

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

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Concerns about the equitable distribution of school funding within school districts have led to new federal data collections on school-level expenditures through the *American Recovery and Reinvestment Act of 2009*, the Civil Rights Data Collection (CRDC), and the National Center for Education Statistics' pilot School-Level Finance Survey. In addition, the *Every Student Succeeds Act*, enacted in December 2015, amended Title I, Part A of the *Elementary and Secondary Education Act of 1965* to require, among other things, state educational agencies and local educational agencies (LEAs) to report school-level per-pupil expenditure data on state and LEA report cards. School-level expenditure data are useful for examining the extent to which resources are distributed equitably across schools and may also help practitioners and researchers better understand associations between spending patterns and student outcomes and identify cost-effective practices.

However, the quality and utility of current school-level expenditure data are uncertain, and many school districts do not have experience in systematically tracking expenditures at the school level. This study explores the feasibility of improving the collection of school-level expenditure data by examining the nature and quality of school-level fiscal data collection in five states and four school districts that had developed their own systems for collecting and reporting school-level expenditures: Florida, Hawaii, Ohio, Rhode Island, Texas, Baltimore City, Hillsborough County, Houston, and Los Angeles.

### RESEARCH QUESTIONS

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?

### STUDY DESIGN

The study included (1) surveys and interviews of officials to understand the process of collecting school-level expenditure data and (2) collection and analysis of school-level spending data to examine data quality issues. The study examined three aspects of data quality: the *comprehensiveness* of school-level spending data, *consistency* with other data sources, and the relative *accuracy* of allocating expenditures to schools by formula (rather than tracking actual expenditures for each school).

Because of differences in the data submitted by the sites, some of the analyses and findings do not include all nine sites.

### Highlights

- 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.

## EXPENDITURE ATTRIBUTION PRACTICES

**The states and districts in this study have developed accounting systems that report large shares of their total operational expenditures at the individual school level.**

In interviews and surveys, officials from all nine sites reported attributing most expenditure categories 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.

Fiscal data provided by the sites confirmed that expenditures attributed to schools accounted for a large proportion of total operational expenditures, ranging from 69 percent in three sites to 89 percent in two sites, with an average of 77 percent across eight study sites. A larger share of personnel expenditures was attributed to schools (85 percent) than for non-personnel expenditures (53 percent).

**Most of the expenditures that the study sites attributed to schools were directly tracked to schools rather than simply being allocated by formula.**

On average, across eight of the study sites, 85 percent of expenditures were tracked to schools and 8 percent were allocated. 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). In four sites, the attribution method was not clear for some of the expenditures (3 percent).

Personnel expenditures were more often directly tracked to schools than were non-personnel expenditures (90 percent vs. 60 percent).

## RELIABILITY OF THE DATA

**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.**

Site-provided data on total salary costs differed from equivalent data from the National Center for Education Statistics School District Finance Survey (F-33) by only 2 percent on average, but non-personnel expenditures differed by a much greater margin (21 percent).

Similarly, comparisons with CRDC data found that school-level salary expenditures based on the site-reported data differed by an average of 12 percent for salary expenditures but 129 percent for non-personnel expenditures.

**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.**

To assess the accuracy of allocating expenditures to schools by formula, we simulated allocations of spending for several expenditure categories that most of the study sites reported as being tracked to schools and compared those amounts with

actual tracked expenditure amounts reported by the sites. The expenditure category for which simulated allocations most poorly matched schools' actual tracked expenditures was instructional support, which differed by an average of 51 percent when prorated to schools based on full-time equivalent (FTE) staff and 53 percent when allocated based on enrollment.

Simulated allocations most closely approximated actual tracked expenditures for health benefits (differing by 10 to 12 percent, depending on allocation metric). Moderate differences were found for retirement benefits (14 to 18 percent) and pupil support staff (29 to 33 percent).

Benefit allocations were more accurate when based on shares of total salaries rather than on shares of FTEs. Instructional and pupil support allocations were more accurate when based on FTEs than when based on student enrollment.

## LESSONS LEARNED

**Advice that interviewees offered for others aiming to implement similar school expenditure reporting systems was to get stakeholders involved, communicate clearly and frequently, and think long term about future data needs.**

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).

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 specific types of expenditures. 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).

## STUDY LIMITATIONS

The study relied largely on expenditure data that were collected and reported according to the individual sites' own policies, practices, and needs. Data differences across sites resulted in some sites being excluded from portions of the quantitative analysis. In some cases, spending for a particular category was absent from the data provided because it was managed by a state agency other than the site itself (e.g., pension benefits administered by a state finance department). Additionally, one site did not participate fully in the qualitative data collection.

The determination of whether expenditures were tracked or allocated to individual schools was based on self-reporting by study sites. Sites were asked about the method of attribution (tracking or allocation) of relatively large categories of expenditures, and a site's attribution method may have sometimes varied within a category. In some cases, respondents explained this variation to interviewers, but there may be other cases where this was not recorded.

## ADDITIONAL INFORMATION

The complete report is available at [www2.ed.gov/about/offices/list/oepdp/ppss/reports.html](http://www2.ed.gov/about/offices/list/oepdp/ppss/reports.html).