

**Exploring the Quality of School-Level Expenditure Data:
Practices and Lessons Learned in Nine Sites**

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Prepared by:

Drew Atchison
Bruce Baker
Andrea Boyle
Jesse Levin
Karen Manship
American Institutes for Research

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U.S. Department of Education

John B. King, Jr.
Secretary

Office of Planning, Evaluation and Policy Development

Amy McIntosh
Delegated Duties of Assistant Secretary

Policy and Program Studies Service

Jennifer Bell-Ellwanger
Director

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Content Contact:

Stephanie Stullich
202-401-2342
stephanie.stullich@ed.gov

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Executive Summary

Concerns about the equitable distribution of school funding within and across school districts have led to new federal data collections on school-level expenditures. The *American Recovery and Reinvestment Act of 2009 (ARRA)* required states to collect and report, for the first time, school-level data on both personnel and non-personnel expenditures from state and local sources for the 2008–09 school year. Subsequently, the Office for Civil Rights (OCR) added a similar data collection to its Civil Rights Data Collection (CRDC) beginning with the 2009–10 school year, and the National Center for Education Statistics (NCES) is currently piloting a School-Level Finance Survey (SLFS) that would extend current NCES fiscal data collections to include some school-level variables. In addition, the *Every Student Succeeds Act (ESSA)*, enacted in December 2015, amended Title I, Part A of the *Elementary and Secondary Education Act of 1965 (ESEA)* to require states and local educational agencies (LEAs) to report school-level per-pupil expenditures on state and LEA report cards. These data may be useful for helping policymakers, educators, and others understand the extent to which resources are distributed equitably among schools and may also enhance transparency and efficiency in the allocation of education resources.

However, many school districts do not have experience in systematically tracking expenditures at the school level, and the quality of these large-scale data collections is uncertain. To better understand the feasibility of broadening the collection and reporting of detailed school-level expenditure data, and improving the quality of such data, this study examines five states and four school districts that have developed their own accounting systems for school-level expenditures: Florida, Hawaii, Ohio, Rhode Island, Texas, Baltimore City Public Schools, Hillsborough County Public Schools, Houston Independent School District, and Los Angeles Unified School District. Key findings from the study include the following:

- Study sites reported that they attributed most categories of spending to the school level, including salaries for teachers, administrators, and other support staff, as well as non-personnel items such as textbooks, instructional materials, furniture and equipment, and computers and software.
- The school districts and states in this study attributed an average of three-quarters of operational expenditures to individual schools, demonstrating that it is feasible to link a significant share of spending to the school level.
- Most of the expenditures that the study sites attributed to schools were directly tracked to schools (85 percent) rather than simply being allocated by formula (8 percent).
- Comparisons between the site-reported school-level expenditures and other data sources showed a relatively high degree of consistency for salary expenditures, but non-personnel expenditure data were much less consistent.
- Allocating expenditures to schools by formula (based on total salaries or staff) appeared relatively accurate for health benefits and less accurate for pension benefits, pupil support staff, and instructional support staff.
- Instituting a system for collecting school-level expenditure data typically required new hardware and software (eight sites), changes to charts of accounts (six sites), and staff training (eight sites).
- Interviewees advised others aiming to implement an accounting system capable of capturing school-level expenditures to ensure that stakeholders are involved early, communicate clearly and frequently, and think about future data needs in the long term.

Study Design and Limitations

Methods

This mixed-methods study collected and analyzed school-level and districtwide expenditure data from each of the nine sites. It also conducted surveys and telephone interviews with the state- and district-level fiscal directors. The sites were asked to provide data files containing both operational expenditures and school-level expenditures for the 2011–12 school year for all schools in each state or district, organized by the accounting code structure used in their data system. The study also obtained school-level expenditure data from the CRDC and district-level data from the School District Finance Survey (F-33) for 2011–12. A short survey was administered to obtain information on the specific types of expenditures that each site tracked directly to individual schools or allocated to schools by formula. This survey was followed by telephone interviews to ask the fiscal directors about the development and implementation of their school-level expenditure systems, including challenges, expenses, quality assurance methods, and lessons that could be shared with other states and districts that might wish to implement similar systems to attribute spending to individual schools.

To measure variation in attribution practices (how the accounting systems determined the amounts being spent at individual schools), we calculated the proportion of expenditures in each site that were attributed to individual schools and the proportion of those school-attributed expenditures that were tracked rather than allocated. In this report, we use the term “tracked” to indicate that specific expenditures were explicitly linked to each individual school where an expense was incurred. We use the term “allocated” to indicate that the specific expenditures were not explicitly linked to a school; instead, the district calculated amounts for each school using a formula designed to approximate resource usage (e.g., assigning expenditures on pupil support services to individual schools based on each school’s share of total district enrollment).

We examined the reliability of school-level expenditure data in two ways. First, we examined the consistency of expenditure data provided by the study sites with those reported in other published sources such as the CRDC and the School District Finance Survey (F-33). Second, we examined the accuracy of allocating expenditures to schools using formulas by calculating simulated allocations based on formulas and comparing these to actual spending figures reported for expenditure categories.¹

In addition to analyzing information collected from the nine study sites, the study team convened a panel of education finance experts, including practitioners as well as researchers, to discuss issues and considerations regarding the collection and use of school-level fiscal data for the purposes of measuring equity.

Limitations

The study relied largely on expenditure data that were collected and reported in accordance with the individual sites’ own practices and needs, and data differences across sites resulted in some sites being excluded from portions of the quantitative analysis. Additionally, one site did not participate fully in the qualitative data collection.

¹ Simulated allocations were conducted by distributing total school-level expenditures within a given category by an allocation metric, such as a school’s share of district enrollment.

Our approach to determining the method of attribution — tracking or allocating — was informed by district officials’ responses to the pre-interview survey. The survey provided a list of expenditure categories and asked whether the expenditures within each category were attributed to schools, and if so, whether they were tracked or allocated. In some instances, respondents indicated that both tracking and allocating occurred within a category. In these instances, we indicated that the method of attribution varied within the category.

Findings regarding practices and challenges are based largely on self-reports of staff interviewed and limited documents reviewed, at a small number of purposively selected sites. Therefore, findings are not generalizable to other districts and states. Still, administrators may use the study findings to inform their own efforts to implement school-level expenditure reporting systems. Specifically, the districts whose practices, and policies are described herein are large urban districts; these experiences may not be as applicable to smaller or more rural districts.

Key Findings

Expenditure Attribution Practices

With an average of three-quarters of operational expenditures attributed to individual schools across the district and state sites, the study results demonstrate that it is feasible to link a significant share of spending to the school level.

All nine study sites reported that they attributed most categories of spending to the school level, including salaries for teachers, administrators, and other support staff, as well as non-personnel items such as textbooks, other instructional materials, furniture and equipment, and computers and software. According to the survey responses, the expenditure categories that were least likely to be attributed to schools were district-level insurance (five sites), staff who provide districtwide instructional and student support services (four sites), centralized curriculum development (six sites), transportation (five sites), and district administrative staff and services (six sites).

Across eight of the study sites, the share of operational expenditures that were attributed to individual schools ranged from 69 to 89 percent, with an average of 77 percent.

Fiscal data provided by the sites confirmed that expenditures attributed to schools accounted for a large proportion of operational expenditures, ranging from 69 percent in three sites (Hawaii, Baltimore, and Los Angeles) to 89 percent in two sites (Ohio and Rhode Island), with an average of 77 percent across eight study sites.

Study sites attributed a greater share of personnel expenditures to schools than they did for non-personnel expenditures (85 percent versus 53 percent, on average).

There was also a wider range in the percentage of non-personnel expenditures attributed to schools across study sites, compared with personnel expenditures. For non-personnel expenditures, the percentage attributed to schools ranged from 27 percent to 79 percent, whereas for personnel expenditures, all study sites attributed at least 78 percent and as much as 92 percent to schools.

Most of the expenditures that the study sites attributed to schools were directly tracked to schools(85 percent, on average), and 8 percent were allocated using formulas.

The percentage of expenditures that the sites reported directly tracking to schools ranged from 66 percent in Rhode Island to 100 percent in Hawaii. Expenditures that were allocated to schools using formulas were distributed in proportion to school shares of various metrics such as total staff, salaries, or enrollment; this ranged from 0 percent in Hawaii and Houston to 25 percent in Ohio. Five sites indicated that the method for attributing expenditures to schools sometimes varied within a category (4 percent of all expenditures attributed to schools in the eight sites). Additionally, Rhode Island reported that the decision to track or allocate several categories of expenditures — representing 25 percent of total statewide school-attributed expenditures — varied across districts in the state. At four sites, the attribution method was not clear for some of the expenditures (3 percent of school-level expenditures across the eight sites).

Study sites tracked school-attributed personnel expenditures at higher rates (90 percent) than non-personnel expenditures (60 percent).

Across eight sites, at least 75 percent of school-level personnel expenditures were tracked to schools, with four of the sites tracking 97 percent or more. In contrast, only two sites attributed more than 75 percent of school-level non-personnel expenditures based on direct tracking, with percentages across sites ranging from 10 to 99 percent.

Looking at specific expenditure categories, the method used to attribute expenditures to schools was less consistent across study sites for non-personnel categories than for personnel categories. The expenditure categories most likely to be tracked to schools were salaries for teachers and other school staff, professional development, and certain categories of supplies and equipment. Expenditures for transportation, maintenance, curriculum development, and technology were commonly pro-rated to school sites rather than tracked directly.

Metrics used to pro-rate district-level expenditures to the school level included staff FTEs, student enrollment, students eligible for free or reduced-price lunch, students being transported (for transportation expenditures), and square footage of buildings (for utilities and maintenance and operations expenditures).

Consistency of Data With Other Published Data Sources

Site-reported school-level expenditures and expenditures reported in other data sources were relatively consistent for salaries, but less consistent for non-personnel expenditures.

Site-provided data on total districtwide salary expenditures differed from equivalent data from the School District Finance Survey (F-33) by only 2 percent on average across the eight sites, but non-personnel expenditures differed by an average of 21 percent. Total personnel and non-personnel expenditures based on the site-provided data differed from the F-33 data by an average of 5 percent. Four sites showed differences of 1 percent or less, and the other four sites had differences ranging between 6 and 11 percent. Similarly, comparisons with CRDC data found that school-level salary expenditures based on site-reported data were much closer to the CRDC data than non-personnel

expenditures (differing by an average of 12 percent for salary expenditures, compared to 129 percent for non-personnel expenditures).

The range of differences among the seven sites included in this analysis also varied considerably between personnel and non-personnel expenditures. For personnel expenditures, the range was fairly narrow (7 to 16 percent), whereas for non-personnel expenditures the differences ranged from a low of 34 percent to a high of 261 percent. In three of the sites, the difference for non-personnel expenditures was greater than 190 percent.

When comparing site-provided data with CRDC data, the average differences across schools for non-personnel expenditures in all study sites were at least two times larger — and in all but one study site were at least six times larger — than differences for salary expenditures.

Accuracy of Using Formulas to Allocate Expenditures to Schools

To examine the accuracy of using formulas to allocate expenditures to individual schools, we simulated allocations of spending for several expenditure categories that the majority of the study sites reported as being tracked to schools. The goal was to compare the expenditure simulations with actual expenditures in spending categories that were reported as being directly tracked to schools. We therefore calculated the percentage difference between the actual reported expenditures and simulated allocations for each school within a site. The percentage differences for individual schools were then averaged across sites to provide the average difference between the reported and allocation-simulated spending for each site.

Allocating expenditures to schools by formula appeared relatively accurate for health benefits and less accurate for pension benefits, pupil support staff, and instructional support staff.

When allocating expenditures to schools by pro-rating based on their shares of total district FTEs, the average differences between actual tracked expenditures and simulated allocations were 12 percent for health benefits, 18 percent for retirement benefits, 29 percent for pupil support, and 51 percent for instructional support. However, the relative accuracy of allocating expenditures using formulas varied by expenditure category and allocation method. Allocations of health and retirement benefits were more accurate when distributed according to shares of total salaries rather than shares of FTEs. Allocations of pupil and instructional support spending were more accurate when using school shares of FTEs rather than shares of student enrollment.

Developing and Implementing Systems to Collect School Expenditure Data

Study sites' motivations for developing systems to collect school expenditure data typically included the goals of increasing the transparency and equity of school expenditures.

Interviews with officials from eight study sites revealed that they had been collecting and reporting school-level expenditure data for varying amounts of time, but most (seven sites) had been doing so for two or more decades, and most (five sites) reported making significant improvements to their school expenditure data system within the past 10 years. Site officials tended to report similar motivations for developing or expanding their school expenditure data systems. Officials from all four state sites said

their state's school expenditure data system was initiated or expanded in response to state laws intended to promote equity and transparency in school spending. Officials from three of the district sites indicated that district efforts to give schools more authority over spending decisions was a major reason for collecting school-level expenditure data. Officials from the fourth district site reported developing their data system in response to an equity-focused state mandate.

Instituting a system for collecting school-level expenditure data typically required new hardware and software (eight sites), changes to charts of accounts (six sites), and staff training (eight sites).

All six sites that provided information on the expenses associated with developing their system for collecting school-level expenditure data ² indicated that they incurred both personnel and non-personnel expenses. Reported personnel expenses included staff time spent choosing and/or designing the data system, planning system roll-out strategies, and developing training materials. Common non-personnel expenses included contracts with vendors or consultants (four sites) and technology upgrades (four sites).

Sites reported that maintaining their school expenditure data systems required costs related to staff training, new central office staff, and technology improvements.

Personnel expenses associated with implementation of the accounting systems included new information technology and finance staff in their central offices, staff time to develop training materials and provide training, and time for school-level staff (in the study districts) to manage expenditure reporting. Non-personnel expenses often related to technology improvements (e.g., server expansions and upgrades) and database maintenance contracts.

Surveyed site officials most commonly identified staff capacity and training needs as a major challenge in implementing systems for tracking school-level expenditures. The most commonly identified challenge that sites continued to face was in tracking certain types of expenditures.

During interviews, site officials elaborated on their challenges with regard to staff capacity, emphasizing staff difficulty in reporting expenditures correctly and site difficulty in providing training to address staff capacity needs. Other reported challenges included outdated hardware and software (e.g., unsupported operating systems in schools) and initial resistance from schools (e.g., reluctance to take on new roles in managing budgets and spending, perceptions that the changes were not needed, and general opposition to change).

However, most sites indicated that they overcame many of these challenges as staff adjusted to new expectations and procedures, and received additional training. The most commonly identified challenge that sites continued to face was in tracking certain types of expenditures, such as staff who work at multiple schools and telecommunications, because it was difficult to know who used phone and Internet services at which schools and to what extent.

² Analyses of the costs incurred and staff involved in developing systems for collecting school-level expenditure data exclude Hawaii and Texas because their systems were developed more than 20 years ago and state officials who were interviewed were unable to speak to these details.

To promote data reliability, study sites relied most heavily on staff training (eight sites), data reviews (seven sites), and automated error checks in their respective software systems (six sites).

Although staff training was the most common method used by study sites to ensure the reliability of their data, the focus and intensity of the training varied across sites. At the state level, Texas and Rhode Island provided training to districts on the chart of accounts, and Hawaii provided training on financial reporting procedures overall. At the district level, training ranged from limited and sporadic training in Baltimore to monthly principal meetings in Hillsborough to making training a requirement to access the software in Houston.

Most sites also established mechanisms to locate errors in data input through data audits or automatic checks in their software that flag incorrect use of accounting codes or implausible values. In addition, officials from six sites noted that their personnel and expenditure data systems could connect to one another, another feature that may promote data reliability.

Site officials reported using their school-level expenditure data primarily to promote transparency around school expenditures (five sites) and to inform decision-making (six sites).

Officials from five study sites indicated that they post school expenditure data on their state or district websites to foster transparency with the general public. Sites that reported using school expenditure data to make decisions described using these data to assess compliance with federal and state laws (four sites), develop school budgets and monitor spending (three sites), evaluate which investments have been cost-effective (three sites), and/or guide strategic planning (two sites). Officials from Hawaii and Texas indicated that, aside from promoting transparency, their school-level expenditure data were not widely used.

Interviewees advised others aiming to implement such systems to involve stakeholders early, communicate clearly and frequently, and think about long-term data needs.

When asked what advice they would offer other states and districts aiming to develop or improve similar systems, site officials made three main recommendations:

- Include a wide range of stakeholders in the development process at the school and district levels and in the larger community.
- Communicate clearly and frequently with all stakeholders (both before and during changes to systems).
- Think about long-term needs when designing software and charts of accounts for school expenditure reporting.

Conclusions

The experiences of the nine sites included in this study demonstrate that collecting and reporting high-quality school-level expenditure data is feasible and has perceived benefits for transparency, equity, and the efficient use of resources. Each of the study sites attributed a large majority of their operational expenditures to individual schools, and most of these expenditures were directly tracked to school sites rather than merely being allocated post hoc using formulas. A key challenge in the process of collecting and reporting school-level expenditure data — according to the panel of experts, as well as our own findings — is ensuring consistency in practices surrounding the attribution of dollars to schools both within and across districts and states.

The states and districts in this study were most able to track personnel expenditures to the school level. Data on non-personnel expenditures were much less comprehensive and consistent. Our findings also raise concerns about the accuracy of allocating expenditures to schools using formulas, rather than directly tracking expenditures to schools.

In addition, differences across sites in the types and shares of expenditures attributed to schools, and the methods used to do so, indicate that reported school-level expenditure figures are not necessarily comparable across sites. Nevertheless, the experiences and data shared by these five states and four school districts may serve as examples for others wishing to develop or improve their own systems for collecting and reporting high-quality data on school-level expenditures.

I. Introduction

Although funding inequities between more and less affluent districts have been well documented, little data are available to help us understand whether spending in schools with different needs *within* districts is equitable. Concerns about the equitable distribution of school funding within school districts have led to new federal data collections on school-level expenditures. The *American Recovery and Reinvestment Act of 2009 (ARRA)* required states to collect and report, for the first time, school-level data on both personnel and non-personnel expenditures from state and local sources for the 2008–09 school year. Subsequently, the Office for Civil Rights (OCR) added a similar data collection to its Civil Rights Data Collection (CRDC), beginning with the 2009–10 school year, and the National Center for Education Statistics (NCES) is currently piloting a School-Level Finance Survey (SLFS) that would extend current NCES fiscal data collections to include some school-level variables.³ In addition, the *Every Student Succeeds Act (ESSA)*, enacted in December 2015, amended Title I, Part A of the *Elementary and Secondary Education Act of 1965 (ESEA)* to, among other things, require states and local educational agencies (LEAs) to report school-level expenditures per pupil on annual report cards, “including actual personnel expenditures and actual non-personnel expenditures” (ESEA section 1111(h)(1)(C)(x)).⁴

School-level expenditure data are important in two ways. First, these data show whether resources are distributed equitably across schools. Previous measures used to determine the comparability of services between high- and low-poverty schools, such as staff-to-student ratios, have masked inequities in school spending. Second, detailed school-level expenditure data also help practitioners and researchers better understand associations between patterns of spending and student outcomes, and identify successful and cost-effective practices.

However, many school districts do not have experience in systematically tracking expenditures at the school level, so the quality of these data is uncertain. To respond to federal data collections on school-level expenditures, states and districts may simply pro-rate — or allocate — district expenditures to individual schools in proportion to student enrollment or based on other metrics or formulas. Even when expenditures are tracked to individual schools, school districts and states may differ in the definitions and procedures used and the types of expenditures that are included and excluded.⁵ Non-personnel expenditures may be the most difficult to track and report at the individual school level, but understanding how expenditures on non-personnel resources such as professional development, instructional materials, and technology are distributed among schools may also be important for comprehending the distribution and uses of educational resources at the school level.

³ The SLFS is an extension of an existing data collection conducted by NCES in collaboration with the Census Bureau: the School District Finance Survey (F-33), an annual survey that collects district-level data on a wide range of education expenditures and revenues. The SLFS is essentially an expansion of the School District Finance Survey (F-33) to include some school-level variables.

⁴ All references to the *ESEA* in this document refer to the law as amended by the *ESSA*.

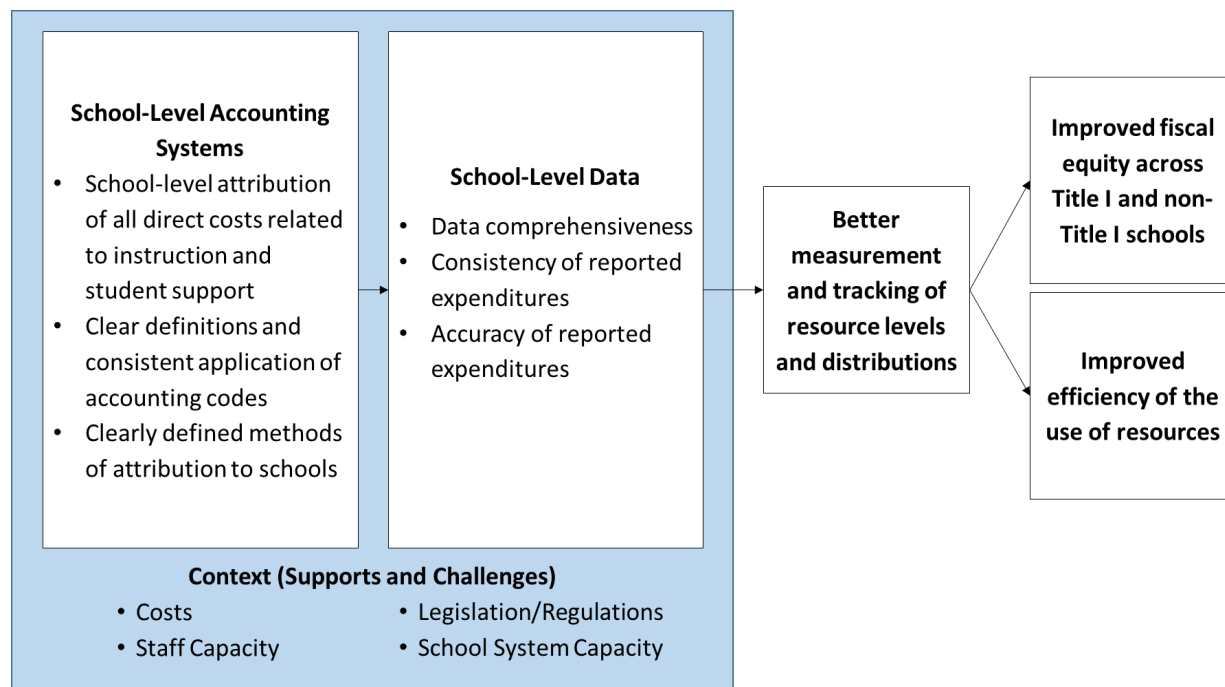
⁵ In this report we use the word *attributed* to mean that expenditures were linked to individual school sites, whereas *tracked* and *allocated* are methods by which expenditures were attributed. *Tracked* means expenditures were identified at the school where actual resource use or cost occurred. *Allocated* means expenditures were not identified at the school where resource use or cost occurred, but expenditures were instead distributed across schools according to a formula intended to approximate resource use.

To explore the feasibility of broadening the collection and reporting of meaningful school-level fiscal data, this study examines the nature and quality of school-level fiscal data collection in nine case study sites — five states and four school districts — that developed their own systems for collecting and reporting school-level expenditures: Florida, Hawaii, Ohio, Rhode Island, Texas, Baltimore City Public Schools, Hillsborough County Public Schools, Houston Independent School District, and Los Angeles Unified School District. Four research questions guided this study:

1. In states and districts that have developed systems to report expenditures at the school level, what types of personnel and non-personnel expenditures are included in the school-level data?
2. To what extent do the sites track actual expenditures to individual schools versus allocating or pro-rating expenditures to schools using formulas?
3. How consistent are school-level expenditure data obtained from these systems with similar data from other sources? How do the funding amounts attributed to individual schools based on formula allocations compare to those based on tracking actual expenditures?
4. What lessons can other states and districts learn from these sites if they wish to implement systems for reporting accurate and reliable data on school-level expenditures?

Exhibit 1 shows the conceptual framework of this study. The study’s analyses focus on the contents of the blue box, seeking to better understand the types of expenditures that are linked — or attributed — to schools and the methods by which funds are attributed to these sites. In addition, the study measures differences between the raw data contained in the study sites’ accounting systems and the data reported for external federal data collections (e.g., the CRDC). Finally, the study examines the experiences of states and districts that have implemented such systems, including their motivations, the challenges and expenses they have faced, and their efforts to ensure data quality.

Exhibit 1. Conceptual framework



Challenges Involving School-Level Fiscal Data Collection

Ideally, school-level fiscal data collection results in detailed expenditure data that are comprehensive, consistent, and accurate. Comprehensive spending data capture all expenditures that were made and attributes the correct proportion of these to the school level. Consistent spending data report expenditure levels that are similar across different independent data collections. Accurate data reflect the true amount of spending on resources actually received and used by schools and the district. However, there are numerous challenges to collecting school-level fiscal data, which have implications for the comprehensiveness, consistency, and accuracy of the resulting data.

Certain types of expenditures are more difficult to collect than others. For example, data on itinerant teachers — those working at more than one school — may be more challenging for districts to collect. State staffing databases and district expenditure databases that track staff to individual schools often do not track itinerant teachers to each school site (Goertz 1997).⁶ Staffing databases may also only include information on certificated staff, such as teachers, thereby excluding uncertificated staffing positions such as teacher aides (Goertz 1997).

Accurate and detailed expenditure data for non-personnel resources, such as instructional materials and equipment, are often difficult to collect — funds may be budgeted to schools, programs within schools, or even individual teachers, and spending decisions then made by those entities. Follow-up is then required to either catalog or qualitatively report what was ultimately purchased (Goertz 1997). Furthermore, schools or teachers may purchase equipment and materials using alternative funding sources, such as PTA funds, grants awarded to individual teachers, or private donations, which the data do not capture (Goertz 1997).

Another complication is that not all spending within a district is attributed to schools. In the early 2000s a study of 10 urban school districts reporting school-level expenditure data showed that between 38 and 95 percent of total district expenditures were attributed to schools (Miller, Roza, and Swartz 2004). This wide variation was largely due to differences in decisions about whether and how to attribute non-school-based expenditures to individual schools. Miller, Roza, and Swartz (2004) identified three aspects of the overall spending of school districts:

1. **School spending:** Expenditures that can be tracked directly to school sites, such as expenditures on staff working at schools and certain school-based non-personnel items.
2. **Shared district resources:** Expenditures for staff, materials, and services that are housed in or supervised by district central offices but that directly benefit students and schools. These shared resources may include itinerant staff, expenditures on transportation of students, and programs for students from multiple schools (such as summer school or special music and art programs).
3. **District operations and leadership:** Expenditures for personnel and services not used directly by students or schools, such as the superintendent, other district governance, and district management expenses.

⁶ In the expert panel meeting, both practitioners and researchers indicated that itinerant teachers are often not tracked to school sites in their districts or those they have worked with.

Districts within and across states vary in how they treat the latter two categories of resources, making cross-district comparisons of school-level expenditures more difficult. Districts must decide whether and how to allocate shared district resources to schools, and whether the shared resources can be disentangled from the district operations and leadership expenses. For example, certain services, such as student busing, are provided for students of individual schools, but buses and the transportation staff driving and maintaining the buses often serve students going to multiple schools. Districts must decide whether to attribute those transportation expenses to schools or keep them at the district level. And if the attribution of shared resources does not reflect the actual use of those resources, the resulting estimates of school spending will not be accurate.

Characteristics of the Case Study Sample

The five states and four school districts in this study were chosen largely based on the extent to which each had established accounting systems capable of attributing expenditures to individual schools. These states and districts represent a variety of geographic regions within the United States, including the South, Northeast, Midwest, and Pacific. Exhibit 2 shows characteristics of the nine sites, including numbers of districts, schools, and students; levels of operational expenditures (also referred to as current expenditures); and distribution of student enrollment by type of school.⁷

Exhibit 2. Characteristics of sample states and districts, 2011–12

Name of State or District	# of Districts	# of Schools	# of Students	Operational Expenditures	Operational Expenditures per Pupil ^a	% of Students in Regular Schools	% of Students in Charter Schools	% of Students in Other Schools
Hawaii	1	286	182,705	\$2.2 billion	\$12,054	95	5	<1
Florida	74	3,920	2,668,113	22.2 billion	8,342	91	7	2
Ohio ^b	1,003	3,585	1,722,183	17.9 billion	10,281	93	7	<1
Rhode Island	54	299	141,564	2.1 billion	14,426	95	3	2
Texas	1,235	8,557	5,000,193	40.9 billion	8,182	96	4	1
Baltimore	1	195	84,212	1.3 billion	15,287	76	15	9
Hillsborough	1	286	197,041	1.6 billion	8,318	93	5	2
Houston	1	278	203,012	1.9 billion	9,232	90	9	1
Los Angeles	1	935	659,132	7.0 billion	10,602	80	14	5

Exhibit reads: In the 2011–12 school year, the State of Hawaii public school system consisted of one school district, 286 public schools, and 182,705 students. Operational expenditures in Hawaii were \$2.2 billion and operational expenditures per pupil were \$12,054. Students attending regular schools accounted for 95 percent of public school students; 5 percent attended charter schools, and less than 1 percent attended other types of schools (such as special education, vocational, or alternative schools).

^a Operational spending per pupil is defined as operational spending divided by number of students.

^b Data on the number of districts, schools, and students for Ohio are from the 2013–14 school year. Data on operational expenditures and operational expenditures per pupil are from the 2011–12 school year (for Ohio and for all other study sites).

Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Public Elementary/Secondary School Universe Survey,” School District Finance Survey (F-33).

⁷ The definition of operational spending used in this study is similar to that of current expenditures used in the School District Finance Survey (F-33), which includes spending for the daily functioning of public education systems to support elementary and secondary education and excludes expenditures for capital outlay (e.g., purchases of land, school construction, and equipment) and debt service. In addition, the definition excludes expenditures for programs outside the scope of public prekindergarten through grade 12 education such as adult education and community services.

The nine sites in this study, although small in number, account for a relatively large share (18 percent) of total operational expenditures for K–12 education in the United States.⁸ The sites differ in several ways. Total operational expenditures for elementary and secondary education ranged from less than \$2 billion in three of the four districts to over \$40 billion in Texas. Per-pupil operational expenditures ranged from \$8,182 in Texas to \$15,287 in Baltimore. For the five state education systems, the number of students served in 2011–12 ranged from 142,000 to 5.0 million students. Enrollment sizes for the four school districts ranged from 84,000 to 659,000 students; the three largest school districts each had more students than two of the four states.

The sites also varied in the types of schools students attended. The share of students attending regular schools ranged from 76 percent in Baltimore to 96 percent in Texas. Each site contained charter schools with the share of students attending such schools ranging from 3 percent in Texas to 15 percent in Baltimore. Other schools such as vocational, alternative, and special education schools also accounted for a share of the student population in each site ranging from in Baltimore (9 percent) and Los Angeles (5 percent). The shares of the overall student population served in the study sites attending regular, charter and other schools were 93 percent, 6 percent, and 1 percent, respectively.

Data and Methods

The study team collected and analyzed three types of data for this study: quantitative fiscal data from case studies, qualitative data from interviews and surveys of case study officials, and focus group data from a panel of education finance experts.

Analyses of Fiscal Data

We conducted analyses of fiscal data to address the first three research questions: examining the types of expenditures attributed to schools, the methods for attributing expenditures, and the consistency and accuracy of school-level data collections. The study team obtained fiscal data from each sample site containing all expenditures and revenues, organized by function, object, and location. To increase the consistency of these data across the sites, we used the function and object information to categorize the expenditures into personnel and non-personnel categories based on the categories used by the School District Finance Survey (F-33) — which is widely used and is familiar to education finance practitioners as well as researchers. We used site-provided crosswalks between their data and the F-33 to perform the conversion of site-provided data to the F-33 foundation. We also used documentation provided by each site to identify more detailed expenditures within their charts of accounts. Site-provided location codes, which attribute an expenditure to a specific school or department, were used to determine whether the expenditure was attributed to an individual school or kept at the district level.

⁸ The nation's total K–12 current expenditures for 2011, calculated by summing district-level figures from the School District Finance Survey (F-33), were \$521 billion.

We supplemented data from each site with demographic data from the Common Core of Data “Public Elementary/Secondary School Universe Survey.” This dataset contains information on enrollment and number of full-time equivalent (FTE) teachers at each school, as well as whether the school is classified as charter, magnet, vocational, special education, or alternative education. For certain analyses these non-regular schools were excluded; they typically have expenditure patterns that differ from more traditional schools, and may have less reliable or accurate reporting of data.⁹

The primary purpose of the quantitative analysis was to examine differences in the types and amount of expenditures attributed to individual schools across the study sites; it also helped assess the general reliability of each site’s expenditure figures. There were three components to the quantitative analysis — comprehensiveness, consistency, and accuracy — each intended to examine a different aspect of the data. Below is a brief description of the methodology for each analysis:

- **Comprehensiveness.** To assess the comprehensiveness of the data we examined the variation across study sites in how much of operational spending (in total and by expenditure category) was attributed to individual schools, as well as whether school-attributed expenditures were tracked or allocated.
- **Consistency.** To assess how consistent the expenditure data collected from the study sites were with other data sources, the research team compared the site-reported expenditures with data reported in the CRDC, the School District Finance Survey (F-33), and state personnel databases.
- **Accuracy.** To gauge the accuracy of allocating expenditures to individual school sites rather than directly tracking expenditures to schools, we used an allocation formula to recalculate expenditures that were reported as being tracked, and compared this “simulated” allocated expenditure with the actual tracked spending. For this analysis we selected a small number of spending categories that most sites reported as being tracked but might plausibly be allocated in other districts and states — health benefits, retirement benefits, pupil support,¹⁰ and instructional support.^{11, 12}

Surveys and Interviews of Fiscal Office Staff

To understand the lessons learned from the case study sites to inform future implementation of systems for collection and reporting school-level data (Research Question 4), the study team relied on qualitative data collection.

⁹ We explored conducting consistency analysis that compared site-reported data on charter schools to the CRDC data on charter schools. In some instances the results for charter schools was similar to that of regular schools; however, in other instances the results were quite different. Given this finding, non-regular schools were excluded from the consistency analysis comparing site-provided data to CRDC data and the accuracy analysis. These analyses are described further below.

¹⁰ Pupil support is defined by the National Center for Education Statistics as expenditure for attendance record keeping, social work, student accounting, counseling, student appraisal, record maintenance, and placement services. This category also includes medical, dental, nursing, psychological, and speech services.

¹¹ Instructional support is defined by the National Center for Education Statistics as expenditure for supervision and instruction service improvements; curriculum development; instructional staff training; and instructional support services, such as libraries, multimedia centers, and computer stations for students that are outside of the classroom.

¹² Almost all of the study sites reported tracking school-level expenditures for health benefits, retirement benefits, instructional support, and pupil support. In Baltimore, officials indicated that expenditures for health and retirement benefits were allocated rather than tracked; therefore, this site was excluded from the accuracy analysis for these spending categories.

We conducted surveys and interviews with fiscal office staff at eight ¹³ of the nine study sites to gather in-depth information about the following:

- Details surrounding the accounting system each site used to attribute spending to individual schools.
- Which types of expenditures were tracked or allocated to schools and the allocation methods used.
- Challenges the state or district encountered in establishing the accounting system, and how these challenges were addressed.
- The level of effort involved in developing and implementing the accounting system.
- How the school-level expenditure data were being used.

Prior to the interviews, the research team asked each site to complete a survey to provide descriptive information about the specific types of expenditures that the site tracked directly to individual schools or allocated to schools by formula, along with closed-ended questions about specific challenges and types of data systems. The survey instrument is included in Appendix D.

The research team conducted descriptive analyses of the survey responses to tabulate the number of sites that used particular methods for attributing various types of expenditures to schools. The research team also used the survey data about the study sites' attribution methods in analyses of sites' fiscal data (see above).

To collect more in-depth information about sites' experiences collecting and reporting school-level expenditures, the research team conducted semi-structured interviews with financial officials at eight sites, using an interview protocol that asked about the processes used and any challenges that had been faced. Depending on the preference of the site, the number of individuals at each interview ranged from only one person to a group of staff with responsibilities that included working with school expenditure data. To ensure accurate interview data, the research team recorded each formal interview (after receiving consent), and a junior-level researcher took notes. The note-taker later checked the interview notes for accuracy and completeness using the audio for reference. In addition, immediately following each interview, the lead interviewer made separate notes regarding key themes and lessons learned; these notes served as an information source against which to check the conclusions from the coding and analysis of the interview data.

The study team coded the qualitative data using NVivo qualitative analysis software. The study team developed a list of codes aligned with the study's research questions. We applied multiple codes to the interview data when appropriate, so that the study team could run queries to locate interview segments on particular topics. The interview transcripts were independently coded by two study team members to ensure reliability, and the coded data were used to create detailed case narratives for each of the eight sites. The narratives summarized key information related to the sites' adoption of accounting systems attributing expenditures to schools; processes for collecting and reporting, and then using, these expenditure data; and quality assurance procedures. The synthesized narrative data were used to conduct cross-case comparisons to identify themes and patterns.

¹³ Ohio was unable to participate in an interview.

Convening of Expert Panel

The study team also convened a panel of experts in the field of education finance for a one-day meeting to discuss their perceptions of the feasibility and utility of collecting school-level finance data. The panel consisted of nine individuals, including three college professors, two researchers at research organizations, and four practitioners working in school districts or state education agencies (SEAs).

The comments of the panel members were used to refine the study design and data collection instruments. In addition, panel comments are also included in this report where they may help readers understand the issue being discussed.

Study Limitations

Limitations for this study relate largely to the uniqueness of the fiscal data collected from each site. Although the research team requested the same types of data from each site, the information that was provided varied widely in form as well as ease of use. The data preparation procedure was intended to group expenditures into categories based on function and object uniformly across all sites. Despite efforts to make the data as comparable as possible, there are likely to be differences across sites due to differences in how variables were defined as well as in the structure and coding of the data. Furthermore, decisions were made about how to categorize expenditures according to each study site's chart of accounts prior to receiving the data, which in turn impacted how we categorized expenditures for our purposes. For example, in school districts in Texas, including Houston, all furniture, equipment, computers, and software were categorized as capital expenditures. Because we limited the scope of spending for this project to operational expenditures, which excludes capital expenditures, these were excluded for both Texas and Houston. In contrast, other sites categorized these expenses as operational, which resulted in these types of expenditure being included in the analysis. Although differences such as these impact the comparability of the data across the sites, one of the purposes of this study was to examine the difficulties associated with collecting and analyzing school-level fiscal data. Therefore, the process of collecting and preparing the data was an informative exercise, highlighting some of the challenges in using school-level fiscal data.

Differences in the data reported by the nine study sites also affected the analyses that could be performed. Site-specific data issues, which led to the omission of certain sites from at least some of the quantitative or qualitative analysis, are as follows:

- **Baltimore.** The analysis of the accuracy associated with allocating health and retirement benefit spending to schools using formulas rather than tracking could only be conducted on sites that actually tracked such expenditures to individual schools. Because Baltimore allocated these expenditures via formula, the site could not be included in the accuracy analysis of these particular spending categories.
- **Florida.** This site reported school-level expenditure data that had been aggregated into broad expenditure categories and did not include the types of detailed expenditure categories needed for most of the analyses conducted for this report. As a result, data for Florida were excluded from most quantitative analyses.

- **Hawaii.** Benefits in Hawaii are handled by the Department of Budget and Finance, and therefore do not appear in the school-level expenditure files provided by the Hawaii Department of Education. For the analysis of consistency between the Hawaii and School District Finance Survey (F-33) data, benefits were not included. Hawaii was also excluded from the accuracy analysis of the allocation of health and retirement benefit spending to schools.
- **Ohio.** Ohio was not able to provide data for 2011–12 and instead provided data for the 2013–14 school year. Because 2013–14 data are not yet available for the CRDC and the School District Finance Survey (F-33), Ohio was excluded from all consistency analyses. In addition, Ohio did not participate in the pre-interview survey or formal interview and therefore was excluded from most of the qualitative analysis. However, representatives from the Ohio Department of Education participated in several phone conversations, enabling us to determine which expenditure categories were attributed to schools and by what method.
- **States with personnel databases for consistency analysis.** Only two states, Hawaii and Texas, had statewide databases available that included spending on school-level personnel. Therefore, the only sites where we could compare personnel spending between site-provided data and data from a state personnel database were Hawaii, Texas, and the Houston school district.

Findings regarding practices and challenges are based largely on self-reports of staff interviewed and limited documents reviewed, at a small number of purposively selected sites. Therefore, findings are not generalizable to other districts and states. Still, administrators may use the study findings to inform their own efforts to implement school-level expenditure reporting systems. Specifically, the districts whose practices and policies are described herein are large urban districts; these experiences may not be as applicable to smaller or more rural districts.

II. Expenditure Attribution Practices

This chapter examines the types of expenditures that the study sites attributed to schools, the extent to which various expenditure types were attributed to schools, and how this varied across sites and by type of expenditure. In addition, this chapter examines the methods used to attribute those expenditures to schools, particularly the extent to which the expenditures were directly tracked to individual schools rather than being allocated or pro-rated using various metrics and formulas.

Types of Expenditures Attributed to Schools

To examine the types of expenditures that were attributed to schools, we first relied on responses to the surveys administered to each site prior to the interviews and collection of detailed school-level expenditure data. During the interviews, we followed up with site staff regarding their survey responses to enable them to clarify and elaborate as appropriate. Finally, we examined the extent to which various types of expenditures were attributed to individual schools by using the location codes embedded in the fiscal data.¹⁴

With an average of three-quarters of operational expenditures attributed to individual schools across the district and state sites, the study results demonstrate that it is feasible to link a significant share of spending to the school level.

All nine study sites reported that they attributed most categories of spending to the school level, including salaries for teachers, administrators, and other support staff, as well as non-personnel items such as textbooks, other instructional materials, furniture and equipment, and computers and software. The expenditure categories that were least likely to be attributed to schools were security staff and services (three sites), curriculum development staff (three sites), and liability and property insurance (five sites). However, even among sites that reported attributing certain categories of expenditures to the school level, there was sometimes wide variation in the amount of such expenditures, based on the fiscal data.¹⁵ For example, although eight sites reported attributing non-personnel expenditures for professional development services to schools, these school-level expenditures accounted for just 33 percent of total non-personnel expenditures for professional development (Exhibit 3).

¹⁴ Tables showing spending amounts by expenditure category for each study site are provided in Appendix B.

¹⁵ Additionally, the fiscal data sometimes showed small amounts of money assigned to individual schools within expenditure categories that were reported as not attributed to schools in the pre-interview survey.

Exhibit 3. Number of study sites that reported attributing various types of expenditures to schools, and average percentage of operational expenditures attributed to schools, by expenditure type, 2011–12

Expenditure Type	Number of Sites	Average Percentage of Operational Expenditures Attributed to Schools
Salaries for School-Level Personnel		
Principals and other school administrative staff	9	99%
Teachers	9	97%
Instructional support staff	9	71%
Pupil support staff	9	82%
School maintenance and operations staff	9	63%
Food services personnel	9	75%
Salaries for Other Personnel		
Professional development staff	9	70%
Curriculum development staff	3	23%
Transportation staff	6	22%
Security staff	3	63%
Other district staff	9	6%
Employee Benefits		
Health/group benefits	9	78%
Retirement benefits	8	67%
Other benefits	8	74%
Non-Personnel Expenditures — Services		
Professional development	8	33%
Security services	3	56%
Transportation	8	28%
Insurance (e.g., liability, property)	5	21%
Utilities	7	63%
Non-Personnel Expenditures — Supplies		
Textbooks and instructional materials	8	78%
Furniture and equipment	7	79%
Computers and software	7	85%
General supplies	8	75%
Food supplies	8	76%

Exhibit reads: Nine sites reported that they attributed salaries for principals and other school administrative staff to schools, and school-level expenditures accounted for 99 percent of total site expenditures in this category.

Note: Average percentage of total expenditures attributed to schools does not include Florida.

Source: Site fiscal and accounting information systems.

The percentage of specific expenditure categories that were attributed to schools often varied considerably across sites. For example, although all sites reported attributing salary expenditures for instructional support staff at the school level, the percentage of these expenditures attributed to schools ranged from less than 40 percent in Hawaii and Houston to over 90 percent in Ohio and Baltimore (Exhibit 4). Some expenditure categories showed a high degree of consistency across sites in either high coverage (e.g., teacher pay) or low coverage (e.g., “other” district staff). More commonly, however, there was relatively wide variation across sites, suggesting that the composition of school-level expenditures is often not consistently defined or measured across these sites.

Exhibit 4. Share of personnel expenditures attributed to schools, by type of expenditure and by site, 2011–12

Expenditure Type	Hawaii	Ohio ^a	Rhode Island	Texas	Baltimore	Hillsborough	Houston	Los Angeles
School administrative staff pay	100%	99%	99%	99%	97%	97%	100%	98%
Teacher pay	95%	100%	99%	97%	97%	98%	99%	94%
Instructional support staff pay	36%	92%	87%	85%	99%	62%	32%	77%
Pupil support staff pay	55%	89%	90%	88%	99%	88%	63%	81%
Maintenance and operations staff pay	89%	86%	79%	35%	58%	60%	41%	54%
Security personnel pay	—	85%	87%	—	18%	—	—	—
Transportation staff pay	1%	73%	62%	1%	0%	0%	2%	37%
Food service personnel pay	96%	82%	83%	65%	89%	88%	25%	71%
Professional development staff pay	49%	80%	81%	69%	92%	84%	31%	75%
Curriculum development staff pay	0%	78%	—	—	6%	29%	0%	—
Other district staff	2%	13%	14%	2%	1%	1%	4%	10%
Health/group benefits	32%	79%	92%	83%	79%	86%	83%	92%
Retirement benefits	—	87%	92%	82%	15%	85%	20%	91%
Other benefits	—	95%	86%	80%	77%	85%	26%	71%

Exhibit reads: In Hawaii, 100 percent of spending for school administrative staff pay was attributed to schools, 95 percent of spending for teacher pay was attributed to schools, etc.

^a Data for Ohio are from the 2013–14 school year.

Note: Detail on personnel expenditure attributed to schools by type of expenditure is provided in Exhibits B4 and B5 in Appendix B.

Source: Site fiscal and accounting information systems.

Non-personnel expenditure categories often showed even more variation across sites (Exhibit 5), indicating that these expenditures are likely to be less comparable across districts and states than personnel spending. According to the panel of education finance experts convened early in this study, certain types of non-personnel spending — such as contracted services, utilities, and telecommunications — are often managed centrally by the district, even though they are benefiting individual schools. These centrally managed expenditures are often paid as a single bill for the district, and it is difficult to determine usage by school site and thus assign expenditures to schools accurately. For this reason, these types of spending are not reported at the school level.

Exhibit 5. Share of non-personnel expenditures attributed to schools, by type of expenditure and by site, 2011–12

Expenditure Type	Hawaii	Ohio ^a	Rhode Island	Texas	Baltimore	Hillsborough	Houston	Los Angeles
Textbooks / instructional materials	90%	99%	99%	41%	76%	94%	56%	66%
General supplies	64%	95%	88%	68%	69%	79%	76%	58%
Food supplies	98%	87%	68%	66%	13%	91%	98%	89%
Furniture and equipment	75%	94%	84%	—	75%	72%	—	76%
Computers and software	81%	97%	81%	—	93%	63%	—	97%
Transportation	1%	78%	95%	2%	1%	13%	2%	28%
Professional development	6%	81%	47%	57%	19%	13%	20%	22%
Curriculum development	82%	77%	—	—	18%	2%	0%	—
Other district services	2%	27%	17%	2%	0%	7%	1%	1%
Purchased services and rentals	15%	91%	77%	48%	56%	71%	69%	5%
Telecommunications	61%	87%	56%	—	2%	32%	—	61%
Utilities	0%	93%	92%	51%	0%	94%	76%	96%
Insurance	57%	67%	34%	8%	0%	0%	0%	0%
Security	—	83%	82%	—	2%	—	—	—
Miscellaneous items	100%	89%	68%	58%	55%	83%	68%	47%

Exhibit reads: In Hawaii, 90 percent of spending for textbooks and instructional materials was attributed to schools, 64 percent of general supply spending was attributed to schools, and so forth.

^a Data for Ohio are from the 2013–14 school year.

Note: Detail on personnel expenditure attributed to schools by type of expenditure is provided in Exhibits B6 and B7 in Appendix B.

Source: Site fiscal and accounting information systems.

Share of Operational Expenditures Attributed to Schools

Across eight of the study sites, the share of operational expenditures attributed to individual schools ranged from 69 to 89 percent, with an average of 77 percent.

Fiscal data provided by the sites confirmed that expenditures attributed to schools accounted for a large proportion of operational expenditures, ranging from 69 percent in three sites (Hawaii, Baltimore, and Los Angeles) to 89 percent in two sites (Ohio and Rhode Island), with an average of 77 percent across eight study sites (Exhibit 6).

Exhibit 6. Share of operational expenditures attributed to schools, 2011–12

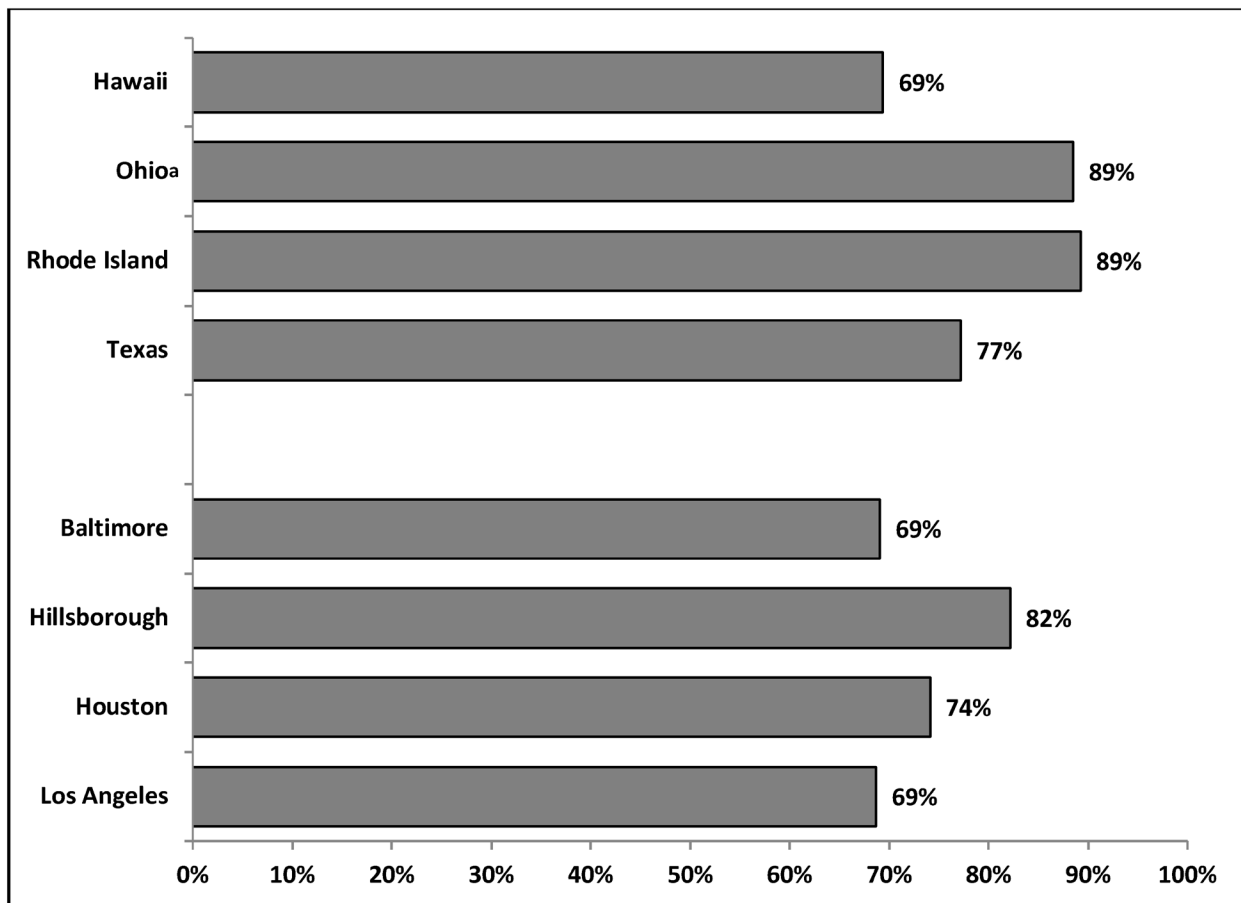


Exhibit reads: In Hawaii, 69 percent of operational expenditures were attributed to schools.

^a Data for Ohio are from the 2013–14 school year.

Note: Detail on operational expenditure attributed to schools is provided in Exhibit B1 in Appendix B.

Source: Site fiscal and accounting information systems.

School-level personnel expenditures accounted for over half of total spending in each study site, ranging from 59 to 77 percent of operational expenditures. School-level non-personnel expenditures accounted for an additional 7 to 17 percent of operational expenditures. District-level personnel expenditures also accounted for 7 to 17 percent of operational spending, depending on the site, and district-level non-personnel expenditures accounted for 4 to 20 percent of operational spending (Exhibit 7).

Exhibit 7. Distribution of school- and district-level spending among personnel and non-personnel expenditure categories, 2011–12

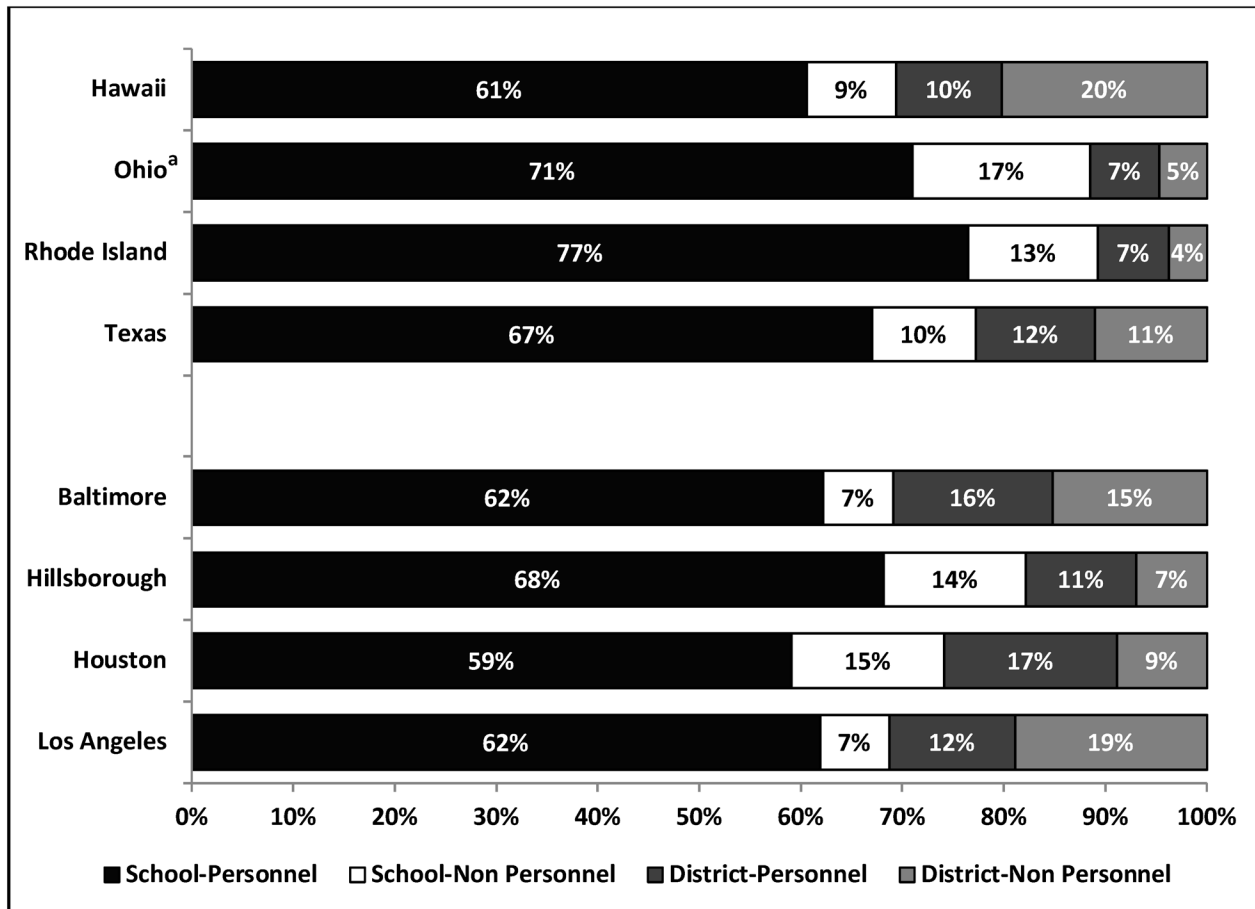


Exhibit reads: In Hawaii, 61 percent of operational expenditures were personnel expenditures (i.e., pay and benefits) that were attributed to schools; 9 percent were non-personnel expenditures that were attributed to schools; 10 percent were district-level personnel expenditures; and 20 percent were district non-personnel expenditures.

^a Data for Ohio are from the 2013–14 school year.

Note: Detail on personnel and non-personnel expenditure attributed to schools is provided in Exhibit B2 in Appendix B.

Source: Site fiscal and accounting information systems.

In seven of the eight sites, school-level personnel expenditures were at least four times higher than school-level non-personnel expenditures. District-level expenditures were split more evenly between personnel and non-personnel categories.

Study sites attributed a greater share of personnel expenditures to schools than they did for non-personnel expenditures (85 percent versus 53 percent, on average).

Another way to examine the comprehensiveness of school-level expenditure reporting is to calculate the share of personnel expenditures and the share of non-personnel expenditures attributed to schools. Across eight sites, the percentage of personnel expenditures attributed to schools ranged from 78 percent in Houston to 92 percent in Rhode Island. The percentages of non-personnel expenditures attributed to schools covered a much wider range, varying from 27 percent in Los Angeles to 79 percent in Ohio (Exhibit 8).

Exhibit 8. Share of personnel and non-personnel expenditures attributed to schools, 2011–12

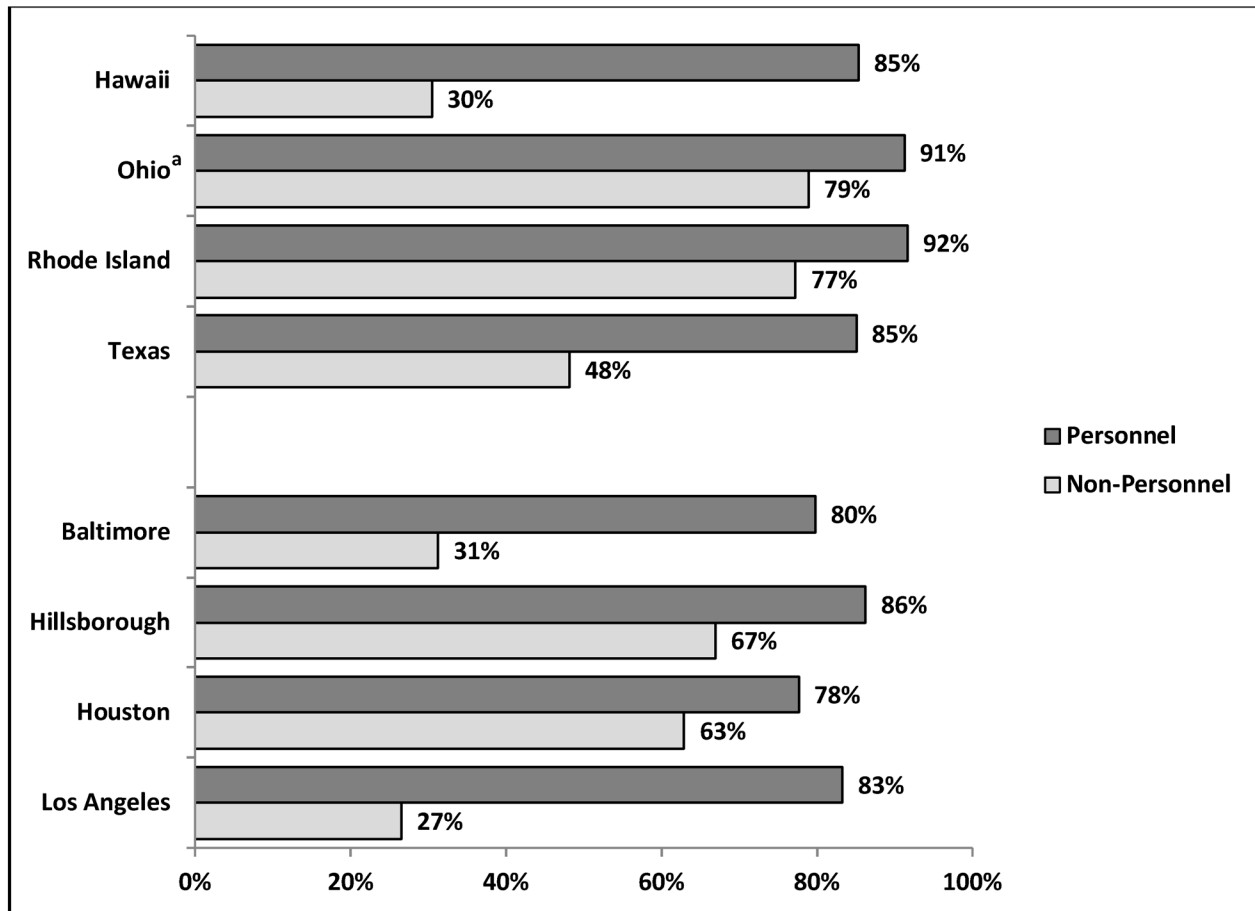


Exhibit reads: In Hawaii, 85 percent of personnel expenditures (i.e., pay and benefits) and 30 percent of non-personnel expenditures were attributed to schools.

^a Data for Ohio are from the 2013–14 school year.

Note: Detail on personnel and non-personnel expenditure attributed to schools is provided in Exhibit B2 in Appendix B.

Source: Site fiscal and accounting information systems.

In all sites, the share of non-personnel expenditures attributed to schools was less than that for personnel expenditures (in some cases, less than half as much). Los Angeles had the largest difference, with 83 percent of personnel expenditures and 27 percent of non-personnel expenditures attributed to schools — a difference of 56 percentage points.

School Finance Experts on Inconsistent Attribution Practices

Members of the panel of school finance experts (convened at the beginning of the study) expressed concerns about the variation across districts in practices related to attributing spending to schools.

One concern was the level of consistency across districts in terms of which types of spending would be attributed to schools. According to one panelist, “there is a lot of district discretion about how expenditures are coded to the school level and how they code to the central office.” This panelist used substitute teachers and curriculum development staff as examples of spending that could be held centrally by some districts or attributed to schools in others, and it was suggested that clear guidelines should be developed about what kinds of expenses to attribute to schools.

Acknowledging concern about inconsistent practices regarding categorization of spending, as well as practices of attribution to schools, another panelist suggested collecting as much raw data as possible, and having a central authority, such as the National Center for Education Statistics (NCES), conduct the process of classifying expenditures into categories and assigning dollars to schools. This panelist’s opinion was that data quality would be weakened if districts were asked to make a lot of decisions about how to categorize different types of expenditures.

Finally, experts raised concerns about inconsistent methods of attributing spending to schools. According to one panelist, “you need to make a clear distinction between allocations and direct expenses.” There was concern that for those expenses that are allocated rather than tracked directly, allocation formulas would vary substantially across districts and states. The panel member’s preference was to leave any expense that was allocated by formula at the district level, and to allow NCES or researchers to determine and use a common allocation formula across districts and states.

Methods for Attributing Expenditures to Schools

For this analysis, we asked officials at each of the study sites whether they directly tracked expenditures to individual schools or pro-rated or allocated the expenditures to schools using formulas. We also estimated the percentage of school-level expenditures that were attributed to schools based on tracking versus allocating by combining the information on the reported method of attribution for each expenditure category with site-reported fiscal data on the amount of expenditures in each expenditure category.

Study sites reported directly tracking many categories of personnel and non-personnel expenditures to schools.

All study sites reported directly tracking several categories of personnel spending (e.g., salaries for administrative staff, teachers, and instructional and pupil support staff) and non-personnel spending (e.g., textbooks, instructional materials, furniture, equipment, computers, and software) to schools (Exhibit 9). In some cases, sites reported both tracking and allocating expenditures in the same category; for example, teacher salaries might be tracked to schools in most cases, but allocated in cases where a teacher’s time was divided between more than one school.

Exhibit 9. Number of study sites that reported tracking or allocating various types of expenditures to schools, by expenditure type, 2011–12

Expenditure Type	Tracked at School Level	Allocated to School Level	Varied Within Category	Not Reported at School Level
Salaries for School-Level Personnel				
Principals and other school administrative staff	9	0	0	0
Teachers	9	0	0	0
Instructional support staff	8	0	1	0
Pupil support staff	8	0	1	0
School maintenance and operations staff	5	2	2	0
Food services personnel	7	1	1	0
Salaries for Other Personnel				
Professional development staff	7	1	1	0
Curriculum development staff	1	4	1	3
Transportation staff	1	5	1	2
Security staff	4	0	2	3
Other district staff ^a	3	2	2	1
Employee Benefits				
Health/group benefits	6	1	2	0
Retirement benefits ^a	5	1	2	0
Other benefits ^a	3	1	1	0
Non-Personnel Expenditures — Services				
Professional development	7	1	1	0
Security services	4	0	2	3
Transportation	1	5	1	2
Insurance (e.g., liability, property)	1	1	2	5
Utilities	3	2	3	1
Non-Personnel Expenditures — Supplies				
Textbooks and instructional materials	7	0	2	0
Furniture and equipment	8	0	1	0
Computers and software	8	0	1	0
General supplies	7	0	2	0
Food supplies	6	1	2	0

Exhibit reads: Nine sites reported that they directly tracked salaries for principals and other school administrative staff to schools, and no sites reported that such expenditures were allocated to schools or varied (sometimes tracked, sometimes allocated).

^a One or more sites reported they did not know whether or how this type of expenditure was attributed to schools.

Note: Site-by-site supporting detail for this table is provided in Exhibits A1 and A2 in Appendix A. Although Ohio did not participate in the survey, the fiscal data the state provided included information identifying which expenditures were tracked and which were allocated. For all categories in Ohio, some expenditures were allocated and others were tracked, but the percentage that was tracked varied by expenditure type (e.g., 91 percent of teacher pay and 51 percent of security services). For Ohio, expenditure types for which more than 90 percent of expenditures were tracked were identified as tracked (this included expenditures for principals and other school administrative staff and teachers), and expenditure types for which more than 90 percent of expenditures were allocated were identified as allocated (this included expenditures for transportation staff, and transportation non-personnel expenditures).

Source: Pre-interview surveys and follow-up conversations with site officials.

Across eight sites, an estimated 85 percent of the expenditures attributed to schools were directly tracked to schools, and 8 percent were allocated using formulas.

The percentage of expenditures that the sites reported directly tracking to schools ranged from 66 percent in Rhode Island to 100 percent in Hawaii. Expenditures that were allocated to schools using formulas were distributed in proportion to school shares of various metrics such as total staff, salaries, or enrollment; this ranged from 0 percent in two study sites (Hawaii and Houston) to 25 percent in Ohio (Exhibit 10). Study sites most commonly reported allocating transportation, maintenance, curriculum development, utilities, and telecommunications expenditures to schools.

Exhibit 10. Distribution of school-level expenditures by attribution method, 2011–12

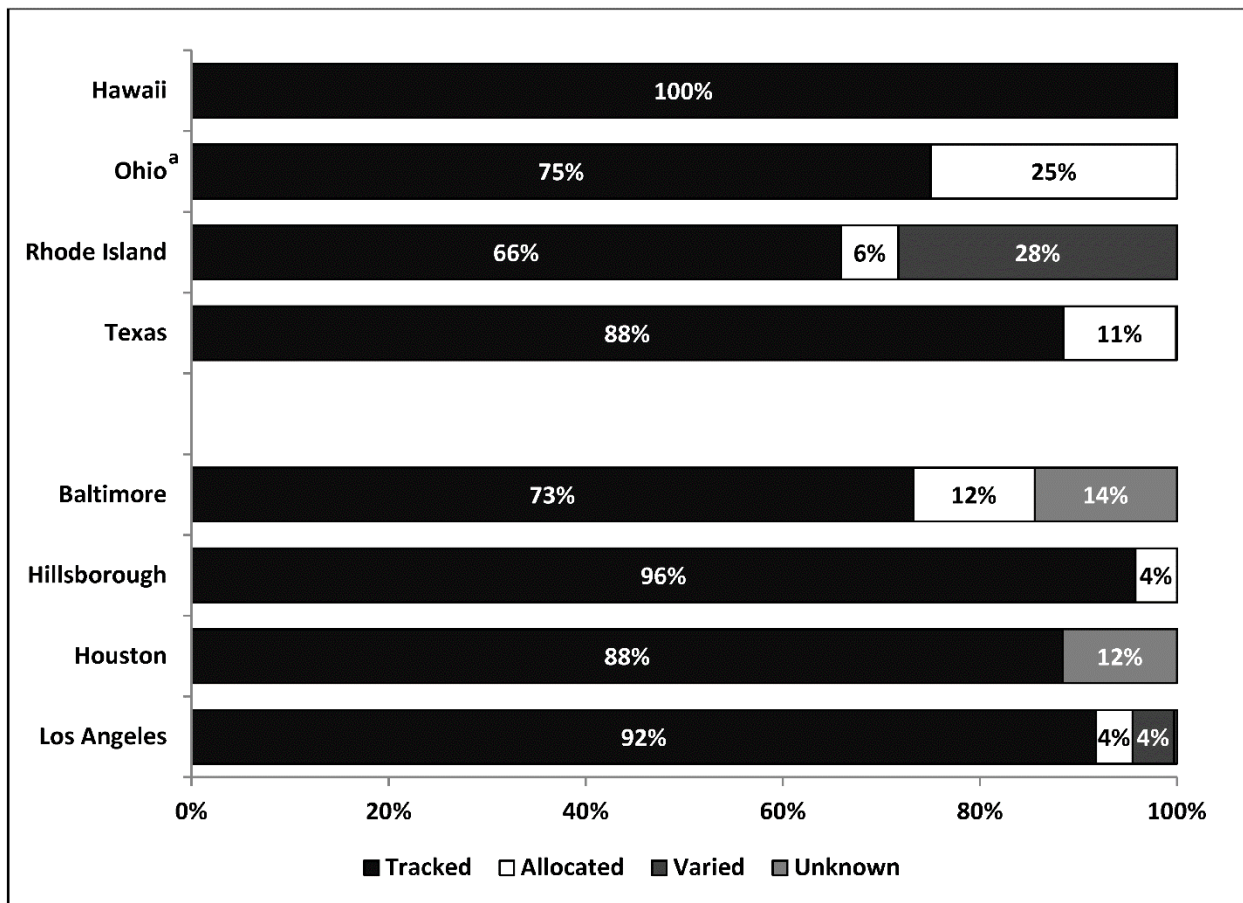


Exhibit reads: Hawaii reported that 100 percent of expenditures attributed to schools were tracked.

^a Data for Ohio are from the 2013–14 school year. For Ohio, the attribution method was determined based on an indicator in the fiscal data; for all other states, the attribution method was determined based on the reported attribution method by spending category in the pre-interview survey and follow-up conversations.

Note: Detail on school-level expenditures by attribution method is provided in Exhibit B3 in Appendix B.

Source: Site fiscal and accounting information systems.

Two of the eight study sites included in the expenditure analysis reported that the attribution method varied (i.e., both tracking and allocation were used) for at least one spending category (28 percent of school-level expenditures in Rhode Island and 4 percent in Los Angeles). Rhode Island reported that the attribution method for some expenditure categories varied because school districts have discretion over how to attribute certain types of expenditures to schools.¹⁶

In two of the eight study sites, the attribution method was unknown for a substantial proportion of school-level spending: 14 percent of spending in Baltimore and 12 percent in Houston.¹⁷ The attribution method was also unknown for small percentages of school expenditures in Hawaii (0.1 percent) and Los Angeles (0.3 percent).

Study sites tracked school-attributed personnel expenditures at higher rates (90 percent) than non-personnel expenditures (60 percent).

Across all sites, at least 75 percent of school-level personnel expenditures were tracked to schools, with four of eight sites tracking 97 percent of these expenditures or more. Only two sites directly tracked more than 75 percent of school-level non-personnel expenditures. For all sites, the share of school-level non-personnel expenditures attributed by tracking was less than the tracked share for school-level personnel spending. Hawaii and Hillsborough reported that high percentages of both personnel and non-personnel expenditures were tracked to schools. In other sites — Rhode Island, Baltimore, and Houston — there was a large difference between the percentage of personnel and non-personnel school-level spending that was reported as tracked to schools (Exhibit 11).

¹⁶ Two other sites also reported that their attribution method varied within some expenditure categories (Texas and Ohio), but the actual amount of expenditures involved was negligible. In Texas, the amount of expenditure in categories reported as varied was only 0.1 percent. In Ohio, although the attribution method used varied across all expenditure categories, it was possible using their fiscal data to determine exactly how much was directly tracked to schools and how much was allocated.

¹⁷ The attribution method was labeled as unknown for one of three reasons: (1) pre-interview survey respondents did not indicate whether expenditures were tracked or varied; (2) pre-interview survey respondents indicated the expenditure category was held centrally at the district level, but some expenditures in that category were assigned to school locations in the actual fiscal data; or (3) the category was not listed in the pre-interview survey and the study site did not respond to the study team's follow-up efforts.

Exhibit 11. Share of school-level personnel and non-personnel spending tracked by sites, 2011–12

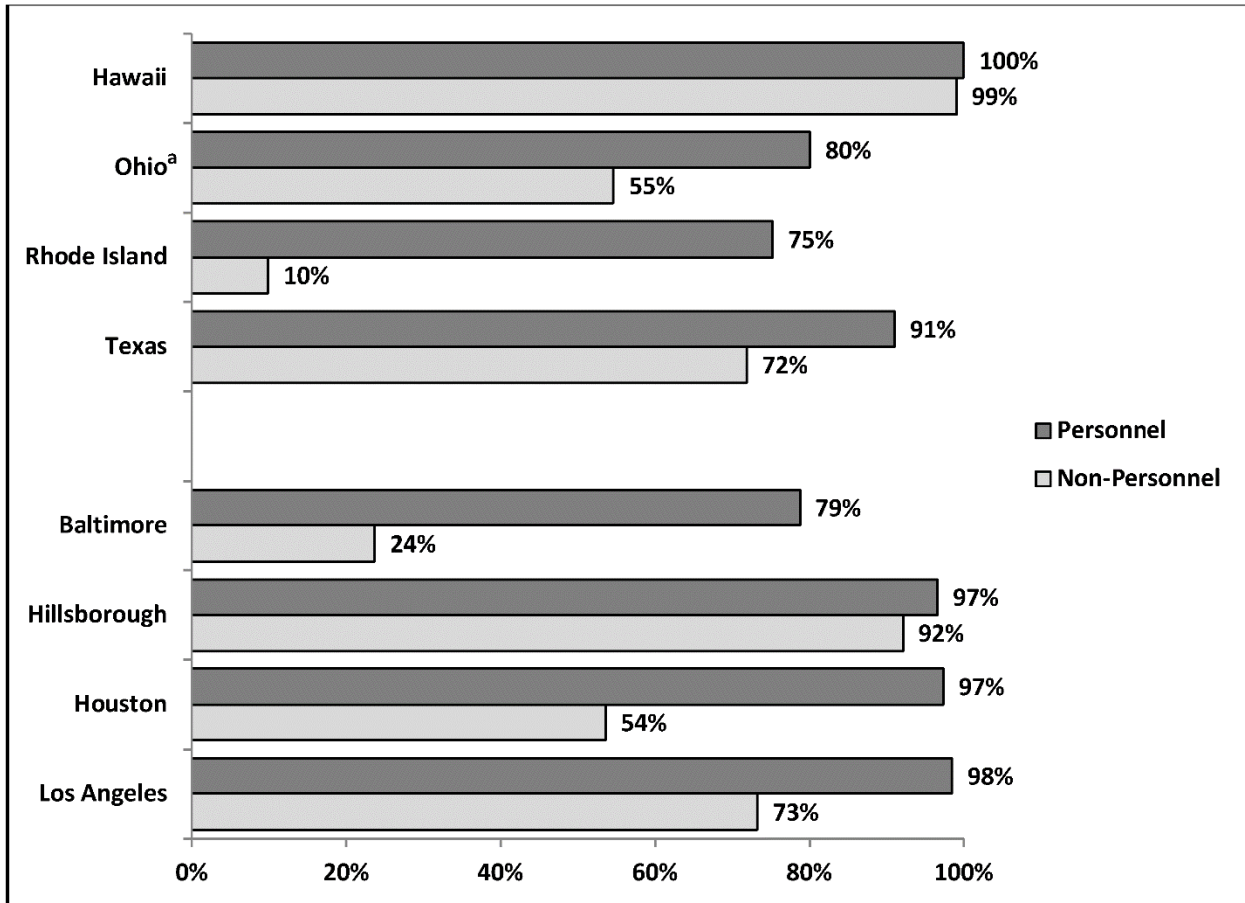


Exhibit reads: In Hawaii, 100 percent of school-level personnel spending and 99 percent of school-level non-personnel spending was tracked to schools.

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Metrics used to pro-rate district-level expenditures to the school level included staff FTEs, student enrollment, students eligible for free or reduced-price lunch, students being transported (for transportation expenses), and square footage of buildings (for utilities and maintenance and operations expenses).¹⁸

Rhode Island, for example, chose to encourage districts to allocate transportation expenditures to schools by formula, based on the number of students riding buses at each school site. Interviewees in Rhode Island indicated that the decision to promote allocation of transportation expenditures (rather than tracking them directly) was based on cost-efficiency concerns and the inability to track transportation expenses accurately. (Tracking transportation expenditures such as bus driver time and fuel was determined not to be cost-efficient because these expenditures are a small part of overall district budgets and require significant staff effort to track by school.) Allocations based on bus ridership were also determined to be reasonably accurate.

In Ohio, districts are asked to report expenditures at the school level to the extent possible, and the state's fiscal data system then employs a set of rules directing whether and how the remaining district expenditures (those not assigned to specific school buildings by districts) are to be allocated. The metrics used to allocate expenditures to the school level include enrollment, staff salaries, lunchroom meals served, number of students transported, and square footage of each school building.

In Hillsborough County, interviewees reported using different metrics to pro-rate different types of expenditures. For example, maintenance expenditures are allocated to schools on the basis of square footage at each school site. Many centrally purchased technology expenditures are pro-rated to schools based on staff FTEs, rather than tracking them directly, because state guidance instructs them to do so. State guidance also instructs districts in Florida to allocate telecommunications and professional development to schools by staff FTEs.

Summary

Study findings confirm some of the concerns of the expert panelists regarding inconsistent practices for attributing certain types of spending to schools, how they are attributed, and how they are categorized. In certain categories of personnel, such as teacher and school administration salaries, almost all expenditures were attributed to schools in all sites. In other categories, such as district services and transportation, most sites accounted for the large majority of expenses at the district level. For many spending categories, there was large variation across districts in the amount of spending attributed to schools. There was also substantial variation across districts in methods of attribution to schools, particularly for non-personnel spending. Improving the quality and usefulness of school-level expenditure data to enable comparisons across districts and states would require greater consistency in both definitions and attribution practices.

¹⁸ For each of the listed factors used for determining allocations, allocations are based on a school's share of the districtwide total of that factor.

III. Reliability of School-Level Expenditure Data

This chapter examines the reliability of school-level expenditure data in two ways. First, we examine the consistency of reported expenditures across different data sources. Second, we examine the relative accuracy of allocating expenditures to schools using formulas based on numbers of students, teachers, and other factors.

Consistency of Site-Provided Data With Other Sources

For this analysis, we compared the detailed expenditure data from each site with school-level expenditure data from the CRDC and state personnel databases, and with district-level expenditure data from the School District Finance Survey (F-33). Because the F-33 data reflect districtwide expenditures and do not currently include school-level data, we aggregated the sites' school-level fiscal data to the district level for that comparison. For the five study sites consisting of a single school district (the four school districts and Hawaii), the consistency measure was simply the difference between the district-aggregated expenditures per pupil from the site-provided data and from the F-33.

Comparison Between Site-Provided and School District Finance Survey (F-33) Expenditure Data

Site-provided data on total districtwide expenditures differed from School District Finance Survey (F-33) data by an average of 5 percent.

Four sites showed differences of 1 percent or less, and the other four sites had differences of 6 to 11 percent (Exhibit 12). Although the simple average of the percentage differences for the eight sites was 5 percent, the weighted average was less than 1 percent because the larger sites tended to show smaller percentage differences.

Exhibit 12. Comparison of operational expenditures from site-provided data and the School District Finance Survey (F-33), 2011–12

Site	Site-Provided Data	F-33 Data	Percent Difference
Hawaii ^a	\$1,608,900,224	\$1,775,553,024	9%
Ohio ^b	\$17,827,524,608	\$17,832,790,016	0%
Rhode Island	\$2,074,596,096	\$2,057,982,976	1%
Texas	\$38,861,967,360	\$38,503,124,992	1%
Baltimore	\$1,173,004,416	\$1,287,342,976	9%
Hillsborough	\$1,643,538,944	\$1,639,068,032	0%
Houston	\$1,676,154,240	\$1,874,685,056	11%
Los Angeles	\$7,385,582,592	\$6,993,387,008	6%

Exhibit reads: In Hawaii, operational expenditures calculated from the site-provided data were \$1,608,900,224; this was 9 percent less than the total reported in the School District Finance Survey (F-33) (\$1,775,553,024).

^a In Hawaii, most employee benefits were not included in the site-provided data, so benefits expenditures were subtracted from both the site-provided and School District Finance Survey (F-33) expenditure totals.

^b The site-provided data for Ohio are from the 2013–14 school year, whereas the School District Finance Survey (F-33) data are from the 2011–12 school year. In Ohio, the site-provided data did not include Education Service Centers (ESCs), which are regional education support centers that often serve multiple districts. Because ESC spending was not included in the site-provided data, we also excluded it from the School District Finance Survey (F-33) total.

Sources: Site fiscal and accounting information systems and the School District Finance Survey (F-33).

Comparisons between the site-reported school-level expenditures and School District Finance Survey (F-33) data showed a relatively high degree of consistency for salary expenditures (2 percent different on average), but non-personnel expenditure data were much less consistent (21 percent).

For salary expenditures, the difference between the site-provided data and School District Finance Survey (F-33) data ranged from less than 1 percent in three sites to 4 percent in two sites. For non-personnel expenditures this difference ranged from 6 percent to 62 percent. In each of the sites, the magnitude of the difference between the two data sources was at least twice as large for non-personnel expenditures as for salary expenditures (Exhibit 13).

Exhibit 13. Percentage difference between site-provided data and School District Finance Survey (F-33) data, for total salary expenditures and non-personnel expenditures, 2011–12

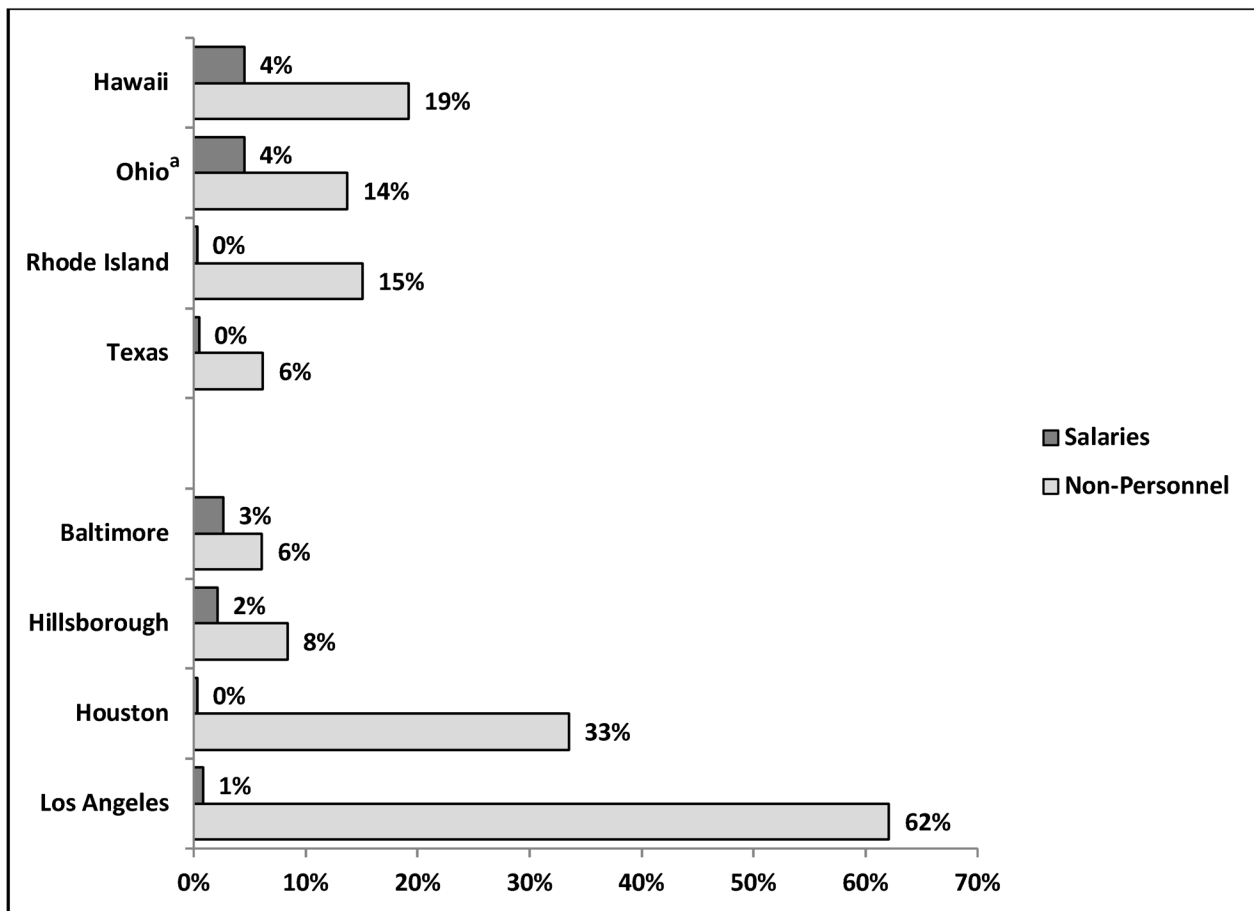


Exhibit reads: In Hawaii, the difference between the site-provided data and School District Finance Survey (F-33) data was 4 percent for salary expenditures and 19 percent for non-personnel expenditures.

^a The site-provided data for Ohio are from the 2013–14 school year, whereas the School District Finance Survey (F-33) data are from the 2011–12 school year. The site-provided data from Ohio did not include Education Service Centers (ESCs), which are regional education support centers often serving multiple districts. Because ESC spending was not included in the site-provided data, we also excluded ESC spending from the School District Finance Survey (F-33) total salaries and non-personnel expenditures.

Note: For state sites, district totals in the School District Finance Survey (F-33) were aggregated to the state level.

Sources: Site fiscal and accounting information systems and the School District Finance Survey (F-33).

Comparison Between Site-Provided and Civil Rights Data Collection Expenditure Data

For this analysis, we calculated the percentage difference in spending between the site-provided data and CRDC data for each individual school within a study site, and averaged the magnitude of those differences across all of the schools for the study site.

Comparisons with CRDC data found that school-level salary expenditures based on site-reported data were much closer to the CRDC data than non-personnel expenditures (differing by an average of 12 percent for salary expenditures, compared to 129 percent for non-personnel expenditures).

The differences among the seven sites included in this analysis also varied considerably between personnel and non-personnel expenditures. The range was narrower for personnel expenditures, from 7 to 16 percent, than for non-personnel expenditures, which ranged from 34 to 261 percent. In three sites, the difference for non-personnel expenditures was more than 190 percent (Exhibit 14).

Exhibit 14. Average percentage differences between site-provided data and Civil Rights Data Collection (CRDC) data on schools' total salary expenditures and non-personnel expenditures, 2011–12

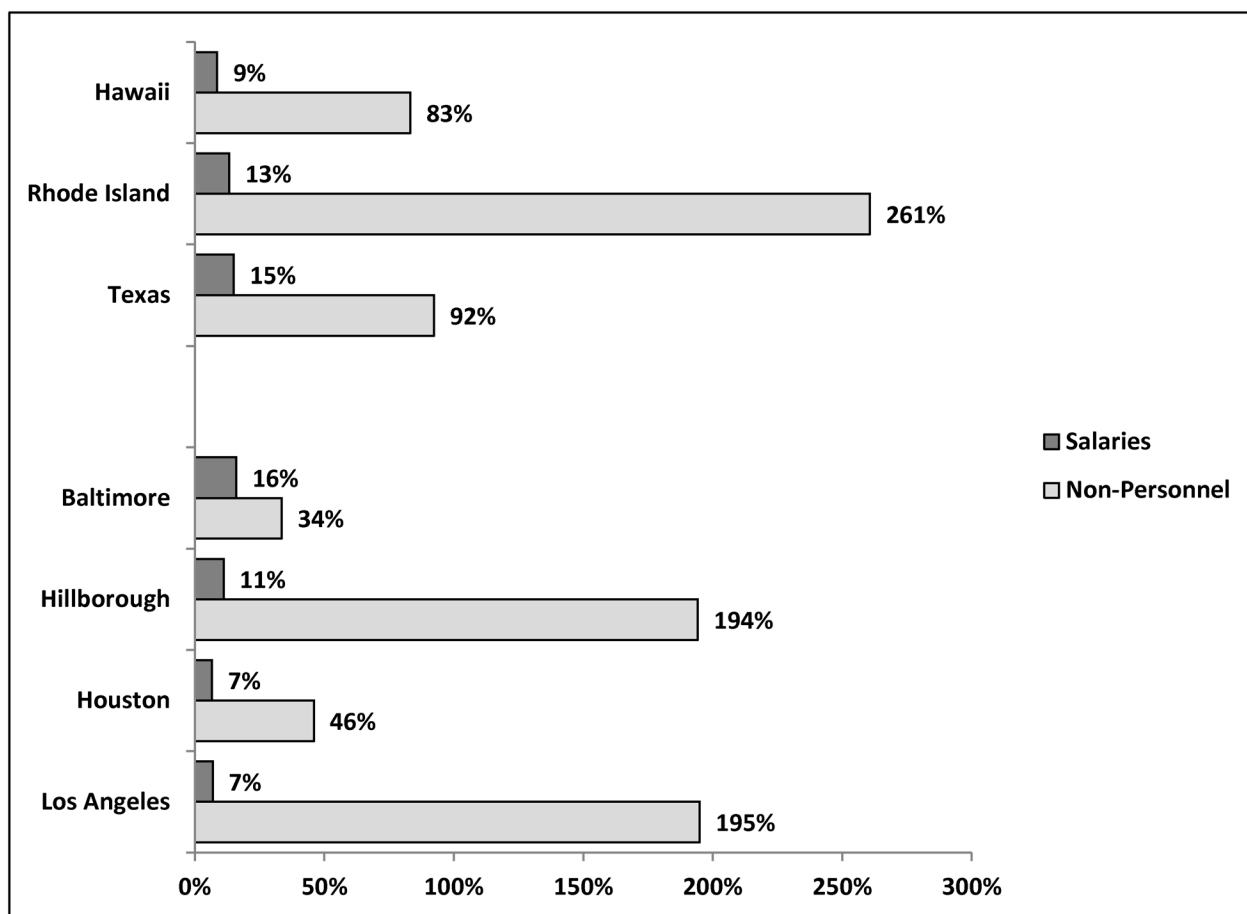


Exhibit reads: In Hawaii, the average difference between the site-provided data and CRDC data was 9 percent for salary expenditures per pupil but 83 percent for non-personnel expenditures per pupil.

Sources: Site accounting and student information systems and Civil Rights Data Collection.

School Finance Experts on Non-Personnel Spending

In the panel meeting, the education finance experts pointed out that non-personnel expenditures are often more difficult to track to schools, are often difficult to categorize, and are often problematic for the purposes of equity comparisons. The following examples from the panel show some of the difficulties associated with attribution of non-personnel expenditures to schools and using non-personnel expenditures in making determinations regarding equity:

- Telecommunications and networking are often covered by centralized districtwide contracts. It is difficult to determine how to allocate expenses across schools, and even more difficult to assign expenses to functional areas, such as administration or instruction.
- Textbooks and technology equipment are often subject to irregularity (lumpiness) due to the fact that books and equipment are often used for several years. Some schools might have high technology spending one year and low the next, making it difficult to compare across schools. Furthermore, because some non-personnel resources are used over multiple years, they are sometimes classified as capital expenditures rather than operational expenditures and therefore excluded from resource equity determinations.
- Transportation and utility expenditures are often affected by uncontrollable aspects of schools, such as the age of the facilities (for utilities) and the size of school enrollment catchments and whether districts have school choice programs (for transportation).
- Contracted services are an important, but difficult, category to track to schools. Some schools contract out services that other schools provide in-house; therefore, it is important to be able to attribute contracted services to schools. However, it is difficult to know what is being provided by contracted services and categorize them accordingly. Furthermore, contracts are often brokered at the district or even state level, which makes it more difficult to track spending from contracts to schools.

The difficulty of tracking, lumpiness, and uncertainty regarding categorization of certain non-personnel spending categories potentially explains why non-personnel expenditures are less reliably reported across data sources than personnel expenditures.

In five out of seven study sites, the site-provided data and CRDC data on school salary expenditures differed by less than 10 percent for the majority of the site's schools.

Another way of examining consistency between site-provided and CRDC data on school-level expenditures is to look at how individual school differences between the two data sources are distributed in each site. Distributions, as opposed to averages, show how often differences within certain ranges occurred. For this analysis we defined small differences as less than 10 percent, medium differences as between 10 and 25 percent, and large differences as greater than 25 percent.

For salary expenditures, in five of seven sites included in this analysis, there were small differences between the sites accounting system and CRDC data for the majority of schools; the two remaining sites had small differences in 35 and 47 percent of their schools. The share of schools with large differences between the site-provided and CRDC data on total salaries ranged from 0 percent in two study sites to 21 percent in Texas. Despite Texas having the most schools with large differences, Houston had no schools with large differences, and 89 percent of Houston schools had small differences, indicating that there is heterogeneity across Texas districts (Exhibit 15).

Exhibit 15. Percentage of study site schools with small, medium, and large differences between the site-provided data and Civil Rights Data Collection (CRDC) data on salary spending per pupil, 2011–12

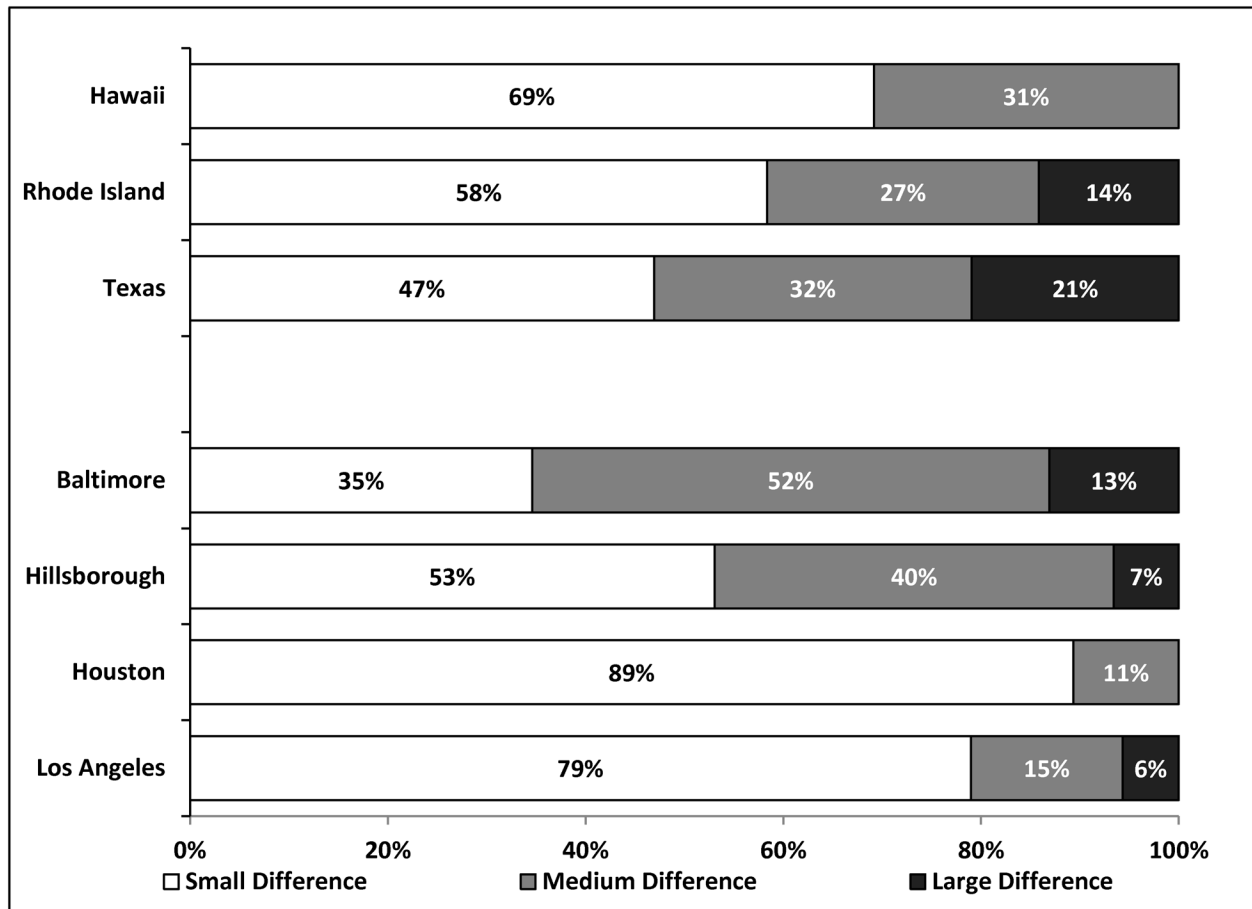


Exhibit reads: In Hawaii, the differences in school-level per-pupil total salary spending between the site accounting system data and CRDC were distributed as follows: 69 percent of schools had small differences, 31 percent of schools had medium differences, and 0 percent of schools had large differences.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the CRDC spending figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Sources: Site fiscal and accounting information systems and Civil Rights Data Collection.

Site-provided and CRDC data on school non-personnel expenditures differed by more than 25 percent for the majority of schools in each of the seven sites.

When examining the distribution of differences in non-personnel spending between site-provided and CRDC data across schools, in all of the sites, at least 71 percent of schools had large differences; in Hillsborough, all of the schools had large differences (see Exhibit 16).

Exhibit 16. Percentage of study site schools with small, medium, and large differences between site-provided data and Civil Rights Data Collection (CRDC) data on non-personnel expenditures per pupil, 2011–12

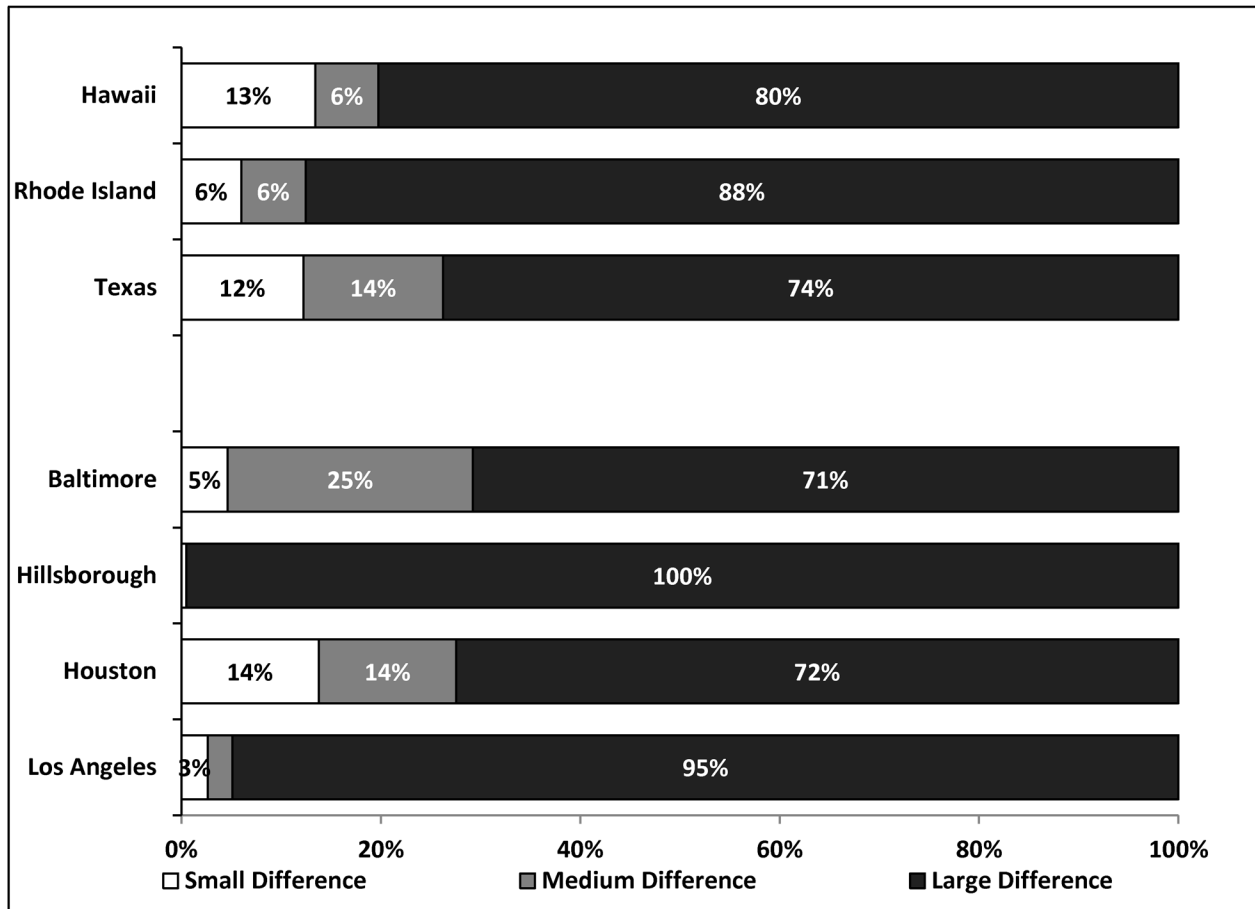


Exhibit reads: In Hawaii, the differences in school-level per-pupil non-personnel spending between the site accounting system data and CRDC were distributed as follows: 13 percent of schools had small differences, 6 percent of schools had medium differences, and 80 percent of schools had large differences.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the CRDC spending figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Sources: Site fiscal and accounting information systems and Civil Rights Data Collection.

Comparison Between Site-Provided and State Personnel Database Salary Data

Finally, we examined consistency across data sources by comparing site-provided salary data with salary data collected from states' education personnel databases, which house various data on the qualifications and salaries of all public school employees in the state, for the three sites that provided this information (Hawaii, Texas, and Houston). This comparison, like the above analyses with CRDC data, examines differences across schools within the study sites. While we would expect salary data from the personnel databases and that from the sites fiscal files to be the same, when asked whether personnel data and expenditure data were connected in any way, only two study sites (both districts — Baltimore and Hillsborough) indicated that their personnel and expenditure data systems were directly linked. All other sites indicated that the personnel databases did not inform expenditure databases, indicating there could be differences in records across the two data sets.

The average difference in total salaries between the site-provided and state personnel data ranged from 5 percent in Hawaii to 16 percent in Houston.

This range is comparable to that between site-provided and CRDC data. When only instructional salaries were included, the average difference increased slightly in Hawaii to 6 percent, but substantially decreased in Texas (6 percent) and Houston (10 percent) (Exhibit 17).

Exhibit 17. Average percent difference between the site-provided data and state personnel database data on total salaries and instructional salaries, 2011–12

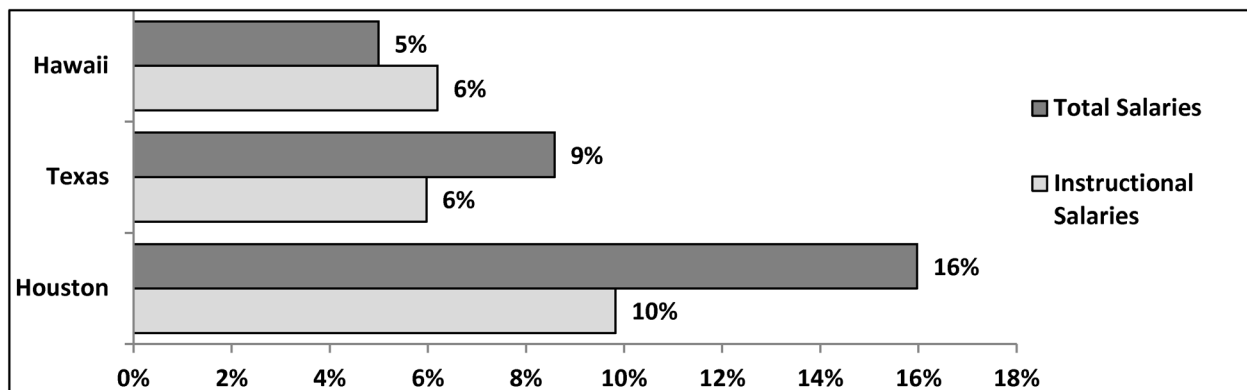


Exhibit reads: In Hawaii, the average magnitude of the difference between the site-provided data on school-level total salary expenditures per pupil and data from the state personnel database was 5 percent; the difference for instructional salaries was 6 percent.

Note: Hawaii's data are for base salaries only and exclude any stipends or additional pay.

Sources: Site fiscal and accounting information systems and state personnel databases.

In Hawaii and Texas, there was a small difference (less than 10 percent) between site-provided and state-personnel data on school salary expenditures for the majority of schools, but in Houston there was a medium-sized difference (10 to 25 percent) for the majority of schools.

When examining the distribution of differences in total salaries between site-provided and state personnel data, 91 percent of schools in Hawaii had only small differences, and no schools had large differences. In Texas, 72 percent of schools had small differences, and fewer than 3 percent had large differences. In Houston, however, only 12 percent of schools had small differences, and the vast majority (80 percent) of schools had medium differences. This high percentage of schools with medium-sized differences indicates that there is some systematic difference between the salaries being reported by Houston and those reported in the state personnel database. Additionally, the higher proportion of these medium-sized differences in Houston relative to Texas as a whole suggests that the discrepancy in Houston is uncommon in other districts in Texas. In both Houston and Texas, the higher proportion of schools with only small differences in the data when considering only instructional salaries indicates that the differences between data sources are substantially larger for salaries of non-instructional positions (Exhibits 18 and 19).

Exhibit 18. Percentage of study site schools with small, medium, and large differences between the site-provided data and state personnel database data on total salary expenditures per pupil, 2011–12

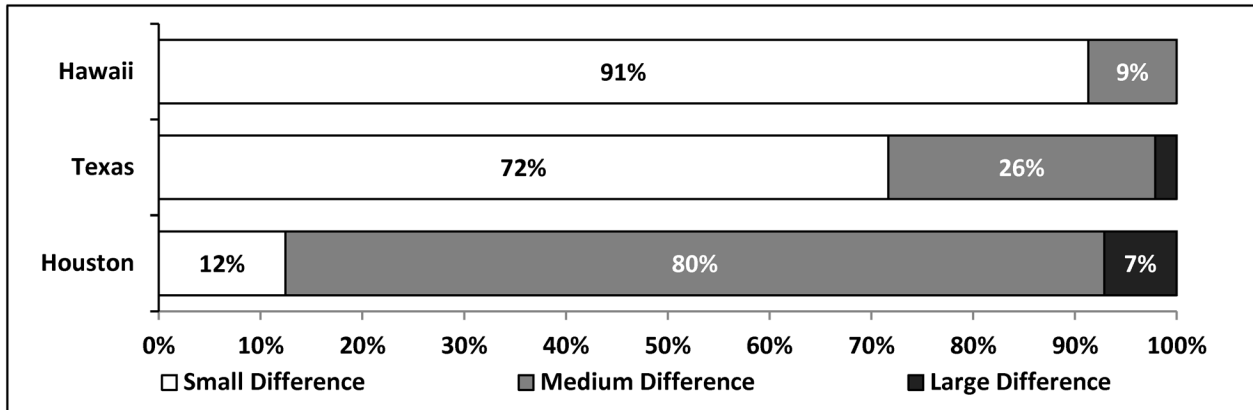


Exhibit reads: In Hawaii, the differences in reported school-level per-pupil total salary spending between the site accounting system data and the state personnel database were distributed as follows: 91 percent of schools had small differences, 9 percent of schools had medium differences, and 0 percent of schools had large differences.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the CRDC spending figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Sources: Site fiscal and accounting information systems and state personnel databases.

Exhibit 19. Percentage of study site schools with small, medium, and large differences between the site-provided data and state personnel database data on instructional salaries per pupil, 2011–12

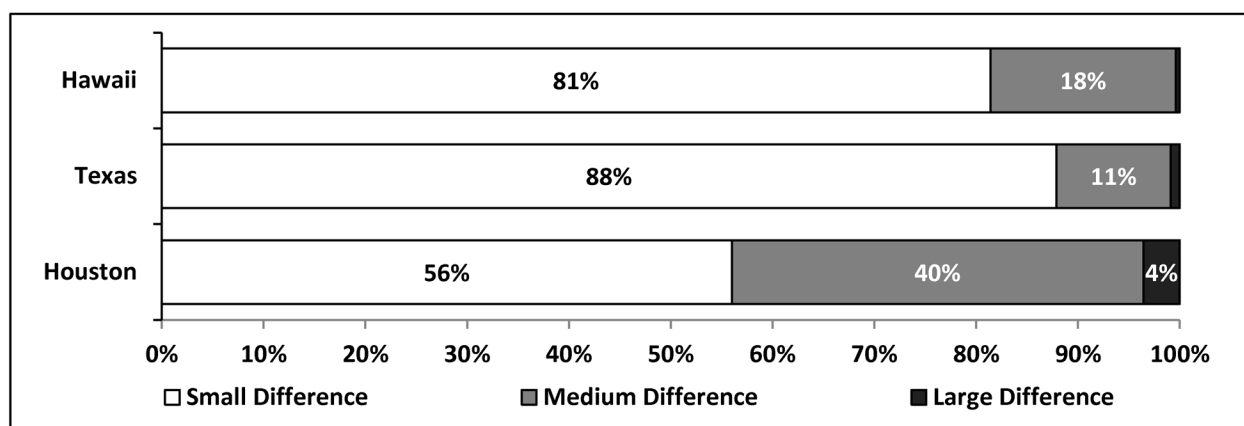


Exhibit reads: In Hawaii, the differences in reported school-level per-pupil instructional salary spending between the site accounting system data and that from the state personnel database were distributed as follows: 81 percent of schools had small differences, 18 percent of schools had medium differences, and less than 3 percent of schools had large differences.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the CRDC spending figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Sources: Site fiscal and accounting information systems and state personnel databases.

Accuracy of Attributing Expenditures to Schools Through Allocation Formulas

As discussed in Chapter II, some states and districts attribute some types of expenditures to individual schools through formulas that allocate expenditures post-hoc to schools in proportion to staff FTEs, student enrollment, or other metrics rather than track these expenditures directly to school sites. However, this approach may be less accurate than directly tracking spending to individual schools. The analysis described in this section assesses the relative accuracy of pro-rating through formulas compared with directly tracking expenditures at the school level. To do this, we applied commonly used allocation factors — school shares of districtwide enrollment, total salaries, or number of teachers — to certain expenditure categories (instructional support, pupil support, retirement benefits, and health benefits) to simulate the result of allocating these expenditure types in study sites that actually tracked them to individual schools. We then compared the simulated allocation amounts with the actual tracked expenditures for those sites. The individual school percent differences were then averaged across sites to provide the average difference between the actual reported spending and simulated allocated spending for each site.

Allocating expenditures to schools by formula appeared relatively accurate for health benefits and less accurate for pension benefits, pupil support staff, and instructional support staff.

Exhibit 20 shows the average differences across sites between actual reported expenditures and simulated allocations for each spending category and allocation formula.¹⁹ Using formulas to allocate expenditures to the school level appeared to be more accurate for health benefits and retirement benefits than for instructional support and pupil support. When allocating expenditures to schools by pro-rating based on their shares of total district FTEs, the average differences between actual tracked expenditures and simulated allocations were 12 percent for health benefits, 18 percent for retirement benefits, 29 percent for pupil support, and 51 percent for instructional support. However, the relative accuracy of allocating expenditures using formulas varied by expenditure category and allocation method. Allocations of health and retirement benefits were more accurate when distributed according to shares of total salaries rather than shares of FTEs. Allocations of pupil and instructional support spending were more accurate when using school shares of FTEs than shares of student enrollment.

Exhibit 20. Average difference between actual tracked expenditures and simulated allocations, across eight sites

	Full-Time Equivalent (FTE) Staff	Salary	Enrollment
Health benefits	12%	10%	
Retirement benefits	18%	14%	
Pupil support	29%		33%
Instructional support	51%		53%

Exhibit reads: For health benefits, the average difference across sites between actual tracked expenditures and simulated allocations was 12 percent when using FTEs to simulate allocations and 10 percent when using salaries.

Note: Averages for health and retirement benefits are based on only six sites. Baltimore was excluded because they reported allocating health and retirement benefits. Hawaii was excluded because health and retirement benefits are not administered by the state’s education department.

Source: Site fiscal and accounting information systems.

Instructional Support Allocations

For instructional support, the average percent difference between actual reported expenditures and simulated allocations based on school shares of total enrollment ranged from 25 percent in Texas to 108 percent in Houston (Exhibit 21). Across the eight sites, the average difference was 53 percent.

¹⁹ The average difference across sites was calculated as the simple average of the site-specific average percent difference between actual tracked expenditures and simulated allocations. We used a simple average rather than a weighted average in order to reflect tendencies across all of the study sites rather than primarily those in the largest sites.

Exhibit 21. Average percent difference between actual tracked expenditures for instructional support and allocations that were simulated based on enrollment and full-time equivalent (FTE) staff, 2011–12

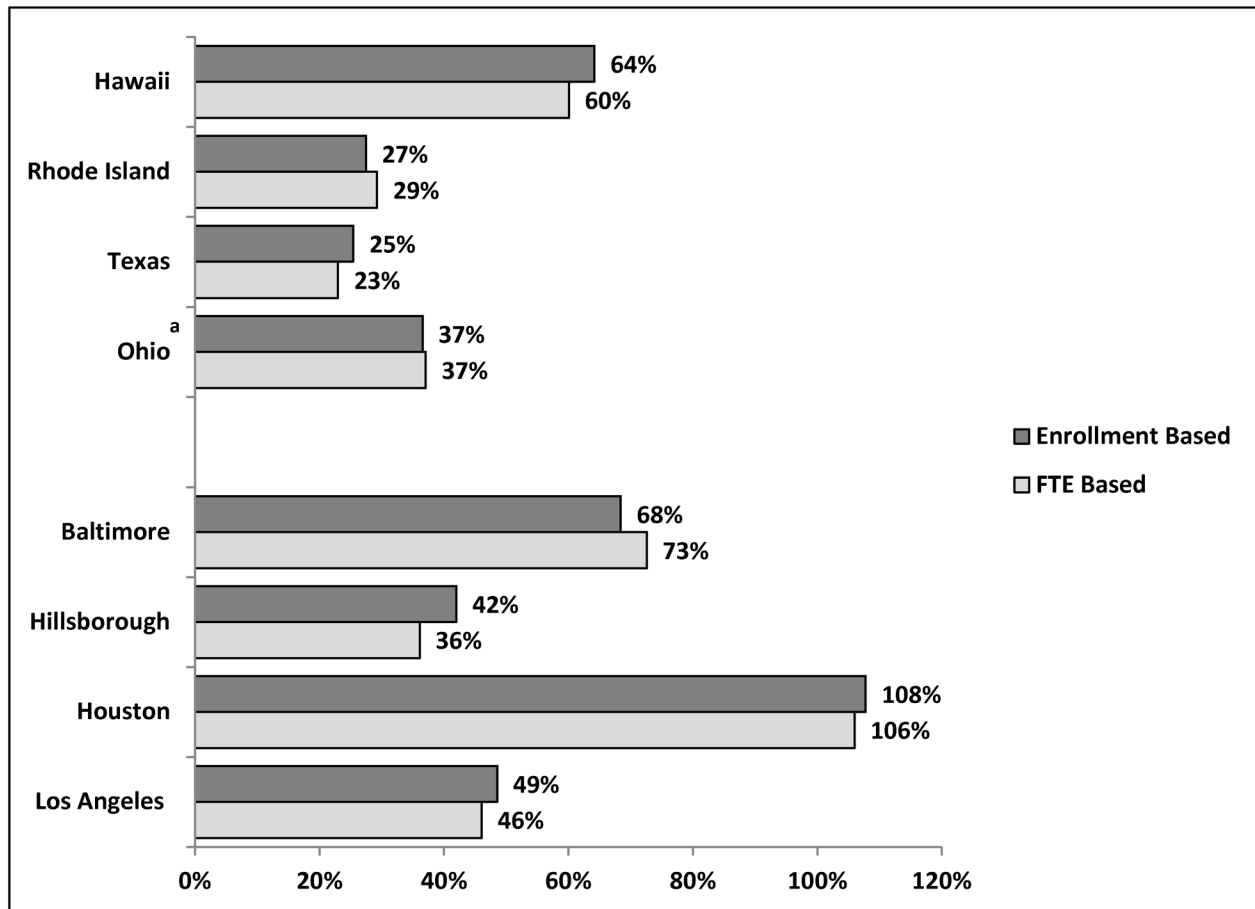


Exhibit reads: In Hawaii, the average difference between tracked expenditures and simulated allocations for instructional support was 64 percent when allocated by enrollment and 60 percent when allocated by FTEs.

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Average percent differences in instructional support between tracked expenditures and simulated allocations were slightly smaller when using FTEs as the allocating mechanism, with an average difference of 51 percent across sites. However, for all sites, the simulated instructional support expenditures were similar to each other whether using FTEs or enrollment, with differences of no more than 6 percentage points between the two allocation approaches.

Looking at the distribution of school-by-school differences between actual reported expenditures and simulated allocations, most sites showed relatively large differences of 25 percent or more for a majority of their schools, for simulations based on both enrollment and FTEs (see Exhibits C1 and C2 in Appendix C).

Pupil Support Allocations

Allocating by enrollment and averaging across sites, the difference between tracked expenditures and simulated allocations for pupil support was 33 percent. The range, from 23 to 44 percent, was narrower here for pupil support than for instructional support. As with instructional support, allocations were more accurate when based on FTEs versus enrollment: In all eight sites, the average difference between actual expenditures and simulated allocations was 1 to 6 percentage points less based on FTEs (Exhibit 22).

Exhibit 22. Average difference between actual tracked expenditures for pupil support and allocations that were simulated based on enrollment and full-time equivalent (FTE) staff, 2011–12

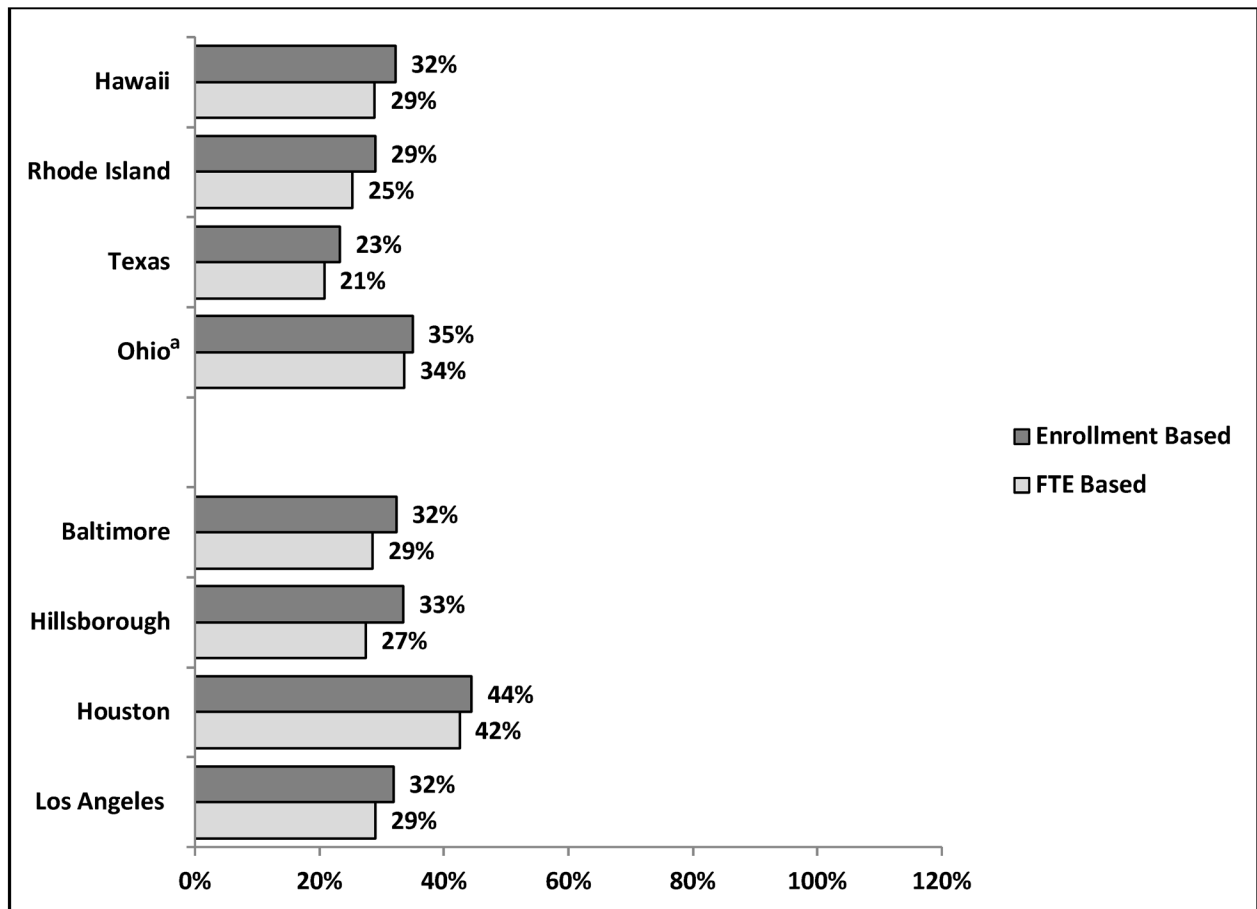


Exhibit reads: In Hawaii, the average difference between tracked expenditures and simulated allocations for pupil support was 32 percent of the simulated allocation figure when using enrollment as the allocating mechanism and 29 percent when using FTEs as the allocation mechanism.

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Looking at the distribution of school-level differences between actual expenditures for pupil support and simulated allocations using enrollment, more than a third of schools at each site had large differences, and 30 percent or fewer had small differences (see Exhibit C3 in Appendix C). Allocations using FTEs generated only slightly smaller differences than allocations using enrollment (see Exhibit C4 in Appendix C).

Retirement Benefit Allocations

When using FTEs to allocate dollars and averaging across sites, the difference between actual reported expenditures for retirement benefits and simulated allocations was 18 percent. Across all sites, the difference between actual reported expenditures and simulated allocations was reduced by 2 to 8 percentage points when allocations were based on salaries rather than FTEs, indicating that salary-based allocations offered greater accuracy (Exhibit 23).

Although simulated allocations of retirement benefits were, on average, more accurate than allocations for pupil support and instructional support, there was substantial variation in accuracy across sites. For example, in five of the six study sites included in the analysis the difference between actual reported retirement benefit expenditures and simulated allocations based on salaries was not more than 14 percent, with a low of 4 percent. However, in Houston the difference was 41 percent. The difference between allocation-simulated spending and actual reported spending in Houston indicates the unreliability of allocations, suggesting that tracking may be preferable.

Differences in retirement benefit spending between tracked expenditures and simulated allocations strengthen the finding that allocations based on share of salaries were more accurate than those using FTEs, and that simulated allocations in Houston were less accurate than those in the other sites. For several sites, there was a marked increase in the share of schools with small differences between tracked expenditures and simulated allocations when salaries were the allocating factor, rather than FTEs. In Rhode Island, Ohio, Hillsborough, and Los Angeles, the increase in the share of schools with small differences where salaries were the allocating factor (rather than FTEs) was between 16 and 27 percentage points (see Exhibits C5 and C6 in Appendix C).

When using schools' shares of salaries to simulate allocations of expenditures on retirement benefits, the majority of schools in five of the six study sites (56 to 95 percent) had small differences between tracked expenditures and simulated allocations. For Houston, only 21 percent of schools had small differences and 52 percent of schools had large differences. In no other site did more than 16 percent of schools have large differences (see Exhibit C6 in Appendix C).

Exhibit 23. Average difference between actual tracked expenditures for retirement benefits and allocations that were simulated based on full-time equivalent (FTE) staff and staff salaries, 2011–12

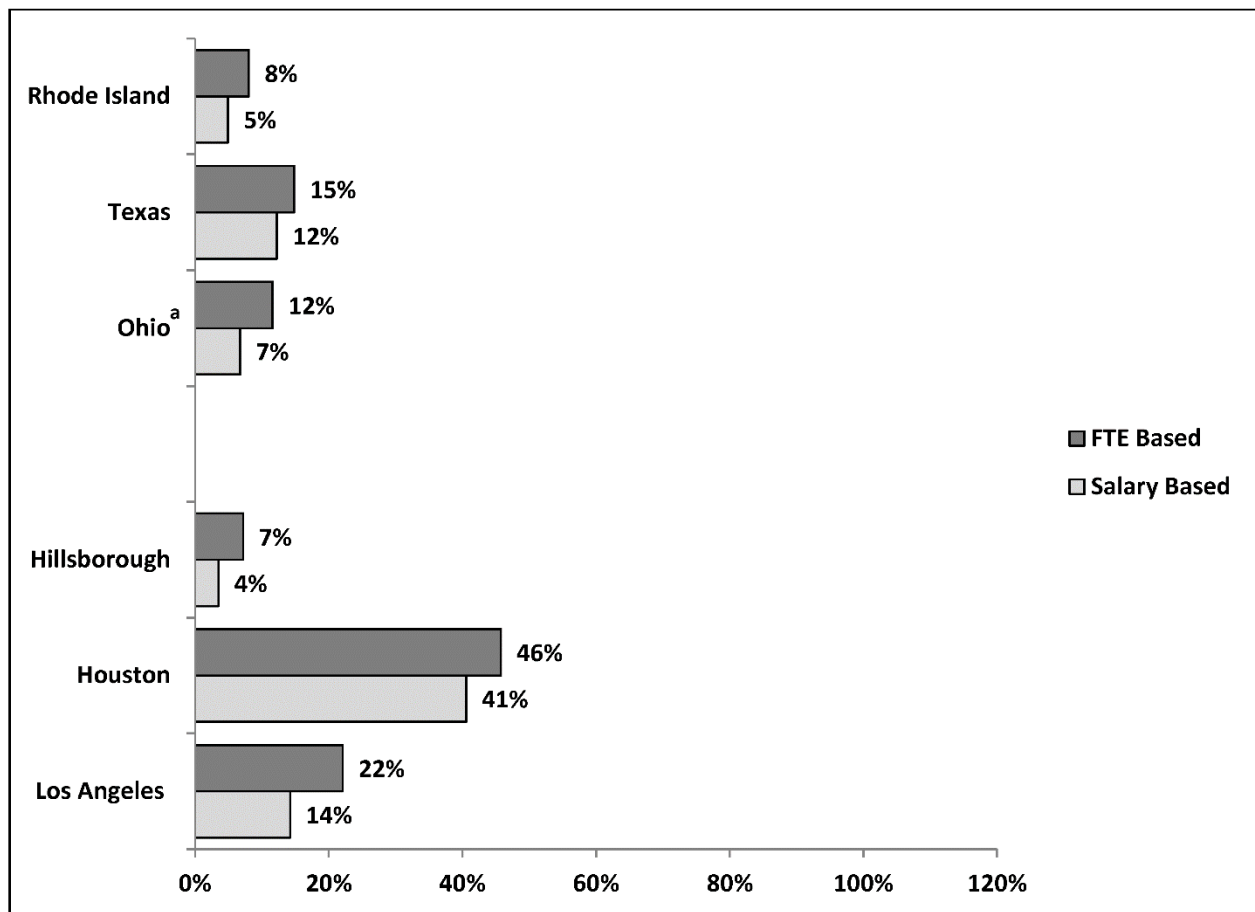


Exhibit reads: In Rhode Island, the average difference between tracked expenditures and simulated allocations for retirement benefits was 8 percent of the simulated allocation figure when using FTEs as the allocating mechanism and 5 percent when using salaries as the allocation mechanism.

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Health Benefit Allocations

Using school shares of districtwide FTEs as the allocation mechanism, the average of the site-specific average differences between tracked expenditures and simulated allocations was 12 percent. As with retirement benefits, using school shares of total salaries instead to allocate health benefits reduced the difference between tracked expenditures and simulated allocations across all study sites by 2 to 6 percentage points, indicating that allocations based on shares of salary expenditures were more accurate. For simulated allocations based on salary expenditures, the average difference between actual tracked expenditures and simulated allocations ranged from 7 percent to 19 percent across sites (Exhibit 24) — a narrower spread than for retirement benefits — with an overall average difference of 10 percent across the six sites.

Exhibit 24. Average difference between actual tracked expenditures for health benefits and allocations that were simulated based on full-time equivalent (FTE) staff and staff salaries, 2011–12

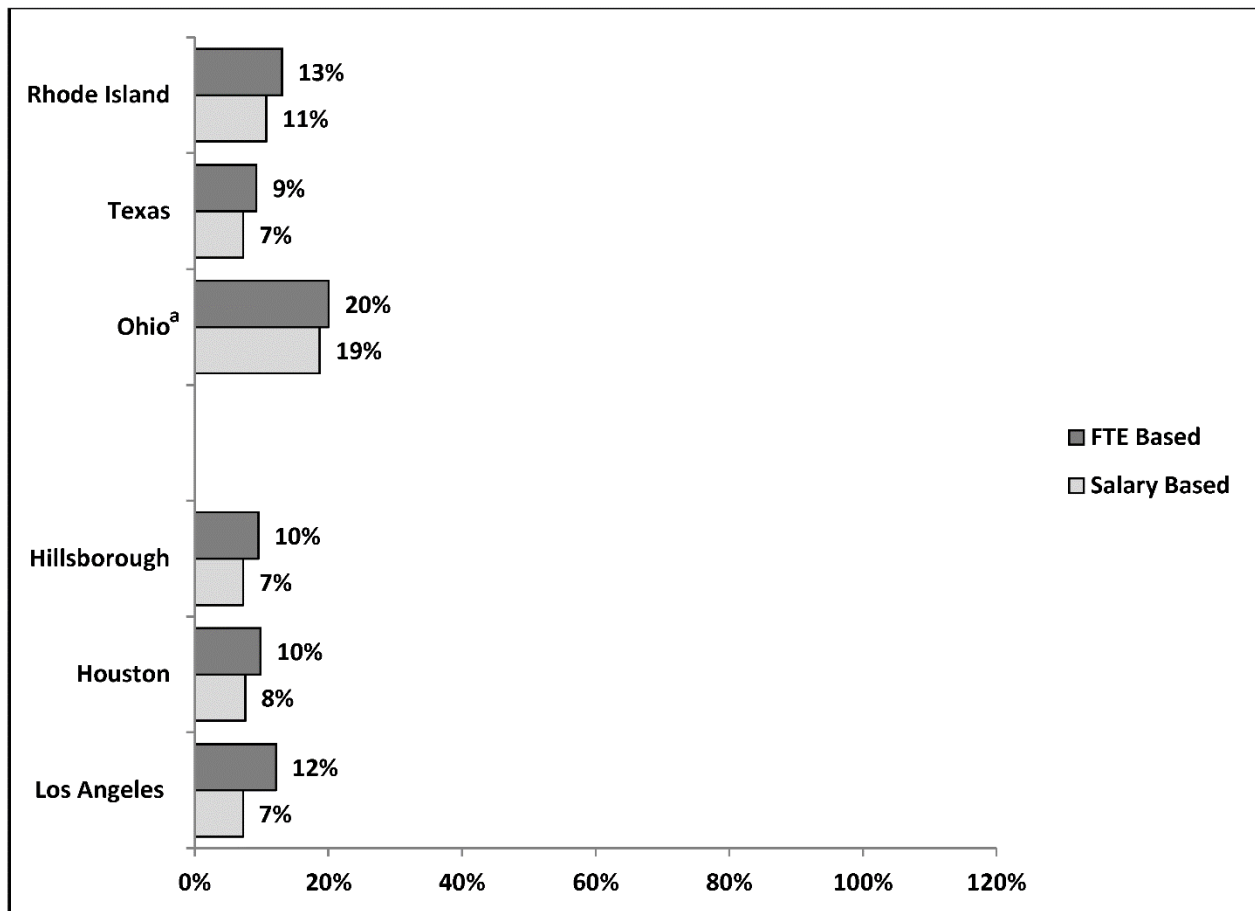


Exhibit reads: In Rhode Island, the average difference between tracked expenditures and simulated allocations for health benefits was 13 percent of the allocation-simulated figure when using FTEs as the allocating mechanism and 11 percent when using salaries as the allocation mechanism.

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

When examining differences in health benefit spending between tracked expenditures and simulated allocations, we found that there was an increase across all sites in the share of schools with small differences when salaries rather than FTEs were used to simulate allocations. Increases ranged from 6 to 22 percentage points (see Exhibits C7 and C8 in Appendix C).

When using allocations that were simulated using share of salaries, the majority of schools in five of six sites (65 to 75 percent) had small differences between actual reported and allocation-simulated spending. Only Ohio did not have a majority of schools with small differences (42 percent). No study site had more than 21 percent of schools with large differences, and four of six study sites had less than 3 percent of schools with large differences (see Exhibit C8 in Appendix C).

Summary

In this chapter, we presented analyses examining the reliability of school-level fiscal data in the state and district study sites that maintain systems for collecting and reporting such data. By examining the consistency of school-level data from sites' accounting systems with expenditure figures reported in other sources (School District Finance Survey [F-33], CRDC, and state personnel systems), it was clear that expenditures on personnel — namely salaries — were much more consistently reported than non-personnel expenditures. The panel of experts provided insights as to why non-personnel expenditures might be reported less consistently, highlighting the complexity of tracking certain types of non-personnel expenditures to schools, the difficulties associated with classification decisions, and irregular spending patterns. The inconsistency of non-personnel spending data indicates that we should question the trustworthiness of such data and exercise caution when using it to make comparisons for the purposes of equity or for analyzing efficiency.²⁰ Some experts on the panel also felt that it may not be advisable to use all categories of non-personnel expenditures — particularly those that are non-instructional and largely uncontrollable — to evaluate equity.

We also observed that allocation-simulated expenditures can differ quite substantially from actual reported spending, suggesting that allocations can be quite inaccurate. There was substantial variation in the accuracy of allocations across categories, across study sites, and across allocation methods, with allocations being quite accurate in some instances and very inaccurate in others. This makes it difficult or impossible to determine the accuracy of allocations used to report spending. Due to uncertainty regarding the accuracy of allocations, states and districts should be encouraged to track as much school-attributed spending as possible, particularly for categories accounting for large shares of overall spending. Furthermore, the results from analyses of school-level expenditure data where large amounts are allocated (rather than tracked) to schools should be interpreted cautiously, keeping in mind the potential unreliability of the data.

²⁰ Because the CRDC and School District Finance Survey aggregate spending into broad categories, we cannot make statements regarding the consistency of more refined expenditure types within non-personnel or limit this analysis just to those categories of non-personnel that sites report as being allocated to schools.

IV. Developing and Implementing Systems to Collect School-Level Expenditure Data

To generate useful information on school spending, states and districts should establish systems and procedures that support the collection and reporting of comprehensive and accurate expenditure data at the school level. This chapter describes the case study states' and districts' experiences establishing school-level expenditure reporting processes in their states or districts and using the resulting data, to provide context and advice for other states or districts considering establishing similar systems of their own.

Because school-level expenditure reporting systems often rely on staff at multiple levels of the school system to carry out data collection procedures, the panel of experts convened for this study — particularly the practitioner representatives — emphasized the importance of motivating and providing support for district and school staff to implement and use the system as intended. The expert panel members recommended creating incentives for district and school staff members to become invested in collecting high-quality expenditure data — for example, by explaining to them how the data will be used and by making the data widely available. The panel also underscored the importance of providing clear guidelines, definitions, training, and technical assistance to system users to ensure they implement data collection procedures consistently. The experts noted that training system users will be an iterative process; new needs will be discovered, requiring revisions to the original guidelines, definitions, and support.

Drawing on data collected from interviews and pre-interview surveys with officials from eight of the nine study sites,²¹ this chapter explores the steps that these states and districts took to develop or enhance their systems for collecting and reporting school-level expenditure data. Specifically, it examines the history and development of these systems, tasks and costs involved, and challenges experienced.

Development and Expansion of School Expenditure Data Systems

Most of the sites reported that they had been collecting school-level expenditure data for two or more decades, and most reported making significant improvements to these systems within the past 10 years.

Officials from the eight study sites described varied backgrounds regarding their collection and reporting of school-level expenditure data (Exhibit 25). Baltimore reportedly began tracking school-level expenditures relatively recently, in 2007, while officials from the other seven sites indicated that they have tracked some form of school-level expenditure data for over two decades (Exhibit 25). Five of these seven sites reported making significant advances in their capacity to collect school expenditure data within the past 10 years.

²¹ Ohio did not participate in the interviews and pre-interview survey used to collect information about sites' experiences developing and implementing systems for collecting and reporting school-level expenditure data. Accordingly, Ohio is excluded from all of the analyses in this chapter.

Exhibit 25. Study sites' development of school expenditure data systems

Site	Year School-Level Data First Collected	Milestones	Origin of Current Data System
Florida	1974	2012–13: Began transferring from a mainframe-based cost reporting system to a Web-based system	Developed internally
Hawaii	More than 20 years ago	1991: Began using integrated financial management system	Purchased from vendor
Ohio	1991	1991–92: System piloted 1994–95: First mandatory statewide data collection	
Rhode Island	1990	1997: Purchased software to annually collect school-level expenditure data 2009: Instituted a new data system and a new uniform chart of accounts	Developed internally with support from vendor
Texas	1988	1991: Began collecting school expenditure data through statewide data system 2003: Transferred state data system from mainframe to Web-based platform	Developed internally
Baltimore	2007	2007: Implemented new “Principal Dashboard” system that facilitated collection and reporting of school-level fiscal data	Purchased from vendor
Hillsborough	Mid-1970s	1994: Implemented software system that could track salaries to school level Late 1990s: Replaced existing data system with new software due to Y2K concerns	Purchased from vendor, with customizations
Houston	More than 20 years ago	1999: Implemented new data system and reporting guide 2016: Plans to implement add-on software module to support tracking of additional expenses (e.g., building repairs, equipment) to schools	Purchased from vendor
Los Angeles	More than 20 years ago	2007–08: Replaced outdated expenditure tracking software with a new system that provides more detailed tracking of expenditures	Purchased from vendor, with customizations

Note: Ohio is included here even though the site was not able to participate in interviews. Information was obtained from Sherman, Best, and Luskin (1996) or provided by the state department of education official who provided data for analysis. “More than 20 years ago” indicates that sites have been reporting expenditures at the school level as long as anyone available for interviews could remember.

Source: Interviews and pre-interview surveys of site officials, spring 2014.

Officials from all four state sites said their data system was initiated or expanded in response to state laws intended to promote equity and transparency in school spending.

Florida officials traced their state’s collection of school-level expenditure data to a 1973 law enacted by the state legislature (F.S., 1011.62, establishing the Florida Education Finance Program), which required the collection of school- and program-level expenditure data to ensure that all students in the state have comparable access to educational programs and services. According to one official, the law came about as state legislators were hearing reports from school board members that parents were concerned about their schools “not getting their share”; the legislation was introduced to address these concerns and improve equity.

Texas collects and reports school expenditure data through the state’s Public Education Information Management System (PEIMS), which stemmed from state legislation passed in 1984 to increase transparency and accountability for educational programs (Texas House Bill 72). According to state officials, Texas Education Agency staff developed PEIMS in 1989 and further developed the system in 1991 to collect school expenditure data, in response to the 1984 law.

In Hawaii, state officials indicated that a 1986 law granting the SEA administrative flexibility in budgeting and fiscal operations facilitated the state’s move to computerize its fiscal data collection. This flexibility allowed the SEA to manage all aspects of its fiscal operations, with the exception of payroll, which was outside the state’s centralized accounting system. In 2004, the Hawaii State Legislature enacted a Weighted Student Formula policy, which established a student needs-based formula for distributing funds to schools and gave principals more authority over spending decisions. These policy changes required or facilitated school-level expenditure reporting.

More recently, in 2009, Rhode Island embarked on an initiative to improve the information it had available on school-level expenditures. Although the state has annually collected school expenditure data since 1990, prior to 2009, districts and schools varied in how they accounted for expenditures, and this variation precluded the SEA from answering important policy questions for the Rhode Island General Assembly. In 2006, the General Assembly charged the SEA and the Office of the Auditor General with developing and implementing a statewide uniform chart of accounts to create more consistency in expenditure reporting.

Officials from three of the five district sites cited giving schools more authority over spending decisions as a major reason for collecting school-level expenditure data.

A Houston official noted that the district’s movement toward decentralization over the past two decades — which had given schools more autonomy over their budgets — led to a greater need for district and school staff to monitor spending against those budgets. In addition, although Texas requires all districts to collect and report school expenditure data in the PEIMS system, the Houston Independent School District decided to track expenditures at an even more granular level than the state required in order to examine program effectiveness. In 2013–14, the district decided to add to the chart of accounts sub-object codes within object codes, representing each academic subject (for example, a sub-object code of 10 refers to math), in response to stakeholder questions about spending by academic subject and the expenditures associated with programs that were showing student achievement results.

Los Angeles officials reported that the district has always reported expenditures at the school level in some manner, but had implemented a new expenditure tracking system in 2007–08 that facilitated more specific expenditure tracking. The district purchased this new system because its previous software system was out of date, could no longer be updated, and was prone to crashing. In 2013–14 this school-level expenditure data was used often when Los Angeles instituted a new Budgeting for Student Achievement policy, which “pushed out” a greater share of funds to schools and aimed to give principals more flexibility and control over resource allocation decisions in exchange for stronger accountability for results.

Baltimore began implementing a Fair Student Funding policy in 2008–09, which, like in Los Angeles, transferred significantly more spending authority to schools to enable principals to make spending decisions based on the specific needs of their students and community. This new autonomy at the school level limited district management of the system, making it important to adjust expenditure data

systems to track funding and expenditures at the school level to ensure the intended equity. This need motivated the development of their school-level expenditure tracking system.

In Hillsborough, respondents did not see a connection between their school expenditure data system and any effort to give schools more authority over spending. Instead, Hillsborough officials attributed the adoption of their system to a state legislative initiative in 1973 to improve equity and create more transparency regarding expenditures in individual schools.

Specific Tasks and Costs Involved

Officials from six sites indicated that developing their operational expenditure reporting system involved changes to their charts of accounts to create or revise codes for capturing school-level spending.

As noted earlier, Rhode Island created a statewide uniform chart of accounts in 2009 to standardize how all districts in the state recorded school-level expenditures. Florida's move to school- and program-level reporting in 1974 also required changes to the state's chart of accounts. Texas officials reported that the state has slightly modified its chart of accounts periodically to reflect new programs and funds but that these changes did not represent major policy or procedural changes.

At the district level, Baltimore changed its chart of accounts when it implemented its Fair Student Funding policy. Los Angeles officials reported that the district augmented its chart of accounts to take advantage of its new software system's capacity to handle a greater number of sub-codes allowing collecting expenditure data at a more granular level. Houston officials reported that the district changed its chart of accounts to allow cost-effectiveness analyses based on new academic sub-object codes.

All states and districts had needed hardware and software changes to capture or report the new data they sought.

Site officials described making various hardware and software changes to expand their capacity to attribute expenditures to schools. For example, Texas used a mainframe computer system for its PEIMS through the 1990s but migrated to a Web-based application in 2003 when its previous data system reached capacity. Officials from both Houston and Los Angeles reported purchasing new software from SAP to increase data storage capacity and allow more specific expenditure tracking. Houston officials also mentioned plans to purchase an add-on SAP module for their system to collect additional data on building repair and equipment expenses. In Hillsborough, the district's shift to a new software system in the late 1990s also required additional hardware because the software was incompatible with their existing servers and computers.

Personnel costs associated with developing new data systems included time for staff to select or design the new system, plan its roll-out, and provide training to system users.

Officials from all six sites that provided information on the costs associated with developing their current system²² reported incurring costs for staff time spent choosing or designing the system. Personnel costs also included staff time devoted to planning system roll-out strategies and developing

²² Analyses of the costs incurred and staff involved in developing systems for collecting school expenditure data exclude Hawaii and Texas because the development of their systems occurred more than 20 years ago, and the state officials who were interviewed for this study did not have this information.

training materials. For example, to implement the new system, SEA staff in Rhode Island relied on a group of district administrators who served as part of a statewide workgroup (see box, “Rhode Island’s Efforts to Engage Stakeholders During System Design and Implementation”). Internal SEA staff developed the new data system and then negotiated with vendors for district-level systems. Many information technology staff also were involved in setting up the new systems.

In Los Angeles, directors from all relevant departments within the central office (including accounting, payroll, benefits, projects, accounts payable, procurement, and many others) were involved in the selection process for the new expenditure reporting system. After the district’s SAP system was selected, about 80 to 90 district employees — including information technology staff — helped support district-wide implementation.

Non-personnel costs associated with developing school expenditure data systems included contracts with vendors or consultants (six sites) and technology upgrades (four sites).

As shown above in Exhibit 25, five study sites reported purchasing their expenditure data system from an outside vendor, and another site (Rhode Island) collaborated with a system vendor when developing a data system internally. Several sites established contracts with consultants or organizations other than the system vendor to support the design or implementation of their new system. For example, Florida officials worked with representatives from Orange County Schools and later a small business to develop their data system internally. Los Angeles officials reported contracting with 80 to 90 consultants to support central office personnel in creating and rolling out the district’s new system. For example, one individual consultant helped develop the system, which took about a year. Officials from four sites also described hardware or software upgrades as key non-personnel expenditures related to developing their data systems.

Estimates of the total amount of non-personnel costs involved in developing new data systems varied across sites. Rhode Island officials reported investing approximately \$2.2 million in helping districts replace or modify their accounting software systems. Officials in Los Angeles estimated that their SAP system cost more than \$200 million to develop, and the district paid this amount “across five or six years” using mostly capital funds from the district’s general fund. Most of this cost was for the software, the vendor (contractor labor), licenses, and the development of training materials. At four sites, interviewees reported that they incurred technology costs to upgrade system hardware or software, such as new servers and software.

Rhode Island's Efforts to Engage Stakeholders During System Design and Implementation

After receiving a mandate from the Rhode Island General Assembly in 2006 to develop a statewide Uniform Chart of Accounts, a state policy workgroup surveyed other states to find out what systems already existed and what their capabilities were. They looked closely into what effort it would take and what it would cost to develop a system for Rhode Island. The group also surveyed all stakeholders — including principals, other school staff, district staff, General Assembly members, and the governor's office — to find out what they were looking for in a new school expenditure tracking and reporting system. The group heard from stakeholders that they were interested in answering questions about return on investment — how they could know if the money they were spending was being well spent.

A Rhode Island official noted that a key to the successful implementation of their Uniform Chart of Accounts was the involvement of the school business managers from the development stage, including a pilot group of 17 district business managers who provided input on the design, codes, and code descriptions. This involvement gave this set of districts ownership of the project and helped to ensure that the remainder of the districts followed suit knowing that it was not a “top down” approach being forced upon them. According to the state official, continuing to include district input through the annual meeting format “has been very powerful.”

In addition to start-up costs, all sites reported incurring day-to-day operating costs to maintain their data systems, including personnel costs for information technology and finance staff in their central offices, school staff in the study districts, and staff time to develop and provide training.

The number of staff involved in the day-to-day operations of expenditure tracking systems and processes varied across sites. In Florida, the staff involved in maintaining the expenditure tracking system day to day include at least four people in the Office of Financial Reporting, the Assistant Deputy Commissioner of Finance and Operations, a programmer (0.25 FTE) who receives school district data and produces reports for reviewers, and two full-time program analysts who provide technical assistance to school districts, review data for accuracy, and analyze data when requested. In Houston, somewhat more staff are involved, including 10 budget analysts, three senior budget analysts, and two budgeting managers who provide support and oversee campus budgeting. A senior manager of accounting in the school-based division within the Department of Budget and Financial Planning, along with five other staff, ensures federal, state, and local grant reporting and compliance. At the school level, approximately 40 of Houston's large high schools have school business managers who handle budgeting and expenditure reporting. Overall, districts in this study employed about one FTE staff per 10,000 to 15,000 students to maintain the systems.

Six sites reported incurring ongoing non-personnel costs such as contracts with external vendors or consultants (four sites) and technology upgrades (four sites) to maintain their school expenditure data system.

In addition to the personnel costs associated with the site employees who operate these systems, officials from six sites indicated that they continue to incur non-personnel costs to maintain their data system. In four sites, these costs included ongoing contracts with vendors or partner organizations. For instance, Florida officials reported using contractor staff to work at a help desk to provide technical assistance to school and district staff working with the expenditure software. The state also contracts with the Northwest Regional Data Center — which houses the data — to run overnight reports. In another four sites, maintaining their data system requires technology costs, such as software licenses and server upgrades. For example, Hillsborough officials explained that the district needs to purchase updated licenses for their software every two years because their expenditure data system does not support outdated licenses.

Challenges

Site officials most commonly identified staff capacity and training needs as a major challenge in developing and implementing new systems for tracking school-level expenditures. The most commonly identified challenge that sites continued to face was in tracking certain types of expenditures.

Officials from all eight sites indicated on the pre-interview survey that they had experienced challenges regarding staff capacity and training needs (Exhibit 26). During interviews, site officials elaborated on these challenges. With regard to staff capacity, officials at three sites emphasized their staff's difficulty reporting expenditures correctly. Providing training to address these capacity needs also proved difficult. For example, Los Angeles officials reported that training staff was one of their greatest challenges in implementing their new school expenditure data system, and they emphasized importance of training new staff quickly and thoroughly. Texas officials mentioned challenges ensuring consistency in the training provided in districts across the state. In response, state staff created standardized training documents to reduce the variation among trainers' presentation of material. Texas officials also described how the SEA tried to create online training modules, but the amount and nature of the content that needed to be delivered made Web-based trainings unfeasible and unmanageable. As a result, the state switched to delivering training in person.

Outdated technology and resistance from schools also were reported as challenges. State and district officials in the case study sites described specific challenges with outdated hardware and software (unsupported operating systems) in schools. Among the seven study sites that identified resistance from schools as a challenge, officials described initial pushback due to staff reluctance to take on new roles in managing budgets and spending, perceptions that the changes were unnecessary, and general opposition to change. In all but one study site, officials reported that the initial resistance they encountered eventually subsided as schools and districts became more accustomed to the new system. Rhode Island officials emphasized that giving district and school stakeholders a voice in the change process helped them to overcome opposition.

Exhibit 26. Number of study sites reporting that various issues represented a moderate or major challenge in implementing or changing their financial data system

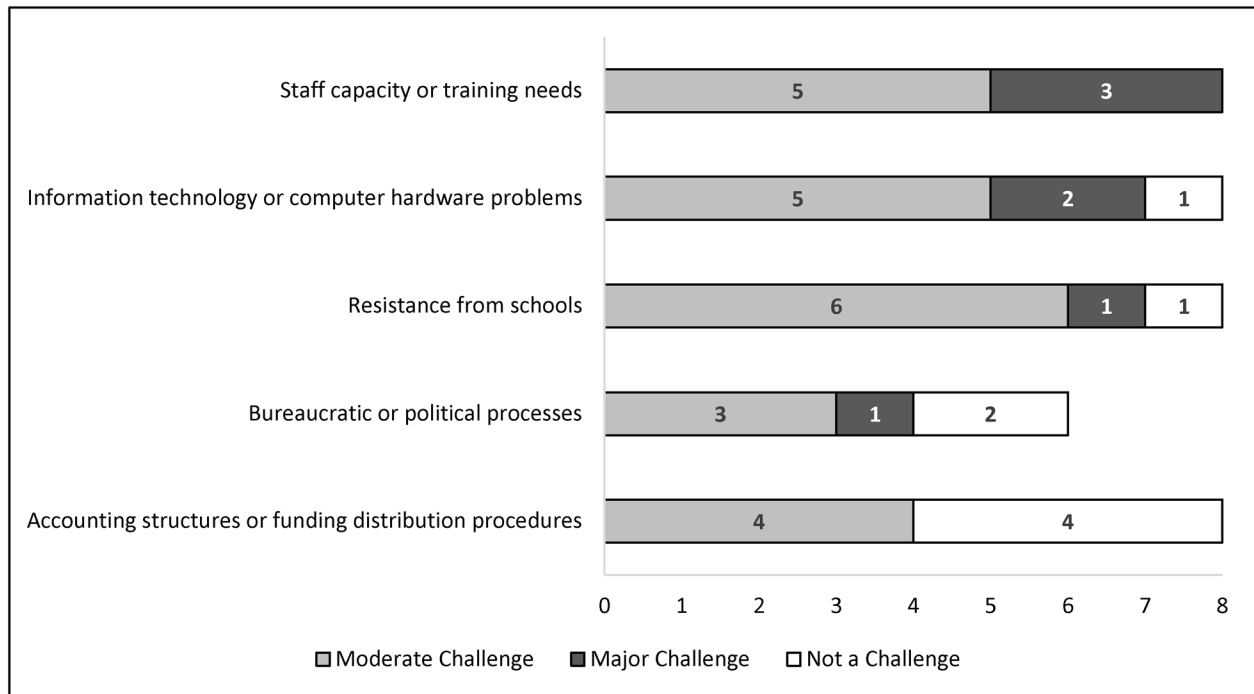


Exhibit reads: Five sites indicated that staff capacity or training needs represented a moderate challenge in implementing or changing the financial data collection and reporting system.

Note: Two sites did not respond to the survey item regarding bureaucratic or political processes.

Source: Pre-interview survey of site officials, spring 2014 (n = 8 sites).

Additional challenges that respondents mentioned during interviews included difficulty allocating expenditures on itinerant staff who work at multiple schools as well as particular types of non-personnel expenses (such as transportation and telecommunications) to schools. For states, collecting data from districts that used varied accounting software systems emerged as a challenge. One state also reported challenges in comparing school budgets to expenditures because expenditure reporting was at a fairly granular level, whereas districts typically budget at a higher level. In the two study districts that were located within study states (Houston and Hillsborough), cross-walking local and state accounting codes reportedly posed a challenge.

Site officials explained that they were able to overcome many challenges with time, as staff adjusted to new expectations and procedures, and with additional training. However, when asked about the challenges they continued to face, site officials reported ongoing challenges with tracking certain types of expenditures, such as staff who work in more than one school, transportation costs, and utility expenses. For example, a Rhode Island official reported that tracking telecommunications expenses was challenging because it was difficult to measure the amount of Internet time or bandwidth that was used by students, teachers, and administrators, and for what purposes.

Training and Quality Assurance Practices

All eight sites reported providing training on their systems for collecting school expenditure data, although the focus and intensity of the training varied.

At the state level, Texas and Rhode Island officials reported providing training to districts on the state's chart of accounts, and Hawaii provided training on overall financial reporting procedures. In Rhode Island, the SEA developed a comprehensive slide deck of 200 slides for districts to use to train district and school stakeholders, but rather than requiring district trainers to cover the entire slide deck with each group of trainees, the SEA instructed districts to focus on a subset of slides that were most relevant for the particular group being trained. In Hawaii, the SEA created online, self-paced courses using a software program that presents narrated PowerPoint presentations. Each course includes several modules, including the roles that various entities and individuals play in operating and using the data system. Hawaii officials also reported that new principals are trained through the state's New Principal Academy, where they receive operational as well as academic leadership training.

Officials from Florida reported that the SEA provided its most intensive training on required reporting procedures in 2013–14 as districts began using the state's new Web-based data system. For example, the SEA held several workshops throughout the state on the system's Program Cost Report, which provides various analyses of school- and program-level expenditure data. The Florida officials said the state also provides annual updates and guidance to local staff, including updates on any changes that have been made to the software system, legislative changes, new rules, and other information.

At the district level, officials described providing training that ranged in intensity from episodic trainings (Baltimore) to monthly principal meetings (Hillsborough). In addition to providing in-person training during monthly principal meetings, Hillsborough trainers also provide training on account coding and financials to bookkeepers, principals, and secretaries during quarterly meetings, as well as to district leaders and other district staff when requested. Hillsborough officials noted that small group meetings were common, as staff from schools located near one another often get together to discuss issues with reporting. To ensure that staff turnover does not negatively impact data quality, the district focuses on getting as much information to staff as possible so that all schools have the same information.

Similarly, Houston officials emphasized that “training [of school staff] is the best option for data quality.” They explained that the district's Budget and Financial Management Division provides mandatory training on data coding procedures and use of the SAP software to all newly hired employees whose job responsibilities require access to the expenditure data system. The district also offers three to five sections of a refresher course at the beginning of the school year, depending on the number of school staff who need to be trained. In addition, the district has periodically provided specific training for school business managers, who are sometimes hired by principals in large secondary schools to assist with budget management. Although the district has found face-to-face training to be most effective, a Houston official noted that the district also developed an online training course, which includes a test that participants must pass to demonstrate their mastery of the information.

In Los Angeles, the district rolled out its new software system and data collection procedures over time through its Education Service Centers, which act as subdistricts within the district. According to Los Angeles officials, the central office answers school staff members' questions and provides additional training and technical assistance until the school staff are fluent in and comfortable with the system.

The central office also gives school leaders a manual that outlines the district’s accounting guidelines and instructions for using its SAP system software.

To monitor quality, states and districts in the study relied most heavily on staff review of data (seven sites) or automated error checks in their respective software systems (six sites) to identify errors, incorrect use of accounting codes, or implausible values.

Though staff training was a primary way sites ensured the quality of their data, they also incorporated staff review of data and automated checks of values in their software systems. For example, Rhode Island officials described how their Office of Statewide Efficiencies reviews and cleans expenditure data quarterly, and how their software includes automatic checks on the validity of codes and appropriateness of values. Rhode Island also employs staff who provide technical assistance directly to sites and independent auditors who use the Uniform Chart of Accounts to identify common errors across districts and ask districts to correct these errors. Baltimore’s system reportedly did not have any automatic checks built into the software; rather, staff in the budget department review expenditure data throughout the year to ensure that school staff are using the correct account codes.

The states in this study differed in the extent to which they gave districts discretion in how they report school-level expenditures.

For instance, although Texas districts are guided by an expenditure reporting manual and chart of accounts distributed by the state, districts themselves determine how they track or allocate expenditures to schools. Although Florida allows districts some discretion in how they attribute expenditures (for example, using formulas driven by number of students or number of staff), the state centralizes and standardizes expenditure reporting by requiring districts to use one system for reporting expenditures. Rhode Island is even more prescriptive: The state drives districts’ reporting of expenditures through an extensive set of specific accounting codes and rules for allocating central office expenditures.

Officials from six sites noted that their personnel and expenditure data systems could connect to one another, a feature that may promote data reliability.

Several sites also have system design elements in place to ensure consistency of data. For example, two district sites — Hillsborough and Baltimore — have personnel and expenditure tracking systems that are directly linked, meaning personnel records — including individuals’ salaries — directly inform the reporting of school-level expenditures. In four other sites, officials reported that their personnel and fiscal data systems do not “talk” directly to each other, but that common sets of codes for identifying objects and locations are used, so that data from the two systems can be merged if needed. Two other sites — Florida and Texas — reported that their state-level personnel and expenditure tracking systems are completely separate and do not link to each other at all. In theory, having data systems that are interconnected — or having one combined fiscal and personnel data system — should result in more reliably reported figures as there are fewer data points in isolation.

Use of School Expenditure Data

Study sites most commonly reported using their school-level expenditure data to promote transparency with the general public.

When asked about the primary ways in which their school-level expenditure data were used, officials from five sites highlighted how the data served to promote transparency regarding school spending

(Exhibit 27). For example, a Los Angeles official noted how the district, which has been criticized for not being sufficiently transparent, has published individual school expenditure reports online so that parents, teachers, and the community can see how much money their school has to spend, how much their school is spending, and what the school is purchasing. The Los Angeles official also mentioned that, at the time of the interview in spring 2014, discussions were under way to make district expenditure information available online as well.

Exhibit 27. Number of study sites that reported using their school-level expenditure data in various ways

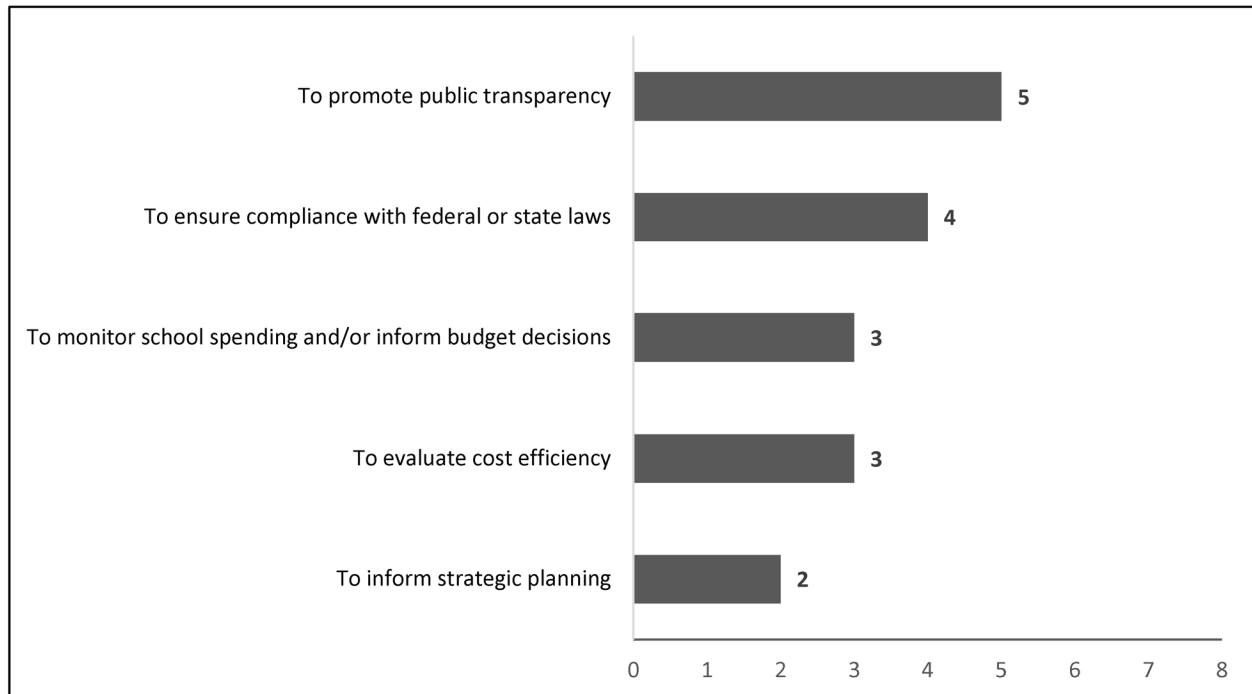


Exhibit reads: Officials from five sites indicated that their site used its school-level expenditure data to promote transparency with the general public.

Source: Interviews with site officials, spring 2014 ($n = 8$ sites).

In total, officials from five study sites reported that they shared school expenditure data on their state or district website to foster transparency. In Florida, where state law requires the state to provide parents with information on how money is spent at their child’s school, the SEA posts a series of nine reports on the state department website that include detailed information on the amount and types of expenses that each school in the state has incurred.

Officials from six study sites described their use of school-level expenditure data to inform decision-making, including decisions regarding compliance with federal and state laws (four sites), school budgeting and spending monitoring (three sites), cost-effective investments (three sites), and strategic planning (two sites).

Officials from four study sites reported using school expenditure data to determine compliance with federal or state laws (Exhibit 27). For instance, Florida and Rhode Island officials indicated that the state used school expenditure data to assess whether districts receiving Title I funds satisfied federal maintenance of effort requirements.

Three sites reportedly used their school expenditure data to monitor how schools are spending their funding and/or to plan school budgets. Officials in Los Angeles, for example, explained that expenditure data played a prominent role in informing school budget decisions. According to these officials, the district tracks expenditures to monitor progress on the budget plan or assess whether instructional goals are being met; this enables program staff to make decisions about any budget revisions or corrective actions needed.

Officials from three sites — Houston, Los Angeles, and Rhode Island — reported using school expenditure data to analyze the cost-effectiveness of investments in particular areas. Baltimore and Hillsborough officials noted how their school expenditure data were used to guide strategic planning decisions. For instance, Baltimore officials discussed how a former district leader wanted to conduct a “deep analysis” of spending in the district’s schools, and a Hillsborough official mentioned that the local school board used school expenditure data to review the district’s strategic plan.

A Hawaii official explained that SEA staff tend to focus more attention on school funding data than expenditure data because they were more concerned that schools were receiving adequate funding and less concerned with how the funds are spent. SEA staff reported that they primarily use school expenditure data to respond to questions from the public about what particular schools are spending.

Texas officials reported that the primary purpose of collecting school-level expenditure data is public transparency. One state official noted that SEA staff did not find the school-level expenditure data to be particularly useful because many types of expenditures were allocated to schools by formula and therefore do not necessarily reflect what is actually going on at individual schools. Moreover, the official said the SEA does not scrutinize school-level expenditure reports because the reports are not used to make policy decisions. The official explained that the SEA obtained more accurate expenditure data at the district level, and, unlike the district reports, school-level reports did not have a wide audience.

Officials in the study sites encouraged other states and districts that wish to implement school expenditure data systems to get stakeholders involved, remember that communication is critical to success, and be mindful of long-term issues and needs when designing such systems.

When asked what advice they would offer for other states and districts aiming to develop or improve systems for tracking expenditures at the school level, site officials recommend including a wide range of stakeholders at the school and district levels, and in the larger community; communicating clearly and frequently with all stakeholders, both in advance of and during changes to systems; and thinking about long-term needs for the future when designing software and charts of accounts for school expenditure reporting. For instance, Los Angeles officials advised districts to select a software system carefully to ensure it included the functionality and specific features the district would need to do business and answer anticipated questions.

Summary

Study sites described varied motivations for developing systems for collecting and reporting expenditure data — including state legislative mandates and efforts to transfer more spending authority to schools — but the motivations typically represented steps to increase transparency and equity of spending. Site officials described the development and implementation of their systems as a multi-faceted process that required thoughtful approaches to designing system functionality, promoting stakeholder awareness, and providing sufficient personnel and resources to ensure the systems functioned as intended. The change process in each study site involved challenges — particularly related to staff capacity and training, technology issues, and staff resistance — but most sites indicated that they were able to overcome these challenges over time.

V. Conclusion

The states and districts in this study have developed accounting systems that report large shares of their operational expenditures at the individual school level, ranging from 69 to 89 percent, with an average of 77 percent. In most cases these systems have been operating for a considerable number of years, often two decades or more, but most sites reported efforts to continue to improve their systems over time. Most of the expenditures that the study sites attributed to schools were directly tracked, rather than allocated to schools by formula.

Comparisons between the site-reported school-level expenditures and other data sources showed a relatively high degree of consistency for salary expenditures. However, non-personnel expenditure reporting varied considerably, both within specific expenditure categories and across the sites. The analyses conducted for this study confirm concerns of the study's expert panel about the comprehensiveness, consistency, and reliability of existing school-level data on non-personnel expenditures, particularly those that are not tracked directly to schools.

Study sites reported using their school-level expenditure data to inform decision-making and promote transparency concerning school spending. Site officials reported experiencing a variety of challenges in developing and implementing these systems, particularly related to staff capacity and training needs, but most sites indicated that they overcame many of these challenges as staff adjusted to new expectations and procedures and received additional training. All sites reported working to monitor and improve data quality, including by providing ongoing training for staff, establishing procedures for reviewing the data, and using automated error checks in their software to identify implausible values and other errors.

When asked what advice they would offer for other states and districts aiming to develop or improve systems for tracking expenditures at the school level, site officials recommend involving multiple stakeholders; communicating clearly and frequently with those stakeholders, both in advance of and during changes to systems; and thinking about long-term needs for the future when designing software and charts of accounts for school expenditure reporting.

The nine sites participating in this study may serve as helpful models for other states and districts interested in establishing systems to collect and report school-level expenditure data.

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Appendix A. Attribution Methods by Category

Exhibit A1. Methods used to attribute personnel expenditures to schools, by type of expenditure

Expenditure Type	Florida	Hawaii	Ohio ^a	Rhode Island	Texas	Baltimore	Hillsborough	Houston	Los Angeles
School administrative staff pay	T	T	T	T	T	T	T	T	T
Teacher pay	T	T	T	T	T	T	T	T	T
Instructional support pay	T	T	V	T	T	T	T	T	T
Pupil support pay	T	T	V	T	T	T	T	T	T
Maintenance and operations staff pay	T	T	V	T	A	T	A	T	V
Security personnel pay	T	T	V	V	T	D*	D	T	D
Transportation staff pay	A	D*	A	V	T	A	A	D	A
Food service personnel pay	A	T	V	T	T	T	T	T	T
Professional development pay	A	T	V	T	T	T	T	T	T
Curriculum development pay	A	D	V	T	A	A	A	D	D
Other district staff	A	T	V	T	V	T	A	D*	U
Health/group benefits	T	T	V	V	T	A	T	T	T
Retirement benefits	T	-	V	V	T	A	T	T	T
Other benefits	-	-	V	T	A	U	T	U	T

^a For Ohio, expenditure types for which more than 90 percent was tracked were identified as tracked (this included expenditures for principals and other school administrative staff and teachers) and expenditure types for which more than 90 percent was allocated were identified as allocated (this included expenditures for transportation staff).

Note:

T = Expenditures were tracked.

A = Expenditures were allocated using a formula.

V = Method of attribution varied (some tracked, some allocated).

U = Method of attribution was not determined.

D = Expenditure category was not reported at the school level.

D* = Officials indicated the category was not reported at the school level, but we found small amounts of expenditures attributed to schools and the attribution method was not determined. There were also cases where the respondent initially indicated the category was not reported at the school level, but then later indicated an attribution method in response to follow-up questions; in those cases, the attribution method is listed.

Source: Pre-interview surveys and follow-up conversations with site officials.

Exhibit A2. Methods used to attribute non-personnel expenditures to schools, by type of expenditure

Expenditure Type	Florida	Hawaii	Ohio ^a	Rhode Island	Texas	Baltimore	Hillsborough	Houston	Los Angeles
Textbooks and instructional materials	T	T	V	V	T	T	T	T	T
General supplies	T	T	V	V	T	T	T	T	T
Food supplies	A	T	V	V	T	T	T	T	T
Furniture and equipment	T	T	V	T	T	T	T	T	T
Computers and software	T	T	V	T	T	T	T	T	T
Transportation	A	D*	A	V	T	A	A	D*	A
Professional development	A	T	V	T	T	T	T	T	T
Curriculum development	A	D*	V	T	A	A	A	D	D
Other district services	A	T	V	T	V	T	A	D*	D*
Purchased services and rentals	U	T	V	A	A	U	T	U	T
Telecommunications	T	T	V	V	T	T	A	T	A
Utilities	V	D*	V	V	T	A	T	T	A
Insurance	A	D*	V	V	T	D	D	D	D
Security	T	T	V	V	T	D*	D	T	D
Miscellaneous items	-	T	V	T	A	U	A	U	A

^a For Ohio, expenditure types for which more than 90 percent of expenditures were allocated were identified as allocated (this included expenditures for transportation).

Note:

T = Expenditures were tracked.

A = Expenditures were allocated using a formula.

V = Method of attribution varied (some tracked, some allocated).

U = Method of attribution was not determined.

D = Expenditure category was not reported at the school level.

D* = Officials indicated the category was not reported at the school level, but we found small amounts of expenditures attributed to schools and the attribution method was not determined.

Source: Pre-interview surveys and follow-up conversations with site officials.

Appendix B. Detailed Spending by Study Site, Attribution Method, and Expenditure Category

Exhibit B1. Personnel and non-personnel expenditures at the district level and at the school level, 2011–12

Site	District Level	School Level	Total
Hawaii	\$503,338,576	\$1,140,759,120	\$1,644,097,696
Ohio ^a	\$2,136,743,680	\$16,455,908,608	\$18,592,652,288
Rhode Island	\$216,822,960	\$1,800,087,568	\$2,016,910,528
Texas	\$8,856,920,064	\$30,007,776,512	\$38,864,696,576
Baltimore	\$362,664,176	\$810,340,264	\$1,173,004,440
Hillsborough	\$292,596,904	\$1,350,942,112	\$1,643,539,016
Houston	\$433,618,480	\$1,242,535,680	\$1,676,154,160
Los Angeles	\$2,312,587,648	\$5,072,994,912	\$7,385,582,560

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Exhibit B2. Personnel and non-personnel expenditures at the district level and at the school level, 2011–12

Site	Personnel		Non-Personnel		Total
	District-Level	School-Level	District-Level	School-Level	
Hawaii	\$171,071,568	\$995,411,072	\$332,267,008	\$145,348,048	\$1,644,097,696
Ohio ^a	\$1,268,543,104	\$13,205,345,280	\$868,200,576	\$3,250,563,328	\$18,592,652,288
Rhode Island	\$141,159,248	\$1,543,163,136	\$75,663,712	\$256,924,432	\$2,016,910,528
Texas	\$4,574,798,848	\$26,033,225,728	\$4,282,121,216	\$3,974,550,784	\$38,864,696,576
Baltimore	\$184,866,848	\$729,488,448	\$177,797,328	\$80,851,816	\$1,173,004,440
Hillsborough	\$178,440,832	\$1,120,185,344	\$114,156,072	\$230,756,768	\$1,643,539,016
Houston	\$285,020,992	\$990,327,552	\$148,597,488	\$252,208,128	\$1,676,154,160
Los Angeles	\$918,051,328	\$4,569,957,376	\$1,394,536,320	\$503,037,536	\$7,385,582,560

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Exhibit B3. District-level expenditures and school-level expenditures by method of attribution, 2011–12

Site	District-Level	School-Level				Total
		Tracked	Allocated	Varied	Unknown	
Hawaii	\$503,338,592	\$1,139,324,288	—	—	\$1,434,889	\$1,644,097,769
Ohio ^a	\$2,136,743,680	\$12,347,590,656	\$4,108,317,440	—	—	\$18,592,651,776
Rhode Island	\$216,822,960	\$1,186,700,032	\$104,722,032	\$508,665,600	—	\$2,016,910,624
Texas	\$8,856,920,064	\$26,552,360,960	\$3,426,736,384	\$28,678,946	—	\$38,864,696,354
Baltimore	\$362,664,160	\$593,727,872	\$99,724,280	—	\$116,888,096	\$1,173,004,408
Hillsborough	\$292,596,896	\$1,294,354,816	\$56,587,192	—	—	\$1,643,538,904
Houston	\$433,618,496	\$1,098,814,976	—	—	\$143,720,688	\$1,676,154,160
Los Angeles	\$2,312,587,776	\$4,657,463,296	\$186,825,824	\$214,501,280	\$14,204,332	\$7,385,582,508

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

Exhibit B4. Spending by personnel category and level of attribution for state study sites, 2011–12

Expenditure Type	Hawaii		Ohio ^a		Rhode Island		Texas	
	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level
School admin staff pay	-\$1,702,803 ^b	\$89,015,944	\$9,774,264	\$653,811,136	\$491,542	\$67,859,488	\$26,657,960	\$1,778,064,128
Teacher pay	\$40,048,144	\$732,669,184	\$2,738,952	\$6,992,621,056	\$11,732,411	\$819,652,288	\$518,624,832	\$17,269,655,552
Instructional support pay	\$24,052,632	\$13,419,239	\$13,857,842	\$155,460,976	\$3,051,334	\$21,276,726	\$114,404,528	\$667,414,656
Pupil support pay	\$48,670,588	\$58,933,812	\$65,280,040	\$543,242,496	\$13,185,354	\$118,553,464	\$174,405,232	\$1,300,534,144
Maintenance and operations pay	\$6,020,603	\$49,429,596	\$79,675,808	\$496,315,968	\$10,199,472	\$38,218,896	\$1,012,484,352	\$557,240,704
Security personnel pay	—	—	\$4,296,732	\$23,974,950	\$421,121	\$2,836,819	—	—
Transportation staff pay	\$657,367	\$6,028	\$104,564,392	\$288,133,728	\$4,737,472	\$7,801,430	\$598,940,928	\$7,950,089
Food service personnel pay	\$1,464,494	\$39,320,316	\$37,951,696	\$174,759,952	\$414,428	\$2,012,279	\$238,859,712	\$451,094,752
Professional development pay	\$945,495	\$898,512	\$24,253,906	\$98,141,048	\$4,018,431	\$17,429,118	\$131,361,768	\$297,106,624
Curriculum development pay	\$9,696	—	\$12,275,080	\$44,190,952	—	—	—	—
Other district staff	\$26,919,400	\$506,839	\$468,386,112	\$68,778,784	\$49,222,088	\$7,773,508	\$919,420,032	\$14,527,727
Health/group benefits	\$23,985,952	\$11,211,633	\$142,303,632	\$543,874,112	\$20,112,032	\$227,865,488	\$292,859,776	\$1,477,384,576
Retirement benefits	—	—	\$221,719,584	\$1,477,825,408	\$12,193,975	\$143,340,368	\$98,799,968	\$447,041,632
Other benefits	—	—	\$81,464,992	\$1,644,214,784	\$11,379,581	\$68,543,344	\$447,979,776	\$1,765,209,984

^a Data for Ohio are from the 2013–14 school year.

^b The negative value for school administrative staff pay in Hawaii is likely due to an accounting adjustment. This negative amount accounts for a very small percentage of total expenditures in Hawaii (approximately one third of 1 percent (0.0034) of total reported district-level expenditures and one tenth of 1 percent (0.0010) of total reported site-level (district and school) expenditures).

Source: Site fiscal and accounting information systems.

Exhibit B5. Spending by personnel category and level of attribution for district study sites, 2011–12

Expenditure Type	Baltimore		Hillsborough		Houston		Los Angeles	
	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level
School admin staff pay	\$2,090,536	\$67,704,824	\$2,055,317	\$67,066,672	-\$51,551	\$96,997,552	\$3,761,483	\$243,740,496
Teacher pay	\$14,686,195	\$432,665,696	\$16,912,844	\$672,576,000	\$5,506,726	\$718,368,384	\$148,929,904	\$2,412,985,856
Instructional support pay	\$85,772	\$6,644,501	\$9,902,761	\$16,428,071	\$16,250,993	\$7,490,789	\$5,229,371	\$17,676,438
Pupil support pay	\$444,767	\$34,280,524	\$7,338,275	\$51,375,260	\$15,034,154	\$25,093,328	\$43,079,448	\$178,763,696
Maintenance and operations staff pay	\$8,295,212	\$11,316,179	\$18,841,348	\$28,613,886	\$44,245,092	\$30,126,710	\$180,304,288	\$214,501,280
Security personnel pay	\$9,344,335	\$2,070,929	—	—	—	—	—	—
Transportation staff pay	\$3,487,181	—	\$33,099,034	\$89,934	\$25,712,416	\$576,849	\$90,192,288	\$53,856,492
Food service personnel pay	\$1,361,719	\$10,731,282	\$2,961,061	\$22,343,432	\$23,040,288	\$7,770,509	\$27,498,136	\$67,804,656
Professional development pay	\$1,030,086	\$11,232,299	\$4,931,163	\$25,853,716	\$17,966,680	\$8,106,753	\$60,825,404	\$177,799,632
Curriculum development pay	\$18,657,364	\$1,146,482	\$23,534,616	\$9,439,271	\$3,259,458	—	—	—
Other district staff	\$36,657,100	\$362,760	\$20,631,820	\$223,448	\$29,837,278	\$1,122,220	\$111,452,280	\$12,755,270
Health/group benefits	\$23,287,820	\$88,104,552	\$17,348,002	\$107,522,544	\$13,221,224	\$64,378,612	\$44,968,728	\$514,831,712
Retirement benefits	\$49,195,764	\$8,559,433	\$7,034,508	\$41,398,732	\$21,684,862	\$5,328,036	\$25,768,564	\$252,474,816
Other benefits	\$16,243,000	\$54,668,964	\$13,850,084	\$77,254,320	\$69,313,376	\$24,967,858	\$176,041,456	\$422,766,816

Source: Site fiscal and accounting information systems.

Exhibit B6. Spending by non-personnel category and level of attribution for state study sites, 2011–12

Expenditure Type	Hawaii		Ohio ^a		Rhode Island		Texas	
	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level
Textbooks and instructional materials	\$469,391	\$4,460,508	\$253,524	\$18,941,356	\$35,257	\$5,230,991	\$246,591,840	\$167,939,744
General supplies	\$23,838,440	\$42,455,420	\$27,053,252	\$472,977,600	\$7,214,573	\$51,901,516	\$550,210,048	\$1,192,542,464
Food supplies	\$985,885	\$38,583,364	\$34,133,488	\$222,758,912	\$847,832	\$1,800,542	\$345,115,264	\$662,312,896
Furniture and equipment	\$3,519,114	\$10,455,142	\$13,282,028	\$192,516,944	\$821,434	\$4,301,294	—	—
Computers and software	\$5,577,958	\$23,212,870	\$1,382,284	\$38,774,384	\$2,500,381	\$10,696,272	—	—
Transportation	\$72,603,800	\$982,772	\$84,250,336	\$295,339,200	\$3,240,317	\$58,740,328	\$475,483,904	\$11,452,494
Professional development	\$9,380,185	\$551,936	\$16,957,042	\$71,144,280	\$6,059,625	\$5,285,662	\$109,266,112	\$146,296,128
Curriculum development	\$72,240	\$321,524	\$8,937,770	\$30,379,130	—	—	—	—
Other district services	\$23,084,910	\$433,328	\$507,462,016	\$190,437,440	\$17,871,534	\$3,718,302	\$640,545,792	\$14,151,219
Purchased services and rentals	\$114,311,016	\$19,927,674	\$123,295,392	\$1,189,691,008	\$30,747,268	\$104,722,032	\$814,346,752	\$745,071,744
Telecommunications	\$1,243,853	\$1,948,147	\$5,890,732	\$40,294,880	\$1,307,934	\$1,664,550	—	—
Utilities	\$62,391,556	\$108,573	\$28,937,398	\$378,243,648	\$278,016	\$3,370,953	\$639,066,112	\$658,706,880
Insurance	\$12,152	\$15,992	\$1,445,546	\$2,919,148	\$3,624,248	\$1,856,214	\$196,694,816	\$16,863,104
Security	—	—	\$3,621,222	\$17,441,278	\$479,825	\$2,256,402	—	—
Miscellaneous items	—	\$1,890,795	\$11,298,546	\$88,704,168	\$635,470	\$1,379,376	\$264,800,608	\$359,214,112

^a Data for Ohio are from the 2013–14 school year.

Source: Site fiscal and accounting information systems.

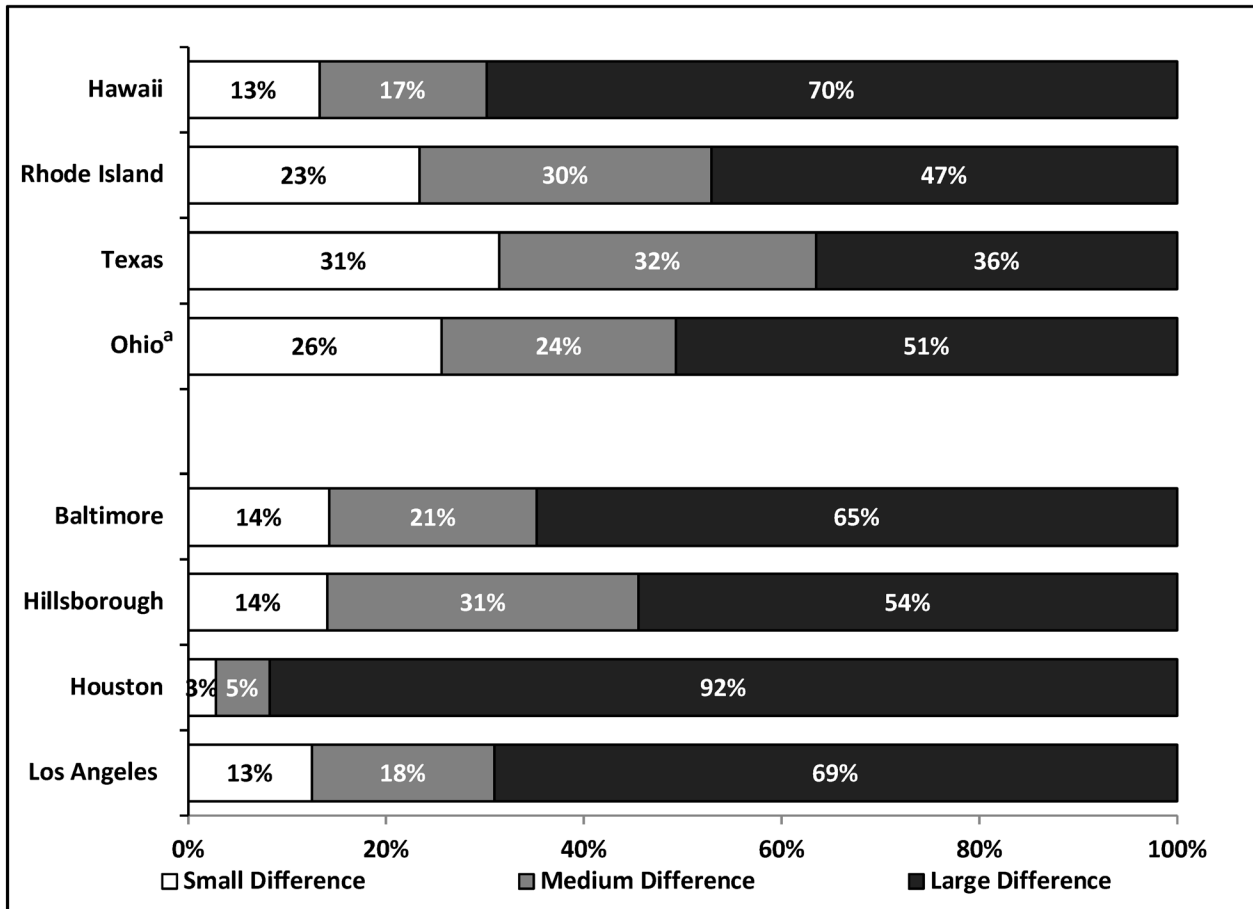
Exhibit B7. Spending by non-personnel category and level of attribution for district study sites, 2011–12

Expenditure Type	Baltimore		Hillsborough		Houston		Los Angeles	
	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level	District-Level	School-Level
Textbooks and instructional materials	\$2,993,891	\$9,569,451	\$1,107,780	\$18,942,266	\$5,280,418	\$6,796,325	\$21,677,282	\$41,371,856
General supplies	\$2,331,581	\$5,133,756	\$7,475,423	\$27,520,376	\$10,549,670	\$33,582,644	\$76,160,040	\$104,471,216
Food supplies	\$17,371,570	\$2,640,059	\$3,360,717	\$36,036,972	\$864,306	\$39,739,580	\$15,814,547	\$128,448,376
Furniture and equipment	\$88,929	\$264,240	\$2,177,803	\$5,738,537	—	—	\$8,327,008	\$26,132,854
Computers and software	\$66,072	\$883,045	\$4,981,936	\$8,364,617	—	—	\$4,676	\$152,348
Transportation	\$36,548,328	\$262,205	\$19,212,854	\$2,899,126	\$12,671,044	\$290,114	\$30,627,264	\$11,638,437
Professional development	\$2,198,287	\$531,959	\$8,766,564	\$1,310,210	\$24,520,186	\$6,185,422	\$31,511,520	\$8,743,940
Curriculum development	\$5,777,860	\$1,288,848	\$8,722,964	\$193,401	\$514,838	—	—	—
Other district services	\$26,163,962	—	\$14,511,758	\$1,034,699	\$24,354,706	\$137,015	\$112,071,040	\$1,449,063
Purchased services and rentals	\$46,851,248	\$59,678,812	\$28,471,688	\$69,518,216	\$44,591,360	\$99,721,344	\$1,079,668,736	\$59,298,548
Telecommunications	\$5,511,901	\$130,051	\$2,752,748	\$1,322,421	—	—	\$6,579,612	\$10,122,064
Utilities	\$28,420,200	—	\$2,722,843	\$45,104,920	\$15,597,265	\$48,850,404	\$4,370,256	\$106,864,600
Insurance	\$10,000	—	\$7,294,807	—	\$1,572,539	—	\$2,746,674	—
Security	\$3,147,141	\$80,616	—	—	—	—	—	—
Miscellaneous items	\$316,351	\$388,778	\$2,596,183	\$12,771,003	\$8,081,165	\$16,905,288	\$4,977,676	\$4,344,240

Source: Site fiscal and accounting information systems.

Appendix C. Distribution of Differences Between Actual Reported Expenditures and Simulated Allocations

Exhibit C1. Distribution of schools by difference in instructional support spending between actual (tracked) expenditures and allocations simulated based on enrollment, 2011–12

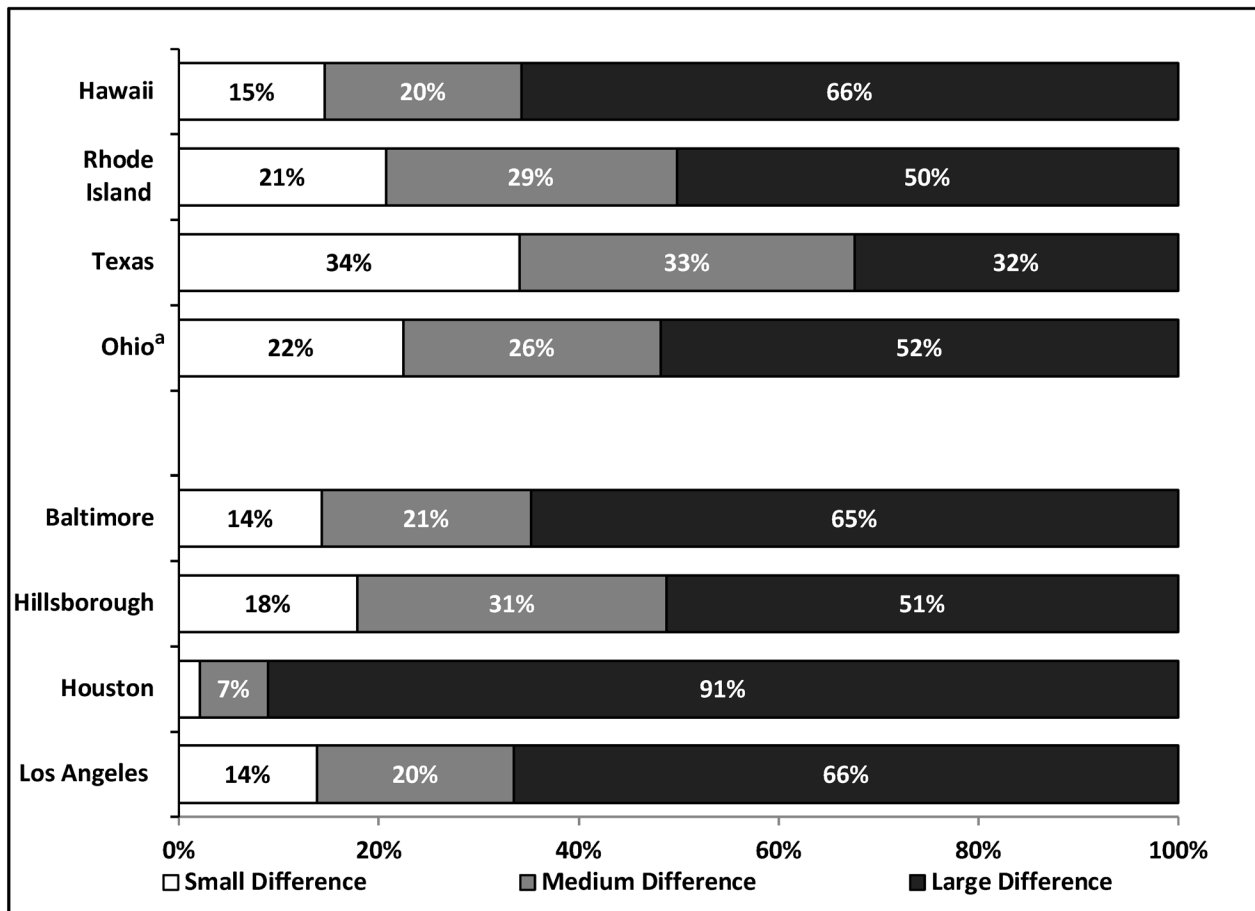


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C2. Distribution of schools by difference in instructional support spending between actual (tracked) expenditures and allocations simulated based on full-time equivalents (FTEs), 2011–12

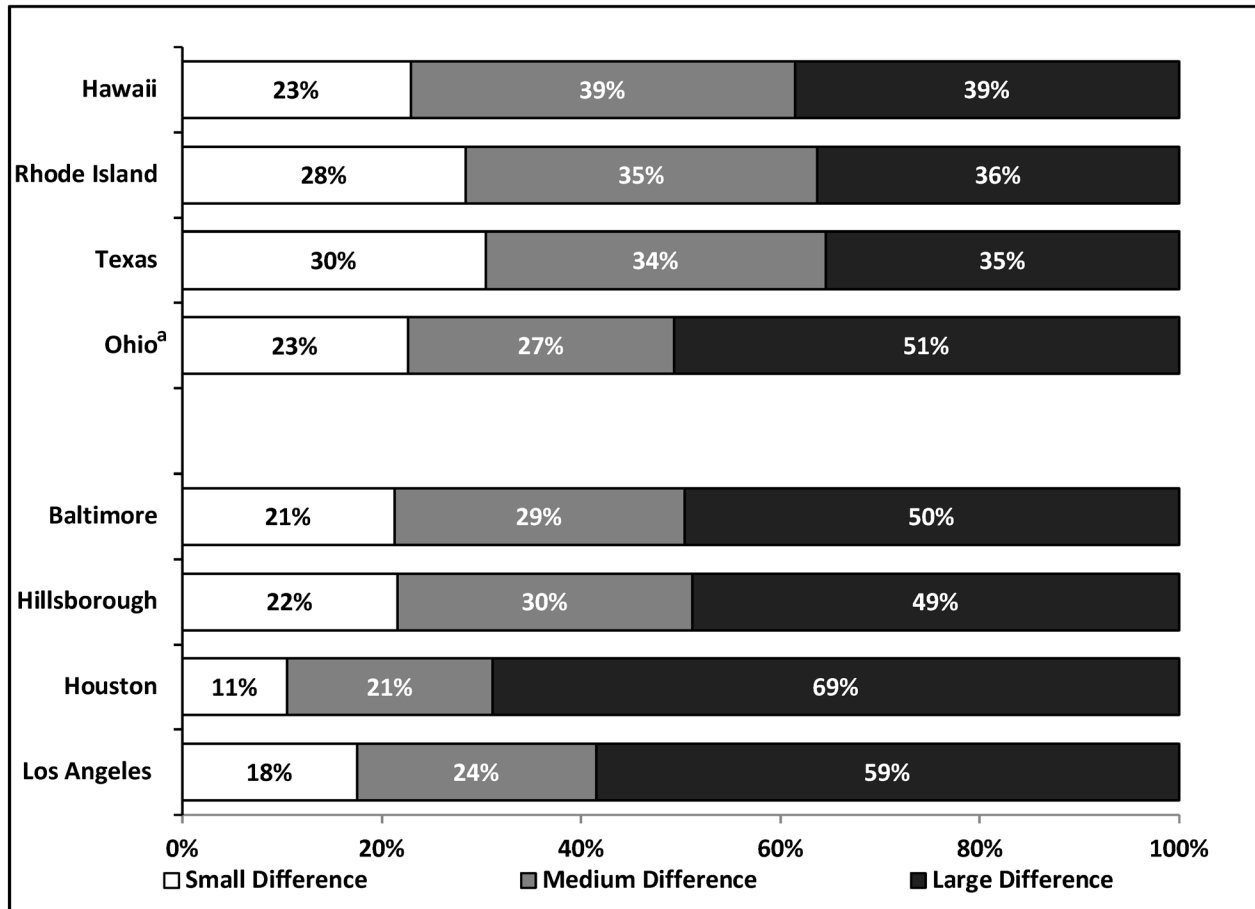


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C3. Distribution of schools by difference in pupil support spending between actual (tracked) expenditures and allocations simulated based on enrollment, 2011–12

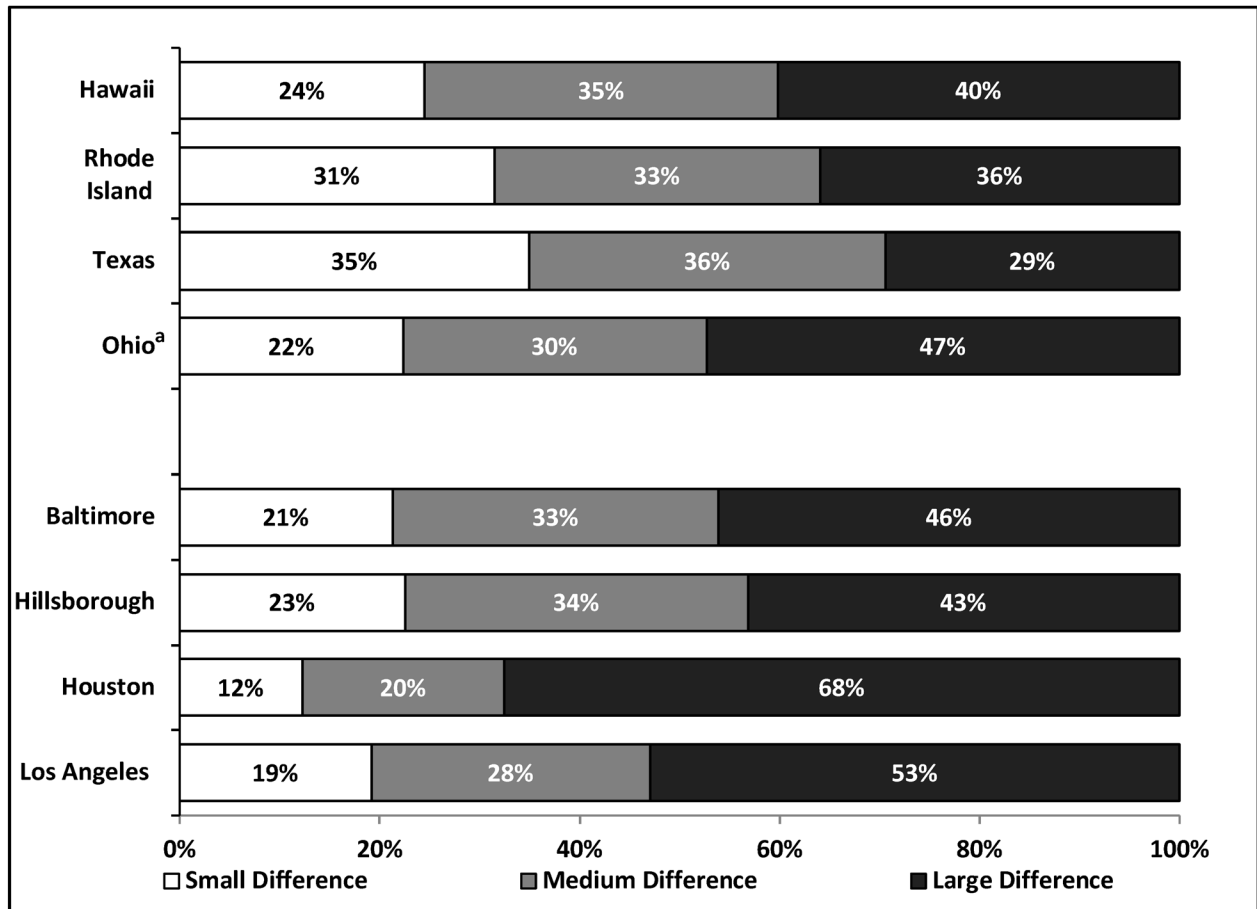


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C4. Distribution of schools by difference in pupil support spending between actual (tracked) expenditures and allocations simulated based on full-time equivalents (FTE), 2011–12

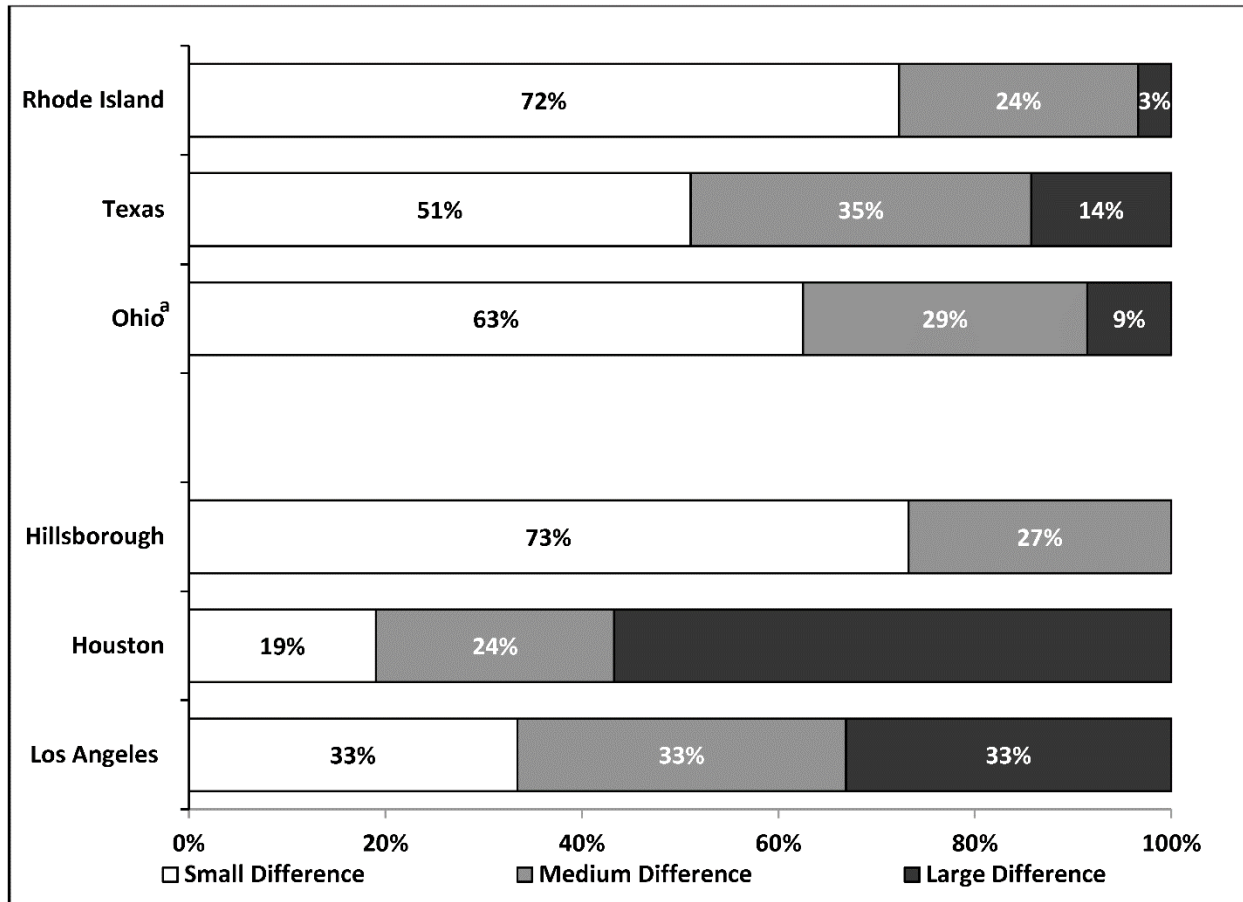


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C5. Distribution of schools by difference in retirement benefit spending between actual (tracked) expenditures and allocations simulated based on full-time equivalents (FTEs), 2011–12

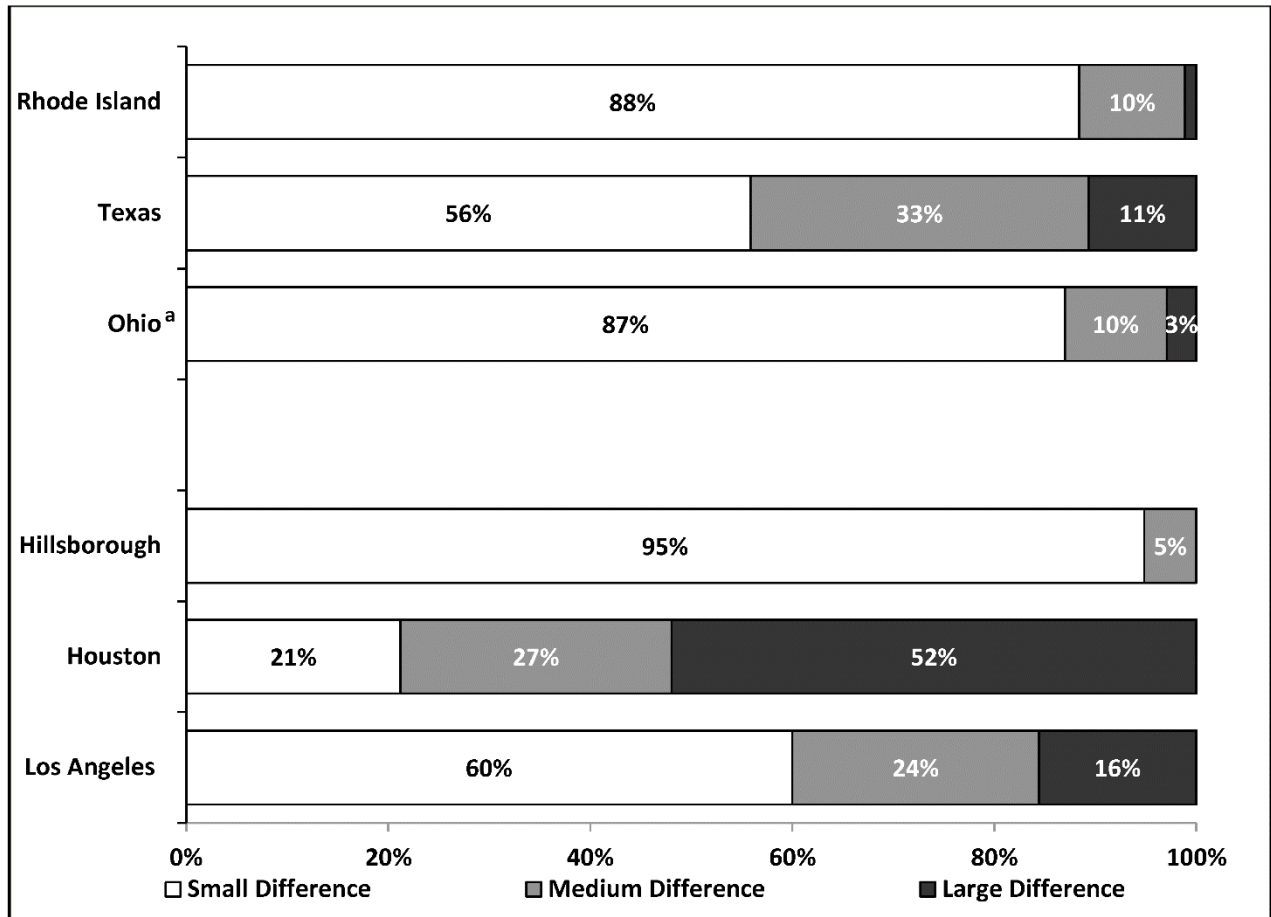


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C6. Distribution of schools by difference in retirement benefit spending between actual (tracked) expenditures and allocations simulated based on salaries, 2011–12

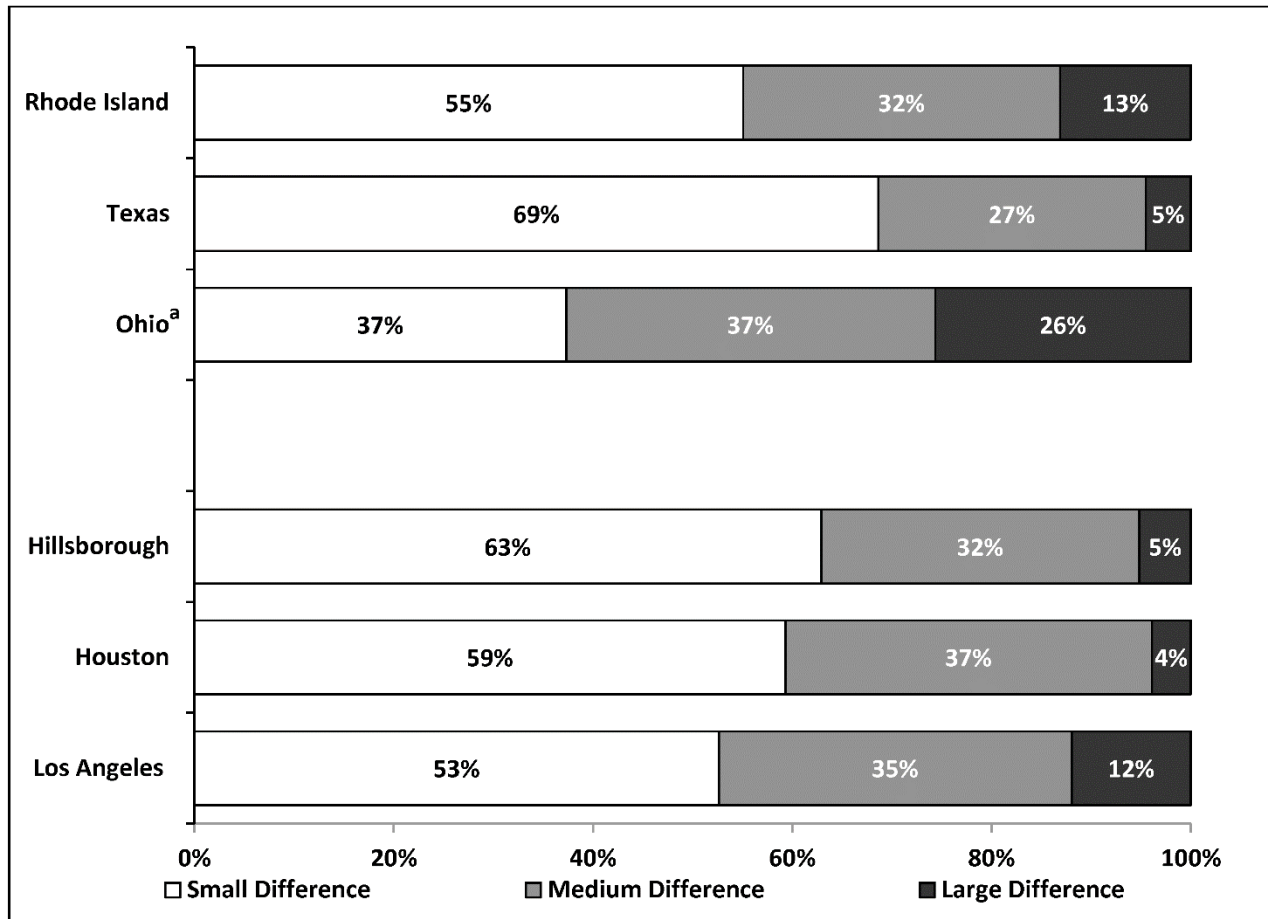


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C7. Distribution of schools by difference in health benefit spending between actual (tracked) expenditures and allocations simulated based on full-time equivalents (FTEs), 2011–12

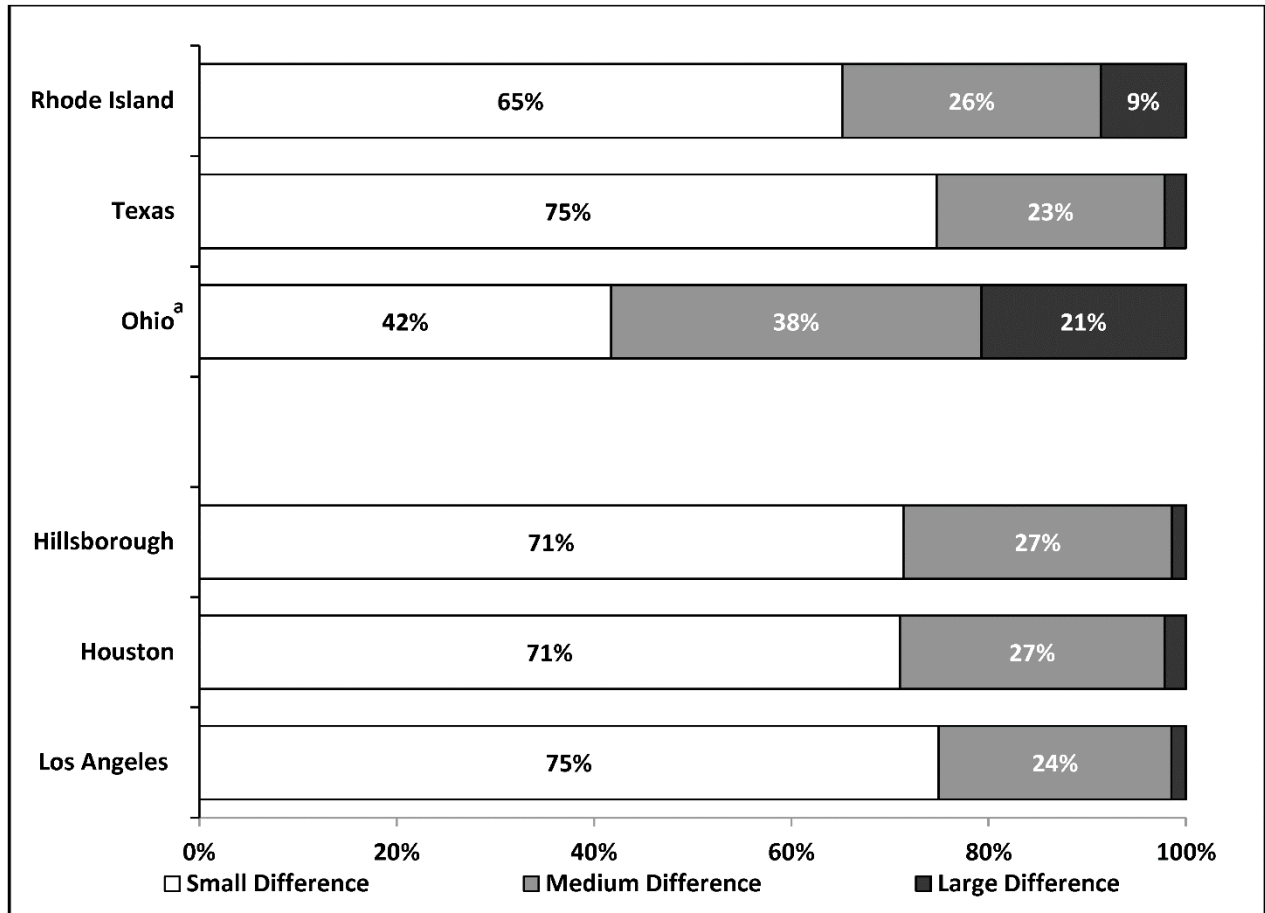


^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Exhibit C8. Distribution of schools by difference in health benefit spending between actual (tracked) expenditures and allocations simulated based on salaries, 2011–12



^a Data for Ohio are from the 2013–14 school year.

Note: Sum of percentages may not add to 100 due to rounding. Bar segments are left unlabeled for values less than 3 percent. Small differences are those where the magnitude of the difference was less than 10 percent of the allocation simulated figure; medium differences are between 10 and 25 percent; and large differences are greater than 25 percent.

Source: Site fiscal and accounting information systems.

Appendix D. Data Collection Instruments

**Feasibility Study on Improving the Quality of School-Level Expenditure Data
Request for Documents and Files (RFD)
for the 2011–12 and 2012–13 School Years
(for State Sites)**

Data Collection Procedures

Background

You have received this Request for Documents because your state was selected to participate in the U.S. Department of Education’s *Feasibility Study on Improving the Quality of School-Level Expenditure Data*. The purpose of the study is to examine how district and state fiscal accounting systems currently track expenditures at the school level and explore possible strategies for improving the quality of school-level expenditure data that are being collected by the U.S. Department of Education.

In this request we are asking participating states and districts to provide school-level expenditure and student count data for the 2011–12 and 2012–13 school years. In order to minimize your burden in providing these data as much as possible, we ask that, before you start to gather these data, please carefully read through this document and participate in a short telephone conversation with us so we can clarify any questions you might have. We will contact you shortly to arrange this discussion at your convenience.

Description of Requested Data Files and Documents

- 1. Detailed school-level expenditure data reports for the 2011–12 and 2012–13 school years.** We would like to obtain *electronic file(s)* that provide a detailed breakdown of site-level expenditures for all schools in your state. This information may reside in a single fiscal file that includes entries for both revenues and expenditures, or in separate files depending on your accounting and reporting methods. **Important:** Please send us the data in its original structure (i.e., do not burden yourself with isolating expenditures if it is housed in a dataset that also includes revenues).

We need to obtain school-level expenditures for each specific combination of codes in your chart of account coding structure. Your codes are likely to include some or all of the following:

- *Year* (school year for which data was collected)
- *Location* (code for each school site or the central district office)
- *Source* (e.g., general unrestricted, federal, state and local restricted categorical programs, private grants, etc.)
- *Program* (e.g., regular education, special education, extended school day, etc.)
- *Function* (e.g., instruction, administration, instructional support, etc.)
- *Object* (e.g., salaries of classified and certified staff, benefits, instructional materials, purchased services, capital equipment, etc.)
- *Job Code* (e.g., teaches, aide, principal, program director, administrator)
- *Amount* (total dollars associated with entry)

To further clarify this request, Attachment A provides an excerpt from a data file as an example of a format that would be acceptable. This example may not resemble the exact reporting structure used in your state, but illustrates the type of information needed. That is, although you do not need to provide a file in precisely this format, we ask that the files you provide do contain the requisite information listed above.

- 2. Chart of accounts and descriptions.** To interpret and analyze the school-level expenditures provided we will also need to understand the account code definitions used in your state. To this end, we request that you provide electronic versions of your state accounting manual, and lists of the various chart of account codes and their descriptions. Attachment B provides an example list of chart of account codes.
- 3. Crosswalk to F-33 Data.** In order to accurately explore the types of school-level expenditures tracked across the study sites, we will need a crosswalk of the (set of) account codes used in your state that match to each object in the *Expenditures* sections of the [F-33 survey](#) (Sections II through IV only). This crosswalk will also help us compare the consistency of data across schools and with the information from alternative federal data collections. The attached excel file in the email is example table which details the information we will need. However, please do not burden yourself with filling out the table if you can send your crosswalk in its current form; we will gladly accept the crosswalk in its original structure.
- 4. Any existing documentation regarding how expenditures are tracked to schools.** To help us understand *how* expenditures are tracked to individual school sites, please provide any existing technical documentation that describes which expenditures are tracked to the school level and how this is done.
- 5. Student counts.** In order to calculate spending on per pupil basis and to perform analyses that take into account school characteristics such as size and student needs we will need school-level student count data for the following: total enrollment by grade level; students eligible for the federal free/reduced price lunch program; students with an Individualized Education Plan (IEP); and students designated as English learners. In addition, please provide a site identifier that is the same as the location code provided with the expenditure data described under item 1 above, or if a different location identifier is used for the expenditure and student count data, then we will require a crosswalk between these two codes.
- 6. State Personnel Database.** Many states maintain statewide personnel data systems that include information about individual employees of local education agencies (LEAs). If such a personnel database exists for your state, please provide it to us or direct us to where it is publically accessible. We would like to compare the salary information in your state's personnel database to the corresponding expenditures data from item 1, above. Sometimes these data use the same coding structure as the system that tracks expenditures (e.g., function, program, object and/or other codes), and while that structure would be beneficial, it is not absolutely necessary for our planned analysis. No personal information will be needed; we will only need personnel expenditures amounts with a common school identifier code which can link the personnel data to the expenditures data (or a crosswalk between the system-specific codes), for our study purposes.

Data Format

We would prefer the fiscal (expenditure) data files to be in Excel format. However, if these are not available in Excel, we are happy to accommodate. We can accept files in at least the following formats:

- Dbase (.dbf)
- SAS (.sas)
- Stata (.dta)
- Access (.mdb)
- Tab-Delimited (.tab)
- Comma Separated Values (.csv)

Submission of Files

Once you have gathered the requested information, we ask that you please forward them using one of the following methods:

- **Email.** Relatively small files may be sent to us as attachments to an e-mail. Note that fiscal files in particular can be too large for many e-mail servers to handle (e.g., attachments that are over 20 MB). Some large files may still be sent via email if they are compressed to a zipped volume(s).
- **FTP.** Larger files may be sent through a secure AIR Extranet or File Transfer Protocol (FTP) site. Should you choose this option we will send you login instructions and credentials to access this site, directions on how to upload files, and work with you to ensure smooth transmission of these data.
- **CD or DVD.** Files that are too large for e-mailing can also be burned to CD or DVD and sent via mail. Please let us know if you prefer to submit the files in this manner, and we will send a pre-paid, pre-addressed FedEx mailer, with instructions, that you may use.

Next Steps

A representative from the study team will be contacting you shortly to schedule a meeting to review this data request and answer any questions you may have. However, should you have any immediate concerns, please feel free to contact Antonia Wang at (650) 843-8225 or awang@air.org.

Thank you in advance for your time and cooperation.

Attachment A

Sample Expenditure Report Data

YEAR	FUND	RESOURCE	OBJECT	SITE	GOAL	FUNCTION	LO1	LO2	EXPENDITURE
1112	01	0000	3501	677	1740	2700	000	051	5.40
1112	01	3010	3101	730	1110	1000	000	303	52.89
1112	01	6500	3502	660	5770	1110	999	891	17.05
1112	01	0000	5800	040	0000	8300	000	604	2,086.88
1112	01	0000	3602	920	0000	3140	000	050	2.17
1112	01	0000	5742	080	1525	1000	000	608	2,987.50
1112	01	0000	3501	657	0000	2700	999	671	321.36
1112	01	0000	4200	651	0000	2700	111	111	265.64
1112	01	6405	3602	910	0000	8300	000	433	5.35
1112	01	0000	3601	607	1110	1000	003	050	8.06
1112	01	0000	3961	040	0000	7180	000	604	3,000.00
1112	01	6500	3101	643	5770	1120	999	201	4,044.37
1112	01	0000	3202	940	0000	8200	000	675	215.82
1112	01	0000	3281	920	0000	2420	999	670	0.00
1112	01	7091	3802	602	4760	1000	999	401	1,637.25
1112	01	0000	3202	602	0000	2420	999	670	1,539.30
1112	01	4035	3101	730	4760	1000	999	335	6,172.44
1112	01	0000	3602	604	0000	2700	999	671	1,232.61
1112	01	4203	5800	100	1110	1000	000	357	103,483.58
1112	01	0000	3202	750	0000	8200	000	629	176.58
1112	01	7090	3501	080	1695	2140	000	401	1.50
1112	01	3010	4300	677	1110	1000	000	303	6,772.00
1112	01	0000	3301	810	1240	4200	000	050	18.91
1112	01	3310	3932	646	5770	1110	999	307	1,079.84
1112	01	0000	3202	691	0000	8200	000	629	79.55
1112	01	0000	3312	750	0000	3140	999	674	514.86
1112	01	0000	3801	060	0000	3120	999	614	1,107.26
1112	01	3710	4300	280	0000	2495	000	302	3,024.41
1112	01	0000	3311	612	1110	1000	012	050	42.92
1112	01	6500	5800	656	5770	1110	000	250	168.50
1112	01	0000	3602	660	0000	3140	000	050	60.38
1112	01	3010	3311	614	1695	1000	000	313	15.68
1112	01	6500	3311	669	5770	1120	999	201	1,221.69
1112	01	3010	3302	627	0000	2700	999	303	2,077.25
1112	01	3010	3311	995	1110	1000	999	303	570.73
1112	01	7395	3312	090	0000	8200	000	454	1.63
1112	01	6275	3311	030	9570	7400	000	457	14.50
1112	01	0000	3302	689	0000	2700	999	671	3,168.18
1112	01	6010	4300	621	1110	1000	000	448	3,083.22
1112	01	3315	3302	690	5730	2700	999	342	448.13
1112	01	0000	3602	649	0000	2700	999	671	1,295.58
1112	01	3310	3602	691	5770	1120	000	307	3.41

Attachment B

Sample Chart of Accounts Codes

FUNCTION

Function classifications indicate the overall purpose or objective of an expenditure. Functions are group-related activities aimed at accomplishing a major service or regulatory responsibility. The activities of a local school system are classified into five broad areas: Instruction, Instructional Support, General Support, Community Services, and Non-program Charges (Debt Service and Transfers). The four character field required for function codes does not currently specify the third and fourth characters. The subfunction codes presently identified for 6100 and 7700 are recommended but not required.

The following expenditures should be classified by function as indicated below:

<u>Employee Benefits</u>	<u>Function</u>
Employee Health Life and Accident	Identify or allocate to employee function on basis that reflects cost incidence.
Cafeteria Benefits	Identify or allocate to employee function on basis that reflects cost incidence.
Workers Compensation	Identify or allocate to employee function (see p. 4-6) on basis that reflects cost incidence.
Unemployment Compensation	Identify or allocate to employee function (see p. 4-6) on basis that reflects cost incidence. If immaterial, expenditure may be charged to Function 7100.

Insurance

Property	Function 7900
Boiler	Function 7900
Casualty (General Liability & Automobile)	Function 7900
Casualty – Pupil Transportation	Function 7800
Fidelity Bonds	Function 7100

...

7000	<u>General Support Services.</u> Activities concerned with establishing policy, operating schools and the school system, and providing the essential facilities and services for the staff and pupils.
7100	<u>Board.</u> Consists of the activities of the elected or appointed body that has been created according to state law and vested with responsibilities for educational activities in a given administrative unit. Also included here are expenses of the Board Attorney and other legal services, independent auditors, internal auditors who report directly to the Board, negotiators, and lobbyists.
7200	<u>General Administration (Superintendent's Office).</u> Activities performed by the superintendent and assistant superintendents in the general direction and management of all affairs of the school system. This includes all personnel and materials in the office of the superintendent. Activities of the offices of the deputy superintendent and associate or assistant superintendents should be charged here unless they can be placed properly into another function.
7300	<u>School Administration (Office of the Principal).</u> Activities concerned with directing and managing the operation of a particular school. This function includes the activities performed by the principal, assistant principal, and other assistants in the general supervision of all operations of the school, evaluations of staff members of the school, assignment of duties to staff members, supervision and maintenance of the records of the school, and coordination of school instructional activities with the instructional activities of the school system. It includes clerical staff for these activities.

Feasibility Study on Improving the Quality of School-Level Expenditure Data

Request for Documents and Files (RFD) for the 2011–12 and 2012–13 School Years (for District Sites)

Data Collection Procedures

Background

You have received this Request for Documents because your district was selected to participate in the U.S. Department of Education’s *Feasibility Study on Improving the Quality of School-Level Expenditure Data*. The purpose of the study is to examine how district and state fiscal accounting systems currently track expenditures at the school level and explore possible strategies for improving the quality of school-level expenditure data that are being collected by the U.S. Department of Education.

In this request we are asking participating states and districts to provide school-level expenditure and student count data for the 2011–12 and 2012–13 school years. In order to minimize your burden in providing these data as much as possible, we ask that, before you start to gather these data, please carefully read through this document and participate in a short telephone conversation with us so we can clarify any questions you might have. We will contact you shortly to arrange this discussion at your convenience.

Description of Requested Data Files and Documents

- 1. Detailed school-level expenditure data reports for the 2011–12 and 2012–13 school years.** We would like to obtain electronic file(s) that provide a detailed breakdown of site-level expenditures for all schools in your district. This information may reside in a single fiscal file that includes entries for both revenues and expenditures, or in separate files depending on your accounting and reporting methods. **Important:** Please send us the data in its original structure (i.e., do not burden yourself with isolating expenditures if it is housed in a dataset that also includes revenues).

We need to obtain school-level expenditures for each specific combination of codes in your chart of account coding structure. Your codes are likely to include some or all of the following:

- *Year* (school year for which data was collected)
- *Location*²² (code for each school site or the central district office)
- *Source* (e.g., general unrestricted, federal, state and local restricted categorical programs, private grants, etc.)
- *Program* (e.g., regular education, special education, extended school day, etc.)
- *Function* (e.g., instruction, administration, instructional support, etc.)

²² If your district’s location codes to identify school sites differ from your state’s school site codes, please provide us a crosswalk so we can match locations in the expenditure data.

- *Object* (e.g., salaries of classified and certified staff, benefits, instructional materials, purchased services, capital equipment, etc.)
- *Job Code* (e.g., teaches, aide, principal, program director, administrator)
- *Amount* (total dollars associated with entry)

To further clarify this request, Attachment A provides an excerpt from a data file as an example of a format that would be acceptable. This example may not resemble the exact reporting structure used in your district, but illustrates the type of information needed. That is, although you do not need to provide a file in precisely this format, we ask that the files you provide do contain the requisite information listed above.

- 2. Chart of accounts and descriptions.** To interpret and analyze the school-level expenditures provided we will also need to understand the account code definitions used in your state and any additional custom codes your district may use. To this end, we request that you provide electronic versions of your state accounting manual, lists of the various chart of account codes and their descriptions, and additional documentation that describes any additional codes used by your district. Attachment B provides an example list of chart of account codes.
- 3. Any existing documentation regarding how expenditures are tracked to schools.** To help us understand *how* expenditures are tracked to individual school sites, please provide any existing technical documentation that describes which expenditures are tracked to the school level and how this is done.
- 4. Student counts.** In order to calculate spending on per pupil basis and to perform analyses that take into account school characteristics such as size and student needs we will need school-level student count data for the following: total enrollment by grade level; students eligible for the federal free/reduced price lunch program; students with an Individualized Education Plan (IEP); and students designated as English learners. In addition, please provide, for each school, either a site identifier that is the same as the location code provided with the expenditure data described under item 1 above, or if different location identifiers are used for the expenditure and student count data, a crosswalk between these two codes.

Data Format

We would prefer the fiscal (expenditure) data files to be in Excel format. However, if these are not available in Excel, we are happy to accommodate. We can accept files in at least the following formats:

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- **FTP.** Larger files may be sent through a secure AIR Extranet or File Transfer Protocol (FTP) site. Should you choose this option we will send you login instructions and credentials to access this site, directions on how to upload files, and work with you to ensure smooth transmission of these data.
- **CD or DVD.** Files that are too large for e-mailing can also be burned to CD or DVD and sent via mail. Please let us know if you prefer to submit the files in this manner, and we will send a pre-paid, pre-addressed FedEx mailer, with instructions, that you may use.

Next Steps

A representative from the study team will be contacting you shortly to schedule a meeting to review this data request and answer any questions you may have. However, should you have any immediate concerns, please feel free to contact Antonia Wang at (650) 843-8225 or awang@air.org.

Thank you in advance for your time and cooperation.

Attachment A

Sample Expenditure Report Data

YEAR	FUND	RESOURCE	OBJECT	SITE	GOAL	FUNCTION	LO1	LO2	EXPENDITURE
1112	01	0000	3501	677	1740	2700	000	051	5.40
1112	01	3010	3101	730	1110	1000	000	303	52.89
1112	01	6500	3502	660	5770	1110	999	891	17.05
1112	01	0000	5800	040	0000	8300	000	604	2,086.88
1112	01	0000	3602	920	0000	3140	000	050	2.17
1112	01	0000	5742	080	1525	1000	000	608	2,987.50
1112	01	0000	3501	657	0000	2700	999	671	321.36
1112	01	0000	4200	651	0000	2700	111	111	265.64
1112	01	6405	3602	910	0000	8300	000	433	5.35
1112	01	0000	3601	607	1110	1000	003	050	8.06
1112	01	0000	3961	040	0000	7180	000	604	3,000.00
1112	01	6500	3101	643	5770	1120	999	201	4,044.37
1112	01	0000	3202	940	0000	8200	000	675	215.82
1112	01	0000	3281	920	0000	2420	999	670	0.00
1112	01	7091	3802	602	4760	1000	999	401	1,637.25
1112	01	0000	3202	602	0000	2420	999	670	1,539.30
1112	01	4035	3101	730	4760	1000	999	335	6,172.44
1112	01	0000	3602	604	0000	2700	999	671	1,232.61
1112	01	4203	5800	100	1110	1000	000	357	103,483.58
1112	01	0000	3202	750	0000	8200	000	629	176.58
1112	01	7090	3501	080	1695	2140	000	401	1.50
1112	01	3010	4300	677	1110	1000	000	303	6,772.00
1112	01	0000	3301	810	1240	4200	000	050	18.91
1112	01	3310	3932	646	5770	1110	999	307	1,079.84
1112	01	0000	3202	691	0000	8200	000	629	79.55
1112	01	0000	3312	750	0000	3140	999	674	514.86
1112	01	0000	3801	060	0000	3120	999	614	1,107.26
1112	01	3710	4300	280	0000	2495	000	302	3,024.41
1112	01	0000	3311	612	1110	1000	012	050	42.92
1112	01	6500	5800	656	5770	1110	000	250	168.50
1112	01	0000	3602	660	0000	3140	000	050	60.38
1112	01	3010	3311	614	1695	1000	000	313	15.68
1112	01	6500	3311	669	5770	1120	999	201	1,221.69
1112	01	3010	3302	627	0000	2700	999	303	2,077.25
1112	01	3010	3311	995	1110	1000	999	303	570.73
1112	01	7395	3312	090	0000	8200	000	454	1.63
1112	01	6275	3311	030	9570	7400	000	457	14.50
1112	01	0000	3302	689	0000	2700	999	671	3,168.18
1112	01	6010	4300	621	1110	1000	000	448	3,083.22
1112	01	3315	3302	690	5730	2700	999	342	448.13
1112	01	0000	3602	649	0000	2700	999	671	1,295.58
1112	01	3310	3602	691	5770	1120	000	307	3.41

Attachment B

Sample Chart of Accounts Codes

FUNCTION

Function classifications indicate the overall purpose or objective of an expenditure. Functions are group-related activities aimed at accomplishing a major service or regulatory responsibility. The activities of a local school system are classified into five broad areas: Instruction, Instructional Support, General Support, Community Services, and Non-program Charges (Debt Service and Transfers). The four character field required for function codes does not currently specify the third and fourth characters. The subfunction codes presently identified for 6100 and 7700 are recommended but not required.

The following expenditures should be classified by function as indicated below:

<u>Employee Benefits</u>	<u>Function</u>
Employee Health Life and Accident	Identify or allocate to employee function on basis that reflects cost incidence.
Cafeteria Benefits	Identify or allocate to employee function on basis that reflects cost incidence.
Workers Compensation	Identify or allocate to employee function (see p. 4-6) on basis that reflects cost incidence.
Unemployment Compensation	Identify or allocate to employee function (see p. 4-6) on basis that reflects cost incidence. If immaterial, expenditure may be charged to Function 7100.

Insurance

Property	Function 7900
Boiler	Function 7900
Casualty (General Liability & Automobile)	Function 7900
Casualty – Pupil Transportation	Function 7800
Fidelity Bonds	Function 7100

...

7000	<u>General Support Services.</u> Activities concerned with establishing policy, operating schools and the school system, and providing the essential facilities and services for the staff and pupils.
7100	<u>Board.</u> Consists of the activities of the elected or appointed body that has been created according to state law and vested with responsibilities for educational activities in a given administrative unit. Also included here are expenses of the Board Attorney and other legal services, independent auditors, internal auditors who report directly to the Board, negotiators, and lobbyists.
7200	<u>General Administration (Superintendent's Office).</u> Activities performed by the superintendent and assistant superintendents in the general direction and management of all affairs of the school system. This includes all personnel and materials in the office of the superintendent. Activities of the offices of the deputy superintendent and associate or assistant superintendents should be charged here unless they can be placed properly into another function.
7300	<u>School Administration (Office of the Principal).</u> Activities concerned with directing and managing the operation of a particular school. This function includes the activities performed by the principal, assistant principal, and other assistants in the general supervision of all operations of the school, evaluations of staff members of the school, assignment of duties to staff members, supervision and maintenance of the records of the school, and coordination of school instructional activities with the instructional activities of the school system. It includes clerical staff for these activities.

Feasibility Study on Improving the Quality of School-Level Expenditure Data

Pre-Interview Survey for States

American Institutes for Research is conducting a study for the U.S. Department of Education to examine how some states and districts are currently tracking expenditures to the school level in an effort to improve the quality of these types of data. You are one of five states participating in this study.

We want to learn more about the structure of your fiscal system, what types of expenditures you currently track to the school level and the methods used to do so, and how the data system that allows you to do this was implemented in your state. This brief survey aims to gather some basic information in advance of our interview. Please complete the questions below and return the survey to Karen Manship at kmanship@air.org. Thank you!

Name:	
State:	<i>[pre-filled]</i>
Date:	

1. In what year did your state begin tracking expenditures at the school level? _____
2. We are interested in how your systems were developed or modified to track or collect school-level expenditures. Was your current school-level accounting system purchased from a vendor or developed internally? Please check the appropriate box below.

PURCHASED FROM A VENDOR

DEVELOPED INTERNALLY

3. How many SEA staff are currently involved in implementing your school-level expenditure data system? Please complete the table below with the titles of staff members involved, an estimate of the numbers of Full-Time-Equivalent (FTEs) involved for each type of staff, and a brief description of their primary responsibilities (for example, providing technical assistance to LEA staff, cleaning or reviewing data).

JOB TITLE	ESTIMATED FTE	PRIMARY RESPONSIBILITIES

4. Does your state have a personnel data system that includes information about individual employees of the local education agencies (LEAs) in your state?

YES NO

If so, which of the following types of information does the data system contain? *(Check all that apply.)*

- EDUCATIONAL ATTAINMENT/DEGREE
- JOB TITLE
- CERTIFICATIONS
- FULL-TIME EQUIVALENCY OR HOURS /WEEK
- SUBJECT/GRADE ASSIGNMENT
- POSITION LOCATION(S)
- SALARY
- YEARS EMPLOYED/EXPERIENCE

What types of staff are included in the data system? *(Check one box per row.)*

	Certificated and Classified Staff	Certificated Staff Only	Teachers Only
State Education Agency (SEA)			
Local Education Agency (LEA)			

5. To what extent were the following represent a challenge in implementing or changing the financial data collection and reporting system? Which were overcome, and which still remain challenges?

Issue	Not a challenge	Moderate challenge	Major challenge	Was this overcome?	Still a challenge?
IT/computer hardware problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bureaucratic or political processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff capacity/training needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resistance from schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accounting structures or funding distribution procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other challenge (<i>please describe:</i> _____ _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How challenging are the following types of spending for districts in your state to report at the school level?

Type of Expenditure	Not a challenge	Moderate challenge	Major challenge
Teachers that work at multiple schools or sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other staff that worked at multiple schools or sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Central office staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supplies and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other capital expenditures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
District insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other costs? (<i>Describe:</i> _____ _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Please complete the table below to indicate the types of expenditure that are currently reported at the individual school-site level in your state? For each expenditure type, indicate whether school-level expenditure reporting is based on tracking actual expenditures at each site or allocating (estimating) expenditures to each site using a formula or another method?

Expenditure Type	Reported at the school level?		Method?	
	Yes	No	Tracked	Allocated
<i>EXAMPLE: Salaries for teachers</i>	x		x	
<i>EXAMPLE: Utilities</i>	x			x
<i>Administrator salaries</i>				
<i>Salaries for teachers (including special education and other specialist teachers) who work at one school</i>				
<i>Salaries for other instructional support staff (including media specialists, special education aides, and others) who work at one school</i>				
<i>Salaries for pupil support staff (including guidance counselors, speech/language pathologists, and others) who work at one school</i>				
<i>Salaries for teachers who work at more than one school</i>				
<i>Salaries for instructional support staff who work at more than one school</i>				
<i>Salaries for pupil support staff who work at more than one school</i>				
<i>Staff health insurance benefits</i>				
<i>Retirement and pensions (if applicable)</i>				
<i>Other staff benefits (Specify _____)</i>				
<i>Professional development</i>				
<i>Textbooks and other instructional materials</i>				
<i>Office/general supplies</i>				
<i>Furniture</i>				
<i>Computers and equipment</i>				
<i>Telecommunications</i>				
<i>School maintenance and operations staff</i>				
<i>Utilities</i>				
<i>Insurance</i>				
<i>Security services</i>				
<i>Transportation</i>				
<i>Food services personnel</i>				
<i>Food services supplies</i>				
<i>Centralized curriculum development</i>				
<i>Staff who provide districtwide instructional and student support services</i>				
<i>District administrative services</i>				
<i>Other central office staff (please list)</i> _____				
<i>Other expenditures not included above (please list)</i> _____				

Feasibility Study on Improving the Quality of School-Level Expenditure Data

Pre-Interview Survey for Districts

American Institutes for Research is conducting a study for the U.S. Department of Education to examine how some states and districts are currently tracking expenditures to the school level in an effort to improve the quality of these types of data. You are one of four districts participating in this study.

We want to learn more about the structure of your fiscal system, what types of expenditures you currently track to the school level and the methods used to do so, and how the data system that allows you to do this was implemented in your district. This brief survey aims to gather some basic information in advance of our interview. Please complete the questions below and return the survey to Karen Manship at kmanship@air.org. Thank you!

Name:	
District:	<i>[pre-filled]</i>
Date:	

-
1. In what year did your district begin tracking expenditures at the school level? _____
 2. We are interested in how your systems were developed or modified to track or collect school-level expenditures. Was your current school-level accounting system purchased from a vendor or developed internally? Please check the appropriate box below.

- PURCHASED FROM A VENDOR
- DEVELOPED INTERNALLY

3. How many district staff are currently involved in implementing your school-level expenditure data system? Please complete the table below with the titles of staff members involved, an estimate of the numbers of Full-Time-Equivalent (FTEs) involved for each type of staff, and a brief description of their primary responsibilities (for example, providing technical assistance to LEA staff, cleaning or reviewing data).

JOB TITLE	ESTIMATED FTE	PRIMARY RESPONSIBILITIES

4. To what extent did the following represent a challenge in implementing or changing the financial data collection and reporting system? Which were overcome, and which still remain challenges?

Issue	Not a challenge	Moderate challenge	Major challenge	Was this overcome?	Still a challenge?
IT/computer hardware problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bureaucratic or political processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff capacity/training needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resistance from schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accounting structures or funding distribution procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other challenge (<i>please describe:</i> _____ _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. How challenging are the following types of spending for your district to report at the school level?

Type of Expenditure	Not a challenge	Moderate challenge	Major challenge
Teachers that work at multiple schools or sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other staff that worked at multiple schools or sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Central office staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supplies and materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other capital expenditures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
District insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staff benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other costs? (Describe: _____ _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Please complete the table below to indicate the types of expenditure that are currently reported at the individual school-site level in your district? For each expenditure type, indicate whether school-level expenditure reporting is based on tracking actual expenditures at each site or allocating (estimating) expenditures to each site using a formula or another method?

Expenditure Type	Reported at the school level?		Method?	
	Yes	No	Tracked	Allocated
<i>EXAMPLE: Salaries for teachers</i>	x		x	
<i>EXAMPLE: Utilities</i>	x			x
<i>Administrator salaries</i>				
<i>Salaries for teachers (including special education and other specialist teachers) who work at one school</i>				
<i>Salaries for other instructional support staff (including media specialists, special education aides, and others) who work at one school</i>				
<i>Salaries for pupil support staff (including guidance counselors, speech/language pathologists, and others) who work at one school</i>				
<i>Salaries for teachers who work at more than one school</i>				
<i>Salaries for instructional support staff who work at more than one school</i>				
<i>Salaries for pupil support staff who work at more than one school</i>				
<i>Staff health insurance benefits</i>				
<i>Retirement and pensions (if applicable)</i>				
<i>Other staff benefits (Specify _____)</i>				
<i>Professional development</i>				
<i>Textbooks and other instructional materials</i>				
<i>Office/general supplies</i>				
<i>Furniture</i>				
<i>Computers and equipment</i>				
<i>Telecommunications</i>				
<i>School maintenance and operations staff</i>				
<i>Utilities</i>				
<i>Insurance</i>				
<i>Security services</i>				
<i>Transportation</i>				
<i>Food services personnel</i>				
<i>Food services supplies</i>				
<i>Centralized curriculum development</i>				
<i>Staff who provide districtwide instructional and student support services</i>				
<i>District administrative services</i>				
<i>Other central office staff (please list)</i> _____				
<i>Other expenditures not included above (please list)</i> _____				

Feasibility Study on Improving the Quality of School-Level Expenditure Data

Interview Protocol for State Budget Officers

State:	Interviewer:
Interviewee Name:	Date/Time:
Interviewee Title:	Interviewee's Role:

Introduction

Thanks again for taking the time to speak with me this morning/afternoon. Before we start, I'd like to provide a little background on our work, and answer any questions you might have for me.

I work for an independent not-for-profit research organization called the American Institutes for Research and we are conducting a study for the U.S. Department of Education to investigate how state and district data systems are currently tracking expenditures to schools in an effort to improve the quality of these types of data. You are one of five states participating in this study.

We want to learn more about the structure of your school-level expenditure reporting system, what types of expenditures you track or allocate to the school level and how, and how the process of creating a system that allows you to do that was implemented in your state.

Everything that we discuss here will be used for research purposes only. It would help us with note taking if we could record this conversation - would that be ok with you? I can turn the recorder off at any point by your request.

If I ask you a question for which you think you are not the best respondent, it would be helpful if you could refer me to one of your colleagues who would be able to provide the answer.

Do you have any questions for me before we start?

1. First, can you tell me a little about your position and role? What are your responsibilities? How long have you been working in [state], and how long have you been working with district and school expenditure data? In what capacity do you work with these data?
2. We'd like to learn about the history of how your state initiated the collection of school-level expenditure data. You mentioned on the pre-interview survey that you began tracking expenditures to the school level in [YEAR].
 - a. How did this policy originate? Were any specific individuals or organizations active in proposing or advocating for this policy? If so, who? Was there any opposition? What were the reasons for supporting or opposing this policy? How did any disagreements over the new policy get resolved?
 - b. Were specific legislative or regulatory changes enacted to establish the collection of school-level expenditure data? If so, please describe these changes.
 - c. What first motivated your state to create a system to track or collect expenditures at the school level? Are there specific goals or objectives that the state hopes to accomplish through use of these data?
3. You indicated in the pre-interview survey that [_____] were challenges for your state in implementing or changing the financial data collection and reporting system. Which was the *greatest* challenge and why? How did you go about addressing the challenges you were able to overcome? For the challenges that are still being faced, why is this the case?
4. You mentioned that [_____] are the most challenging types of spending for districts in your state to report at the school level. Why is this? How did you go about addressing the challenges you were able to overcome? For the challenges that still exist, why is this the case?
5. We'd like to know more about how your systems were developed or modified to track or collect school-level expenditures. You told us on the pre-interview survey that you [developed the school-level accounting system in house/purchased the system from a vendor]. How did you make that decision, and who was involved?
 - a. Do you use contractor support to implement the data collection and reporting system(s)? If so, what are the contractor's specific responsibilities?
 - b. *[If system was purchased from a vendor:]* How long did it take to acquire the system from the vendor? How did that process work?
 - c. *[If system was developed in house:]* Tell us about the process of developing the accounting system in house. What was required? How long did it take?
6. Thank you for the information you provided regarding the staff who are involved in collecting and cleaning data for the school level expenditure data systems. Were these staff from different agencies or departments, or the same one? Which would you say are the essential staff roles involved in developing and administering a school-level expenditure system?
 - a. Thinking back, what staff were involved in acquiring or developing the new system? Do you have any documentation of the process your state went through in acquiring and developing your fiscal system that permits you to track school level expenditures? Can we obtain this documentation for our records and review?

7. We are also interested in non-staff costs of administering your school-level tracking system. What were the approximate monetary costs involved in developing your school expenditures data system? And what are the monetary costs now, of implementing it day-to-day? Do you have any documentation or analysis of these costs you could share with us?

Probes:

- a. Contract for IT system development?
 - b. Software?
 - c. Hardware?
 - d. Contractor to provide training to staff?
 - e. Training materials/documentation?
 - f. Contractor support for collecting, compiling, cleaning, and reporting the data?
 - g. Other types of expenses?
8. Thank you for the information you provided on the survey regarding your state personnel data system.
 - a. *[If applicable- if state data system contains salary information:]* Do the fiscal data on salaries represent an aggregation of the data in the payroll or personnel systems?
 - b. Are the two systems (the fiscal and personnel systems) linked in any way? If so, please describe how they are linked. Does the personnel data system use the same coding structure as the system that tracks expenditures (e.g., function, program, object and/or other codes)? Can schools be linked across these systems using a common school identifier code or a crosswalk between system-specific codes?
 9. Is there a single centralized system used by districts to input/upload school-level expenditures that consolidates this information into a database accessed by the state?
 - a. If so, does the system also include automated procedures for districts to calculate spending at individual school sites?
 - b. If not, is there a common application used by districts to do this or are different solutions or systems used?
 - c. If districts use their own applications to calculate school-level expenditures, are there standard guidelines developed and issued by the state? May we get a copy of these guidelines?
 - d. Are different types of districts or schools required to report school-level expenditures in the same way, or do requirements vary by type of district or school? If they vary, how and why?
 10. Does the state have any policies or procedures to ensure the quality of school-level expenditure data? By quality, we mean consistency (i.e., that expenditures are tracked or allocated in the same way in different schools and districts, and that information gathered from different systems--e.g., fiscal and payroll systems--would produce the same figures), completeness (i.e., that all expenditure categories included in your school-level expenditure system are fully reported for all sites), and accuracy? Are quality checks performed, and what do these consist of?

Probes:

- a. Guidelines or instructions for schools/districts to use in entering data?
- b. Training for districts? (through in-person meetings, webinars, conference calls?)
- c. Technical assistance for districts?

- d. Automatic checks in data entry system (such as maximum values allowed, or preventing a user from continuing if a cell is left blank)?
- e. Staff assigned to review incoming data?
- f. Standard analyses/data checks done after all data are entered?

11. What challenges have you encountered in ensuring data accuracy, consistency (across data sources and schools/districts), and completeness at the school level?

12. How does your state use school-level expenditure data? For what purposes?

Probes:

- a. Do you do any kind of analysis of school-level spending? Do you report any analysis back to districts?
- b. Could you share an example report with us?

13. Does your state make information on school-level expenditures available to the general public?

Probes:

- a. What kind of information is made available to the public? How is this made available (online and downloadable, or some other method)?

	Available online	Available upon request	Made available through other means (specify)	Not publicly available
Data files with total expenditures by school				
Data files with detailed expenditures by school and by expenditure category				
Reports containing analysis of school-level expenditure data				
Description of the accounting procedures used for tracking and/or allocating school-level expenditures				

- b. [If publicly available:] Is this information frequently accessed or requested? Who uses these data, and how? Who uses the reports, and for what purposes?

14. We understand you have to report information each year to the federal government for the U.S. Census Annual Survey of Local Government Finances-School Systems (the F-33 Form) and the Civil Rights Data Collection (CRDC), and that you recently also had to report information through the ARRA data collection. We understand that the information requested for both of these data collections included school-level personnel salaries for instructional staff and school-level non-personnel expenditures. For each of those data collections, where did the data reported come from? Which system (e.g., payroll, expenditures) is this information pulled from? Who is responsible for generating these data?

15. Is there anything we haven't talked about that would help us to better understand your state's school-level expenditure reporting system? Do you have any advice for other states considering the development of such a system?

Thank you for your time!

Feasibility Study on Improving the Quality of School-Level Expenditure Data

Interview Protocol for District Budget Officers

District:	Interviewer:
Interviewee Name:	Date/Time:
Interviewee Title:	Interviewee's Role:

Introduction

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We want to learn more about the structure of your school-level expenditure reporting system, what types of expenditures you track or allocate to the school level and how, and how the process of creating a system that allows you to do that was implemented in your district.

Everything that we discuss here will be used for research purposes only. It would help us with note taking if we could record this conversation - would that be ok with you? I can turn the recorder off at any point by your request.

If I ask you a question for which you think you are not the best respondent, it would be helpful if you could refer me to one of your colleagues who would be able to provide the answer.

Do you have any questions for me before we start?

1. First, can you tell me a little about your position and role? What are your responsibilities? How long have you been working in [district], and how long have you been working with school expenditure data? In what capacity do you work with these data?
2. We'd like to learn about the history of how your district initiated the collection of school-level expenditure data. You mentioned on the pre-interview survey that you began tracking expenditures to the school level in [YEAR].
 - a. How did this policy originate? Were any specific individuals or organizations active in proposing or advocating for this policy? If so, who? Was there any opposition? What were the reasons for supporting or opposing this policy? How did any disagreements over the new policy get resolved?
 - b. Were specific legislative or regulatory changes enacted to establish the collection of school-level expenditure data? If so, please describe these changes.
 - c. What first motivated your district to create a system to track expenditures at the school level? Are there specific goals or objectives that the district hopes to accomplish through use of these data?
3. You indicated in the pre-interview survey that [_____] were challenges for your district in implementing or changing the financial data collection and reporting system. Which was the *greatest* challenge and why? How did you go about addressing the challenges you were able to overcome? For the challenges that are still being faced, why is this the case?
4. You mentioned that [_____] are the most challenging types of spending for you to report at the school level. Why is this? How did you go about addressing the challenges you were able to overcome? For the challenges that are still being faced, why is this the case?
5. We'd like to know more about how your systems were developed or modified to track or collect school-level expenditures. You told us on the pre-interview survey that you [developed the school-level accounting system in house/purchased the system from a vendor]. How did you make that decision, and who was involved?
 - a. Do you use contractor support to implement the data collection and reporting system(s)? If so, what are the contractor's specific responsibilities?
 - b. *[If system was purchased from a vendor:]* How long did it take to acquire the system from the vendor? How did that process work?
 - c. *[If system was developed in house:]* Tell us about the process of developing the accounting system in house. What was required? How long did it take?
6. Thank you for the information you provided regarding the staff who are involved in collecting and cleaning data for the school level expenditure data systems. Were these staff from different sites or departments, or the same one? Which would you say are the essential staff roles involved in developing and administering a school-level expenditure system?
 - a. Thinking back, what staff were involved in acquiring or developing the new system? Do you have any documentation of the process your district went through in acquiring and developing your fiscal system that permits you to track school level expenditures? Can we obtain this documentation for our records and review?

7. We are also interested in non-staff costs of administering your school-level tracking system. What were the approximate monetary costs involved in developing your school expenditures data system? And what are the monetary costs now, of implementing it day-to-day? Do you have any documentation or analysis of these costs you could share with us?

Probes:

- a. Contract for IT system development?
 - b. Software?
 - c. Hardware?
 - d. Contractor to provide training to staff?
 - e. Training materials/documentation?
 - f. Contractor support for collecting, compiling, cleaning, and reporting the data?
 - g. Other types of expenses?
8. We are interested in how your expenditure data systems link to other systems.
 - a. Do the fiscal data on salaries in your school expenditure data system represent an aggregation of the data in the district's payroll or personnel systems?
 - b. Are the two systems (the fiscal and personnel systems) linked in any way? If so, please describe how they are linked. Does the personnel data system use the same coding structure as the system that tracks expenditures (e.g., function, program, object and/or other codes)? Can schools be linked across these systems using a common school identifier code or a crosswalk between system-specific codes?
 9. Does the district have any policies or procedures to ensure the quality of school-level expenditure data? By quality, we mean consistency (i.e., that expenditures are tracked or allocated in the same way in different schools, and that information gathered from different systems--e.g., fiscal and payroll systems--would produce the same figures), completeness (i.e., that all expenditure categories included in your school-level expenditure system are fully reported for all sites), and accuracy? Are quality checks performed, and what do these consist of?

Probes:

- a. Guidelines or instructions for schools/districts to use in entering data?
 - b. Training for districts? (through in-person meetings, webinars, conference calls?)
 - c. Technical assistance for districts?
 - d. Automatic checks in data entry system (such as maximum values allowed, or preventing a user from continuing if a cell is left blank)?
 - e. Staff assigned to review incoming data?
 - f. Standard analyses/data checks done after all data are entered?
10. What challenges have you encountered in ensuring data accuracy, consistency (across data sources and schools), and completeness at the school level?
 11. How does your district use school-level expenditure data? For what purposes?

Probes:

- a. Do you do any kind of analysis of school-level spending? Do you report any analysis back to schools?
 - b. Could you share an example report with us?
12. Does your district make information on school-level expenditures available to the general public?

Probes:

- a. What kind of information is made available to the public? How is this made available (online and downloadable, or some other method)?

	Available online	Available upon request	Made available through other means (specify)	Not publicly available
Data files with total expenditures by school				
Data files with detailed expenditures by school and by expenditure category				
Reports containing analysis of school-level expenditure data				
Description of the accounting procedures used for tracking and/or allocating school-level expenditures				

- b. [If publicly available:] Is this information frequently accessed or requested? Who uses these data, and how? Who uses the reports, and for what purposes?
13. We understand you have to report information each year to the federal government for the U.S. Census Annual Survey of Local Government Finances-School Systems (the F-33 Form) and the Civil Rights Data Collection (CRDC), and that you recently also had to report information through the ARRA data collection. We understand that the information requested for both of these data collections included school-level personnel salaries for instructional staff and school-level non-personnel expenditures. For each of those data collections, where did the data reported come from? Which system (e.g., payroll, expenditures) is this information pulled from? Who is responsible for generating these data?
14. Is there anything we haven't talked about that would help us to better understand your district's school-level expenditure reporting system? Do you have any advice for other districts considering the development of such a system?

Thank you for your time!



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