### Arizona School District Spending

Fiscal Year 2016



**Debra K. Davenport** Auditor General





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# STATE OF ARIZONA OFFICE OF THE AUDITOR GENERAL

MELANIE M. CHESNEY DEPUTY AUDITOR GENERAL

March 1, 2017

Members of the Arizona Legislature

The Honorable Doug Ducey, Governor

I am pleased to present our report, *Arizona School District Spending, Fiscal Year 2016*, 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 also analyzes nonclassroom 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 showing its performance on various financial and student measures and graphical summaries of its operational trends. To provide a quick summary for your convenience, I am also including a copy of the Report Highlights.

In fiscal year 2016, Arizona districts spent 53.5 percent of available operating dollars on instruction—the lowest percentage in the 16 years our Office has been monitoring district spending. This percentage has declined both during years of increased and decreased overall spending. Since its peak in fiscal year 2004, the State's classroom dollar percentage has declined 5.1 percentage points, while the percentages spent on all other operational areas have increased. Although the impact of a declining classroom dollar percentage varies by district, it can be seen state-wide in lower teacher pay and larger class sizes. In May 2016, voters passed Proposition 123, which provided districts with approximately \$250 million of additional resources in fiscal year 2016. However, because these monies are commingled with other monies, it cannot be determined whether or how the monies were spent. Further, because the monies were not available to districts until after the vote, it is likely that a large portion of these monies were not spent in fiscal year 2016.

In fiscal year 2016, Arizona districts spent approximately \$3,300 less per pupil than the national average and allocated their resources differently, spending a lower percentage of available operating dollars 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 among similar districts. Our performance audits of school districts have identified practices efficient districts use, as well as practices that make other districts less efficient.

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

Sincerely,

Debbie Davenport Auditor General





### REPORT HIGHLIGHTS

Special Study March 2017

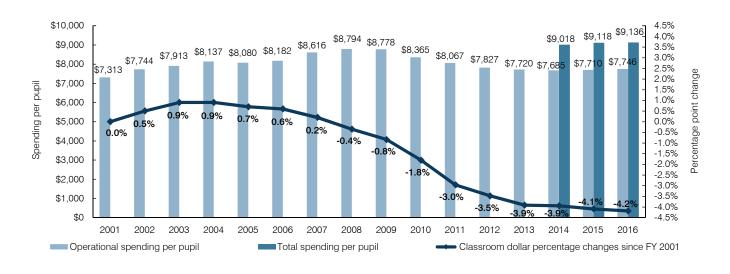
# Arizona School District Spending Fiscal Year 2016

CONCLUSION: In fiscal year 2016, Arizona districts spent 53.5 percent of available operating dollars on instruction—the lowest percentage since we began monitoring this in fiscal year 2001. This percentage has declined both during years of increased and decreased overall spending. Since its peak in fiscal year 2004, the State's classroom dollar percentage has declined 5.1 percentage points, while the percentages spent on all other operational areas have increased. Although the impact of a declining classroom dollar percentage varies by district, it can be seen state-wide in lower teacher pay and larger class sizes. In May 2016, voters passed Proposition 123, which provided districts with approximately \$250 million of additional resources in fiscal year 2016. However, because these monies are commingled with other monies, it cannot be determined whether or how the monies were spent. Further, because the monies were not available to districts until after the vote, it is likely that a large portion of these monies were not spent in fiscal year 2016. 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.

## Continuing its long decline, classroom spending decreased to 53.5 percent, its lowest point since monitoring began in 2001

In fiscal year 2016, Arizona districts spent 53.5 percent of their available operating dollars on instruction—In fiscal year 2016, Arizona school districts spent 53.5 percent of their available operating dollars on instruction—the lowest percentage in the 16 years we have been monitoring district spending. 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 (CSF) monies intended to increase classroom spending. Soon after, in fiscal years 2003 and 2004, the State's classroom dollar percentage increased to 58.6 percent. However, between fiscal years 2004 and 2016, the percentage of resources spent on instruction declined, both during times when total operational spending decreased as

Arizona's operational and total spending per pupil and change in classroom dollar percentage since fiscal year 2001 (inflation adjusted to fiscal year 2016 dollars) Fiscal years 2001 through 2016



well as times when it increased. At the same time, the percentages spent on administration, plant operations, food service, transportation, student support, and instruction support have all increased. Had districts continued directing resources into the classroom at the same rate they did in fiscal year 2001, they would have spent an additional \$422 million in the classroom in fiscal year 2016. In May 2016, voters passed Proposition 123, which provided districts with approximately \$250 million of additional resources in fiscal year 2016. However, because these monies are commingled with other monies, it cannot be determined whether or how the monies were spent. Further, because the monies were not available to districts until after the vote, it is likely that a large portion of these monies were not spent in fiscal year 2016.

Impact of declining classroom dollar percentage varies by district but can be seen state-wide in lower teacher pay and larger class sizes—Although the impact of a declining classroom dollar percentage varies by district depending on the cause of the decline, it is reflected state-wide in lower teacher pay and larger class sizes. Between fiscal years 2004 and 2016, the average teacher salary (adjusted for inflation) decreased 9 percent despite the teachers' average years of experience staying about the same. More recently, between fiscal years 2011 and 2016, the state-wide average teacher salary (adjusted for inflation) decreased from \$49,185 to \$46,384 despite a similar average years of teacher experience. During this same 5-year period, the state-wide average students per teacher increased from 18.1 to 18.6.

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

**Districts spent at widely differing levels**—In fiscal year 2016, 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 2016 spending by district ranged from \$5,542 per pupil to \$18,924 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 2016, after excluding Arizona's very small districts, nonoperational spending by district ranged from \$55 per pupil to \$23,513 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, 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 nonclassroom staffing levels, operated schools far below designed capacity, did not monitor energy consumption,

### Cost variance examples

- A very large, urban, unified district spent \$522 per pupil for administration; another spent \$914 per pupil.
- A medium-sized, rural, unified district spent \$2.66 per square foot for plant operations; another spent \$8.98 per square foot.
- A medium-sized, rural, unified district spent \$2.56 per meal; another spent \$5.39 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; one district spent \$4.07 per mile, and the other spent \$8.14 per mile.

had poorly written vendor contracts, and paid bus drivers for time not spent working.

**Districts that operate efficiently allocate more of their resources to instruction**—Districts that operate efficiently have more dollars available to spend in the classroom. 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 classroom dollar 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 2016, 8

districts were found to have a high financial stress level, 32 a moderate level, and 167 a low level. Having a high financial stress level can be

Number of districts by overall financial stress level Fiscal year 2016

Stress level
High stress
Moderate stress
Low stress

Number of districts
8
32
167

Number of districts

a sign that a district has inefficient operations. However, there are many districts with low or moderate financial stress levels 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 moderate or low financial stress level may need to take additional actions to operate efficiently or address other areas of concern.

## 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 2016, Arizona school districts spent approximately \$3,300 less per pupil than the 2014 national average (most recent national data available). This lower spending is seen in the classroom (instruction), as well as every nonclassroom 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,

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

Fiscal years 2016 (Arizona) and 2014 (U.S.)

	Arizona average 2016	National average 2014	Difference
Spending by area Instruction Administration Plant operations Food service Transportation Student support	\$ 4,145 806 939 415 364 633	\$ 6,726 1,211 1,060 447 477 615	(\$ 2,581) (405) (121) (32) (113) 18
Instruction support	444	530	(86)
Total operational  Land and buildings  Equipment Interest Other  Total nonoperational	\$7,746 \$ 621 400 216 153 \$1,390	\$11,066 \$ 740 188 343 159 \$ 1,430	(\$3,320) (\$ 119) 212 (127) (6) (\$ 40)
Total per pupil spending	\$9,136	\$12,496	(\$3,360)

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.

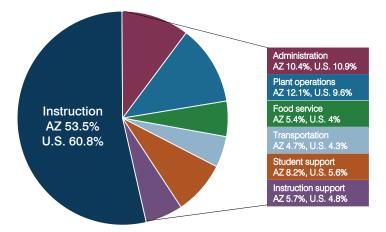
Arizona school districts allocated their resources differently than national averages—Compared to national averages, Arizona school districts spent a lower percentage of their available resources on instruction and administration and a greater percentage on all other operational areas. In fiscal year 2016, Arizona districts spent 53.5 percent of available operating dollars on instruction, 7.3 percentage points below the national average of 60.8 percent. Arizona's lower instructional spending is reflected in its larger class sizes. In fiscal year 2015, Arizona's class size was 18.6 students per teacher compared to the national average of 16.1 students per teacher. The relatively low classroom dollar 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, primarily for plant operations and student support services.

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, a financial stress assessment, revenues by source, and graphical summaries of each district's operational trends.

Comparison of Arizona and U.S. spending by operational area Fiscal years 2016 (Arizona) and 2014 (U.S.)



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### INTRODUCTION AND OBJECTIVES

Arizona Revised Statutes §41-1279.03 requires the Auditor General to monitor the percentage of each dollar spent in the classroom and conduct performance audits of Arizona's school districts. This report, the 16th annual report analyzing school district spending, has two main objectives:

- It analyzes state-wide operational spending trends in instruction and six nonclassroom 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.<sup>1</sup>
- 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 classroom and nonclassroom 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 student test scores 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.

**Arizona Auditor General** 

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.

# Continuing its long decline, classroom spending decreased to 53.5 percent, its lowest point since monitoring began in 2001

In fiscal year 2016, Arizona school districts spent 53.5 percent of available operating dollars on instruction—the lowest percentage since auditors began monitoring this in fiscal year 2001.<sup>2</sup> This percentage has declined both during years of increased overall spending and decreased overall spending. Since its peak in fiscal year 2004, the State's classroom dollar percentage has declined 5.1 percentage points, while the percentage of available operating dollars spent in all other operational areas has increased. Although the impact of a declining classroom dollar percentage varies by district, it can be seen state-wide in lower teacher pay and larger class sizes. In May 2016, voters passed Proposition 123, which provided districts with approximately \$250 million of additional resources in fiscal year 2016. However, because these monies are commingled with other monies, it cannot be determined whether or how the monies were spent. Further, because the monies were not available to districts until after the vote, it is likely that a large portion of these monies were not spent in fiscal year 2016.

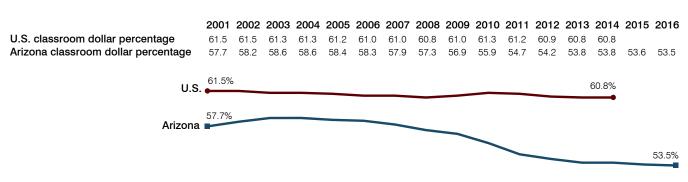
### Lowest classroom spending percentage in 16 years

In fiscal year 2016, Arizona school districts spent 53.5 percent of available operating dollars on instruction. As shown in Figure 1, this is the lowest percentage since auditors began monitoring classroom spending in fiscal year 2001. Specifically, in fiscal year 2001,

### Instruction (classroom spending)

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.

Figure 1
Comparison of U.S. and Arizona classroom dollar percentages
Fiscal years 2001 through 2016



Source: Auditor General staff analysis of the National Center for Education Statistics' *Revenues and Expenditures for Public Elementary and* Secondary Education for fiscal years 2001 through 2014 (the most recent year for available data) and Arizona school district-reported accounting data for fiscal years 2001 through 2016.

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.

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 classroom spending.<sup>3</sup> Soon after, in fiscal years 2003 and 2004, the State's classroom dollar percentage reached its highest level during this 16-year period at 58.6 percent. However, as shown in Figure 1 on page 3, the percentage of resources spent on instruction then declined nearly every year between fiscal years 2004 and 2015, and decreased an additional 0.1 percentage points in fiscal year 2016 to 53.5 percent, leaving 41 percent of Arizona school districts spending less than 50 percent of their available operating dollars in the classroom. This trend is not reflected in the national trend, which has been comparatively stable, fluctuating only seven-tenths of a percentage point between fiscal years 2001 and 2014 (the most recent year for available national data). Had Arizona districts continued directing resources into the classroom at the same rate they did in fiscal year 2001, they would have spent an additional \$422 million in the classroom in fiscal year 2016.

# Proposition 123 provided additional resources, but it is likely that a large portion of these monies were not spent in fiscal year 2016 because of timing

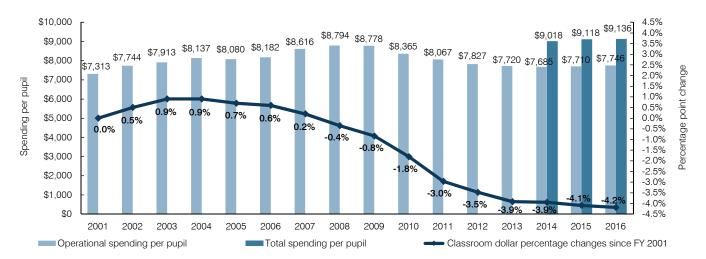
In May 2016, voters passed Proposition 123, which provided districts with approximately \$250 million of additional resources in fiscal year 2016. The monies are comingled and are not separately identifiable from other district monies, and therefore, it cannot be determined whether and how the monies were spent. Additionally, there was no requirement that districts had to spend these monies in the classroom, and districts had the option of using the monies for operational or capital purposes. Further, because the monies were not available to districts until after the vote, it is likely that a large portion of these monies were not spent in fiscal year 2016. Specifically, at the end of fiscal year 2016, districts reported total Maintenance and Operation Fund carryforward balances of \$326 million, while they had reported carryforward balances totaling \$147 million at the end of fiscal year 2015 and \$137 million at the end of fiscal year 2014. These carryforward monies are available to be spent by districts in future fiscal years.

# Percentage of resources spent in classroom declined both during years of increased and decreased overall spending

Despite receiving the additional CSF monies specifically intended to increase classroom spending and spending an additional inflation-adjusted \$433 per pupil in total, districts spent a lower percentage in the classroom in fiscal year 2016 than in fiscal year 2001. As shown in Figure 2 on page 5, since fiscal year 2001, even after controlling for inflation, Arizona school districts' total operational spending per pupil has increased 5.9 percent, from \$7,313 (\$5,374 unadjusted) in fiscal year 2001 to \$7,746 in fiscal year 2016. As discussed earlier, districts began receiving CSF monies in fiscal year 2002, which resulted in a \$431 per pupil increase and a 0.5 percentage point increase to the state-wide classroom dollar percentage. However, between fiscal years 2004 and 2016, the percentage of resources spent on instruction declined, both during times when total spending decreased as well as times when it increased. For example, the decline in instructional spending in fiscal years 2010 through 2014 occurred at a time when overall per pupil spending was also decreasing. This decrease in overall spending and the impact of having certain noninstructional costs that may be difficult to cut quickly in response to reduced funding, such as electricity or insurance costs, may explain some of the decline in instructional spending during these years. However, the percentage of available operating dollars spent on instruction also decreased in fiscal years 2005 through 2009, when year-to-year operational spending per pupil increased or remained about the same. As a result, the percentage of available operating dollars allocated to the classroom has decreased 4.2 percentage points since fiscal year 2001 and 5.1 percentage points since reaching its peak in fiscal years 2003 and 2004. The decrease since 2004 represents more than \$2.4 billion not being spent in the classroom during this 12-year period.

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.

Figure 2
Arizona's operational and total spending per pupil<sup>1</sup> and change in classroom dollar percentage since fiscal year 2001 (inflation adjusted to fiscal year 2016 dollars)
Fiscal years 2001 through 2016



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, 2015, and 2016.

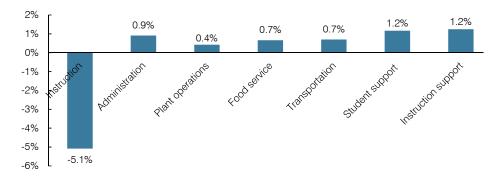
Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2016 dollars and Arizona Department of Education student membership data for fiscal years 2001 through 2016.

### District spending shifted from classroom to other areas

Since its peak in fiscal year 2004, the State's classroom dollar percentage has declined 5.1 percentage points. As shown in Figure 3, at the same time, the percentage of available operating dollars spent in all other operational areas increased. There may be reasons that 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 in recent years 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.

Figure 3
Percentage point change in spending by operational area
Fiscal year 2004 versus 2016



Source: Auditor General staff analysis of district-reported accounting data for fiscal years 2004 and 2016

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 nonclassroom areas may have been more within districts' control. For example, between fiscal years 2004 and 2016, Arizona school districts added 22 million square feet of building space—a 19 percent increase—despite a student enrollment increase of only 7 percent during this same period. This increased the state-wide average square footage per student from 138 to 154 square feet per student. On an inflation-adjusted basis, as shown in Table 1, 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 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.

### Impact of declining classroom dollar percentage varies by district but can be seen state-wide in lower teacher pay and larger class sizes

The impact of a declining classroom dollar percentage varies by district depending on the cause of the decline. However, at a state level, the decline in the classroom dollar percentage is indicative of fewer dollars going into the classroom and is reflected in lower teacher pay and larger class sizes.

**Impact of declining classroom dollar percentage varies by district—**The impact of a declining classroom dollar percentage varies depending on the cause of the decline. For example, by not operating

2016 dollars)

efficiently in nonclassroom areas, a district will have a lower classroom dollar percentage and will have fewer dollars to spend in the classroom. 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 the classroom, such as the National School Lunch Program monies, will also have a lower classroom dollar percentage, but it will not spend less in the classroom because of having received these monies.

State-level decline in classroom dollar percentage indicative of fewer dollars going into the classroom—At a state level, the decline in the classroom dollar percentage between fiscal years 2004 and 2016 is indicative of fewer actual dollars going into the classroom. As shown in Table 1, after

**Table 1**Comparison of per pupil expenditures by operational area (inflation adjusted to fiscal year

Fiscal year 2004 versus 2016

	2004	2016	Increase / (Decrease)
Instruction	\$4,766	\$4,145	(\$621)
Administration	771	806	35
Plant operations	956	939	(17)
Food service	384	415	31
Transportation	325	364	39
Student support	567	633	66
Instruction support	368	444	76
Total	\$8,137	\$7,746	(\$391)

Source: Auditor General staff analysis of district-reported accounting data inflation adjusted to fiscal year 2016 dollars and Arizona Department of Education student membership data for fiscal years 2004 and 2016.

controlling for inflation, total per pupil spending decreased \$391 per pupil, or 4.8 percent, between fiscal years 2004 and 2016. At this same time, spending in the classroom decreased an even greater amount, \$621 per pupil, or 13 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 classroom spending was due to an increase in monies earmarked for use outside the classroom, but rather represents a shift in how school districts directed resources.

**Decline in classroom spending reflected in lower teacher pay and larger class sizes**—The state-level decline in classroom spending is reflected in lower teacher pay and larger class sizes. Between fiscal years 2004 and 2016, the average teacher salary (inflation adjusted to fiscal year 2016 dollars) decreased 9 percent despite the teachers' average years of experience staying about the same. More recently, between fiscal years 2011 and 2016, the state-wide average teacher salary (adjusted for inflation) decreased from \$49,185 to \$46,384 despite a similar average years of teacher experience. During this same 5-year period, the state-wide average students per teacher increased from 18.1 to 18.6.

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

In fiscal year 2016, 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 2016, 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 2016 spending by district ranged from \$5,542 per pupil to \$18,924 per pupil. As shown in Table 2, on average, the 31 highest-spending districts spent \$12,753 per pupil, \$6,090 more than the \$6,663 the 31 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 2**Comparison of operational spending per pupil for Arizona's highest- and lowest-spending districts Fiscal year 2016

Highest-

Classroom dollar percentage
Total operational spending
Instruction
Administration
Plant operations
Food service
Transportation
Student support

Instruction support

spending districts' average <sup>1</sup>	spending districts' average <sup>1</sup>	Difference
46.6%	54.4%	
\$12,753	\$6,663	\$6,090
5,946	3,625	2,321
1,870	725	1,145
1,938	792	1,146
650	374	276
710	315	395
948	495	453
691	337	354

Lowest-

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

Districts also varied greatly in nonoperational spendina. 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 2016, after excluding Arizona's very small districts, nonoperational spending by district ranged from \$55 per pupil to \$23,513 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. For example, the District that spent \$23,513 per pupil in fiscal year 2016 built a school during that year.

Dollar amounts shown are averages of the 31 highest and 31 lowest per pupil operational spending districts in Arizona, excluding very small districts.

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.

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 3, on average, the 31

highest-spending districts received \$3,093 more per pupil in federal impact aid, \$1,674 more per pupil in federal grants, and \$972 more per pupil in transportation funding than the 31 lowest-spending districts. To a lesser extent, the highest-spending districts also received more monies through additional budgetary funding and the small school adjustment, 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

**Table 3**Comparison of revenue sources per pupil for Arizona's highest- and lowest-spending districts
Fiscal year 2016

Revenue source <sup>1</sup>	Highest- spending districts' average	Lowest- spending districts' average	Difference
Federal impact aid	\$3,099	\$ 6	\$3,093
Federal grants	2,501	827	1,674
Transportation funding	1,284	312	972
Additional budgetary funding	1,675	1,207	468
Small school adjustment	463	0	463
Desegregation	263	24	239
Voter-approved budget overrides	311	262	49
Tax credits	18	35	(17)

See Appendix B, page b-2, for description of each listed revenue source.
Source: Auditor General staff analysis of fiscal year 2016 district-reported accounting and budget data and Arizona Department of Education student membership and budget data.

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 2016, the average cost per mile for urban districts traveling between 270 and 335 miles per rider was \$3.58, while rural districts traveling a similar range of miles per rider averaged \$2.55 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 the classroom. 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

### Cost variance examples

- A very large, urban, unified district spent \$522 per pupil for administration; another spent \$914 per pupil.
- A medium-sized, rural, unified district spent \$2.66
  per square foot for plant operations; another
  spent \$8.98 per square foot.
- A medium-sized, rural, unified district spent \$2.56 per meal; another spent \$5.39 per meal.
- Two medium-large-sized, urban, elementary districts drove a similar number of miles per rider; one district spent \$4.07 per mile, and the other spent \$8.14 per mile.

practices efficient districts use, as well as practices that make other districts less efficient. For example:

#### 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.

#### Less efficient districts:

- Have costly benefit packages and higher nonclassroom 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 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.

- 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

- 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 in the classroom. 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 classroom dollar 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 classroom 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

#### 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

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.

As shown in Table 4, in fiscal year 2016, 8 districts were found to have a high financial stress level, 32 a moderate level, and 167 a low level. Having a high financial stress level can be a sign that a district has inefficient operations.

# **Table 4**Number of districts by overall financial stress level Fiscal year 2016

Stress level	Number of districts
High stress	8
Moderate stress	32
Low stress	167

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

For example, when reviewing the districts determined to have a high financial stress level and after excluding very small districts, which as previously noted have highly variable spending patterns, 6 of the remaining 7 districts operated inefficiently compared to their peers. However, there are many districts with low or moderate financial stress levels 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 moderate or low financial stress level may need to take additional actions to operate efficiently or address other areas of concern.

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

In fiscal year 2016, Arizona school districts spent approximately \$3,300 less per pupil than the 2014 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 5, in fiscal year 2016, Arizona school districts spent approximately \$3,300 less per pupil than the 2014 national average—the most recent year for available national data. This lower spending is seen in the classroom (instruction), as well as every nonclassroom operational area except student support, which was similar to the national average. It is interesting to note that 65 Arizona districts spent more than the national per pupil operational average. Forty-three of these are very small districts (i.e., less than 200 students), and almost all of them received additional monies from a small school adjustment. Eighteen of the 65 districts received federal impact aid monies as a result of their location on tax-exempt federal lands.

Arizona's lower spending occurred in operational rather than nonoperational areas. As shown in Table 5, Arizona districts' nonoperational spending was similar to the national average. Arizona districts spent more per pupil on equipment but less on land and buildings and interest, and a similar amount on other programs, such as

**Table 5**Comparison of Arizona and U.S. per pupil spending by area
Fiscal years 2016 (Arizona) and 2014 (U.S.)

	Arizona average 2016	National average 2014	Difference
Spending by area			
Instruction	\$ 4,145	\$ 6,726	(\$ 2,581)
Administration	806	1,211	(405)
Plant operations	939	1,060	(121)
Food service	415	447	(32)
Transportation	364	477	(113)
Student support	633	615	18
Instruction support	444	530	(86)
Total operational	\$7,746	\$11,066	(\$3,320)
Land and buildings	\$ 621	\$ 740	(\$ 119)
Equipment	400	188	212
Interest	216	343	(127)
Other	153	159	(6)
Total nonoperational	\$1,390	\$ 1,430	(\$ 40)
Total per pupil spending	\$9,136	\$12,496	(\$3,360)

Source: Auditor General staff analysis of fiscal year 2016 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 2013-14, October 2016.

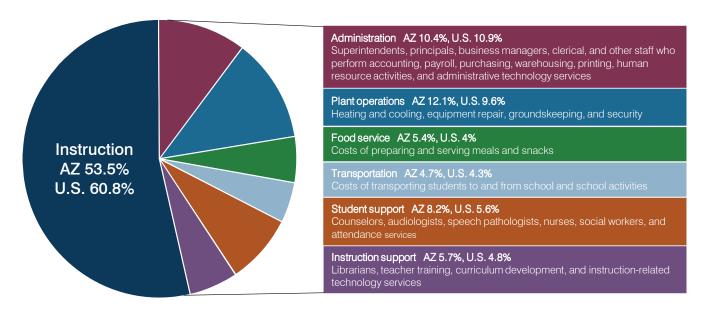
adult education and community service that are outside the scope of preschool through grade 12 education.

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 2016, 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 2014, which was the most recent year for available national data. In fiscal year 2014, school districts nationwide received 9 percent of their revenues from federal sources and 91 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 4, in fiscal year 2016, Arizona districts spent 53.5 percent of available operating dollars on instruction, 7.3 percentage points below the most recent national average of 60.8 percent. Many factors may account for Arizona's lower percentage of classroom spending, and classroom size is one of them. Compared to the fiscal year 2015 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 16.1 students per teacher. The relatively low classroom dollar 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, primarily for plant operations and student support services. 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. Arizona's higher percentage

Figure 4
Comparison of Arizona and U.S. spending by operational area
Fiscal years 2016 (Arizona) and 2014 (U.S.)



Source: Auditor General staff analysis of fiscal year 2016 district-reported accounting data and National Center for Education Statistics Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2013-14, October 2016.

allocated to student support may be related to the State's higher poverty rate. In fiscal year 2015 (the most received year for available national data), 23 percent of Arizona's school-aged children lived at or below the poverty lecompared to the national average of 19 percent. In Arizona, a district's level of spending on student supported to the percentage of students who live in poverty.	evel,

### State of Arizona

Total operational spending<sup>1</sup>: \$7,021,671,942

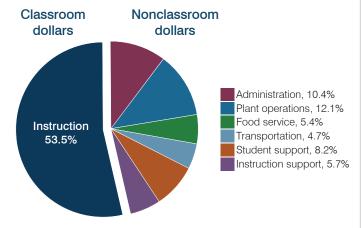
Number of districts: 236 Number of schools: 1,369

#### **OPERATIONAL EFFICIENCY**

### STUDENT AND TEACHER MEASURES, FINANCIAL ASSESSMENT, AND REVENUES

906,444

### Spending by operational area



### **Efficiency measures**

Operational area	Measure	2014	2015	2016
	Cost per pupil	\$757	\$780	\$806
Administration	Students per administrative position	68	67	67
Plant operations	Cost per square foot	\$6.04	\$6.09	\$6.10
	Square footage per student	153	153	154
Food service	Cost per meal	\$2.69	\$2.79	\$2.81
Transportation	Cost per mile	\$3.62	\$3.66	\$3.72
Transportation	Cost per rider	\$1,036	\$1,071	\$1,092

### Per pupil spending

		S	tate			ational erage
Spending by area	2014		2015	2016		2014
Instruction	\$ 4,073	\$	4,105	\$ 4,145	\$	6,726
Administration	757		780	806		1,211
Plant operations	923		930	939		1,060
Food service	405		417	415		447
Transportation	373		371	364		477
Student support	600		613	633		615
Instruction support	447		442	444		530
Total operational	\$ 7,578	\$	7,658	\$ 7,746	\$1	11,066
Land and buildings	\$ 606	\$	641	\$ 621	\$	740
Equipment	339		383	400		188
Interest	222		225	216		343
Other	148		150	153		159
Total nonoperational	\$ 1,315	\$	1,399	\$ 1,390	\$	1,430
Total per pupil spending	\$ 8,893	\$	9,057	\$ 9,136	\$1	12,496

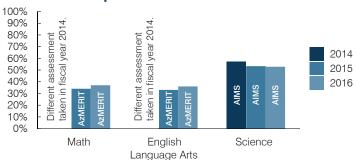
See Appendix B, page b-1.

#### Student and teacher measures

Students attending<sup>2</sup>:

Measure	2014	2015	2016
Attendance rate	95%	94%	N/A
Graduation rate	76%	78%	N/A
Poverty rate	23%	23%	N/A
Students per teacher	18.6	18.6	18.6
Average teacher salary	\$46,026	\$46,008	\$46,384
Amount from Proposition 301	\$4,810	\$5,034	\$5,315
Average years of teacher experience	10.9	11.0	11.0
Percentage of teachers in first 3 years	20%	20%	20%

#### Students who passed state assessments



### **Financial stress assessment**

Filialiciai Stress assessifient	Number of districts		
Overall financial stress level:	167	32	8
Measure: 2014 through 2016			
Change in number of district students	161	30	16
Spending exceeded operating/capital budgets	186		19
Spending increase election results	81	5	14
Operating reserve percentage, Trend	174	11	22
Years of capital reserve held	128	67	12
Current financial and internal control status	151	34	9

#### Per pupil revenues

			National
	St	ate	average
Revenues by source	2015	2016	2014
Federal	\$ 1,299	\$ 1,301	\$ 1,090
State	3,517	3,780	5,762
Local	4,248	4,268	5,608
Total revenues per pupil	\$ 9,064	\$ 9,349	\$12,460
Select revenues from common so	urces		
Equalization formula funding	\$ 5,303	\$ 5,471	N/A
Grants	1,167	1,182	N/A
Donations and tax credits	78	86	N/A
	Amount r	eceived	Number of
Select 2016 revenues from	range pe	er pupil	districts
less common sources	Min	Max	receiving
Desegregation	\$ 130	\$ 2,043	18
Small school adjustment	370	63,126	50
Federal impact aid	5	12,942	48
Voter-approved levy increases	20	7,839	132

Some districts are working with the Arizona Department of Education to resolve student count discrepancies. See Appendix B, page b-5.

### State of Arizona—page 2

### Classroom dollar percentage

Year: 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Percentage: 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

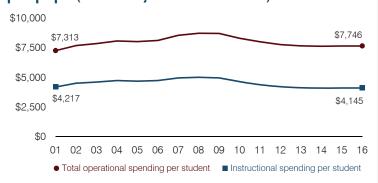
### TRENDS Fiscal years as indicated

### OPERATIONAL SPENDING DETAIL Fiscal year 2016

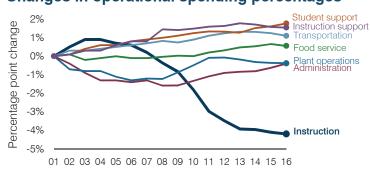
### 5-year spending trend (2011 through 2016)

Total operational spending per pupil, adjusted for inflation, decreased by 4 percent from \$8,067 in fiscal year 2011 to \$7,746 in fiscal year 2016. The percentage of dollars spent in the classroom decreased from 54.7 to 53.5 percent. As a percentage of total operational spending, administration increased slightly while all other nonclassroom areas remained stable. The number of students attending has remained relatively stable during this 5-year period.

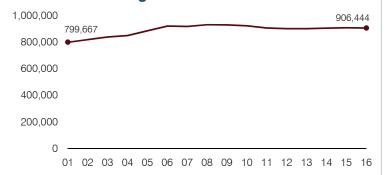
### Total operational and instructional spending per pupil (inflation adjusted to 2016 dollars)



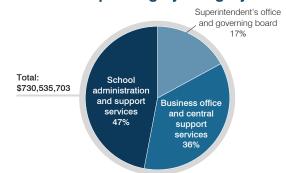
### Changes in operational spending percentages



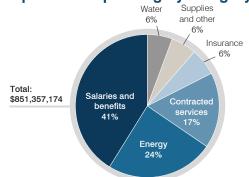
#### Students attending



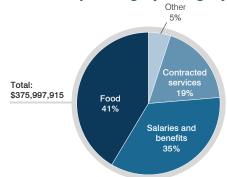
### Administrative spending by category



### Plant operations spending by category



### Food service spending by category



#### Transportation spending by category



Arizona Auditor General

### **APPENDIX A**

This appendix lists the 207 districts organized into operational efficiency, transportation efficiency, and student achievement peer groups. Table 6 (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 2016 classroom dollar percentages. Table 7 (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 2016 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 8 (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 Spring 2016 Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) test and the Spring 2016 Arizona's Instrument to Measure Standards (AIMS) test.

**Table 6**Districts grouped by operational efficiency peer group and ranked by classroom dollar percentage
Fiscal year 2016

Peer gro	up		Classroom dollar		Classroom dollar
Number	Description	District name	percentage	District name	percentage
1	Very large unified	Peer group average	56.2%		
and union high		Chandler USD	61.0	Peoria USD	56.2
	school districts in cities and suburbs	Gilbert USD	60.7	Dysart USD	55.8
		Deer Valley USD	58.5	Phoenix UHSD	54.0
		Mesa USD	56.7	Scottsdale USD	53.6
		Paradise Valley USD	56.4	Tucson USD	48.8
2	Large unified and	Peer group average	52.8%		
	union high school	Higley USD	57.7	Amphitheater USD	52.8
	districts in cities and suburbs	Glendale UHSD	56.1	Flagstaff USD	52.5
	and odbarbo	Tolleson UHSD	55.3	Vail USD	51.4
		Tempe UHSD	54.1	Sunnyside USD	48.5
		Marana USD	53.9	Yuma UHSD	46.1

### Table 6 (continued)

Peer gro	ир		Classroom dollar		Classroom dollar
Number	Description	District name	percentage	District name	percentage
3	Medium-large and	Peer group average	52.9%		
	medium unified	Tanque Verde USD	58.5	Buckeye UHSD	52.9
	and union high school districts in	Humboldt USD	55.7	Cave Creek USD	52.8
	cities and suburbs	Apache Junction USD	54.4	Prescott USD	51.3
		Sierra Vista USD	53.9	Queen Creek USD	51.0
		Lake Havasu USD	53.8	J.O. Combs USD	50.8
		Flowing Wells USD	53.7	Fountain Hills USD	50.0
		Catalina Foothills USD	53.5	Casa Grande UHSD	47.5
		Agua Fria UHSD	53.0		
4	Large and	Peer group average	51.9%		
medium-large unified and union high school districts in towns and rural areas	Safford USD	63.3	Santa Cruz Valley USD	50.5	
	Show Low USD	56.9	Winslow USD	50.0	
	0	Snowflake USD	55.8	Chinle USD	49.9
	Sahuarita USD	54.4	Chino Valley USD	49.5	
	Florence USD	53.4	Kingman USD	49.5	
		Blue Ridge USD	53.1	Page USD	49.2
		Payson USD	52.2	Maricopa USD	49.1
		Nogales USD	51.5	Coolidge USD	48.3
		Douglas USD	50.5	Whiteriver USD	47.5
5	Medium unified	Peer group average	49.6%		
	and union high	Thatcher USD	61.6	Bisbee USD	49.6
	school districts in towns and rural	Morenci USD	60.2	Saddle Mountain USD	49.3
	areas	Pima USD	59.4	St. Johns USD	48.3
		Mingus UHSD	58.6	Wickenburg USD	47.9
		Willcox USD	57.2	Tombstone USD	47.5
		Camp Verde USD	56.3	Window Rock USD	44.7
		Miami USD	55.3	San Carlos USD	44.1
		Holbrook USD	54.7	Baboquivari USD	43.2
		Colorado River UHSD	52.9	Ganado USD	42.6
		Sedona-Oak Creek Joint USD	51.7	Sanders USD	41.5
		Benson USD	51.3	Tuba City USD	41.2
		Round Valley USD	51.1	Kayenta USD	41.1
		Parker USD	50.8	Piñon USD	39.2
		Mammoth-San Manuel USD	50.7	Red Mesa USD	36.8
		Globe USD	49.8		

### Table 6 (continued)

Peer grou	up		Classroom dollar		Classroom dollar
Number	Description	District name	percentage	District name	percentage
6 Small unified and	Peer group average	49.6%			
	union high school	Fredonia-Moccasin USD	55.9	Superior USD	49.5
	districts in towns and rural areas	Bagdad USD	55.4	Ash Fork Joint USD	49.0
	and raidi arodo	Ray USD	54.2	Duncan USD	48.4
		Colorado City USD	54.1	Mayer USD	48.4
		Antelope UHSD	53.5	Ft. Thomas USD	46.6
		Littlefield USD	52.8	Gila Bend USD	44.9
		St. David USD	52.6	Joseph City USD	44.3
		Williams USD	52.3	Grand Canyon USD	43.6
		Heber-Overgaard USD	51.3	Hayden-Winkelman USD	43.5
		Ajo USD	50.7	Santa Cruz Valley UHSD	41.7
7	Very large and	Peer group average	53.5%	·	
large elementary	Kyrene ESD	59.2	Tempe ESD	52.5	
	school districts in cities and suburbs	Litchfield ESD	58.6	Glendale ESD	52.1
	Cities and suburbs	Cartwright ESD	57.3	Pendergast ESD	51.4
		Alhambra ESD	54.2	Yuma ESD	48.8
		Washington ESD	53.7	Roosevelt ESD	47.3
8	Medium-large	Peer group average	51.3%		
	and medium	Liberty ESD	56.7	Crane ESD	51.2
	elementary school districts in cities	Wilson ESD	56.4	Union ESD	51.0
	and suburbs	Fowler ESD	54.8	Osborn ESD	50.7
		Avondale ESD	53.1	Casa Grande ESD	49.6
		Buckeye ESD	53.0	Phoenix ESD	49.5
		Littleton ESD	52.5	Creighton ESD	48.3
		Tolleson ESD	52.3	Balsz ESD	48.1
		Madison ESD	51.9	Murphy ESD	47.2
		Laveen ESD	51.8	Riverside ESD	44.4
		Isaac ESD	51.5		
9	Medium-large	Peer group average	49.1%		
	and medium	Bullhead City ESD	55.6	Gadsden ESD	47.8
	elementary school	Palominas ESD	53.9	Eloy ESD	47.3
	districts in towns and rural areas	Cottonwood-Oak Creek ESD	53.0	Nadaburg USD <sup>1</sup>	46.2
		Somerton ESD	49.1	Toltec ESD	45.2
		Mohave Valley ESD	48.8	Altar Valley ESD	44.4
10	Small elementary	Peer group average	51.2%		
	school districts in	Naco ESD	59.4	Arlington ESD	53.3
	towns and rural	Red Rock ESD	58.2	Beaver Creek ESD	49.8
	areas	Clarkdale-Jerome ESD	57.9	Santa Cruz ESD	49.1
		Wellton ESD	54.8	Stanfield ESD	46.4
	Continental ESD	54.7	Sacaton ESD	46.3	
		Palo Verde ESD	53.9	Quartzsite ESD	42.4

### Table 6 (concluded)

Peer gro	up		Classroom dollar		Classroom dollar
Number	Description	District name	percentage	District name	percentage
11	Very small school	Peer group average	49.7%		
districts	Blue ESD	76.9	Paloma ESD	48.9	
		Alpine ESD	63.0	Bicentennial UHSD	47.7
		Bonita ESD	62.2	Tonto Basin ESD	47.7
		Double Adobe ESD	61.7	Hyder ESD	47.6
		Hillside ESD	60.4	San Simon USD	47.1
		Cochise ESD	56.9	Bowie USD	46.8
		Pearce ESD	56.9	Seligman USD	46.7
		Sonoita ESD	56.0	Patagonia ESD	46.6
		McNary ESD	55.7	Patagonia UHSD	46.6
		Valentine ESD	55.4	Topock ESD	46.5
		Aguila ESD	54.8	Skull Valley ESD	46.4
		Congress ESD	54.8	Mohawk Valley ESD	45.6
		Picacho ESD	53.5	Solomon ESD	45.6
		Elfrida ESD	53.3	Wenden ESD	45.4
		Morristown ESD	53.1	Yucca ESD	45.0
		Young ESD	53.1	McNeal ESD	44.2
		Maine Consolidated SD	53.0	San Fernando ESD	44.0
		Pine Strawberry ESD	53.0	Owens-Whitney ESD	43.7
		Valley UHSD	52.8	Hackberry ESD	43.1
		Cañon ESD	51.2	Vernon ESD	43.1
		Kirkland ESD	51.2	Concho ESD	42.1
		Sentinel ESD	50.8	Salome Consolidated ESD	41.8
		Crown King ESD	50.6	Bouse ESD	40.6
		Yarnell ESD	50.3	Cedar USD	37.1
		Apache ESD	49.4	Ash Creek ESD	33.5
		Pomerene ESD	49.0	Mobile ESD	32.9

Although unified school districts, Nadaburg USD and Peach Springs USD were included in groups with elementary school districts because they did not have any high school students in fiscal year 2016.

Source: Auditor General staff analysis of fiscal year 2016 district-reported accounting data, fiscal year 2016 Arizona Department of Education student membership data, and fiscal year 2015 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

**Table 7**Districts grouped by transportation efficiency peer group and ranked by cost per mile and cost per rider
Fiscal year 2016

T-1	Peer group			Cost	Cost
Suburbs traveling   150 miles per rider or less   Riverside ESD   4.85   538   Riverside ESD   4.94   572	Number	Description	District name	per mile	per rider
150 miles per rider or less   Riverside ESD   4.94   572     Tempe ESD   5.26   568     Laveen ESD   6.18   550     Laveen ESD   5.39   674     Littleton ESD   5.89   925     Littleton ESD   5.47   1,068     Alhambra ESD   7.45   1,308     Murphy ESD   9.25   1,161     T-2	T-1	Districts in cities and	Peer group average	\$6.21	\$783
T-2 Districts in cities and suburbs traveling 151-220 miles per rider  T-2 Districts in Cities and Suburbs traveling 151-220 miles per rider  T-2 Districts in Cities Sund Suburbs traveling 151-220 miles per rider  T-2 Districts in Cities Sund Suburbs traveling 151-220 miles per rider  T-2 Districts in Cities Sund Sund Suburbs traveling 151-220 miles per rider  T-2 Districts in Cities Sund Sund Suburbs traveling 151-220 miles per rider  T-2 Districts in Cities Sund Sund Sund Sund Sund Sund Sund Sund			Crane ESD	4.85	538
Laveen ESD 6.18 550 Fowler ESD 5.39 674 Littleton ESD 6.35 783 Glendale ESD 5.89 925 Union ESD 5.47 1,068 Alhambra ESD 7.31 992 Madison ESD 7.45 1,309 Murphy ESD 9.25 1,161  T-2 Districts in cities and suburbs traveling 151-220 miles per rider  Peer group average \$5.73 \$910 Catalina Foothills USD 3.14 542 Sunnyside USD 3.76 741 Buckeye ESD 4.07 818 Osborn ESD 4.74 956 Flowing Wells USD 5.52 901 Cartwright ESD 5.99 891 Avondale ESD 5.84 1,172 Creighton ESD 7.14 1,080 Isaac ESD 9.24 1,215		·	Riverside ESD	4.94	572
Fowler ESD 5.39 674  Littleton ESD 6.35 783  Glendale ESD 5.89 925  Union ESD 5.47 1,068  Alhambra ESD 7.31 992  Madison ESD 7.45 1,309  Murphy ESD 9.25 1,161  T-2 Districts in cities and suburbs traveling 151-220 miles per rider  Peer group average \$5.73 \$910  Catalina Foothills USD 3.14 542  Sunnyside USD 3.76 741  Buckeye ESD 4.07 818  Osborn ESD 4.74 956  Flowing Wells USD 5.52 901  Cartwright ESD 5.99 891  Avondale ESD 5.84 1,172  Creighton ESD 7.14 1,080  Isaac ESD 9.24 1,215			Tempe ESD	5.26	569
Littleton ESD 6.35 783 Glendale ESD 5.89 925 Union ESD 5.47 1,068 Alhambra ESD 7.31 992 Madison ESD 7.45 1,309 Murphy ESD 9.25 1,161  T-2 Districts in cities and suburbs traveling 151-220 miles per rider  Peer group average \$5.73 \$910 Catalina Foothills USD 3.14 542 Sunnyside USD 3.76 741 Buckeye ESD 4.07 818 Osborn ESD 4.74 956 Flowing Wells USD 5.52 907 Cartwright ESD 5.99 891 Avondale ESD 5.84 1,172 Creighton ESD 7.14 1,080 Isaac ESD 9.24 1,218			Laveen ESD	6.18	550
Glendale ESD   5.89   925     Union ESD   5.47   1,068     Alhambra ESD   7.31   992     Madison ESD   7.45   1,309     Murphy ESD   9.25   1,161     T-2   Districts in cities and suburbs traveling 151-220 miles per rider   Peer group average   \$5.73   \$910     Catalina Foothills USD   3.14   542     Sunnyside USD   3.76   741     Buckeye ESD   4.07   818     Osborn ESD   4.74   956     Flowing Wells USD   5.52   901     Cartwright ESD   5.99   891     Avondale ESD   5.84   1,172     Creighton ESD   7.14   1,080     Isaac ESD   9.24   1,215     Isaac ESD   9.24   1,215     Cartwright ESD   9.24   1,215     Creighton ESD   9.24   1,215     Cartwright ESD   9.24   1,215     Cartwright ESD   9.24   1,215     Cartwright ESD   9.24   1,215     Creighton ESD   9.24   1,215     Cartwright ESD   9.24   1,215     Cart			Fowler ESD	5.39	674
Union ESD 5.47 1,068 Alhambra ESD 7.31 992 Madison ESD 7.45 1,309 Murphy ESD 9.25 1,161  T-2 Districts in cities and suburbs traveling 151-220 miles per rider  Peer group average \$5.73 \$910 Catalina Foothills USD 3.14 542 Sunnyside USD 3.76 741 Buckeye ESD 4.07 818 Osborn ESD 4.74 956 Flowing Wells USD 5.52 901 Cartwright ESD 5.99 891 Avondale ESD 5.99 891 Avondale ESD 5.84 1,172 Creighton ESD 7.14 1,080 Isaac ESD 9.24 1,218			Littleton ESD	6.35	783
Alhambra ESD 7.31 992  Madison ESD 7.45 1,309  Murphy ESD 9.25 1,161  T-2 Districts in cities and suburbs traveling 151-220 miles per rider  Peer group average \$5.73 \$910  Catalina Foothills USD 3.14 542  Sunnyside USD 3.76 741  Buckeye ESD 4.07 818  Osborn ESD 4.74 956  Flowing Wells USD 5.52 901  Cartwright ESD 5.99 891  Avondale ESD 5.54 1,043  Roosevelt ESD 5.84 1,172  Creighton ESD 7.14 1,080  Isaac ESD 9.24 1,215			Glendale ESD	5.89	925
Madison ESD   7.45   1,309			Union ESD	5.47	1,068
T-2 Districts in cities and suburbs traveling 151-220 miles per rider    Catalina Foothills USD   3.14   542			Alhambra ESD	7.31	992
T-2 Districts in cities and suburbs traveling 151-220 miles per rider    Catalina Foothills USD   3.14   542			Madison ESD	7.45	1,309
and suburbs traveling 151-220 miles per rider         Catalina Foothills USD         3.14         542           Sunnyside USD         3.76         741           Buckeye ESD         4.07         818           Osborn ESD         4.74         956           Flowing Wells USD         5.52         901           Cartwright ESD         5.99         891           Avondale ESD         5.54         1,043           Roosevelt ESD         5.84         1,172           Creighton ESD         7.14         1,080           Isaac ESD         9.24         1,215			Murphy ESD	9.25	1,161
Sunnyside USD   3.76   741	T-2		Peer group average	\$5.73	\$910
rider    Sunnyside USD   3.76   741     Buckeye ESD   4.07   818     Osborn ESD   4.74   956     Flowing Wells USD   5.52   901     Cartwright ESD   5.99   891     Avondale ESD   5.54   1,043     Roosevelt ESD   5.84   1,172     Creighton ESD   7.14   1,080     Isaac ESD   9.24   1,215     Cartwright ESD   9.24		151-220 miles per	Catalina Foothills USD	3.14	542
Osborn ESD       4.74       956         Flowing Wells USD       5.52       901         Cartwright ESD       5.99       891         Avondale ESD       5.54       1,043         Roosevelt ESD       5.84       1,172         Creighton ESD       7.14       1,080         Isaac ESD       9.24       1,215			Sunnyside USD	3.76	741
Flowing Wells USD       5.52       901         Cartwright ESD       5.99       891         Avondale ESD       5.54       1,043         Roosevelt ESD       5.84       1,172         Creighton ESD       7.14       1,080         Isaac ESD       9.24       1,215			Buckeye ESD	4.07	818
Cartwright ESD       5.99       891         Avondale ESD       5.54       1,043         Roosevelt ESD       5.84       1,172         Creighton ESD       7.14       1,080         Isaac ESD       9.24       1,215			Osborn ESD	4.74	956
Avondale ESD       5.54       1,043         Roosevelt ESD       5.84       1,172         Creighton ESD       7.14       1,080         Isaac ESD       9.24       1,215			Flowing Wells USD	5.52	901
Roosevelt ESD       5.84       1,172         Creighton ESD       7.14       1,080         Isaac ESD       9.24       1,215			Cartwright ESD	5.99	891
Creighton ESD         7.14         1,080           Isaac ESD         9.24         1,215			Avondale ESD	5.54	1,043
Isaac ESD 9.24 1,215			Roosevelt ESD	5.84	1,172
			Creighton ESD	7.14	1,080
Tolleson ESD 8.14 1,657			Isaac ESD	9.24	1,215
			Tolleson ESD	8.14	1,657
Phoenix ESD 7.93 1,796			Phoenix ESD	7.93	1,796

### Table 7 (continued)

Peer gro		<b>-</b>	Cost	Cost
Number	Description	District name	per mile	per rider
T-3	Districts in cities and suburbs traveling 221-269 miles per	Peer group average	\$3.92	\$970
		Apache Junction USD	2.87	771
	rider	Fountain Hills USD	3.15	704
		Queen Creek USD	3.25	723
		Litchfield ESD	3.26	745
		Tempe UHSD	3.26	879
		Sierra Vista USD	3.59	874
		Kyrene ESD	3.84	876
		Tolleson UHSD	4.44	840
		Higley USD	4.28	965
		Washington ESD	4.57	1,237
		Balsz ESD	3.79	1,515
		Chandler USD	4.69	1,338
		Pendergast ESD	5.96	1,136
		Wilson ESD	6.07	1,274
T-4	Districts in cities and	Peer group average	\$3.58	\$1,168
	suburbs traveling 270-335 miles per	Cave Creek USD	3.12	888
	rider	Humboldt USD	3.02	977
		J.O. Combs USD	3.06	1,027
		Liberty ESD	3.41	1,142
		Gilbert USD	3.68	1,074
		Casa Grande ESD	3.68	1,105
		Amphitheater USD	3.20	1,294
		Prescott USD	3.56	1,213
		Agua Fria UHSD	3.66	1,219
		Deer Valley USD	4.34	1,104
		Paradise Valley USD	3.87	1,350
		Dysart USD	4.35	1,622

### Table 7 (continued)

Peer grou	•	B	Cost	Cost
Number	Description	District name	per mile	per rider
T-5	Districts in cities and suburbs traveling more than 335 miles per rider	Peer group average	\$3.76	\$1,462
		Tanque Verde USD	2.03	781
		Vail USD	2.89	717
		Casa Grande UHSD	3.17	1,133
		Marana USD	3.21	1,150
		Buckeye UHSD	2.92	1,445
		Peoria USD	3.53	1,270
		Flagstaff USD	3.08	1,460
		Yuma ESD	3.80	1,564
		Lake Havasu USD	3.58	1,652
		Mesa USD	4.42	1,537
		Scottsdale USD	4.46	1,677
		Yuma UHSD	4.48	1,816
		Tucson USD	4.65	2,033
		Glendale UHSD	5.61	2,223
		Phoenix UHSD	NA	1,107
T-6	Districts in towns and	Peer group average	\$3.68	\$543
	rural areas traveling less than 200 miles	Gadsden ESD	3.39	252
	per rider	Toltec ESD	3.24	290
		Bullhead City ESD	3.60	298
		Safford USD	2.49	479
		Somerton ESD	2.75	515
		Thatcher USD	3.14	588
		Eloy ESD	3.29	612
		Mingus UHSD	3.16	632
		Clarkdale-Jerome ESD	4.05	522
		Colorado City USD	4.03	560
		Pima USD	3.86	706
		Maricopa USD	3.97	780
		Nogales USD	5.18	872
		Globe USD	4.64	1,375
		Superior USD	3.85	NR

### Table 7 (continued)

Number	Description	District name	Cost per mile	Cost per ride
T-7	Districts in towns and rural areas traveling 200-259 miles per rider	Peer group average	\$3.32	\$863
		Continental ESD	1.77	468
		Mammoth-San Manuel USD	2.06	531
		Littlefield USD	2.40	598
		Mohave Valley ESD	2.36	632
		Quartzsite ESD	2.39	730
		Parker USD	2.93	593
		Beaver Creek ESD	2.51	704
		Sahuarita USD	2.90	632
		Santa Cruz Valley USD	2.79	742
		Whiteriver USD	3.35	806
		Window Rock USD	2.96	959
		Chino Valley USD	3.44	901
		Morenci USD	4.27	820
		Sedona-Oak Creek Joint USD	4.15	903
		Miami USD	4.18	1,023
		St. David USD	3.33	1,308
		Snowflake USD	4.28	1,291
		San Carlos USD	5.97	1,142
		Bagdad USD	5.03	1,613
		Peach Springs USD	NR	NR
		Red Rock ESD	NR	NR
T-8	Districts in towns and rural areas traveling 260-389 miles per rider	Peer group average	\$2.55	\$996
		Ganado USD	1.92	690
		Stanfield ESD	2.22	688
		Altar Valley ESD	1.90	837
		Saddle Mountain USD	2.23	737
		Palominas ESD	1.73	1,062
		Cottonwood-Oak Creek ESD	2.77	694
		Wellton ESD	1.73	1,118
		Ft. Thomas USD	2.76	782
		Show Low USD	2.63	948
		Palo Verde ESD	2.95	836
		Benson USD	3.08	845
		Winslow USD	2.17	1,214
		Gila Bend USD	2.53	1,137
		Nadaburg USD	2.69	1,081
		Blue Ridge USD	3.26	1,067
		Douglas USD	3.25	1,513
		Payson USD	3.67	1,463
		Sacaton ESD	3.56	1,564
		Naco ESD	10.13	5,416

Peer group			Cost	Cost
Number Description		District name	per mile	per ride
T-9	Districts in towns and	Peer group average	\$2.49	\$1,031
	rural areas traveling	Heber-Overgaard USD	1.57	633
	390-489 miles per rider	Kingman USD	1.98	519
		Oracle ESD	2.08	697
		Joseph City USD	1.77	865
		Arlington ESD	1.93	913
		Grand Canyon USD	2.44	987
		Bisbee USD	2.44	994
		Coolidge USD	2.55	955
		Tombstone USD	2.33	1,152
		Williams USD	2.29	1,195
		Camp Verde USD	2.73	1,021
		Florence USD	3.00	1,179
		Chinle USD	2.89	1,244
		Wickenburg USD	3.05	1,334
		Hayden-Winkelman USD	3.14	1,481
		Ajo USD	3.59	1,490
		Tuba City USD	2.82	1,887
T-10	Districts in towns and	Peer group average	\$1.89	\$1,242
	rural areas traveling more than 489 miles per rider	Antelope UHSD	0.83	719
		Santa Cruz ESD	1.20	592
	•	Duncan USD	1.27	887
		Round Valley USD	1.70	1,127
		Ray USD	2.02	955
		St. Johns USD	1.37	1,422
		Ash Fork Joint USD	1.84	1,222
		Red Mesa USD	1.83	1,287
		Mayer USD	1.98	1,207
		Baboquivari USD	2.23	1,063
		Holbrook USD	1.66	1,464
		Willcox USD	1.99	1,317
		Sanders USD	2.01	1,350
		Fredonia-Moccasin USD	1.94	1,498
		Santa Cruz Valley UHSD	2.51	1,316
		Colorado River UHSD	2.60	1,468
		Kayenta USD	2.83	1,499
		Page USD	2.57	1,931

Peer group  Number Description			Cost	Cost	
Number	Description	District name	per mile	per rider	
T-11	Very small districts	Peer group average	\$1.75	\$1,495	
		McNary ESD	0.34	222	
		Owens-Whitney ESD	0.42	535	
		Double Adobe ESD	0.65	565	
		Aguila ESD	0.88	623	
		Bonita ESD	1.02	583	
		Yarnell ESD	0.77	906	
		Pearce ESD	1.26	584	
		San Simon USD	0.82	1,023	
		Solomon ESD	1.72	285	
		Alpine ESD	0.43	1,406	
		Congress ESD	1.21	784	
		Topock ESD	1.73	368	
		Bouse ESD	1.55	644	
		Valentine ESD	1.42	779	
		Paloma ESD	1.74	505	
		Mohawk Valley ESD	1.63	674	
		Concho ESD	0.94	1,264	
		Hyder ESD	1.08	1,181	
		Cochise ESD	1.88	580	
		Skull Valley ESD	1.78	839	
		Vernon ESD	1.34	1,226	
		Morristown ESD	1.68	943	
		Hillside ESD	1.61	1,260	
		Picacho ESD	2.48	546	
		Seligman USD	0.93	1,889	
		McNeal ESD	1.54	1,403	
		Bicentennial UHSD	1.30	1,705	
		Kirkland ESD	1.68	1,428	
		Elfrida ESD	2.15	1,138	
		Apache ESD	0.97	2,464	
		Cañon ESD	2.82	981	
		Young ESD	3.19	874	
		Bowie USD	1.19	2,761	
		Mobile ESD	2.19	1,933	
		Tonto Basin ESD	1.53	2,583	
		Sonoita ESD	1.44	2,972	
		Salome Consolidated ESD	3.59	1,150	
		Patagonia UHSD	1.23	3,310	
		Patagonia ESD	1.23	3,310	
		Wenden ESD	2.81	1,974	
		Welldell LOD	۷.0۱	1,974	

### Table 7 (concluded)

Peer group			Cost	Cost
Number	Description	District name	per mile	per rider
T-11	Very small districts	Valley UHSD	\$1.61	\$3,099
(concluded)		Maine Consolidated SD	3.15	1,926
		Pine Strawberry ESD	3.20	2,017
		Pomerene ESD	5.03	463
		Ash Creek ESD	0.73	4,472
		Sentinel ESD	2.54	3,656
		Cedar USD	3.62	3,194
		Hackberry ESD	5.66	2,545
		San Fernando ESD	6.36	24,505

Source: Auditor General staff analysis of fiscal year 2016 district-reported accounting data, fiscal year 2016 Arizona Department of Education route reports, and fiscal year 2015 U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

**Table 8**Districts grouped by student achievement peer group and ranked by percentage of students who passed state assessments
Fiscal year 2016

Peer group			Perce	Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science	
1	Unified school districts	Peer group average	58%	57%	77%	
	with poverty rates less	Catalina Foothills USD	68	69	86	
	than 10 percent in cities and suburbs	Cave Creek USD	61	61	79	
		Vail USD	61	58	80	
		Tanque Verde USD	57	56	83	
		Higley USD	60	57	77	
		Gilbert USD	52	52	68	
		Fountain Hills USD	45	48	64	
2	Unified school districts	Peer group average	44%	44%	63%	
	with poverty rates of 10	Queen Creek USD	57	53	74	
	to 17 percent in cities and suburbs	Chandler USD	55	55	72	
		Scottsdale USD	50	52	68	
		Deer Valley USD	48	50	71	
		Prescott USD	43	47	69	
		Paradise Valley USD	44	46	64	
		Peoria USD	44	39	58	
		Marana USD	36	41	59	
		J. O. Combs USD	37	32	53	
		Dysart USD	34	35	52	
		Flagstaff USD	32	32	54	
3	Unified school districts	Peer group average	37%	38%	51%	
	with poverty rates	Sierra Vista USD	47	45	53	
	greater than 17 percent in cities and suburbs	Lake Havasu USD	45	41	55	
		Mesa USD	38	37	58	
		Humboldt USD	36	36	61	
		Apache Junction USD	30	33	56	
		Amphitheater USD	38	42	38	
		Tucson USD	27	30	38	

Number	Description	District name	Perce Math	English Language Arts	Science
	·				
4	Unified school districts with poverty rates less	Peer group average	30%	31%	51%
	than 20 percent in towns	Thatcher USD	42	48	69
	and rural areas	St. David USD	38	47	65
		Morenci USD	44	41	63
		Sahuarita USD	38	41	54
		Sedona-Oak Creek Joint USD	43	36	50
		Bagdad USD	29	28	64
		Saddle Mountain USD	38	29	53
		Fredonia-Moccasin USD	34	31	53
		Duncan USD	29	27	57
		Ray USD	19	27	57
		Florence USD	26	29	47
		Willcox USD	27	22	46
		San Simon USD	26	26	41
		Tombstone USD	28	28	37
		Maricopa USD	26	26	39
		Seligman USD	24	30	33
		Mammoth-San Manuel USD	21	25	32
		Bowie USD¹	4	8	-
		Blue ESD <sup>1, 3</sup>	-	-	-
5	Unified school districts	Peer group average	30%	31%	44%
	with poverty rates of 20 to 27 percent in towns	Snowflake USD	51	47	74
	and rural areas	Ash Fork Joint USD	49	54	65
		Young ESD <sup>1, 3</sup>	53	50	-
		Chino Valley USD	32	38	68
		Benson USD¹	46	45	-
		Safford USD	36	35	56
		Williams USD	37	36	48
		Payson USD	30	32	55
		Grand Canyon USD	31	29	47
		Pima USD	22	33	46
		Littlefield USD	30	30	41
		Wickenburg USD	30	28	43
		Santa Cruz Valley USD	29	28	37
		Camp Verde USD	21	26	43
		Page USD	20	19	41
		Coolidge USD	13	14	30
		Tuba City USD	20	12	16
		-			
		Superior USD	8	12	20

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
6	Unified school districts	Peer group average	28%	27%	43%
	with poverty rates of 28 to 36 percent in towns	St. Johns USD	42	44	59
	and rural areas	Round Valley USD	42	39	61
		Show Low USD	29	36	70
		Blue Ridge USD	39	36	43
		Heber-Overgaard USD <sup>1</sup>	40	36	-
		Flowing Wells USD <sup>2</sup>	32	34	47
		Mayer USD	27	21	55
		Kingman USD	28	28	44
		Holbrook USD	24	23	51
		Ajo USD	23	23	47
		Bisbee USD	25	23	36
		Globe USD	22	20	35
		Winslow USD	24	18	35
		Parker USD	23	18	30
		Ft. Thomas USD	15	13	18
	Hayden-Winkelman USD	11	15	10	
7	Unified school districts	Peer group average	19%	18%	28%
	with poverty rates greater than 36 percent in towns and rural areas	Colorado City USD	49	49	66
		Joseph City USD	44	43	57
		Nogales USD	28	30	40
		Miami USD	22	20	39
		Sunnyside USD <sup>2</sup>	20	23	34
		Douglas USD	23	24	26
		Chinle USD	21	14	26
		Piñon USD	18	12	27
		Kayenta USD	12	12	23
		Baboquivari USD	17	12	15
		Ganado USD	10	11	23
		Window Rock USD	9	14	20
		Whiteriver USD	11	9	13
		Sanders USD	8	6	18
		Red Mesa USD	7	8	13
		San Carlos USD	8	4	8
8	Union high school	Peer group average	28%	27%	34%
	districts with poverty	Tempe UHSD	43	44	55
	rates of 24 percent or less in cities and	Agua Fria UHSD	35	32	37
	suburbs	Buckeye UHSD	28	22	33
		Casa Grande UHSD	23	22	21
		Tolleson UHSD	10	15	25

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
9	Union high school	Peer group average	26%	24%	28%
	districts with poverty	Glendale UHSD	39	36	49
	rates greater than 24 percent in cities and	Phoenix UHSD	24	20	22
	suburbs	Yuma UHSD	14	16	14
10	Union high school	Peer group average	29%	26%	32%
	districts with poverty rates of 24 percent or	Patagonia UHSD	46	36	30
	less in towns and rural	Mingus UHSD	31	27	47
	areas	Santa Cruz Valley UHSD	9	15	20
11	Union high school	Peer group average	17%	20%	31%
	districts with poverty rates greater than 24	Valley UHSD	24	28	32
	percent in towns and	Colorado River UHSD	16	24	32
	rural areas	Bicentennial UHSD	13	14	36
		Antelope UHSD	13	15	24
12 Elementary school		Peer group average	49%	51%	72%
	districts with poverty rates less than 21	Kyrene ESD	55	58	77
percent in cities and suburbs	percent in cities and	Madison ESD	52	55	77
		Litchfield ESD	53	53	76
	Liberty ESD	36	39	59	
13		Peer group average	31%	31%	48%
	districts with poverty rates of 21 to 30 percent	Crane ESD	43	39	63
	in cities and suburbs	Avondale ESD	32	33	57
		Laveen ESD	36	32	54
		Tempe ESD	34	37	50
		Yuma ESD	33	32	51
		Casa Grande ESD	34	29	45
		Pendergast ESD	30	30	45
		Buckeye ESD	27	29	47
		Littleton ESD	24	26	45
		Riverside ESD	30	25	37
		Union ESD	23	24	33
14	Elementary school	Peer group average	28%	25%	44%
	districts with poverty rates of 31 to 40 percent	Washington ESD	32	34	52
	in cities and suburbs	Osborn ESD	29	24	44
		Glendale ESD	28	24	44
		Fowler ESD	27	25	43
		Tolleson ESD	28	25	42
		Roosevelt ESD	23	20	36

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
15	Elementary school	Peer group average	24%	21%	39%
	districts with poverty	Wilson ESD	32	26	48
	rates greater than 40 percent in cities and	Alhambra ESD	31	24	46
	suburbs	Phoenix ESD	25	25	44
		Cartwright ESD	25	22	44
		Balsz ESD	27	21	36
		Creighton ESD	21	22	33
		Isaac ESD	15	15	35
		Murphy ESD	17	16	26
16	Elementary school	Peer group average	39%	42%	60%
	districts with poverty	Owens-Whitney ESD <sup>1</sup>	54	54	-
	rates less than 16 percent in towns and	Maine Consolidated SD	38	37	79
	rural areas	Continental ESD	39	40	66
		Morristown ESD	37	40	63
		Skull Valley ESD <sup>1</sup>	36	57	-
		Bonita ESD	44	40	47
		Nadaburg USD <sup>3</sup>	23	28	42
		Mobile ESD <sup>1</sup>	-	-	-
		San Fernando ESD <sup>1</sup>	-	-	-
17	Elementary school	Peer group average	33%	37%	56%
	districts with poverty	Solomon ESD	42	50	81
	rates of 16 to 22 percent in towns and rural areas	Pomerene ESD	38	50	78
		Hyder ESD	55	43	65
		Topock ESD <sup>1</sup>	58	50	-
		Red Rock ESD	40	38	75
		Yucca ESD¹	46	54	-
		Cañon ESD	35	36	76
		Hillside ESD <sup>1</sup>	33	60	-
		Clarkdale-Jerome ESD1	36	52	-
		Elfrida ESD	25	30	67
		McNeal ESD	30	39	46
		Quartzsite ESD	25	33	45
		Beaver Creek ESD	17	18	56
		Toltec ESD	22	22	39
		Oracle ESD <sup>1</sup>	27	26	-
		Picacho ESD	12	12	29
		Stanfield ESD	17	14	19
		Bouse ESD <sup>1</sup>	-	-	-

Peer group			Percentage of students passing		
Number	Description	District name	Math	English Language Arts	Science
18	Elementary school	Peer group average	32%	34%	61%
	districts with poverty	Sonoita ESD	51	51	86
	rates of 23 to 28 percent in towns and rural areas	Palominas ESD	54	51	76
	in towns and rarar areas	Hackberry ESD <sup>1</sup>	58	56	-
		Cochise ESD	46	48	73
		Pine Strawberry ESD	35	43	86
		Pearce ESD	16	34	93
		Cottonwood-Oak Creek ESD	31	36	64
		Yarnell ESD <sup>1</sup>	43	43	-
		Mohave Valley ESD	32	34	51
		Palo Verde ESD	26	24	59
		Altar Valley ESD	30	26	51
		Arlington ESD	31	20	45
		Mohawk Valley ESD	30	21	32
		Double Adobe ESD <sup>1</sup>	12	24	-
		Valentine ESD¹	5	18	-
		Naco ESD	5	12	17
19	Elementary school	Peer group average	36%	35%	50%
	districts with poverty	Alpine ESD	69	69	93
	rates of 29 to 39 percent in towns and rural areas	Congress ESD	66	64	70
		Kirkland ESD	44	46	67
		Santa Cruz ESD	37	49	69
		Vernon ESD	34	40	63
		Bullhead City ESD	35	30	53
		Aguila ESD	38	31	38
		Somerton ESD	29	25	41
		Wellton ESD	25	17	43
		Gadsden ESD	24	23	31
		Eloy ESD	15	16	25
		Cedar USD <sup>1,3</sup>	12	6	-
		Peach Springs USD <sup>1,3</sup>	-	-	4

#### Table 8 (concluded)

Peer group Percentage of students passing

Number	Description	District name	Math	English Language Arts	Science
20	Elementary school	Peer group average	24%	25%	35%
	districts with poverty rates greater than 39	Patagonia ESD	29	46	63
	percent in towns and	Tonto Basin ESD1	37	49	-
	rural areas	Concho ESD	38	32	54
		Sentinel ESD¹	42	25	-
		Paloma ESD	19	28	43
		Wenden ESD	12	18	44
		Ash Creek ESD <sup>1</sup>	21	23	-
		Salome Consolidated ESD	12	12	23
		Sacaton ESD	18	12	11
		McNary ESD	13	9	5
		Apache ESD <sup>1</sup>	-	-	-

Scores are not shown because measure was not available or did not meet auditors' criteria for reporting.

Source: Auditor General staff analysis of fiscal year 2016 Arizona Department of Education AzMERIT and AIMS data and fiscal year 2015 U.S. Census Bureau poverty rates and location designations reported in the National Center for Education Statistics' Common Core of Data.

<sup>&</sup>lt;sup>2</sup> Although urban districts, Flowing Wells USD and Sunnyside USD were included in groups with rural districts to better match poverty rates.

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 2016. In addition, Blue ESD and Young ESD were included in groups with unified school districts as they had high school students who took AzMERIT or AIMS in fiscal year 2016.

### **APPENDIX B**

## Definition of the classroom dollar percentage

The definition of classroom dollars used in this report is based on the same definition developed by the U.S. Department of Education's National Center for Education Statistics for "instruction." The classroom dollar percentage is the amount spent for classroom purposes divided by the total amount spent for day-to-day operations, or total operational spending. The calculation excludes monies spent for the acquisition of capital assets, such as purchasing or leasing land, buildings, and equipment; interest; and programs outside the scope of preschool through grade 12 education, such as adult education and community service programs.

Total operational spending includes classroom and nonclassroom expenses as shown below:

#### Classroom dollars

- **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.

#### Nonclassroom dollars

- **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.<sup>1</sup>

## 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 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 court order for desegregation. 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.
- **Small school adjustment**—Additional local and state monies for small districts, which are allowed by law to increase their expenditure budgets and levy without voter approval if their student enrollment is within the following prescribed numbers:

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.

- Grades K-8 with 125 or fewer students
- o 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 without voter approval to comply with a court order or administrative agreement with the U.S. Department of Education Office of 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.

### Scope

All of the State's 236 school districts were included in calculating the fiscal year 2016 state-wide classroom dollar percentage. However, some districts were excluded from further analysis as follows:

- When calculating individual district classroom dollar 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 classroom expenditures, 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 2016 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 2016 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 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 classroom dollar percentages and other measures analyzed for, and presented in, this report.

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 2016 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 6, 7, and 8 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 52 districts.
- To compare district's 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 11 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 19 districts.

# State and individual district pages

The following describes the data sources, definitions, and methodology for the state page (see pages 16 and 17) and individual district pages (see pages 18 through 431). This information is organized into six sections: background information, such as the number of districts and schools; operational efficiency, such as classroom and nonclassroom spending and other efficiency measures; student and teacher measures, such as average teacher salary and the percentage of students passing state-wide achievement tests; financial assessment; revenues; and operational trends, such as classroom dollar 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 student test scores 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 2016 unless otherwise indicated. Because Patagonia ESD and Patagonia UHSD operate essentially as one district and comingle costs, the two districts' spending 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 2015 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 average daily membership (ADM) counts. ADM numbers are rounded to the nearest whole number. District sizes were categorized as follows:

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

The following disclosure related to ADM was included in ADE's fiscal year 2016 *Annual Report of the Arizona Superintendent of Public Instruction*<sup>2</sup>:

Fiscal Year 2016 Student Count/Enrollment Record System Upgrade

Fiscal Year 2016 was a transitional year as the Department began implementing the new student information system, Arizona Education Data Standards (AzEDS) as the replacement for the Student Accountability Information System (SAIS), which had been the system of record since Fiscal Year 2003. This transition required many modifications to the student information systems used by districts and charters to submit student-level data to the Department. Further, more stringent validation and integrity checks were applied to submitted student-level data resulting in more accurate student data. Along with this more thorough scrutiny, additional issues in submitted information were identified, resulting in more information being rejected by the new system. Although many issues have been resolved, at the time of this report, the Department is continuing to work with districts and charters to resolve discrepancies between the district or charter student information system records and the Department's records. Districts and charters with unresolved student count/enrollment discrepancies are identified with a note preceded by an asterisk, near the bottom of the individual district or charter Annual Financial Report (AFR) page of Volume II of this report, when applicable.

At the time of this study's release, some districts were working with the Arizona Department of Education to resolve fiscal year 2016 student count discrepancies. In these instances, the districts' students attending figures on their individual district pages are identified with a footnote. The state-wide total students attending is also identified with a footnote on the state page.

• **Number of schools**—Auditor General staff analysis of ADE's ADM reports and SFB district-wide building reports.

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<sup>&</sup>lt;sup>2</sup> Arizona Department of Education. (January 2017). Annual Report of the Arizona Superintendent of Public Instruction. Phoenix, AZ. i.

## 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.
- 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 52 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 following criteria were used to determine the efficiency measures relative to peer averages:
  - o Green—Very low—Lower than the peer average by more than 15 percent
  - o Blue—Low—Lower than the peer average by 5.01 to 15 percent
  - Yellow—Comparable—Within 5 percent of the peer average
  - o 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 2016.
- 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 2015 and 2016 operational and nonoperational costs divided by the number of students, using district-reported accounting data and AFRs, and ADEprovided 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 ADEprovided 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 2014 data, the most recently available national data.

#### Student and teacher measures

- Attendance rate—School district attendance rates for fiscal year 2015 (the most recent year for available data) obtained from ADE in October 2015. 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 2015 (the most recent year for available data) 4-year cohort graduation rates obtained from ADE in October 2016. 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 2015 graduation rate reported by ADE.
- **Poverty rate**—Auditor General staff analysis of U.S. Census Bureau fiscal year 2015 (the most recent year for available data) *Small Area Income and Poverty Estimat*es published in December 2016. 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. The peer average percentages were calculated by adding individual districts' poverty rates 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 Proposition 301—Auditor General staff analysis of the total Proposition 301 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 October 2016. 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 October 2016. 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.
- Percentage of students who passed state assessments—Auditor General staff analysis of the Spring 2016 Arizona's Measurement of Educational Readiness to Inform Teaching (AzMERIT) Math and English Language Arts test results obtained from ADE in December 2016 and the Spring 2016 Arizona's Instrument to Measure Standards (AIMS) Science test results obtained from ADE in October 2016. 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 student test scores when the population of test takers was too small or providing the information could identify individual student results. Additionally, these districts' student scores are not included in peer group averages.

#### 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 2014 through 2016 to determine the direction and extent of change in the number of district students from fiscal years 2014 to 2016. 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. In addition, for districts with moderate decreases in their numbers of district students, further analysis was done to determine if the decreases were concentrated at one or more schools. For purposes of this report, the following terminology was used to describe the change in the number of district students:

- o 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
- Concentrated decrease—Districts with decreases that approached the percentage points for a large decrease designation described above and that had decreases at one or more schools that exceeded the percentage points for a moderate decrease
- Moderate decrease—Districts not found to have a concentrated decrease as described above but had the following:
  - Very small and small districts: 5 to 14.99 percent decrease
  - Medium and medium-large districts: 3 to 9.99 percent decrease
  - Large and very large districts: 2 to 4.99 percent decrease
- o 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:<sup>3</sup>
  - 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 2014 through 2016, 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 only—Districts with overspending in their M&O Fund that was \$1,000 or more or occurred in more than 1 year.
  - Capital only—Districts with overspending in their UCO Fund that was \$1,000 or more or occurred in more than 1 year.
  - o Operating and capital—Districts with both operating and capital overspending.
  - < \$1,000, isolated—Districts with overspending less than \$1,000 and only one instance of overspending.
    </p>
  - No overspending—Districts with no operating or capital overspending.

<sup>3</sup> 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.

- Spending increase election results—Auditor General staff analysis of election results for operating and capital budget overrides and bond authorizations from January 1, 2014 through December 31, 2016, 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.
  - 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 2014 through 2016 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 2016 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.
  - o 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 2014 through 2016 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 2015. For purposes of this report, the following terminology was used to describe the current financial and internal control status:
  - o 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.

# Operational trends and spending detail

- Classroom dollar percentage—Auditor General staff analysis of district-reported accounting data and AFRs for fiscal years 2001 through 2016. Classroom dollar percentage 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 2016 dollars), and ADE-provided school district-reported ADM for fiscal years 2011 through 2016. 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
  - o 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.

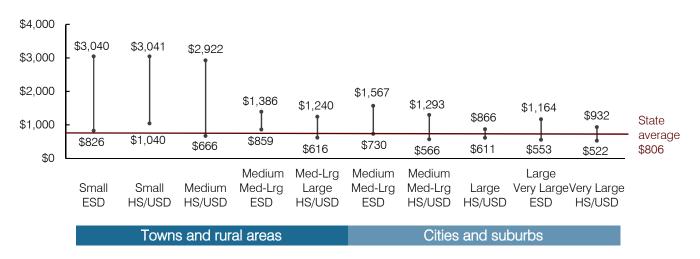
- Total operational and instructional spending per pupil—Auditor General staff analysis of fiscal years 2001 through 2016 district-reported accounting data and AFRs (inflation adjusted to fiscal year 2016 dollars) and ADM counts.
- Changes in operational spending percentages—Auditor General staff analysis of changes in operational spending percentages since fiscal year 2001 using district-reported accounting data and AFRs between fiscal years 2001 and 2016.
- **Students attending**—Auditor General staff analysis of ADE-provided, school-district-reported ADM counts for fiscal years 2001 through 2016.
- 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 2011 through 2016. 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 2016 district-reported accounting data.

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### **APPENDIX C**

This appendix presents graphic representations of cost ranges by efficiency peer groups for administration, plant operations, food service, and transportation. Each figure shows the state average for the cost measures (e.g., administrative costs per pupil, plant operations costs per square foot, etc.), as well as the lowest and highest dollar amounts for each efficiency peer group. See Appendix B, page b-4, for more on how 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 5
Range of administrative costs per pupil by efficiency peer group
Fiscal year 2016



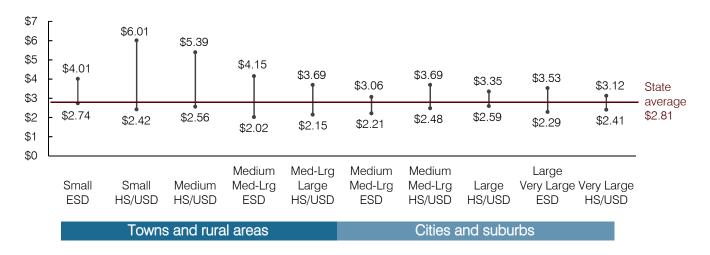
Source: Auditor General staff analysis of fiscal year 2016 district-reported accounting data, Arizona Department of Education student membership data, and U.S. Census Bureau location designations reported in the National Center for Education Statistics' Common Core of Data.

Figure 6
Range of plant operations costs per square foot by efficiency peer group Fiscal year 2016



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

Figure 7
Range of food service costs per meal by efficiency peer group
Fiscal year 2016



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

Figure 8
Range of transportation costs per mile by efficiency peer group
Fiscal year 2016



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

