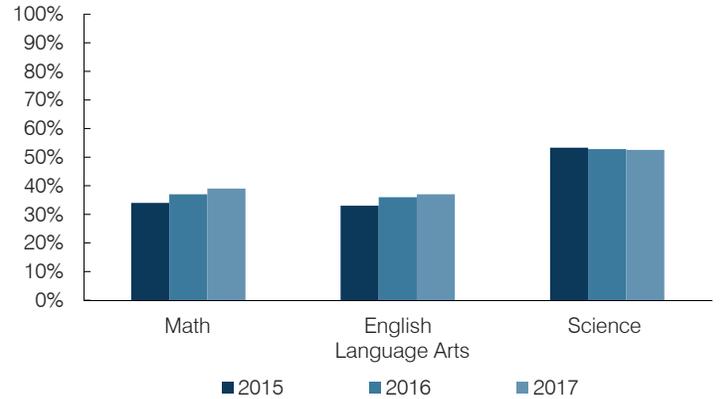
Operational area	Measure	2015	2016	2017
Administration	Cost per pupil	\$780	\$806	\$844
	Students per administrative position	67	67	67
Plant operations	Cost per square foot	\$6.09	\$6.10	\$6.30
	Square footage per student	153	154	155
Food service	Cost per meal	\$2.79	\$2.81	\$2.88
Transportation	Cost per mile	\$3.66	\$3.72	\$3.84
	Cost per rider	\$1,071	\$1,092	\$1,198

Per pupil spending

Spending by area	State			National average 2015
	2015	2016	2017	
Instruction	\$4,105	\$4,145	\$4,377	\$ 6,953
Administration	780	806	844	1,277
Plant operations	930	939	977	1,078
Food service	417	415	422	459
Transportation	371	364	381	483
Student support	613	633	679	644
Instruction support	442	444	461	560
Total operational	\$7,658	\$7,746	\$8,141	\$11,454
Land and buildings	\$ 641	\$ 621	\$ 691	\$ 800
Equipment	383	400	424	207
Interest	225	216	236	347
Other	150	153	161	167
Total nonoperational	\$1,399	\$1,390	\$1,512	\$ 1,521
Total per pupil spending	\$9,057	\$9,136	\$9,653	\$12,975

STUDENT ACHIEVEMENT, STUDENT AND TEACHER MEASURES, AND REVENUES

Students who passed state assessments



Student and teacher measures

Measure	2015	2016	2017
Attendance rate	94%	N/A	94%
Graduation rate	78%	80%	N/A
Poverty rate	23%	22%	N/A
Special education population	N/A	N/A	12%
Students per teacher	18.6	18.6	18.5
Average teacher salary	\$46,008	\$46,384	\$48,372
Amount from Prop 301	\$5,034	\$5,315	\$5,840
Average years of teacher experience	11.0	11.0	11.3
Percentage of teachers in first 3 years	20%	20%	19%

Per pupil revenues

Revenues by source	State		National average 2015
	2016	2017	
Federal	\$1,318	\$1,318	\$1,094
State	3,780	3,831	6,000
Local	4,268	4,443	5,809
Total per pupil revenues	\$9,349	\$9,592	\$12,903

Select revenues from common sources

	2016	2017	N/A
Equalization formula funding	\$5,471	\$5,503	N/A
Amount from Prop 123	243	245	N/A
Prop 123 additional funding	46	46	N/A
Grants	1,182	1,185	N/A
Donations and tax credits	86	89	N/A

Select 2017 revenues from less common sources

	Amount received range per pupil		Number of districts receiving
	Min	Max	
Desegregation	\$91	\$2,029	18
Small school adjustment	411	34,561	48
Federal impact aid	5	40,384	49
Voter-approved levy increases	1	8,015	133

¹ See Appendix B for sources and methodology.

Instructional spending percentage

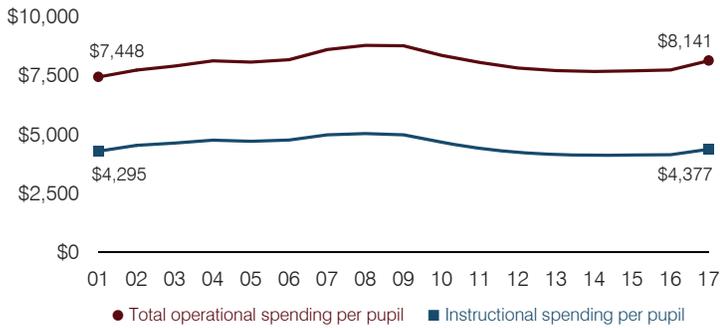
Year:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Percentage:	57.7	58.2	58.6	58.6	58.4	58.3	57.9	57.3	56.9	55.9	54.7	54.2	53.8	53.8	53.6	53.5	53.8

TRENDS AND FINANCIAL STRESS ASSESSMENT Fiscal years as indicated	OPERATIONAL SPENDING DETAIL Fiscal year 2017
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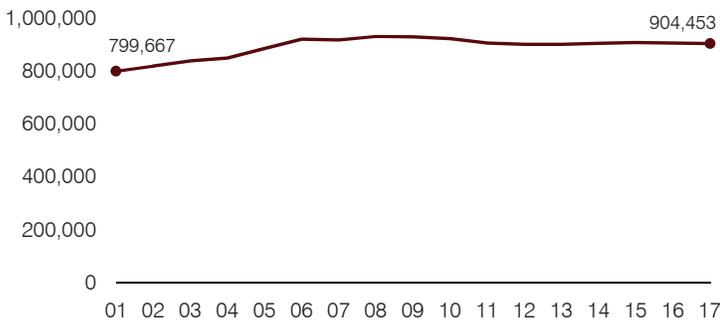
5-year spending trend (2012 through 2017)

Total operational spending per pupil, adjusted for inflation, increased by 2 percent from \$7,971 in fiscal year 2012 to \$8,141 in fiscal year 2017. The percentage of dollars spent on instruction decreased from 54.2 to 53.8 percent. As a percentage of total operational spending, administration and student support increased slightly while all other noninstructional areas remained relatively stable. The number of students attending has remained relatively stable during this 5-year period.

Total operational and instructional spending per pupil (inflation adjusted to 2017 dollars)



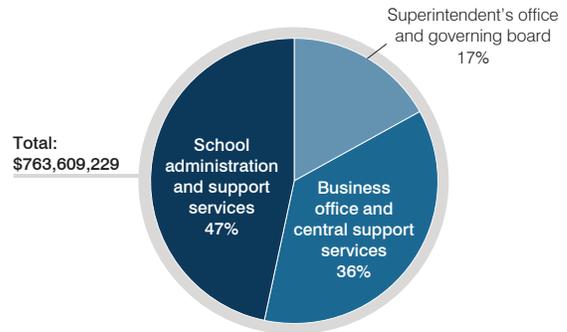
Students attending



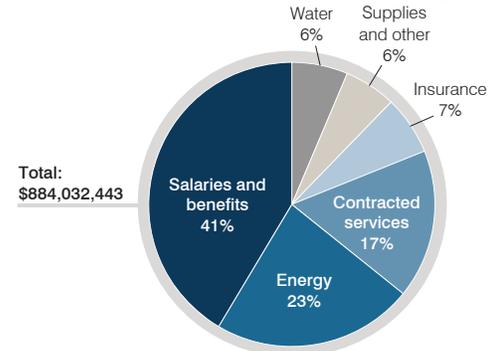
Financial stress assessment

Overall financial stress level:	Number of districts		
	Low	Moderate	High
Measure: 2015 through 2017	164	39	4
Change in number of district students	151	39	17
Spending exceeded operating/capital budgets	179	18	10
Spending increase election results	77	4	11
Operating reserve percentage, Trend	174	10	23
Years of capital reserve held	137	61	9
Current financial and internal control status	143	42	8

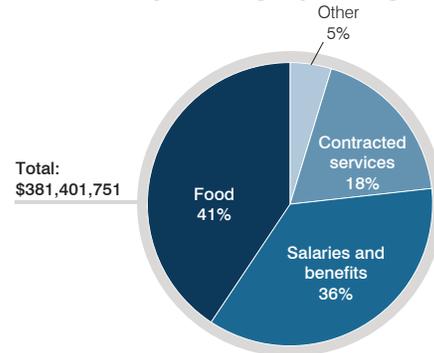
Administrative spending by category



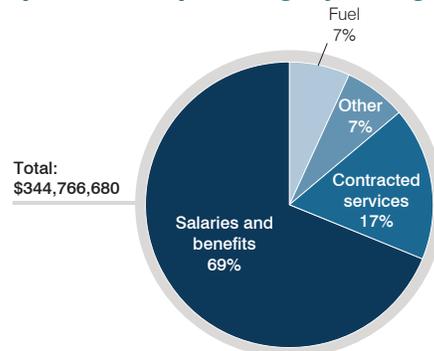
Plant operations spending by category



Food service spending by category



Transportation spending by category





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 2017 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 2017 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 2017 Arizona’s Measurement of Educational Readiness to Inform Teaching (AzMERIT) test and the fiscal year 2017 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 2017

Peer group		Instructional spending percentage		Instructional spending percentage	
Number	Description	District name	District name	District name	District name
1	Very large unified and union high school districts in cities and suburbs	Peer group average	56.4%		
		Chandler USD	60.6	Dysart USD	56.2
		Gilbert USD	60.1	Mesa USD	55.2
		Deer Valley USD	60.0	Phoenix UHSD	53.6
		Paradise Valley USD	57.0	Scottsdale USD	53.6
		Peoria USD	56.9	Tucson USD	50.9
		Peer group average	53.2%		
2	Large unified and union high school districts in cities and suburbs	Higley USD	59.8	Amphitheater USD	53.1
		Glendale UHSD	57.3	Flagstaff USD	51.9
		Marana USD	54.1	Vail USD	51.4
		Tempe UHSD	54.0	Sunnyside USD	49.5
		Tolleson UHSD	53.3	Yuma UHSD	47.1

Table 8 continued

Peer group		Instructional spending percentage		Instructional spending percentage	
Number	Description	District name		District name	
3	Medium-large and medium unified and union high school districts in cities and suburbs	Peer group average	53.1%		
		Lake Havasu USD	56.1	Flowing Wells USD	53.8
		Tanque Verde USD	56.0	Cave Creek USD	53.7
		Queen Creek USD	55.1	Agua Fria UHSD	52.5
		Humboldt USD	54.7	Fountain Hills USD	51.1
		Sierra Vista USD	54.3	Prescott USD	50.2
		Buckeye UHSD	54.2	J.O. Combs USD	49.2
		Apache Junction USD	54.1	Casa Grande UHSD	47.4
		Catalina Foothills USD	53.9		
4	Large and medium-large unified and union high school districts in towns and rural areas	Peer group average	52.0%		
		Safford USD	64.5	Nogales USD	51.2
		Show Low USD	58.5	Kingman USD	50.6
		Snowflake USD	57.1	Santa Cruz Valley USD	50.2
		Sahuarita USD	55.5	Douglas USD	49.8
		Payson USD	52.2	Winslow USD	49.6
		Blue Ridge USD	51.9	Whiteriver USD	49.0
		Florence USD	51.9	Chinle USD	48.5
		Chino Valley USD	51.5	Coolidge USD	47.3
Maricopa USD	51.5	Page USD	44.8		
5	Medium unified and union high school districts in towns and rural areas	Peer group average	50.2%		
		Pima USD	62.3	Bisbee USD	50.5
		Thatcher USD	61.1	Saddle Mountain USD	49.7
		Morenci USD	59.0	St. Johns USD	49.6
		Mingus UHSD	58.3	Window Rock USD	48.9
		Willcox USD	56.8	Globe USD	48.8
		Camp Verde USD	56.7	Wickenburg USD	47.0
		Miami USD	54.5	Ganado USD	45.3
		Holbrook USD	53.8	San Carlos USD	45.2
		Williams USD	53.0	Tombstone USD	44.9
		Parker USD	51.1	Baboquivari USD	42.7
		Sedona-Oak Creek Joint USD	51.0	Sanders USD	42.7
		Benson USD	50.8	Tuba City USD	42.2
		Colorado River UHSD	50.8	Piñon USD	40.0
		Mammoth-San Manuel USD	50.8	Kayenta USD	37.3
Round Valley USD	50.7				

Table 8 continued

Peer group			Instructional spending percentage		Instructional spending percentage
Number	Description	District name		District name	
6	Small unified and union high school districts in towns and rural areas	Peer group average	48.7%		
		Bagdad USD	56.5	Littlefield USD	49.6
		Colorado City USD	54.4	Ash Fork Joint USD	49.3
		Ray USD	54.3	Superior USD	48.4
		Ajo USD	53.8	Hayden-Winkelman USD	47.2
		St. David USD	52.4	Duncan USD	47.0
		Heber-Overgaard USD	51.3	Joseph City USD	45.8
		Antelope UHSD	51.1	Santa Cruz Valley UHSD	43.7
		Fredonia-Moccasin USD	50.1	Gila Bend USD	41.2
		Mayer USD	49.8	Grand Canyon USD	41.2
		Ft. Thomas USD	49.6	Red Mesa USD	38.1
7	Very large and large elementary school districts in cities and suburbs	Peer group average	54.1%		
		Kyrene ESD	60.4	Pendergast ESD	53.6
		Litchfield ESD	58.5	Glendale ESD	52.5
		Alhambra ESD	56.4	Tempe ESD	52.1
		Cartwright ESD	55.9	Roosevelt ESD	48.7
		Washington ESD	53.7	Yuma ESD	48.7
8	Medium-large and medium elementary school districts in cities and suburbs	Peer group average	51.3%		
		Liberty ESD	57.1	Madison ESD	51.3
		Wilson ESD	56.8	Avondale ESD	50.9
		Fowler ESD	54.4	Phoenix ESD	49.8
		Laveen ESD	54.0	Casa Grande ESD	49.5
		Union ESD	53.0	Balsz ESD	49.1
		Tolleson ESD	52.9	Crane ESD	48.8
		Osborn ESD	52.6	Creighton ESD	47.5
		Littleton ESD	52.0	Riverside ESD	46.4
		Isaac ESD	51.8	Murphy ESD	45.4
9	Medium-large and medium elementary school districts in towns and rural areas	Peer group average	50.0%		
		Bullhead City ESD	54.8	Gadsden ESD	48.8
		Toltec ESD	53.7	Mohave Valley ESD	47.5
		Cottonwood-Oak Creek ESD	53.5	Nadaburg USD ¹	47.2
		Palominas ESD	52.1	Eloy ESD	46.9
		Somerton ESD	50.0	Altar Valley ESD	45.7
10	Small elementary school districts in towns and rural areas	Peer group average	52.5%		
		Naco ESD	59.2	Oracle ESD	51.8
		Clarkdale-Jerome ESD	57.7	Wellton ESD	51.1
		Red Rock ESD	56.2	Santa Cruz ESD	49.7
		Continental ESD	55.3	Beaver Creek ESD	49.4
		Palo Verde ESD	54.6	Sacaton ESD	46.6
		Arlington ESD	54.1	Stanfield ESD	43.9

Table 8 concluded

Peer group		Instructional spending percentage		Instructional spending percentage	
Number	Description	District name	District name	District name	District name
11	Very small school districts	Peer group average	50.5%		
		Blue ESD	78.7	Sentinel ESD	50.4
		Hillside ESD	67.8	Solomon ESD	50.0
		Double Adobe ESD	64.2	Bicentennial UHSD	49.1
		Bonita ESD	61.7	Picacho ESD	49.1
		Sonoita ESD	61.2	Owens-Whitney ESD	48.5
		Cochise ESD	60.2	Patagonia ESD	48.5
		Alpine ESD	59.7	Patagonia UHSD	48.5
		Crown King ESD	59.4	Mohawk Valley ESD	48.2
		Aguila ESD	58.0	Pomerene ESD	47.8
		Valentine ESD	57.3	Seligman USD	46.8
		Pearce ESD	55.9	Vernon ESD	46.5
		McNary ESD	55.8	Topock ESD	46.1
		Yucca ESD	55.7	Bowie USD	45.4
		Apache ESD	54.9	Hyder ESD	45.4
		Pine Strawberry ESD	54.5	McNeal ESD	45.4
		Maine Consolidated SD	53.7	Quartzsite ESD	43.9
		Valley UHSD	53.5	Hackberry ESD	43.7
		Cañon ESD	53.4	Salome Consolidated ESD	43.5
		Kirkland ESD	53.1	Tonto Basin ESD	43.2
		Young ESD	52.7	Concho ESD	42.7
		Yarnell ESD	52.5	Skull Valley USD	42.7
		Morristown ESD	52.1	Wenden ESD	40.2
		Elfrida ESD	52.0	Cedar USD	38.7
		Paloma ESD	51.9	Mobile ESD	37.2
		San Fernando ESD	51.5	Bouse ESD	34.9
		Congress ESD	50.9	Ash Creek ESD	33.9
San Simon USD	50.8	Peach Springs USD	33.5		

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 2017.

Source: Auditor General staff analysis of fiscal year 2017 district-reported accounting data, fiscal year 2017 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 2017

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-1	Districts in cities and suburbs traveling less than 160 miles per rider	Peer group average	\$6.81	\$942
		Riverside ESD	3.26	738
		Tempe ESD	4.83	719
		Crane ESD	4.87	785
		Littleton ESD	5.05	800
		Laveen ESD	7.23	669
		Glendale ESD	6.68	825
		Flowing Wells USD	6.14	951
		Cartwright ESD	7.29	1,013
		Alhambra ESD	7.67	971
		Fowler ESD	6.26	1,211
		Madison ESD	9.61	1,319
		Murphy ESD	10.59	1,305
		Union ESD	9.01	1,789
T-2	Districts in cities and suburbs traveling 160-230 miles per rider	Peer group average	\$5.31	\$1,178
		Catalina Foothills USD	3.64	613
		Litchfield ESD	3.39	763
		Buckeye ESD	3.84	847
		Sunnyside USD	3.84	848
		Pendergast ESD	6.01	1,221
		Osborn ESD	6.26	1,170
		Avondale ESD	6.34	1,321
		Creighton ESD	7.40	1,233
		Phoenix ESD	7.08	1,668
		Isaac ESD	9.80	1,517
		Tolleson ESD	9.57	1,759
		Roosevelt ESD	NR	NR

Table 9 continued

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-3	Districts in cities and suburbs traveling 231-290 miles per rider	Peer group average	\$4.28	\$1,207
		Apache Junction USD	3.26	870
		Queen Creek USD	3.68	925
		Sierra Vista USD	3.32	1,060
		Kyrene ESD	3.84	918
		Tempe UHSD	3.79	1,048
		Higley USD	4.24	1,083
		Fountain Hills USD	3.57	1,346
		Deer Valley USD	4.72	1,221
		Wilson ESD	5.12	1,214
		Washington ESD	4.81	1,438
		Chandler USD	4.92	1,412
		Balsz ESD	5.99	1,418
		Tolleson UHSD	5.17	1,741
T-4	Districts in cities and suburbs traveling 291-360 miles per rider	Peer group average	\$3.61	\$1,278
		Vail USD	3.38	880
		Tanque Verde USD	3.14	1,008
		J.O. Combs USD	3.23	998
		Marana USD	3.08	1,146
		Humboldt USD	3.26	1,130
		Cave Creek USD	3.26	1,266
		Casa Grande ESD	3.44	1,229
		Liberty ESD	3.38	1,266
		Amphitheater USD	3.48	1,400
		Agua Fria UHSD	3.72	1,324
		Gilbert USD	4.02	1,246
		Peoria USD	3.85	1,361
		Paradise Valley USD	4.03	1,407
		Prescott USD	3.38	1,700
		Dysart USD	4.52	1,550
Mesa USD	4.56	1,539		

Table 9 continued

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-5	Districts in cities and suburbs traveling more than 360 miles per rider	Peer group average	\$4.15	\$1,809
		Buckeye UHSD	3.12	1,517
		Yuma ESD	3.60	1,326
		Flagstaff USD	3.28	1,487
		Scottsdale USD	4.33	1,541
		Lake Havasu USD	4.32	1,705
		Yuma UHSD	4.71	2,157
		Tucson USD	4.79	2,368
		Glendale UHSD	5.36	2,370
		Casa Grande UHSD	3.89	3,024
		Phoenix UHSD	NA	991
T-6	Districts in towns and rural areas traveling less than 230 miles per rider	Peer group average	\$3.94	\$728
		Gadsden ESD	3.66	285
		Colorado City USD	2.95	488
		Somerton ESD	3.29	521
		Sahuarita USD	3.10	674
		Thatcher USD	3.49	606
		Safford USD	2.83	755
		Bullhead City ESD	4.96	369
		Clarkdale-Jerome ESD	3.88	576
		Parker USD	3.88	763
		Whiteriver USD	3.31	871
		Nogales USD	4.45	841
		Globe USD	4.46	930
		Pima USD	5.45	816
		Eloy ESD	3.68	1,181
		San Carlos USD	4.29	1,203
		Superior USD	3.99	1,366
		Morenci USD	5.65	1,121
		Toltec ESD	3.48	NR
		Maricopa USD	NR	NR

Table 9 continued

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-7	Districts in towns and rural areas traveling 230-299 miles per rider	Peer group average	\$2.98	\$921
		Red Rock ESD	1.36	404
		Mammoth-San Manuel USD	2.16	579
		Continental ESD	2.50	696
		Beaver Creek ESD	2.43	718
		Mohave Valley ESD	2.35	801
		Cottonwood-Oak Creek ESD	2.84	685
		Littlefield USD	2.67	769
		Santa Cruz Valley USD	2.93	778
		Ft. Thomas USD	2.80	822
		Chino Valley USD	3.52	877
		Sedona-Oak Creek Joint USD	3.58	1,260
		St. David USD	3.22	1,393
		Benson USD	3.73	1,303
		Snowflake USD	4.17	1,185
		Miami USD	4.44	1,234
		Window Rock USD	4.39	1,293
Bagdad USD	6.49	3,233		
Mingus UHSD	NR	1,236		
T-8	Districts in towns and rural areas traveling 300-399 miles per rider	Peer group average	\$2.95	\$1,037
		Kingman USD	2.00	604
		Altar Valley ESD	2.01	1,073
		Saddle Mountain USD	2.89	875
		Camp Verde USD	2.80	912
		Show Low USD	2.73	976
		Blue Ridge USD	2.65	1,025
		Bisbee USD	3.31	888
		Stanfield ESD	3.02	1,054
		Gila Bend USD	3.30	1,049
		Grand Canyon USD	2.76	1,298
		Palo Verde ESD	3.59	1,060
		Nadaburg USD	2.90	1,389
		Payson USD	3.96	1,573
		Sacaton ESD	4.49	1,808
		Naco ESD	9.10	4,945
		Ganado USD	2.28	NR

Table 9 continued

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-9	Districts in towns and rural areas traveling 400-519 miles per rider	Peer group average	\$2.60	\$1,363
		Heber-Overgaard USD	1.76	600
		Joseph City USD	1.93	905
		Arlington ESD	1.96	893
		Oracle ESD	2.21	931
		Palominas ESD	1.99	1,071
		Tombstone USD	2.18	1,104
		Florence USD	2.32	1,113
		Winslow USD	2.48	1,164
		Williams USD	2.47	1,310
		Chinle USD	2.89	1,254
		Coolidge USD	2.86	1,390
		Wickenburg USD	3.01	1,506
		Wellton ESD	2.88	1,673
		Tuba City USD	2.94	1,827
		Douglas USD	3.01	2,181
Ajo USD	3.97	1,921		
Hayden-Winkelman USD	3.72	2,218		
T-10	Districts in towns and rural areas traveling more than 519 miles per rider	Peer group average	\$1.93	\$1,267
		Antelope UHSD	1.05	830
		Santa Cruz ESD	1.37	895
		Ash Fork Joint USD	1.68	893
		St. Johns USD	1.15	1,247
		Duncan USD	1.36	1,107
		Holbrook USD	1.46	1,062
		Round Valley USD	2.11	725
		Baboquivari USD	2.15	1,037
		Mayer USD	2.30	1,422
		Willcox USD	2.30	1,436
		Colorado River UHSD	2.29	1,490
		Red Mesa USD	2.44	1,624
		Ray USD	2.42	1,727
		Sanders USD	2.64	1,585
		Page USD	2.70	1,836
		Kayenta USD	3.07	1,712
Piñon USD	3.46	2,174		
Fredonia-Mocasin USD	4.29	1,794		
Santa Cruz Valley UHSD	2.88	2,798		

Table 9 continued

Peer group		District name	Cost per mile	Cost per rider
Number	Description			
T-11	Very small districts	Peer group average	\$1.87	\$1,459
		Paloma ESD	0.84	335
		Aguila ESD	0.75	511
		Double Adobe ESD	0.70	638
		Owens-Whitney ESD	0.60	818
		Peach Springs USD	1.33	482
		San Simon USD	0.83	944
		Topock ESD	1.59	364
		Pearce ESD	1.23	677
		Bonita ESD	1.20	723
		Yarnell ESD	0.74	1,096
		Congress ESD	1.11	854
		McNary ESD	1.42	621
		Alpine ESD	0.49	1,600
		Vernon ESD	1.32	990
		Solomon ESD	2.15	362
		McNeal ESD	1.30	1,074
		Concho ESD	0.92	1,420
		Cochise ESD	1.84	706
		Hillside ESD	1.08	1,306
		Picacho ESD	2.26	476
		Skull Valley ESD	1.76	893
		Mohawk Valley ESD	1.85	830
		Bowie USD	0.84	1,624
		Cañon ESD	2.16	725
		Sonoita ESD	1.16	1,530
		Bicentennial UHSD	1.36	1,612
		Quartzsite ESD	2.47	751
		Mobile ESD	1.96	1,198
		Hyder ESD	1.93	1,343
		Kirkland ESD	1.93	1,524
		Elfrida ESD	2.19	1,463
		Salome Consolidated ESD	3.41	708
		Morristown ESD	2.17	1,776
		Seligman USD	1.84	2,265
		Ash Creek ESD	1.67	2,707
		Maine Consolidated SD	2.87	1,890
		Patagonia ESD	1.39	3,314
		Patagonia UHSD	1.39	3,314
		Young ESD	4.63	911
		Wenden ESD	4.09	1,564

Table 9 concluded

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-11 (concluded)	Very small districts	Tonto Basin ESD	1.98	3,671
		Cedar USD	3.45	2,598
		Pine Strawberry ESD	3.79	2,449
		Valley UHSD	2.02	3,850
		Sentinel ESD	2.36	4,156
		Pomerene ESD	6.03	1,549
		Hackberry ESD	6.88	2,378
		Bouse ESD	1.59	NR
		Valentine ESD	NR	NR

Source: Auditor General staff analysis of fiscal year 2017 district-reported accounting data, fiscal year 2017 Arizona Department of Education 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 2017

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	59%	57%	75%
		Catalina Foothills USD	67	68	82
		Vail USD	64	59	82
		Cave Creek USD	58	62	82
		Tanque Verde USD	55	57	82
		Higley USD	60	58	71
		Queen Creek USD	59	52	73
		Gilbert USD	55	52	67
		Fountain Hills USD	50	47	58
2	Unified school districts with poverty rates of 9 to 17 percent in cities and suburbs	Peer group average	44%	44%	60%
		Chandler USD	55	54	70
		Scottsdale USD	57	54	67
		Deer Valley USD	52	52	71
		Prescott USD	43	50	68
		Paradise Valley USD	46	47	63
		Peoria USD	47	41	56
		Marana USD	35	37	57
		Dysart USD	36	38	49
		J.O. Combs USD	37	34	47
3	Unified school districts with poverty rates greater than 17 percent in cities and suburbs	Peer group average	38%	37%	52%
		Lake Havasu USD	44	42	58
		Sierra Vista USD	44	43	53
		Humboldt USD	40	41	57
		Mesa USD	41	37	56
		Amphitheater USD	38	41	53
		Apache Junction USD	33	29	50
		Tucson USD	27	29	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 21 percent in towns and rural areas	Peer group average	31%	31%	52%
		Morenci USD	47	45	67
		St. David USD	48	46	59
		Sahuarita USD	38	41	56
		Chino Valley USD	31	39	60
		Fredonia-Moccasin USD	26	29	63
		Sedona-Oak Creek Joint USD	30	35	51
		Bagdad USD	31	33	49
		Duncan USD	33	33	47
		Saddle Mountain USD	40	28	44
		Littlefield USD	30	26	46
		Maricopa USD	28	29	42
		Seligman USD	18	27	53
		Florence USD	25	28	45
		Camp Verde USD	20	22	40
		Bowie USD ¹	13	3	-
		Blue ESD ^{1,3}	-	-	-
5	Unified school districts with poverty rates of 21 to 27 percent in towns and rural areas	Peer group average	31%	31%	44%
		Snowflake USD	60	49	74
		St. Johns USD	55	48	64
		Thatcher USD	40	46	60
		Safford USD	41	40	56
		Payson USD	35	40	60
		Ash Fork Joint USD	47	45	38
		Round Valley USD	41	36	49
		San Simon USD	35	34	50
		Grand Canyon USD	36	34	45
		Pima USD	26	37	52
		Kingman USD	30	28	38
		Wickenburg USD	30	25	41
		Ray USD	20	29	44
		Young ESD ^{1,3}	33	29	-
		Santa Cruz Valley USD	27	29	37
		Page USD	24	21	40
		Mammoth-San Manuel USD	20	20	41
		Globe USD	20	21	33
		Ajo USD	22	22	27
		Coolidge USD	15	15	31
		Gila Bend USD	10	11	23
		Superior USD	14	16	13

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 28 to 37 percent in towns and rural areas	Peer group average	34%	31%	45%
		Colorado City USD	54	47	59
		Benson USD	50	44	64
		Heber-Overgaard USD	43	38	71
		Joseph City USD	45	47	59
		Williams USD	34	35	60
		Show Low USD	31	36	62
		Flowing Wells USD ²	37	33	54
		Willcox USD	37	32	48
		Blue Ridge USD	31	29	45
		Winslow USD	32	22	38
		Tombstone USD	27	29	36
		Holbrook USD	28	26	35
		Sunnyside USD ²	26	23	32
		Tuba City USD	26	13	24
		Hayden-Winkelman USD	17	21	15
Ft. Thomas USD	18	15	18		
7	Unified school districts with poverty rates greater than 37 percent in towns and rural areas	Peer group average	18%	17%	25%
		Nogales USD	33	33	43
		Mayer USD	25	29	46
		Bisbee USD	24	23	38
		Miami USD	24	20	36
		Parker USD	23	22	29
		Douglas USD	21	24	26
		Chinle USD	25	17	25
		Kayenta USD	16	15	22
		Window Rock USD	12	17	22
		Baboquivari USD	19	14	17
		Ganado USD	12	12	24
		Piñon USD	13	11	20
		Red Mesa USD	9	10	21
		Whiteriver USD	10	11	11
		Sanders USD	11	11	9
San Carlos USD	4	4	5		
8	Union high school districts with poverty rates of 20 percent or less in cities and suburbs	Peer group average	33%	27%	34%
		Tempe UHSD	39	38	53
		Agua Fria UHSD	40	31	40
		Buckeye UHSD	40	23	33
		Tolleson UHSD	23	25	23
		Casa Grande UHSD	21	20	20

Table 10 continued

Peer group		Percentage of students passing			
Number	Description	District name	Math	English Language Arts	Science
9	Union high school districts with poverty rates greater than 20 percent in cities and suburbs	Peer group average	26%	23%	31%
		Glendale UHSD	46	36	59
		Phoenix UHSD	22	19	20
		Yuma UHSD	11	14	13
10	Union high school districts with poverty rates of 20 percent or less in towns and rural areas	Peer group average	28%	23%	26%
		Mingus UHSD	38	29	38
		Patagonia UHSD	32	27	22
		Bicentennial UHSD	13	14	19
11	Union high school districts with poverty rates greater than 20 percent in towns and rural areas	Peer group average	17%	18%	21%
		Colorado River UHSD	15	26	39
		Valley UHSD	25	18	26
		Santa Cruz Valley UHSD	9	16	15
		Antelope UHSD	17	13	5
12	Elementary school districts with poverty rates less than 21 percent in cities and suburbs	Peer group average	52%	53%	73%
		Kyrene ESD	58	59	78
		Madison ESD	57	58	76
		Litchfield ESD	56	55	77
		Liberty ESD	37	38	61
13	Elementary school districts with poverty rates of 21 to 30 percent in cities and suburbs	Peer group average	32%	32%	46%
		Crane ESD	44	40	59
		Laveen ESD	41	35	60
		Avondale ESD	38	36	53
		Yuma ESD	37	36	52
		Tempe ESD	35	37	49
		Casa Grande ESD	32	30	46
		Tolleson ESD	31	28	46
		Pendergast ESD	28	32	44
		Buckeye ESD	28	28	45
		Littleton ESD	24	27	39
		Riverside ESD	25	26	33
		Union ESD	24	25	31
14	Elementary school districts with poverty rates of 31 to 40 percent in cities and suburbs	Peer group average	29%	27%	40%
		Washington ESD	34	35	51
		Osborn ESD	32	27	41
		Glendale ESD	31	26	42
		Fowler ESD	27	25	40
		Creighton ESD	24	24	35
		Roosevelt ESD	25	23	33

Table 10 continued

Peer group		Percentage of students passing			
Number	Description	District name	Math	English Language Arts	Science
15	Elementary school districts with poverty rates greater than 40 percent in cities and suburbs	Peer group average	25%	22%	37%
		Alhambra ESD	32	26	47
		Cartwright ESD	29	26	46
		Phoenix ESD	28	26	43
		Wilson ESD	33	24	32
		Balsz ESD	25	21	33
		Isaac ESD	16	16	35
		Murphy ESD	14	17	24
16	Elementary school districts with poverty rates less than 16 percent in towns and rural areas	Peer group average	36%	41%	66%
		Morristown ESD	48	45	64
		Bonita ESD	44	47	66
		Clarkdale-Jerome ESD	37	48	69
		Continental ESD	46	40	65
		Owens-Whitney ESD ¹	38	50	-
		Skull Valley ESD ¹	25	42	-
		San Fernando ESD ¹	14	14	-
17	Elementary school districts with poverty rates of 16 to 22 percent in towns and rural areas	Peer group average	37%	38%	62%
		Congress ESD	73	59	74
		Sonoita ESD	49	55	94
		Palominas ESD	56	53	81
		Hyder ESD	49	45	95
		Pine Strawberry ESD	53	47	81
		Red Rock ESD	46	45	85
		Hackberry ESD ¹	50	61	-
		Hillside ESD ¹	58	53	-
		Solomon ESD	37	41	79
		Maine Consolidated ESD	45	38	71
		Topock ESD ¹	54	45	-
		Palo Verde ESD	39	37	67
		Yucca ESD ¹	41	45	-
		Cottonwood-Oak Creek ESD	32	35	61
		Nadaburg USD ³	20	34	50
		Oracle ESD	27	21	50
		Beaver Creek ESD	14	21	60
		Quartzsite ESD	22	34	33
		Toltec ESD	20	21	40
		Bouse ESD ¹	6	28	-
		Stanfield ESD	16	9	23
		Valentine ESD	7	13	7
Crown King ESD ¹	-	-	-		

Table 10 continued

Peer group		Percentage of students passing			
Number	Description	District name	Math	English Language Arts	Science
18	Elementary school districts with poverty rates of 23 to 29 percent in towns and rural areas	Peer group average	36%	37%	61%
		Alpine ESD	70	65	100
		Santa Cruz ESD	42	61	79
		Pearce ESD	35	36	79
		Mohave Valley ESD	38	38	64
		Mohawk Valley ESD	35	34	70
		Arlington ESD	47	29	43
		Patagonia ESD	37	35	46
		McNeal ESD	35	41	42
		Altar Valley ESD	32	28	55
		Elfrida ESD	17	25	55
		Picacho ESD	11	12	38
		Mobile ESD ¹	-	-	-
		19	Elementary school districts with poverty rates of 30 to 39 percent in towns and rural areas	Peer group average	35%
Tonto Basin ESD	61			56	83
Pomerene ESD	48			41	78
Vernon ESD	24			46	85
Concho ESD	36			45	73
Yarnell ESD ¹	37			58	-
Cochise ESD	54			41	45
Bullhead City ESD	34			29	60
Kirkland ESD	38			40	36
Wellton ESD	37			30	46
Somerton ESD	36			28	47
Cañon ESD	24			27	50
Agua Fria ESD	25			39	21
Gadsden ESD	28			25	30
Eloy ESD	22			18	32
Sacaton ESD	17			12	34
Peach Springs USD ^{1, 3}	-			-	-

Table 10 concluded

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
20	Elementary school districts with poverty rates greater than 39 percent in towns and rural areas	Peer group average	25%	26%	30%
		Sentinel ESD ¹	67	50	-
		Ash Creek ESD ¹	40	50	-
		Double Adobe ESD ¹	36	41	-
		Paloma ESD	25	25	31
		Wenden ESD	10	17	50
		Salome Consolidated ESD	16	18	40
		Cedar USD ³	14	14	23
		Naco ESD	9	15	22
		McNary ESD	4	5	15
		Apache ESD ¹	-	-	-

¹ Scores are not shown because measure did not meet auditors' 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 2017. In addition, Blue ESD and Young ESD were included in groups with unified school districts as they did have high school students who took AzMERIT or AIMS in fiscal year 2017.

Source: Auditor General staff analysis of fiscal year 2017 Arizona Department of Education AzMERIT and AIMS data and fiscal year 2016 U.S. Census Bureau poverty rates and 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 auditors 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 the acquisition of 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 expenses 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 of 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 associated with the acquisition of 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 the purchase or lease of land and existing buildings, constructing and renovating school buildings, and improving school grounds.
- **Equipment**—Expenditures for the purchase or lease of 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. Descriptions for specific revenue sources discussed in this report or shown on state and district pages are as follows:

- **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 the dissemination of 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.
- **Amount from Prop 123**—Voter-approved, permanent increase in the base level amount used to calculate equalization formula funding that began in fiscal year 2016. This Proposition 123 approved amount is included in equalization formula funding but is also separately calculated as the original 2016 base level increase of approximately \$173 to \$175 times the annual inflation adjustment applied to the base level in each subsequent year.
- **Prop 123 additional funding**—Voter-approved, temporary, additional funding that began in fiscal year 2016 but is not included in the base level or equalization formula funding. ADE calculates this Proposition 123 additional funding based on each school district’s proportionate share of the total state-wide, group A weighted, attending average daily membership (ADM) counts. 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 2017 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, joint technical education districts (JTEDs), 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 JTEDs 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, JTEDs, and accommodation districts were excluded. Transporting districts, JTEDs, 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, auditors obtained fiscal year 2017 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 auditors with fiscal year 2017 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, auditors performed analytical procedures using the financial data and interviewed school district officials about anomalies or variances. Auditors corrected any data errors prior to calculating instructional spending percentages and other measures analyzed for, and presented in, this report. Additionally, auditors 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, auditors 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, auditors reviewed and analyzed historical spending and trends, and identified efficient and inefficient operational practices from school district performance audits this Office conducted and interviews of school district staff. Where noted, auditors adjusted spending data to fiscal year 2017 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, auditors developed three 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', auditors 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 six district size categories are defined on page b-5. The two district type categories are elementary and high school/unified. Auditors grouped union high school districts with unified districts because both districts serve high school students. The two location categories are cities/suburbs and town/rural areas. The U.S. Census Bureau classifies districts by distance and population density into four main categories: city, suburb, town, and rural. Auditors grouped together districts located in city and suburban areas and grouped together districts located in town and rural areas. Considering these three factors, auditors 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 54 districts.
- To compare districts' transportation cost measures relative to peer groups', auditors developed transportation efficiency peer groups using locations and miles per rider because these factors are associated with school districts' transportation cost measures. Auditors 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, auditors 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 10 and 49 districts.
- To compare districts' academic indicators relative to peer groups', auditors developed student achievement peer groups using poverty rates, district type, and location. Considering these factors, auditors created 20 achievement peer groups to compare student achievement. These peer groups are labeled 1 through 20, and each includes between 3 and 23 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 six 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 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 employees or students. Further, auditors 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 auditors 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 2017 unless otherwise indicated. Because Patagonia ESD and Patagonia UHSD operate essentially as one district and comingle costs, the two districts’ spending, revenues, and other efficiency measures are presented combined on each district’s individual page in this report.

Background information

- **County**—Auditor General staff analysis of ADE-provided county data. For district boundaries encompassing more than one county, the county in which the district office resides is presented.
- **Legislative districts**—Auditor General staff analysis of school district and legislative district boundaries.
- **Location**—Auditor General staff 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 four main categories are city, suburb, town, and rural.
- **Students attending/District size**—Auditor General staff 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**—Auditor General staff analysis of ADE’s ADM reports and SFB district-wide building reports.

Operational efficiency

- **Spending by operational area**—Auditor General staff 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**—Auditor General staff 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. Auditors 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, auditors 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 54 very small districts, auditors 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: Auditor General staff 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: Auditor General staff 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: Auditor General staff 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: Auditor General staff 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 2017.
- Overall assessment: Cost per meal was compared to the peer group average.

Transportation—

- Cost per mile: Auditor General staff analysis of transportation costs divided by the total miles driven, using district-reported accounting data and ADE-provided transportation route reports.

- Cost per rider: Auditor General staff 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—Auditor General staff analysis of fiscal years 2016 and 2017 operational and nonoperational costs divided by the number of students, using district-reported accounting data and AFRs, and ADE-provided ADM data.
 - Peer average—Auditor General staff 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—Auditor General staff 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 2015 data, the most recently available national data.

Student achievement

- **Percentage of students who passed state assessments**—Auditor General staff analysis of the Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) Math and English Language Arts test results obtained from ADE in October 2017 and the Arizona's Instrument to Measure Standards (AIMS) Science test results obtained from ADE in October 2017. 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. Auditor General staff 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 2017. 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 2016 (the most recent year for available data) 4-year cohort graduation rates obtained from ADE in November 2017. 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 2016 graduation rate reported by ADE.
- **Poverty rate**—Auditor General staff analysis of U.S. Census Bureau fiscal year 2016 (the most recent year for available data) *Small Area Income and Poverty Estimates* published in November 2017. 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 percentages were calculated by adding individual districts' poverty rates and dividing by the number of districts in each peer group.

- **Special education population**—Auditor General staff 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**—Auditor General staff 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**—Auditor General staff 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 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**—Auditor General staff 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**—Auditor General staff analysis of district-reported certified teacher FTEs and years of experience obtained from ADE in September 2017. 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**—Auditor General staff analysis of district-reported certified teacher FTEs and years of experience obtained from ADE in September 2017. 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—Auditor General staff analysis of fiscal years 2016 and 2017 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—Auditor General staff 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—Auditor General staff 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 2015 data, the most recently available national data.

Operational trends and spending detail

- **Instructional spending percentage**—Auditor General staff analysis of district-reported accounting data and AFRs for fiscal years 2001 through 2017. Instructional spending is further described on page b-1.
- **5-year spending trend**—Auditor General staff analysis of district-reported accounting data and AFRs (inflation adjusted to fiscal year 2017 dollars), and ADE-provided school-district-reported ADM for fiscal years 2012 through 2017. The following criteria were used to describe changes in operational percentages:
 - Decreased substantially—2 percentage point or larger decrease
 - Decreased—1 to 1.9 percentage point decrease
 - Decreased slightly—0.5 to 0.9 percentage point decrease
 - Increased slightly—0.5 to 0.9 percentage point increase
 - Increased—1 to 1.9 percentage point increase
 - Increased substantially—2 percentage point or larger increase

For districts that were very small during the 5-year trend period, additional auditor judgment beyond the above criteria was necessary to more accurately reflect the 5-year spending trend.

- **Total operational and instructional spending per pupil**—Auditor General staff analysis of fiscal years 2001 through 2017 district-reported accounting data and AFRs (inflation adjusted to fiscal year 2017 dollars) and ADM counts.
- **Students attending**—Auditor General staff analysis of ADE-provided, school-district-reported ADM counts for fiscal years 2001 through 2017.
- **Efficiency trends**—Auditor General staff 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 2012 through 2017. These cost measures are described in more detail on pages b-6 and b-7.
- **Operational spending detail**—Auditor General staff analysis of spending by category divided by total spending in each operational area, using fiscal year 2017 district-reported accounting data.

Financial stress assessment

Auditor General staff developed six key local measures to determine Arizona districts' financial stress. Auditors 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 six key measures, Auditor General staff also determined an overall financial stress level based on the results of the six measures.

- **Overall financial stress level**—The overall financial stress level equally considers each of the district's financial stress measures. For purposes of this report, the following terminology was used to describe the overall financial stress level:
 - High—Districts with three or more individual measures found to be at a high financial stress level.
 - 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 one 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**—Auditor General staff analysis of ADE-provided ADM data for fiscal years 2015 through 2017 to determine the direction and extent of change in the number of district students from fiscal years 2015 through 2017. When analyzing the change in number of district students, auditors considered the relative size of the district based on the district size categories, described on page b-5. For purposes of this report, the following terminology was used 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:²
 - 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**—Auditor General staff analysis of districts' overspending of the Maintenance and Operation (M&O) and Unrestricted Capital Outlay (UCO) Funds for fiscal years 2015 through 2017, using district-reported budget limits and expenditure data obtained from ADE. When analyzing overspending, auditors excluded approved emergency overspending. In addition, auditors considered the amount and frequency of overspending. For purposes of this report, the following terminology was used 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 one instance of overspending in their M&O or UCO Funds.
 - No overspending—Districts with no operating or capital overspending.
- **Spending increase election results**—Auditor General staff analysis of election results for operating and capital budget overrides and bond authorizations from January 1, 2015 through December 31, 2017, obtained from Arizona counties and confirmed with independent reports of election results. In assessing this measure, auditors considered each override type's most recent election result. For purposes of this report, the following terminology was used 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.

² 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.

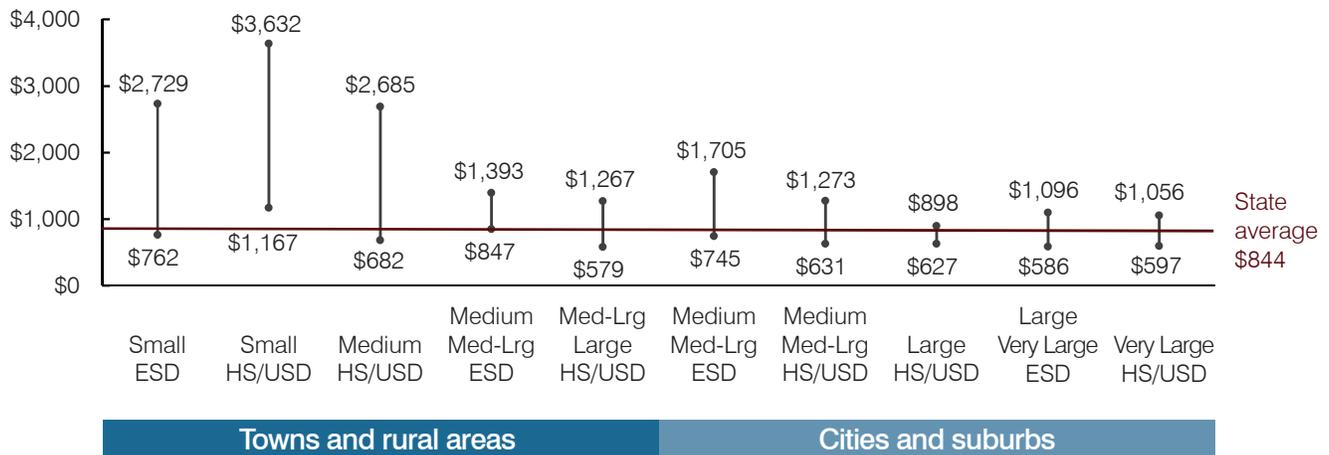
- Mixed election results—Districts that received voter-approval in their most recent election for some but not all override types or bond authorizations sought.
- No election held—Districts that did not hold any override or bond elections.
- **Operating reserve percentage**—Auditor General staff analysis of each district's M&O Fund allowable budget balance carryforward for fiscal years 2015 through 2017 divided by the district's Revenue Control Limit for each year, using district-reported budget limit and expenditure data obtained from ADE. In assessing this measure, auditors considered the 3-year average operating reserve percentage and the direction of change in the reserve percentage. In addition, auditors 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, auditors evaluated each school district that could not increase its property tax rate in fiscal year 2017 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. For purposes of this report, the following terminology was used 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**—Auditor General staff analysis of each district's total UCO Fund spending capacity for fiscal years 2015 through 2017 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, auditors 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. For purposes of this report, the following terminology was used to describe the years of capital reserve held:
 - More than 3 years—Districts with average capital spending capacity more than three times their average combined, adjusted District Additional Assistance.
 - 1 to 3 years—Districts with average capital spending capacity of one to three times their average combined, adjusted District Additional Assistance.
 - Less than 1 year—Districts with average capital spending capacity less than their average combined, 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**—Auditor General staff analysis of district-submitted audited financial statements and related required reports for the most recently required fiscal year, generally 2016. For purposes of this report, the following terminology was used 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 were sent a letter or report emphasizing the need 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.



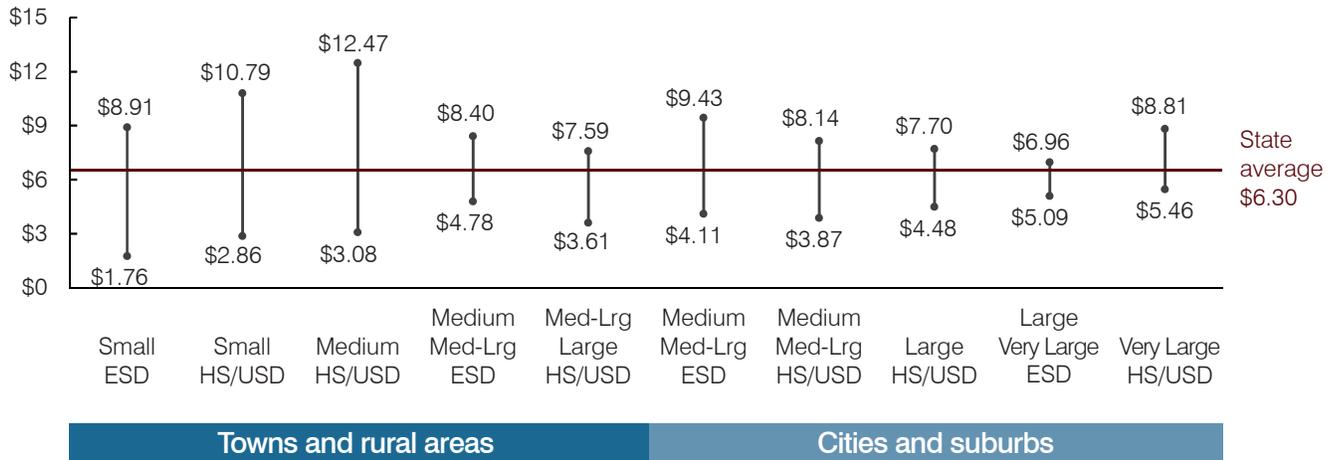
This appendix presents graphic representations of cost ranges by efficiency peer groups for administration, plant operations, food service, and transportation. Each figure shows the state average for the cost measures (e.g., administrative costs per pupil, plant operations costs per square foot, etc.), as well as the lowest and highest dollar amounts for each efficiency peer group. See Appendix B, page b-4, for more on how auditors 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 2017



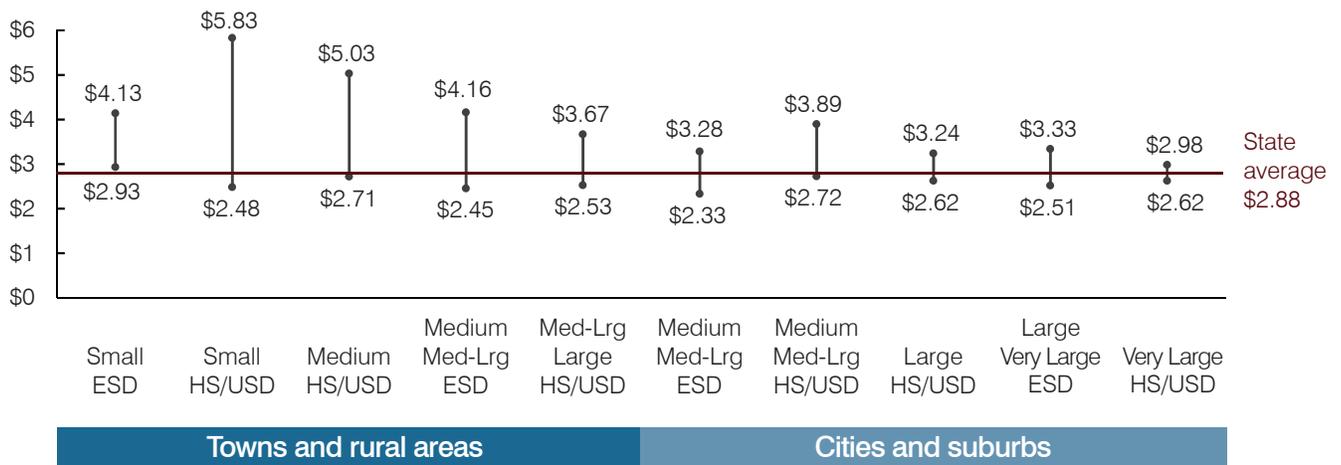
Source: Auditor General staff analysis of fiscal year 2017 district-reported accounting data, fiscal year 2017 Arizona Department of Education student membership data, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 5
Range of plant operations costs per square foot by efficiency peer group
Fiscal year 2017



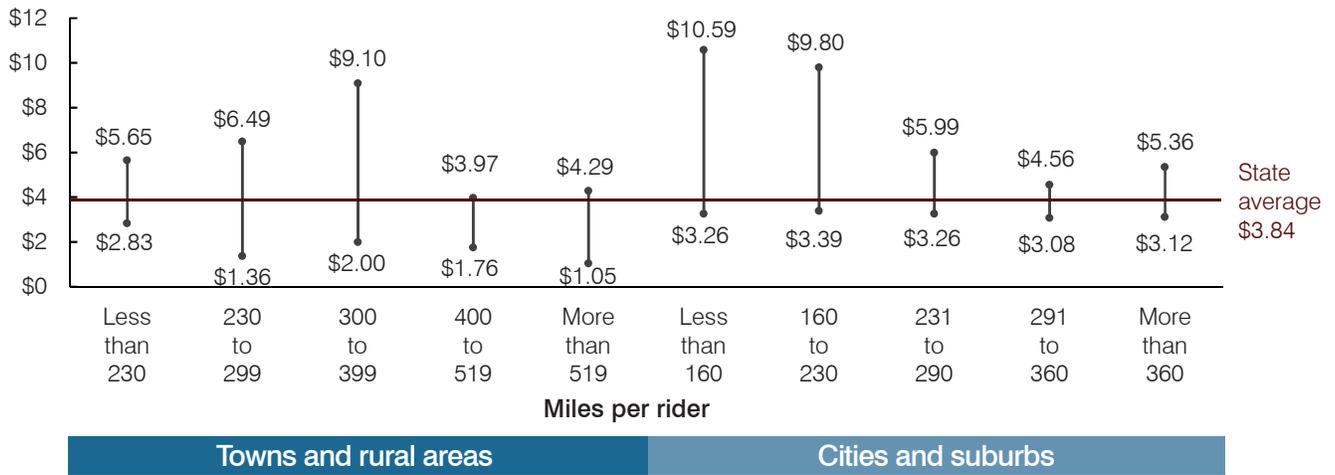
Source: Auditor General staff analysis of fiscal year 2017 district-reported accounting data, fiscal year 2017 School Facilities Board square footage data, and fiscal year 2016 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 6
Range of food service costs per meal by efficiency peer group
Fiscal year 2017



Source: Auditor General staff analysis of fiscal year 2017 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 2017



Source: Auditor General staff analysis of fiscal year 2017 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.

