Education, Human Development, and the Workforce

A Case Study Of Title I Comparability in Three California School Districts

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Report Highlights

The Elementary and Secondary Education Act (ESEA) is due for reauthorization, and Senator Tom Harkin and Congressman Chakkah Fattah have both proposed revisions to the comparability provision of the federal Title I program. Harkin's proposed legislation requires the use of per pupil expenditures, including actual teacher salaries, to demonstrate comparability. This report is the result of a case study in three California districts—Los Angeles Unified School District (LAUSD), Pasadena Unified School District (PUSD), and Twin Rivers Unified School District (TRUSD)—to examine the following research question: *Would our three case study districts be able to use per pupil expenditures to demonstrate comparability?*

The case study this report is based on contained three components. First, we conducted a document analysis to understand the approach currently used in each district to demonstrate comparability. We found that all three of the study districts used student-instructional staff ratios and grade span groupings to demonstrate comparability in 2009–10.

Second, we conducted analyses of per pupil spending to examine resource equity across schools within each district. We found the following:

- Title I schools, on average, have higher total per pupil expenditures (which makes sense because Title I and other federal funds are added to their state and local base resources).
- On average, state and local base expenditures are similar across Title I and non-Title I schools.
- Although, on average, schools with higher percentages of low-income students have higher levels of per pupil spending out of state and local base revenues, at any given poverty level, there is a wide range of spending across schools.
- Many schools fall below the 90 percent lower limit that is currently required for demonstrating comparability using an overall per pupil expenditure metric. This variation persists when we restrict the analysis to focus on instructional per pupil expenditures.

Third, we facilitated discussions with key district officials about the per pupil expenditure analysis. They recognized that shifting to per pupil expenditures would be a major change, expressed concerns, and provided suggestions to enable LEAs to ensure resource comparability across Title I and non-Title I schools.

Under the new Title I legislation being considered by Congress, the shift from metric flexibility, including student-instructional staff ratios, to the requirement of using per pupil expenditures to demonstrate comparability represents a substantive shift in federal policy. Our research demonstrates that the proposed requirement would help to close some of the major loopholes in the current comparability provision to improve resource equity across schools within districts. However, our study also reveals several challenges for Congress to address as they debate and make legislative changes to the comparability provision in the ESEA reauthorization process.

About the Authors

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I. Introduction

The Elementary and Secondary Education Act (ESEA) is due for reauthorization, and as Congress considers modifications and debates the legislation, the comparability provision of the federal Title I program is one of the ESEA components on the table for serious revisions. In California, Title I funds amounted to $1.9 billion in 2006–07, which represents approximately 29 percent of federal K–12 education revenues and 2.7 percent of total education revenues in California.[1]

Title I of the ESEA is the largest federal education funding stream and is intended to supplement state and local revenues in order to provide additional resources and services to meet the needs of economically disadvantaged students. In order for Title I to work as intended and provide additional resources to high-need students at Title I schools, the program funding needs to be added on top of a "comparable" base of resources provided out of state and local revenues for all schools. The purpose of this comparability provision is to demonstrate that state and local funding for Title I schools (and high needs schools in general) have not been replaced or, in legal terms, *supplanted* by the federal Title I funds. Districts must demonstrate fulfillment of the comparability requirement in order to qualify for federal Title I funds. Therefore, both high poverty districts, all of whose schools are Title I schools, and low poverty districts, with few Title I schools, must demonstrate comparability of resources across all of their schools[2] in order to receive federal Title I funds. In general, the average resources in Title I schools are compared with the average resources in non-Title I schools, and for districts with all Title I schools, resources in individual schools are compared to the district average to ensure that schools have a comparable base of resources.

As researchers have noted (Roza, 2008; Roza & Hill, 2006; Weiner, 2008), there are several loopholes in the current comparability provision that allow inequities in resource allocation to go unaddressed. However, given the large contribution of Title I to state education expenditures, there is a strong and increasing desire to ensure that the comparability provision is functioning as the law intends.

Case study sample

This report is the result of a case study in three California districts: Los Angeles Unified School District (LAUSD), Pasadena Unified School District (PUSD), and Twin Rivers Unified School District (TRUSD). Each of the three case study districts had separately expressed interest in improving equity in resource allocation and indicated an interest in having the American Institutes for Research (AIR) conduct analyses of their approaches to complying with the comparability provision of the Title I law. These districts were also participating in a separate study, entitled Strategic School Funding for Results (SSFR), which is being conducted by AIR in

[1] These figures are based on reported revenues from "Table 173. Revenues for public elementary and secondary schools, by source and state or jurisdiction: 2006-07" (U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey," 2006-07) and Title I appropriations from "Table 379. Appropriations for Title I, No Child Left Behind Act of 2001, by program and state or jurisdiction: Fiscal years 2007 and 2008" (U.S. Department of Education, Budget Service, Elementary, Secondary, and Vocational Education Analysis Division, unpublished tabulations).

[2] One exception is that schools with fewer than 100 pupils are excluded from comparability calculations.

partnership with Pivot Learning Partners with funding from the Institute of Education Sciences (IES). The SSFR project is working to implement a district-level pupil-based funding model.[3]

Los Angeles Unified School District (LAUSD) is the largest district in the state of California and, after New York City, the second largest in the nation, enrolling a diverse population of nearly 700,000 students in more than 800 schools. Almost three-fourths of the students are of Hispanic origin, 11 percent are African-American, more than one-third (35 percent) are English learners, and more than two-thirds (68 percent) are eligible for free or reduced price lunch.

Twin Rivers Unified School District (TRUSD) is a mid-size suburban school district in northern California located on the outskirts of Sacramento, California. TRUSD enrolls approximately 27,000 students in 58 schools. Its racial/ethnic composition is 35 percent Latino/Hispanic, 32 percent White, 15 percent Black, and 10 percent Asian. It is a high-poverty district, with a district-wide poverty rate of 79 percent.

Pasadena Unified School District (PUSD) is also a mid-size urban district, located in southern California, and enrolls roughly 20,000 students in 33 schools. Its racial/ethnic composition is 58 percent Latino/Hispanic, 18 percent Black, 14 percent White, and 5 percent Asian, and 65 percent of its students are low-income. Together, these districts allow an examination of the implications of comparability provision changes in mid-size to large districts across California with varying levels of poverty.

Case study components

The case study includes three components. First, we requested documentation provided by each district to the state to demonstrate compliance with the comparability provision. After reviewing these documents, we conducted a follow-up phone call with a key categorical/budget official in each district to clarify our understanding of the documents. In Section II of this report, we summarize what we learned from the documents and phone calls about the approach currently used in each district to demonstrate comparability.

Second, we conducted analyses of per pupil spending to examine resource equity. In this report, we present findings from quantitative analyses that examine the implications for our case study districts of measuring comparability based on per pupil expenditures instead of the student-instructional staff ratio metric they currently use to demonstrate comparability. These analyses are presented in Section III.

Finally, the study team met with each of the districts to present the findings of our quantitative analysis. We facilitated discussions with key district officials about the per pupil spending analysis, during which we solicited their perspectives on Title I comparability. In Section IV, this report presents some of the concerns and suggestions expressed during these meetings by representatives from the three case study districts about the comparability provision, which we hope will help to inform the current Congressional debate on ESEA reauthorization.

[3] For more information, go to www.schoolfundingforresults.org.

II. Comparability Compliance

This section describes how local education agencies (LEAs) in California and nation-wide are allowed to demonstrate comparability, how the three case study districts fulfill the comparability requirement to receive Title I funds, and describes proposed changes to the comparability provision in the current debate about ESEA reauthorization.

How do districts currently demonstrate comparability?

The comparability provision of the ESEA has been directed toward creating such a comparable base for Title I funding, and has been a part of ESEA since its inception in 1965 (McClure, 2008; Roza & Hill, 2006). According to federal guidelines, there are currently numerous ways to demonstrate comparability:

> "Under the statute, an LEA is considered to have met the comparability requirement if the LEA files with the SEA a written assurance that it has established and implemented a—
> - District-wide salary schedule;
> - Policy to ensure equivalence among schools in teachers, administrators, and other staff; and
> - Policy to ensure equivalence among schools in the provision of curriculum materials and instructional supplies.
>
> An LEA may also meet the comparability requirement if it establishes and implements other measures for determining compliance such as—
> - Student/instructional staff ratios[4];
> - Student/instructional staff salary ratios[5];
> - Expenditures per pupil[6]; or
> - A resource allocation plan based on student characteristics such as poverty, limited English proficiency, or disability, etc."
>
> (U.S. Department of Education, 2008)

In California, state statute mirrors the federal law in the requirements for districts to demonstrate comparability:

> "LEAs in California fulfill this requirement by submitting to CDE comparability assurances in the ConApp Part I, which includes the following items:
>
> General Assurance 27 –
>
> > Except as otherwise provided, the LEA will ensure that Title I schools are provided with State and local services that, taken as a whole, are at least

[4] Student/instructional staff ratios compare the average number of instructional staff per student across district schools, without adjusting for job title (teacher, instructional aide, etc.) or experience.
[5] Student/instructional staff salary ratios compare the average instructional staff salary expenditure per student across district schools, without adjusting for job title (teacher, instructional aide, etc.) or experience.
[6] It should be noted that the districts are not required to include several state and local expenditures in determining comparability such as those for: community services, capital outlay, debt service, or supplemental expenses made as a result of a presidentially declared disaster.

> comparable to that in schools that are not receiving Title I, Part A funds. If the LEA is providing Title I, Part A services to all of its schools, the LEA ensures that State and local funds provided to all of its schools, taken as a whole, are at least comparable in each school.
>
> General Assurance 28 –
>
> > The LEA has established and implemented specific policies to ensure the LEA has used State and local funds to provide comparable services in all its schools including, but not limited to, a LEA-wide salary schedule, a policy to ensure equivalence among schools in teachers, administrators, and other staff, and a policy to ensure equivalence among schools in the provision of curriculum materials and instructional supplies. The LEA shall not include staff salary differentials for years of employment when determining per pupil expenditures or instructional salaries per pupil of State and local funds. The LEA has developed procedures for compliance with comparability, annually performs comparability calculations to make adjustments, as necessary to make Title I schools comparable, and maintains updated records documenting the compliance" (California Department of Education, 2009).

In addition to the flexibility described above in demonstrating compliance with the comparability provision, districts are not required to demonstrate precise Title I/non-Title I comparability on the measure they select. Rather, the threshold for determining comparability is deemed acceptable if the measure for the average Title I school does not exceed 110 percent (e.g., for a pupil-staff ratio, where lower values correspond to more resources) or fall below 90 percent (e.g., for per pupil spending or staff-pupil ratios, where higher values correspond to more resources) of the non-Title I school average (U.S. Department of Education, 2008; Wiener, 2008).

For example, if a district uses the student-instructional staff ratio to demonstrate comparability, the 110 percent essentially functions as an upper bound because a lower ratio is associated with greater resources. In this case, the average student-instructional staff ratio in Title I schools must not exceed 110 percent of the average ratio in non-Title I schools.

On the other hand, if a district uses per pupil expenditures out of state and local revenues to meet comparability, the 90 percent functions as a lower bound because greater expenditures imply access to more resources. In this case, the average per pupil expenditures in Title I schools must be greater than or equal to 90 percent of the average in non-Title I schools.

Autonomy over selecting the method and threshold for measuring comparability across schools within a district creates substantial flexibility in meeting federal comparability requirements. One cited deficiency in this flexibility in compliance is that while the distribution of state and local resources to Title I and non-Title I schools may look more or less equal according to the chosen method, there still may be inequities between Title I and non-Title I schools with respect to overall expenditures and/or expenditures in certain resource categories (Roza, 2008; Roza & Hill, 2006; Wiener, 2008). An area of specific concern is the opacity in instructional staff expenditures, which make up the majority of school and district operating costs. California comparability guidelines, for example, currently state,

> The LEA shall not include staff salary differentials for years of employment when determining per pupil expenditures or instructional salaries per pupil of State and local funds (California Department of Education, 2009).

In the current system, a district can choose curriculum materials and instructional supplies as its comparability metric, and the schools within the district may have equivalence in the number of books and supplies. However, a broader look at patterns of resource allocation may reveal areas in which there are prominent differences between Title I and non-Title schools in the district, such as operating expenditures or personnel salaries.

How do the three case study districts currently demonstrate comparability?

All three of the districts in this study used student-instructional staff ratios and grade span groupings to demonstrate comparability in 2009–10, and they all used a district-wide poverty ranking to determine schools' eligibility for Title I funds. This section details the grade span grouping and poverty ranking decisions, as well as other district-specific policies that have implications for defining Title I eligibility and calculating per pupil Title I allocations.

Los Angeles Unified School District. In 2009–10, LAUSD used grade span groupings to demonstrate comparability for its 15 different school configurations. It had seven grade span groupings with Title I and non-Title I schools, and eight with only Title I schools. It did not use enrollment (i.e., school size) groupings in 2009–10, but has utilized this option in other years.

LAUSD uses a district-wide poverty ranking. Poverty is determined using a composite poverty measure, including free and reduced price lunch (FRPL) eligibility and CalWORKs data, referring to the former welfare system in California. To address the under-reporting of FRPL eligibility in middle and high school due to stigma associated with filling out an FRPL application, LAUSD determined whether a family is receiving CalWORKs and cross-referenced this data with FRPL data. They do not double-count, but they include all CalWORKs families within the school boundary to help determine the school's percent poverty.

In 2009–10, there were several policies that influenced Title I allocations. The district emphasized that these decisions vary year to year, but the first policy in 2009–10 was that as long as the school was above 40 percent poverty, it received Title I funding. Second, the district utilized a program continuity or "hold harmless" provision where a school that was above 40 percent poverty in the previous year would still receive Title I funding if it fell below 40 percent poverty in 2009–10. Third, continuation, special education, and opportunity schools received Economic Impact Aid (EIA) instead of Title I.

Also, LAUSD allocated Title I funds based on the concentration of poverty within a school, with higher poverty schools receiving greater amounts per low-income pupil of Title I dollars. In 2009–10, Title I funds were allocated to schools based on three poverty bands. The amount allocated to each band of schools is based on the total amount available after the mandated set-asides and other exemptions are taken out. Schools with less than 40 percent poverty did not receive any Title I funds; schools with 40 to 64.99 percent poverty received $480 per low-income pupil; and schools with 65 percent poverty or higher received $699 per pupil.

Pasadena Unified School District. In 2009–10, PUSD used grade span groupings to demonstrate comparability for its eight different school configurations. It had six grade span groupings with

Title I and non-Title I schools (K–5, K–6, K–8, 6–8, 6–12, and 9–12) and two with only Title I schools (K–5 6–8). It did not use enrollment groupings in 2009–10.

PUSD uses a district-wide poverty ranking, and poverty is determined using FRPL eligibility. It uses student applications for FRPL and their siblings' applications to help with undercounting in middle and high schools.

A historical policy in PUSD has been to allocate Title I funds to elementary and middle schools, and not high schools. To do this and meet the comparability requirement, it must provide district general funds or other funds to high schools whose percent poverty is greater than or equal to the percent poverty of schools in other grade spans that are receiving Title I dollars. For example, if a high school in PUSD has 60 percent FRPL-eligible students and the district funds elementary and middle schools with 40 percent FRPL-eligible students, the district provides the high school with funds from other sources (e.g., Economic Impact Aid, a California categorical program for low-income students) that are similar to the Title I allocation for the elementary and middle schools. PUSD allocates its Title I funds on a strictly per-FRPL student basis, and in 2009–10, it allocated $337.50 in Title I funds for each FRPL student in elementary and middle schools in the district.

Twin Rivers Unified School District. In 2009–10, TRUSD used grade span groupings, with a total of six different grade span configurations in the district (K–6, K–8, 7–8, 7–9, 7–12, and 9–12). In TRUSD, there were only two non-Title I schools, but only one counted for comparability calculations because the other has fewer than 100 students. Therefore, TRUSD used the within-group average to calculate comparability for five of its six grade spans that contain all Title I schools. For high schools, the one non-Title I high school was compared to the average of the remaining Title I high schools.

TRUSD uses a district-wide poverty ranking, based on students' FRPL eligibility. TRUSD allocates its Title I funds on a strictly per-FRPL student basis, and in the study year, the Title I allocation was $211.03 per FRPL student.

What are proposed changes to comparability in the reauthorization of the Elementary and Secondary Education Act (ESEA)?

Through their proposed legislation to revise the comparability provision as part of the current process of reauthorizing the Elementary and Secondary Education Act (ESEA), Senator Tom Harkin[7] and Congressman Chakkah Fattah[8] are attempting to close some of the loopholes in the comparability provisions. The goal of the proposed changes is to remedy the inequitable distribution of state and local funds between the schools attended by the highest and lowest income students and to remedy the weaknesses that have undermined the "spirit" of the comparability requirements.

Senator Harkin's proposed legislation requires the use of per pupil expenditures, including actual teacher salaries, to demonstrate comparability. This signifies two major changes to current legislation. The first change is requiring the use of expenditures instead of staff ratios or other measures; the second is requiring actual salaries instead of average salaries. As discussed above,

[7] Elementary and Secondary Education Reauthorization Act of 2011. Available for download at: http://help.senate.gov/imo/media/doc/ROM117523.pdf.
[8] ESEA Fiscal Fairness Act. Available for download at: http://edmoney.newamerica.net/sites/newamerica.net/files/articles/EFFAforIntro.pdf.

average salaries mask actual cost differences in staff across schools within a district. When districts allocate and report on instructional and other staff by average salaries and full-time equivalent (FTE) counts, each school is not being held accountable for the actual costs of their staff, and resource allocation inequities across schools within a district are hidden. Harkin's proposed legislation would make transparent the actual instructional costs incurred at each school site.[9]

Additionally, Fattah and Harkin both propose increasing the threshold (i.e., the lower limit) on per pupil spending out of state and local revenues that LEAs are required to meet to fulfill comparability. Fattah's proposal changes the threshold for demonstrating comparability between Title I and non-Title I schools from 90 percent to 97 percent. This means that state and local per pupil expenditures in Title I schools must closer to the average at non-Title I schools than they are currently. In districts with all Title I schools, the highest poverty schools (the top three poverty quartiles) must spend 97 percent of the average at low poverty schools (the bottom poverty quartile). Harkin's legislation takes this concept a step further, requiring Title I per pupil spending out of state and local funds to be greater than or equal to non-Title I per pupil state and local expenditures. In effect, Harkin proposes a 100 percent threshold.

III. Quantitative Analyses of Spending Across Schools

All three of our case study districts use the student-instructional staff ratio metric to demonstrate comparability, but current proposals in the ESEA reauthorization discussion seek to limit flexibility in the comparability provision by requiring that local education agencies (LEAs) use per pupil expenditures to demonstrate comparability. With this in mind, this section of the paper describes the quantitative analysis we conducted in each case study district to explore the following question:

> *Would our three case study districts be able to use per pupil expenditures to demonstrate comparability?*

We first focused on the average per pupil expenditures across all schools within a district, including the funding sources of overall per pupil expenditures. This first analysis reveals whether the district would meet the comparability standard by comparing per pupil spending out of state and local revenues for the average Title I and non-Title school.

Second, we examined variations in spending across schools by poverty and grade level. Specifically, we focused on how per pupil spending out of state and local base resources varies across schools serving varying percentages of low-income students measured by free and reduced price lunch program eligibility.

[9] Cohen, Jennifer. October 11, 2011. "Harkin's ESEA Reauthorization Bill Makes Strides in Fixing Title I Teacher Comparability." *Ed Money Watch*. Available for download at: http://edmoney.newamerica.net/blogposts/2011/harkins_esea_reauthorization_bill_makes_strides_in_fixing_title_i_teacher_comparabili

Finally, we limited our analysis to instructional per pupil spending out of state and local base resources to mimic the student-instructional staff ratio metric that districts currently use to demonstrate comparability.

Throughout these three sets of analyses, we compared expenditures within grade spans (elementary, middle, and high school) and by level of poverty. We also controlled for enrollment in the third analysis to examine spending across schools of similar sizes. Current legislation allows districts to demonstrate comparability for the entire district or for subgroups of schools with the same grade span (e.g., K–1, 9–12) and/or enrollment (small, large). Districts often utilize this flexibility to demonstrate comparability for school subgroups rather than across all schools. While there are arguments to be made that elementary schools have different resource requirements and needs than high schools, for example, the extent to which the school grouping flexibility masks resource variations across schools within a district is unclear. Therefore, our analyses examine both average per pupil expenditures and individual schools' per pupil expenditures to get a complete picture of resource equity across schools within each case study district.

Following the comparability provision, we excluded (1) schools that were served by state or local programs that meet the requirement of Title I, Part A (such as the Economic Impact Aid program in California, which is designed to serve the same student population as Title I, Part A); and (2) schools that had an enrollment of less than a 100 students. We conducted the analysis separately for elementary, middle, and high schools. Then we restricted the analysis to what we operationally define as "traditional schools," excluding charter schools, special education, continuation, alternative, and other types of schools in the district. We also eliminated statistical outliers[10] to explore the LEA's ability to demonstrate comparability on per pupil expenditures with a more homogenous set of schools.

Methods and data

This section details the steps we took to look at whether the districts would meet comparability if they changed their metric to per pupil expenditures and to see how school per pupil expenditures compared across schools within each grade span. Our analysis proceeded in four steps.

Step 1. We identified key characteristics of all schools within each case study district, including school type, grade span, Title I/non-Title I, and enrollment.

The demographics and school characteristics were obtained from the California Basic Education Data System (CBEDS) maintained by the California Department of Education (CDE). In what follows, we describe the key characteristics that we incorporated in our analysis.

- *School type.* We identified schools as traditional public, charter, special education, alternative, continuation, or other school type. Then we collapsed this into a dichotomous "traditional"/"non-traditional" variable, where "traditional" excludes all charters and other school types.
- *Grade span.* Whereas current legislation requires that LEAs use the exact grade span configurations that exist in their district if they opt to use grade span groupings to

[10] A statistical outlier is defined as a school whose expenditures out of state and local funds are outside the interquartile range—less than 25 percent of the average expenditures or greater than 75 percent of the average expenditures.

demonstrate comparability, our analysis takes a more global definition of grade spans. We classify schools as elementary (1–5), middle (6–8), or high (9–12) using the CDE data.[11]

- *Title I.* We identified the schools in each district by Title I status. The analyses for LAUSD were conducted for Title I and non-Title I schools. However, in the two smaller case study districts (PUSD and TRUSD), there was not enough variation in Title I status to allow comparisons across Title I and non-Title I schools for each schooling level. The three districts demonstrate that districts can be composed of all Title I schools, no Title I schools, and a mixture of Title I and non-Title I schools. These categorizations vary across schooling levels, and vary across the more fine-grained grade span groupings that LEAs are allowed to use for comparability calculations. Each of these three scenarios (all Title I, no Title I, combination) has implications for calculating comparability.

Step 2. We identified and categorized school-level expenditures.

We separated expenditures into the following revenue categories:

- *State and local base*: State and local base funds are those resources that the districts would use to demonstrate comparability in case they chose the per pupil expenditures metric. Therefore, our analysis mostly concentrates on this group of expenditures.
- *State and local categorical*: State and local categorical funds are those supplemental resources that meet the intent of Title I funds (such as the Economic Impact Aid program in California), and are therefore are not included in the Title I comparability calculations.
- *Title I*: Title I funds are the largest set of federal resources provided to districts, as specified under Title I legislation.
- *Other federal*: This includes all other federal funds received by the districts (e.g., Title II, Title III).

We obtained school-level fiscal data from the central offices in each of the three districts. The expenditure and funding (revenue) data included detailed school-level fiscal information with line-item records for all school-level and central district office expenditures and revenues, coded according to the California Standardized Account Code Structure (SACS). The expenditure analyses utilized the resource identifier to isolate spending supported by state and local versus federal (Title I) funding streams, and the object codes to classify spending by resource type and purpose.

We classified the funding sources of the expenditures as follows: state and local base revenues, other state and local (categorical) revenues, federal Title I, and other federal revenues. Following the federal guidance, Section 1120 A, subsections (c) and (d), we excluded the state and local categorical revenues that an LEA may exclude. These included funds that are assigned for language instruction educational programs, funds for educational services to children with disabilities, and any other fund that meets the intent and purpose of Title I funds. For example, we excluded the revenues that came from the Economic Impact Aid (EIA) program, the Quality

[11] If a school had a grade span that fell into more than one of these categories, we examined the school's enrollment by grade and classified the school according to where the majority of the students were enrolled. For example, if we had a school that had grades 1–8, and the majority of students in that school were in grades 1–6, then the school was classified as an elementary school.

Education Investment Act, special education funds, and others. See Appendix A for a comprehensive list of the classification of funds.

Then we grouped expenditures in the following five categories using the SACS structure, as required of districts for financial reporting to the state: certificated teacher compensation; classified instructional personnel (aide) compensation; pupil support, instructional support, and other staff personnel compensation; administration personnel compensation; capital outlay expenditures; and other non-personnel expenditures. For the comprehensive list of object codes associated with each of these categories in each of the three districts, see Appendix B.

Step 3. We calculated per pupil expenditures.

We calculated a per pupil rate for all expenditures that are traceable to the school site to provide a complete picture of what was being spent for an average student at each schooling level or each school, depending on the analysis. Our analysis is an exercise in understanding the access to total resources that students have in the average school, with the exception of centralized services that we could not track to individual schools. For example, some special education expenditures are accounted for at the central office level instead of the school site. The inability to track centralized services to the school site is a limitation of district data and, therefore, of our analysis.

It is important to note that certain resources such as the targeted instructional improvement block grant (TIIG) are not allocated to schools on a per pupil basis, and other resources such as Gifted and Talented Education (GATE) are targeted to certain students. Therefore, our analysis does not mirror actual district per pupil allocations.

For each district, we calculated the within-district averages for Title 1 and non-Title I schools for each of the funding sources (state or local revenues—base and categorical, Title I, or other federal), for each grade span (elementary, middle, and high). In this case, the numerator was the aggregated expenditure for each funding source by type of school and the denominator was the total school enrollment for each schooling type. Following the same logic, we calculated the per pupil expenditures out of each funding source broken out by object classification for Title I and non-Title I schools. Then, to be able to draw comparisons school by school, we calculated the per pupil expenditure for each school site. In this case, we divided the expenditures out of each funding source for each school by the school enrollment.

Step 4. We conducted descriptive and regression analyses to compare overall per pupil expenditures and state and local per pupil expenditures in Title I and non-Title I schools.

The descriptive results are presented in a series of bar charts that illustrate patterns of expenditure by funding source and, separately, by object category for each schooling level. The regression analyses were estimated for two models—one for overall expenditures and one limited to instructional expenditures. Both regression models examined the association between per pupil spending and the percentage of low income students while controlling for enrollment to understand spending across similar-sized schools. These results are presented in scatter plots to demonstrate the variation of expenditures across schools and to enable visual comparisons of schools within the same grade span and with similar percentages of poverty. In Appendix C, we present the regression equation and regression estimates for the three districts.

Findings from the quantitative analysis

This section summarizes the findings from our three sets of quantitative analyses, as described above. We conducted these analyses for each district (LAUSD, PUSD and TRUSD), and we include the graphics from all three districts in the main text. For the first analysis, we present the findings district-wide, but for the second and third analyses, we present only the elementary level results. Patterns are generally consistent across all schooling levels, but we focus on the elementary results because the greater numbers of schools at the elementary level make the patterns more apparent. The graphics for the middle and high school levels for all three districts are available in Appendix D (LAUSD), Appendix E (PUSD), and Appendix F (TRUSD). We will focus the discussion on the results for LAUSD because it is by far the largest of the three districts and it allows for comparisons between Title I and non-Title I schools across all schooling levels, but we will note general similarities and differences across the case study districts.

It is important to restate that all three districts are in compliance with the current federal comparability requirements using the student-instructional staff ratio metric. However, we examined comparability using an alternative metric: per pupil expenditures. We chose this metric because this measure may be more accurate in promoting an equal base of state and local resources across schools, and because this metric seems to be the focus of changes to the comparability provision proposed by Senator Tom Harkin and House member Chakkah Fattah in the reauthorization of ESEA.

Analysis 1. On average, how much do districts spend per pupil, overall and by revenue source?

This question looks at what is spent on the average student at each schooling level, and provides a general picture of how per pupil expenditures are being funded.

> **Our analysis indicates that Title I schools, on average, have higher total per pupil expenditures, which makes sense because they have Title I and other federal funds added to their state and local base resources.**

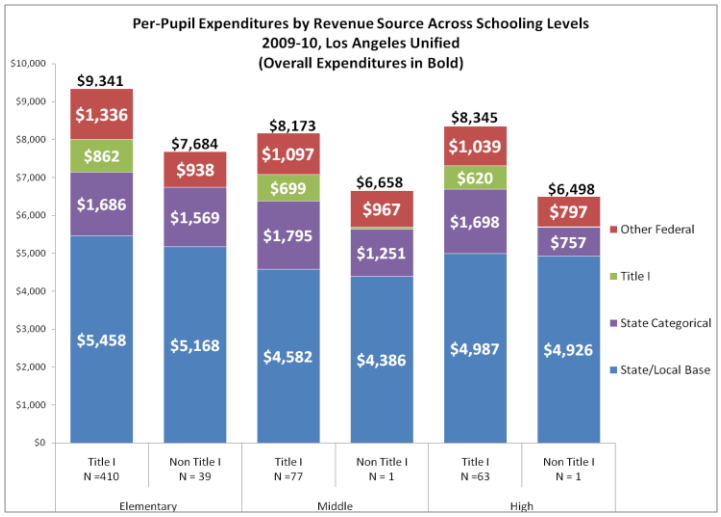
We find that the difference between overall per pupil expenditures in Title I and non-Title I schools is about 20 percent across all three schooling levels in LAUSD. For example, overall per pupil spending is $9,341 in Title I elementary schools, compared with $7,684 for non-Title I elementary schools in LAUSD. In PUSD, where only middle schools permit the Title I/non-Title I school comparison, Title I schools spend an average of about 10 percent more per pupil than their non-Title I counterparts.

> **When we focus on the state and local base resources in Exhibit 1, we find that, on average, the state and local base is similar across Title I and non-Title I schools.**

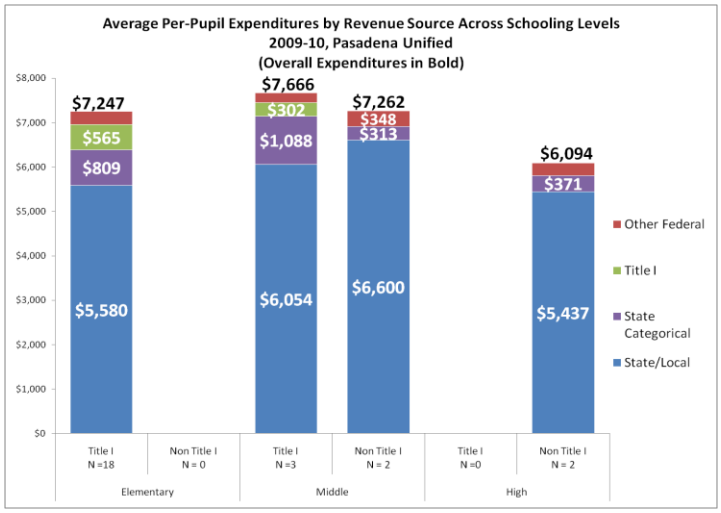
Title I elementary and middle schools in LAUSD spend on average 5 percent more out of state and local base resources than their non-Title I counterparts. Exhibit 1 suggests that LAUSD would meet the comparability requirement using average per pupil expenditures. Still, it is important to note that this graphic does not reveal the full range of variation in spending across schools in each grade span. We will address this in Exhibit 2.

Exhibit 1. Per Pupil Expenditures by Revenue Source

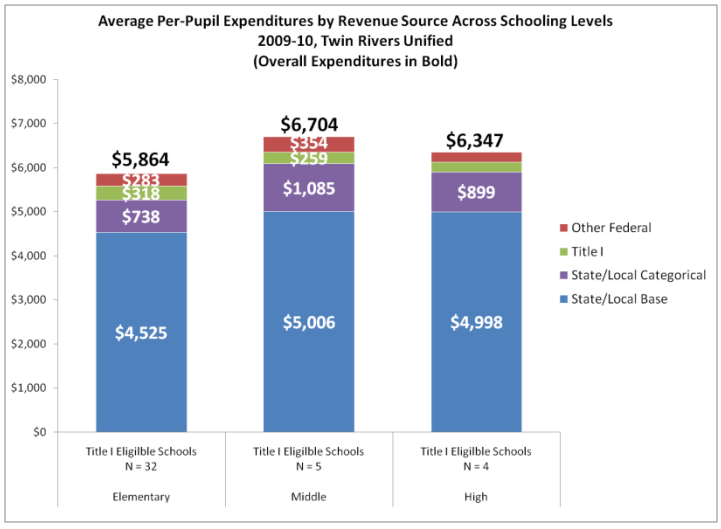
1a. LAUSD



1b. PUSD



1c. TRUSD



Analysis 2. To what extent does spending per pupil out of state and local base revenues vary across schools, by percent low-income students?

This question takes a more granular view, looking at differences across individual schools instead of focusing on average per pupil expenditures. This allows us to understand whether an equitable base of state and local funding exists across schools in each schooling level.

Exhibit 2 illustrates each school either as a green triangle for non-Title I schools or a purple square for Title I schools. We can clearly observe a divide between Title I and non-Title I schools with respect to the percentage of students eligible for the free and reduced price lunch program (FRPL); Title I schools are mostly above 40 percent FRPL.

> **Although, on average, schools with higher percentages of low-income students have higher levels of per pupil spending out of state and local base revenues, we find that at any given poverty level, there is a wide range of spending across schools in each of the three districts.**

In LAUSD, the average per pupil expenditures out of state and local base revenues for Title I schools is $5,943, but the distribution ranges from $2,533 to $20,308.[12] Non-Title I schools have a narrower, but still substantial, range of per pupil expenditures out of state and local base resources of $2,819 to $7,482. The per pupil spending out of base state and local resources in schools with roughly 90 percent low income students ranges from a low of about $3,861 to a high of $19,441 per pupil.

Another way to examine variation across schools is to select a per pupil expenditure value on the y-axis and look at the distribution of schools on the x-axis with the same expenditures. For example, there are several elementary schools in LAUSD that spent around $7,500 per pupil that have quite different percentages of students eligible for FRPL, ranging from 25 percent to above 90 percent.

Across districts and across schooling levels, there are notable differences in the variations in per pupil spending across individual schools. However, these variations are most pronounced in LAUSD.

> **Many schools fall below the 90 percent lower limit that is currently required for demonstrating comparability using a per pupil expenditure metric.**

The gray area in Exhibit 2 shows the 90–110 percent range of the average per pupil expenditures of the non-Title I schools. According to the California state non-regulatory guidelines,[13] the demonstration of compliance using per pupil expenditures out of state and local base resources (option D) requires that the average per pupil expenditures of Title I schools be between 90 and 110 percent of the average of per pupil expenditures of non-Title I schools. In practice, LEAs are mainly concerned with schools that fall below the 90 percent comparability threshold.

[12] Note that some of the lowest per pupil expenditures are have lower percentages of low income students, low percentage of English language learners, The only exception is school with the lowest per pupil expenditure, which offers kindergarten through second grade and has 97 percent of its students eligible for free and reduced price lunch.

[13] "Non-Regulatory Guidance, Title I Fiscal Issues: Maintenance of Effort Comparability Supplement not Supplant, Carryover Consolidating Funds in School Wide Programs, Grantback Requirements." Available for download at www2.ed.gov/programs/titleiparta/fiscalguid.doc

When looking at per pupil expenditures out of state and local base resources for all LAUSD elementary schools, for example, 89 schools fall below the 90 percent lower limit. This represents roughly 20 percent of the district's elementary schools.

As Exhibit 2 illustrates, most of the non-Title I schools were charter schools, so we re-ran the analysis with only "traditional schools" to exclude charter, community, alternative, and other types of schools in order to have a more comparable group of schools. In LAUSD, limiting the grade span sample to "traditional schools" reduced the non-comparable school count to 58 elementary schools that fall below the 90 percent lower expenditure band, which represents a smaller but still substantial 14 percent of the district's elementary schools.

In the case of PUSD and TRUSD, where there are only Title I schools, the per pupil expenditures out of state and local base resources of each school should be within 90 to 110 percent of the average of per pupil expenditures of all schools at the schooling level. In PUSD, there are six schools that fall below the lower comparability threshold, which represents 33 percent of PUSD elementary schools. In the case of TRUSD, there are three schools that fall below the lower band, representing 9 percent of TRUSD elementary schools.

Even after controlling for enrollment in a linear regression, there is a positive and significant relationship between state and local base spending and the percentage of low-income students in elementary and middle schools for LAUSD. In PUSD and TRUSD we do not observe a consistent relationship across schooling levels.

In PUSD and TRUSD we observe a positive relationship between state and local base expenditures and students eligible for free or reduced price lunch at elementary schools. TRUSD also seems to have a positive relationship between spending and poverty in middle schools, but there is no clear relationship for high schools. Conversely, there seems to be a negative relationship between these two factors in PUSD middle schools and there is no clear relationship for high schools.

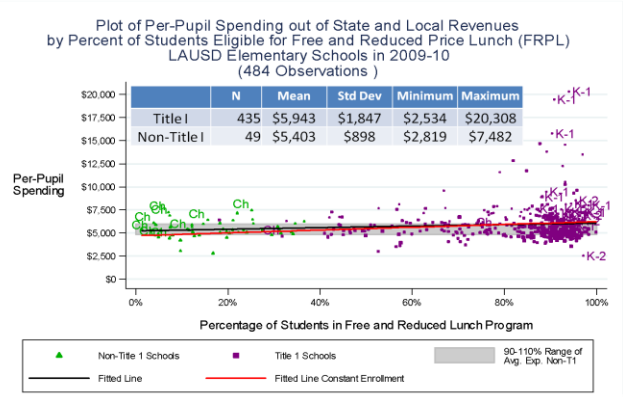
We estimated ordinary least squares regression models to examine whether state and local base per pupil expenditures significantly differed across schools, by percent low-income students. The first model was just a simple regression between spending and percent low-income students, and it is depicted by the black line in the exhibit.

The second model incorporates school size, in order to account for potential differences in administration and operation costs. This relationship is depicted with the red line in the graph. Both models reveal a positive and statistically significant relationship between spending and poverty. This finding is consistent for elementary, middle, and high schools in LAUSD. In LAUSD, this indicates an attempt to allocate more resources to schools with higher percentages of FRPL students.[14] See Appendix C for the regression equations, descriptive statistics, and regression estimates.

[14] We did not estimate the second model in PUSD and TRUSD due to the small number of schools at each schooling level.

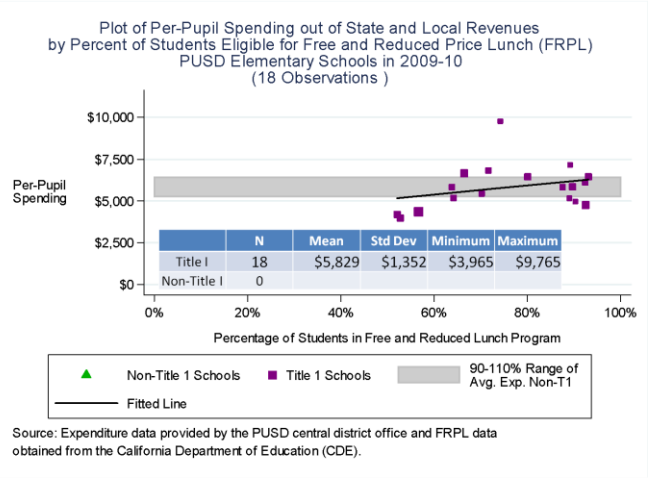
Exhibit 2. Scatter Plot of Per Pupil Expenditures by Poverty[15]

2a. LAUSD



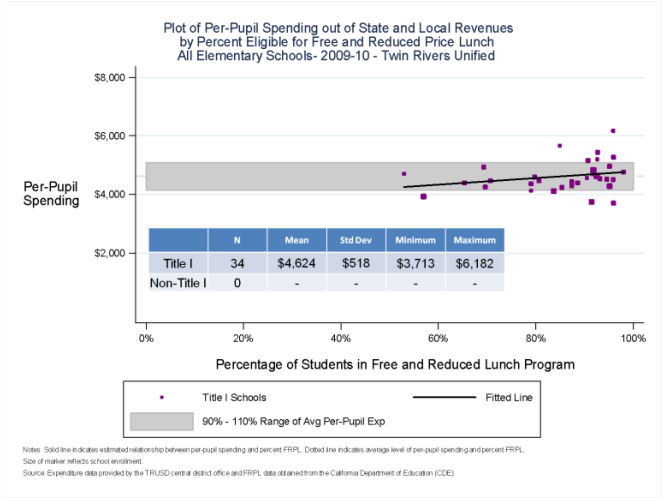
Notes: Of the total number of elementary schools in LAUSD, 73 percent are K-5; 19 percent are K-6; 3 percent are K-1; and the remaining 5 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

2b. PUSD



Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

2c. TRUSD



Notes: Solid line indicates estimated relationship between per-pupil spending and percent FRPL. Dotted line indicates average level of per-pupil spending and percent FRPL.
Size of marker reflects school enrollment.
Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).

[15] For the purposes of quickly identifying some of the outliers, we labeled schools that offered only limited grades kindergarten (K), first (K–1) and second (K–2) grades, as well as charter (CH) schools.

Analysis 3. To what extent do district instructional per pupil expenditures vary across "traditional schools," by percent poverty?

This analysis focused only on "traditional schools" and restricted the above analysis on overall per pupil expenditures to only instructional per pupil expenditures to try to mirror the student-instructional staff ratio metric that districts currently use to satisfy comparability in expenditure form.

> **When focusing on instructional spending per pupil, we find a smaller variation across schools than in overall per pupil spending. However, there is still variation in instructional expenditures across schools, and some schools still fall below the 90 percent comparability threshold.**

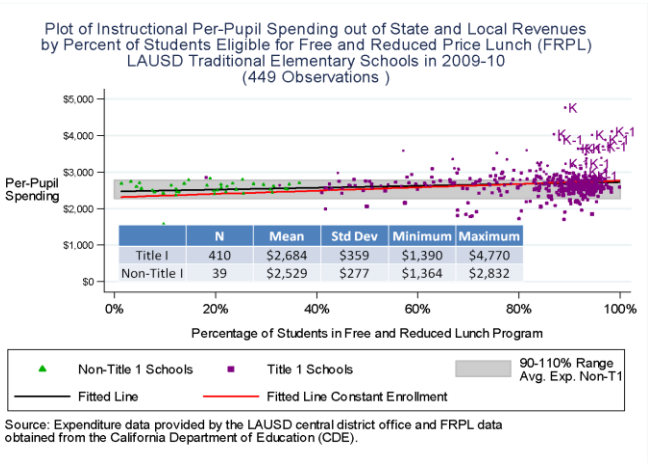
In LAUSD, the average per pupil instructional expenditure for Title I schools is $2,864, and the distribution ranges from $1,390 to $4,770. There are only 34 schools below the 90 percent band when the analysis is limited to instructional spending, representing 8 percent of traditional elementary schools. This analysis shows that most of the Title I schools have instructional expenditures per pupil that are comparable to non-Title I schools.

In PUSD, the average instructional expenditure per pupil for Title I schools is $2,488, and the distribution is also narrower than when we looked at overall expenditures out of state and local base resources. The standard deviation is $376. In PUSD, there are four schools below the lower comparability threshold, representing 22 percent of traditional elementary schools.

In TRUSD, the average instructional per pupil expenditure for Title I schools is $2,067. As with LAUSD and PUSD, the variation of per pupil expenditures decreases substantially once we only focus on instructional expenditures per pupil out of state and local base resources. However, two schools (6 percent) still fall below the lower comparability threshold. The pattern is similar in middle schools and high schools across the three districts.

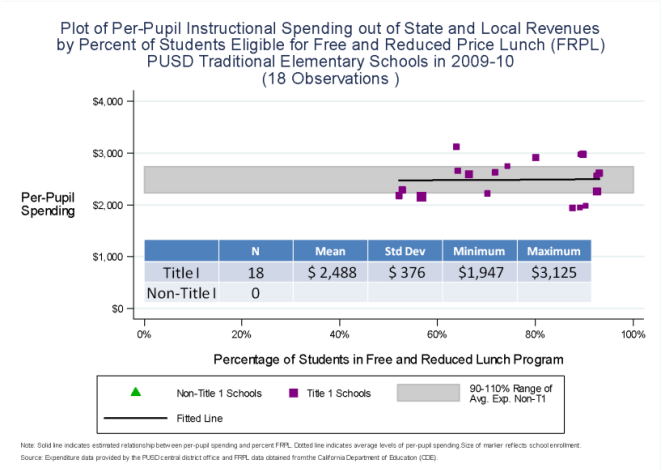
Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures by Poverty[16]

3a. LAUSD



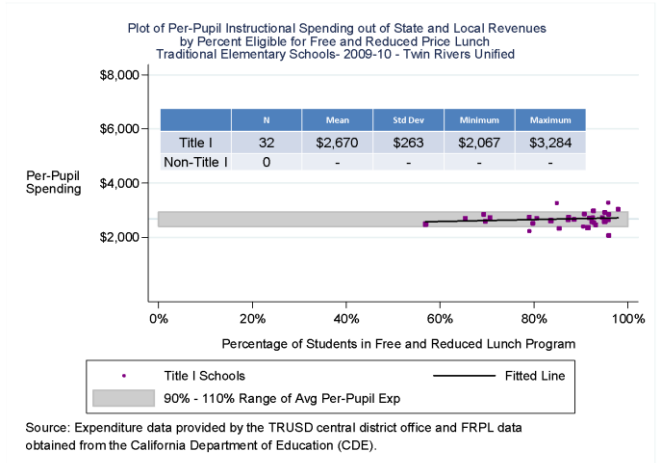
Source: Expenditure data provided by the LAUSD central district office and FRPL data obtained from the California Department of Education (CDE).

3b. PUSD



Note: Solid line indicates estimated relationship between per-pupil spending and percent FRPL. Dotted line indicates average levels of per-pupil spending.Size of marker reflects school enrollment.
Source: Expenditure data provided by the PUSD central district office and FRPL data obtained fromthe California Department of Education (CDE).

3c. TRUSD



Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).

[16] For the purposes of quickly identifying some of the outliers, we labeled schools that offered only limited grades kindergarten (K), first (K–1) and second (K–2) grades, as well as charter (CH) schools.

Quantitative findings summary

Overall, the quantitative analyses presented in this section reveal that the state and local base per pupil expenditures are similar, on average, across Title I and non-Title I schools, but individual schools deviate widely from the per pupil average. The number of schools that fall below the 90 percent comparability threshold is substantial in each of the three case study districts when we use an overall per pupil expenditure metric. Though the number of schools that fall below this threshold decreases when we focus only on instructional per pupil expenditures, it is important to note that these variations persist. Indeed, some schools may not meet the comparability threshold if and when districts are forced to shift from using student-staff ratios to using a per pupil expenditure metric in the comparability provisions being considered under the reauthorization of ESEA. The short answer to our main research question (would our three case study districts be able to use per pupil expenditures to demonstrate comparability?) is "no." Our three case study districts would not be able to demonstrate comparability using a per pupil expenditure metric.

It is important to remember that throughout these analyses, we categorized schools according to three grade spans (elementary, middle, and high), but the comparability provision of the ESEA enables smaller grade span groupings (K–1, K–2, K–3, etc.) based on the configurations that exist within an LEA. For example, Exhibits 2 and 3 illustrate that K–1 schools have higher per pupil expenditures than their other elementary counterparts, on average. This inequity is masked in the current grade span grouping allowances; our analysis by schooling level provides a more general examination of equity and demonstrates that the allowable groupings have important implications for calculating averages and identifying schools that deviate from the group average.

IV. Key District Administrators' Perspectives on Comparability

After conducting the above analyses, we presented the district-specific findings to each district in a meeting with key district staff, including members of the budget and categorical programs/Title I offices or departments. Additional participants included interested staff from the superintendent's office and from curriculum and instruction, technology, and communications departments, depending on the district. In these meetings, the district officials raised several major concerns and recommendations about our findings and the implications for their respective districts. This section presents the issues they raised as important policy considerations in the drafting of legislation and the debate about comparability and ESEA reauthorization in Congress.

> **The shift from metric flexibility, including student-instructional staff ratios, to the requirement of using per pupil expenditures to demonstrate comparability, represents a major change in federal policy.**

All three of the districts in this study stated that they try to calculate comparability using each of the available metrics, but they ultimately use student-instructional staff ratios because they cannot meet comparability requirements using the per pupil expenditure option. They were not aware of any LEAs that currently use per pupil expenditures to demonstrate comparability, illustrating the challenge and magnitude of this proposed change. As one district staff member said, "If LAUSD was required to do [a comparability] analysis based on salaries, it would require a massive redistribution of staff across the district… but we are limited by union contracts."

Officials in Pasadena expressed the same concern, stating, "If PUSD tries to equalize staff, there is the issue of union contracts that limits the district's ability to move people around."

> **Even with a shift to per pupil expenditures, district officials commented that ensuring equity is still a concern because funding amounts are an inexact proxy for staff quality.**

This concern was pervasive across the three districts. District staff members expressed a strong desire to increase equity within their districts, but they were hesitant about the assumption that moving from student-instructional staff ratios to per pupil expenditures would truly address equity. As one person commented, "It's not the dollars that's the problem, but the proxy of salaries for qualified teachers." Another official stated,

> Using staff salaries is hugely problematic. I am not convinced that the more you spend on teacher salaries is a good thing. When comparing good teachers with five years experience to not so great teachers with 30 years, who's getting the better education? Salaries are mostly driven by experience, not quality.

Another staff member said, "If salaries are equal, schools will still not be equal." And a fourth official noted, "We need to look at equity and what that really means."

> **Several district officials said that additional legislation would need to accompany a change in the comparability requirements to enable LEAs to ensure resource comparability across Title I and non-Title I schools.**

The following are some of the suggestions we heard during the meetings with the district representatives.

Comparability legislation should address teacher evaluation and effectiveness

The findings presented in this study illustrate that instructional staff salaries are not currently comparable across schools within districts, even after controlling for enrollment and the percentage of students in poverty. District officials pointed to this finding as evidence that as long as the district and individual schools cannot control the staff in their buildings and the salaries of those staff, the district is limited in its ability to ensure expenditure comparability across schools. If the comparability provision is revised to require the use of expenditures, these officials suggested that concomitant legislation that addresses bargaining agreements, salaries, evaluation, and other related teacher pay issues would be necessary levers to enable LEAs to demonstrate comparability under an expenditure requirement. As one district official commented, "There is no real correlation of having [inexperienced] staff at high poverty schools and student achievement. Until you can equate cost of teachers to their effectiveness, it is not fair to allocate based on actual teacher salaries."

A staff member in TRUSD summarized concerns expressed across all three districts, stating, "Both a pupil-based funding system and a teacher effectiveness measure are needed to achieve equity."

Comparability legislation should include penalties

One person recommended that penalties be included in the legislation to force districts to comply, explaining,

> From the legislative point of view, the penalty for non-compliance could be that a district has to give general funds to the schools that fail comparability. If a district has to use general funds to make up the marginal difference, that is a very large penalty.

This official gave the example of class size reduction in California. Districts had to do this or they lost funding for the out-of-compliance grade level multiplied by every student at that grade level, so the legislation had a higher level of compliance because the alternative was so costly. Another official added in that in the current fiscal climate, any encroachment on the general fund would be "death" to a district.

Comparability legislation should consider which sub-groupings to allow and disallow

The districts had several specific suggestions about sub-groupings that could help them demonstrate comparability in a per pupil expenditure system. First, officials in LAUSD stated that enrollment groupings mask skewed operating costs between large and small schools. As Exhibit 3 and Exhibit 4 in the quantitative findings illustrate, K–1 schools in LAUSD are clustered in a high per pupil expenditure cloud that is well above the district average, a difference that persists for schools with similar poverty levels. One LAUSD official explained,

> K–1 schools were created as a specific response for personalization. They are an educational intervention and they don't pay for themselves. LAUSD bears the

> price for them, dealing with a lot of fixed costs to administer the program. But they are popular, so they're politically difficult to close.

Using grade span groupings under the current legislation which requires LEAs to group schools by the exact configurations that exist in the district, LAUSD demonstrates comparability among K–1 schools. However, this grade span grouping is clearly spending more per pupil than elementary schools with different grade spans. A related issue that was prominent in LAUSD was small schools. One person noted, "The conversation around small schools is going to become more charged because of the new schools that are being opened." This person explained that enrollment grouping hides the higher costs of small schools.

Staff members across all three districts also debated whether "non-traditional" schools such as alternative, continuation, opportunity, and special education schools should be included in comparability calculations, or whether they should be allowed to be grouped separately. Several people raised the concern that "mixing alternative schools with traditional schools is really mixing schools together that are really different types." One PUSD official said, "Pulling out charters makes sense because they're independent. But non-traditional schools such as alternatives absolutely should be included in the comparability analysis." Another person noted, "But they should be separate, just like charters."

Comparability legislation should allow increased flexibility to help LEAs meet the per pupil expenditure requirement, not less flexibility

Several staff members across districts stated that the draft legislation eliminating the 90 to 110 percent band and setting the bar for comparability at 97 percent is "ridiculous." Referencing the move to per pupil expenditures as "huge," they recommended that flexibility such as increasing the band width for an allowable per pupil expenditure fluctuation would be necessary for LEAs to demonstrate comparability, especially given union contracts that limit how they can redistribute staff across schools, as discussed above.

A related consideration is that year by year fluctuations in percent poverty, enrollment, and other factors can have substantial implications for individual schools' funding. As one PUSD official said, "An overall factor in Pasadena is that we have open enrollment and without neighborhood schools, kids can attend a school of choice. So FRPL percentages vary from year to year at a given school." LAUSD officials explained that in 2009–10, they provided Title I funding to schools that were above 40 percent poverty in the prior year but had slipped below that in 2009–10 to allow program continuity. But they expressed the challenge of implementing such policies when there is a strict emphasis on calibrating per pupil expenditures across Title I and non-Title I schools.

Also, officials in PUSD and TRUSD said that some variance in expenditures across schools can be explained by grants going to certain schools and by carryover, which is based on specific grant allowances. They cautioned that since carryover allowances are not uniform across grants, and schools with different priorities and different student populations obtain different grants, it is difficult to anticipate how grants and carryover will affect average per pupil expenditures.

Comparability legislation should define a basic set of "core program" resources on which schools are required to demonstrate comparability, and require that those resources all be traceable to the school site

Across districts, staff members noted the importance of identifying a set of "basic" or "core" resources that every school is entitled to receive. Some specific considerations that district officials pondered in our meetings included these:

- What part of teacher salaries will be included in comparability calculations? Will per pupil expenditures be based only on teacher base salaries, or will they include benefits, incentive pay, or other salary components?
- Will special education funds be included in the per pupil rate? Currently, special education funds and services are often centralized and not traceable to the school site, so per pupil expenditure calculations by school or school type are underestimated because they exclude these costs.
- Will school-specific grants and carryover be included in the per pupil rate?

Business offices and categorical program directors have intimate knowledge of district budget categories and line items, and they expressed concerns about the costs and stress involved in figuring out the details of which specific funds to count or exclude in a per pupil calculation. They said that defining core resources would help reduce these challenges associated with shifting to use of per pupil expenditures to meet comparability.

Comparability legislation should consider exemptions for districts that demonstrate that they are working on increasing spending equity

District staff recognized the difficulty of legislating exemptions and the bureaucratic headache it could cause to monitor exempted districts, but one official felt strongly that

> Congress should figure out ways to allow districts to waive out of the comparability calculations if the district can show that it is working towards increasing equity in spending, for example by using a per pupil allocation model… Isn't that really the point [of comparability]?

V. Conclusion

The legislative language being considered under the reauthorization of ESEA represents a dramatic change in federal Title I policy, requiring the use of per pupil expenditures to demonstrate comparability instead of the current option to use student-staff ratios. If passed, this requirement would help to ensure resource equity in state and local resources across Title I and non-Title I schools within an LEA, tightening what researchers have derided as a substantial loophole that has undermined the spirit of the comparability provision.

However, the analyses presented in this report and the issues raised by these three California districts demonstrate the need for policy makers to consider the implications for districts and what legislative components are necessary to help districts meet comparability requirements in a new, per pupil expenditure system. Without careful deliberation by Congress around such proposed changes, LEAs could face the loss of Title I revenue and potential conflicts with

professional teacher associations around issues related to teacher placement that may be required to ensure compliance under a per pupil expenditure mandate. Implementation will require sufficient time for phasing in the new requirements. At the same time, to ensure that these changes have the desired impact on improving resource allocation equity, deadlines for compliance will need to be set with associated consequences.

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Appendices

Appendix A – Standardized Accounting Code Structure (SACS) Identifiers

SACS classifies expenditure revenues, expenditures, assets, liabilities, and fund balances through using the following seven identifiers:

- *Fund* – Identifies the funding source from which expenditures are paid out or in which revenues are received. Examples include: General Fund, Child Development Fund, and Cafeteria Special Revenue Fund.
- *Resource* – Used to track activities that are funded with revenues with special accounting or reporting requirements or that are legally restricted. Examples include: Unrestricted, Bilingual Education, Educational Technology, and Other Restricted Federal.
- *Goal* – Used to identify costs by instructional goals and objectives of an LEA. Goal groups costs by population, setting, and/or educational mode. Examples include: include regular education K–12, continuation schools, and migrant education.
- *Function* – Identifies activities or services performed to support or accomplish one or more goals. Examples include instruction, school administration, and pupil transportation.
- *Object* – Used to classify revenues by source/type (e.g., revenue limit sources, federal revenue, other state revenue, and contracts) and expenditures by type of commodity or service (e.g., certificated salaries, classified salaries, employee benefits, books/supplies).

Appendix A.1 – SACS Object Classification Codes

The following is the range of the SACS Object codes that will be used in the proposed analysis:

1000–1999 Certificated Personnel Salaries

2000–2999 Classified Personnel Salaries

3000–3999 Employee Benefits

4000–4999 Books and Supplies

5000–5999 Services and Other Operating Expenditures

6000–6999 Capital Outlay

Appendix B – Resource Classification according to the Object Code of the SACS

In this section we list the object that are included in each of the four resource categories: state and local base resources; state and local categorical resources; Title I resources; and other federal resources.

Appendix B.1 – SACS Object Codes Included in State and Local Base Resources

State and Local Base Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
0	Unrestricted	X	X	X
25	Unrestricted: Locally defined			X
28	Unrestricted: Locally defined			X
29	Unrestricted: Locally defined			X
31	Unrestricted: Locally defined			X
32	Unrestricted: Locally defined			X
33	Unrestricted: Locally defined			X
34	Unrestricted: Locally defined			X
36	Unrestricted: Locally defined			X
37	Unrestricted: Locally defined			X
39	Unrestricted: Locally defined			X
49	Unrestricted: Locally defined			X
53	Unrestricted: Locally defined			X
54	Unrestricted: Locally defined			X
55	Unrestricted: Locally defined			X
59	Unrestricted: Locally defined			X
60	Unrestricted: Locally defined			X
61	Unrestricted: Locally defined			X
62	Unrestricted: Locally defined			X
284	Unrestricted: Locally defined			X
290	Unrestricted: Locally defined			X
410	Unrestricted: Locally defined			X
470	Unrestricted: Locally defined			X
480	Unrestricted: Locally defined			X
601	Unrestricted: Locally defined			X
1000	Unrestricted Resources: Reporting or Special Accounting Required		X	
1100	Lottery: Unrestricted		X	X
6010	After School Education and Safety (ASES)	X	X	X
6060	Child Development: State General Child Care, Center-based	X	X	
6080	Child Development: Extended Day Care (Latchkey)	X		
6200	Class Size Reduction Facilities Funding	X		

State and Local Base Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
6205	Deferred Maintenance Apportionment (09–10)	X	X	
6258	Physical Education Teacher Incentive Grants (08-09)	X		
6262	Pre-Internship Teaching Program (CTC) (08-09)	X		
6300	Lottery: Instructional Materials			X
6340	Parent/Teacher Involvement: Nell Soto Program (08-09)	X		
6350	ROC/P Apportionment (08-09)	X		
6377	Career Technical Education Equipment (08-09)	X		
6378	California Health Science Capacity Building Project	X		
6385	Governor's CTE Initiative: California Partnership Academies	X	X	X
6386	California Partnership Academies: Green and Clean Academies	X		
6390	Adult Education Apportionment (09–10)	X		
6660	Tobacco-Use Prevention Education: Elementary Grades 4-8	X		
6670	Tobacco-Use Prevention Education: Grades Nine through Twelve	X		
6760	Arts and Music Block Grant (08-09)	X		
6761	Art, Music, and Physical Education Supplies and Equipment (08-09)	X		
7010	Agricultural Vocational Incentive Grants	X		
7026	California Instructional School Garden (08-09)	X		
7101	Education Technology: Digital High School Staff Development and Support (08-09)	X		
7110	Education Technology: CTAPS, SETS, & Supplementary Grants (08-09)	X		
7120	Education Technology: Staff Development (08-09)	X		
7140	Gifted & Talented Education (GATE) (08-09)	X		
7156	Instructional Materials Realignment, IMFRP (AB 1781) (09–10)	X		
7220	Partnership Academies Program	X	X	X
7230	Transportation: Home to School	X		
7271	California Peer Assistance & Review Program for Teachers (CPARP) (08-09)	X		
7294	Staff Development: Mathematics & Reading (AB 466) (08-09)	X		
7295	Staff Development: Reading Services for Blind Teachers (08-09)	X		
7392	Teacher Credentialing Block Grant (08-09)	X		
7393	Professional Development Block Grant (08-09)	X	X	
7394	Targeted Instructional Improvement Block Grant (08-09)	X	X	
7395	School and Library Improvement Block Grant (08-09)	X	X	

State and Local Base Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
7396	Discretionary Block Grant - School Site (08-09)	X		
7710	State School Facilities Projects	X		
7810	Other State	X		
8150	Ongoing & Major Maintenance Account (RMA: Education Code Section 17070.75)	X		X
9000	Other Local Grant		X	
9001	Culinary Arts Academy / Tuberculosis Grant / Safe & Drug Free		X	
9004	LEARNS Parent Fees / Puente Program / Washington Mutual / Queenscare		X	
9008	Community Donor Hamilton / UPT Leave		X	
9009	Rose Bowl Aquatic / Ed Vision PEF / Foothill Community Challenge Grant		X	
9010	Other Local	X		X
9021	Microsoft Reimbursement		X	
9039	Other Restricted Local: Locally Defined			X
9050	Civic Center Permits / Child Dev - Local Resources		X	
9051	Other Restricted Local: Locally defined*		X	
9060	PEF		X	
9305	Other Restricted Local: Locally Defined			X
9323	Other Restricted Local: Locally Defined			X
9500	Other Restricted Local: Locally defined		X	
9501	Other Restricted Local: Locally defined		X	
9502	Other Restricted Local: Locally defined		X	
9503	Other Restricted Local: Locally defined		X	
9504	Other Restricted Local: Locally defined		X	
9505	Other Restricted Local: Locally defined		X	
9506	Other Restricted Local: Locally defined		X	
9507	Other Restricted Local: Locally defined		X	
9508	Other Restricted Local: Locally defined		X	
9509	Other Restricted Local: Locally defined		X	
9511	Other Restricted Local: Locally defined		X	
9516	Other Restricted Local: Locally Defined			X
9635	Other Restricted Local: Locally defined		X	

Appendix B.2 – SACS Object Codes Included in State and Local Categorical Resources

State and Local Categorical Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
2200	Continuation Education (Education Code sections 42244 and 48438)	X	X	X
2430	Community Day Schools	X		X
6055	Child Development: State Preschool	X	X	
6225	Emergency Repair Program, Williams Case	X	X	
6240	Healthy Start: Planning Grants and Operational Grant	X	X	X
6250	Early Mental Health Initiative (EMHI) (Department of Mental Health	X		
6286	English Language Acquisition Program, Teacher Training & Student Assistance	X	X	X
6287	English Language Learner Acquisition and Development Pilot		X	
6330	School Community Policing Partnerships (08-09)	X		
6405	School Safety & Violence Prevention, Grades 8-12 (08-09)	X		
6500	Special Education	X	X	X
6520	Special Ed: Project Workability I LE			X
7055	CA High School Exit Examination Intensive Instruction and Services (09–10)	X	X	
7080	Supplemental School Counseling Program (08-09)	X	X	
7090	Economic Impact Aid (EIA	X	X	X
7091	Economic Impact Aid: Limited English Proficiency (LEP	X		X
7130	Early Intervention for School Success (EISS) (06-07)	X		
7240	Transportation: Special Education (SH/OH) Education Code sections 41850-41851.	X		
7255	Immediate Intervention/Underperforming Schools Program (08-09)	X		
7256	II/USP: SAIT Corrective Action Grant (08-09)	X		
7258	High Priority Schools Grants Program (08-09)	X		
7260	School Improvement Program (SIP) (06-07)	X		
7268	High Priority Schools: SAIT and Corrective Action (08-09)	X		
7370	Supplementary Programs-Specialized Secondary (08-09)	X		
7390	Pupil Retention Block Grant (08-09)	X	X	
7391	School Safety Consolidated Competitive Grant	X		
7400	Quality Education Investment Act	X	X	X
9030	MAA Reimbursement / ARRA Obesity Prevention		X	
9070	Webster Fndn for MS Reform / Advance Path Academy		X	

Appendix B.3 – SACS Object Codes Included in Title I Resources

Title I Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
3010	NCLB-Title I, Part A, Basic Grants Low Income and Neglected	X	X	X
3011	NCLB: ARRA Title I, Part A, Basic Grants Low Income and Neglected	X	X	X
3013	NCLB-Title I, Part A, Program Improvement SAIT Corrective Action Plans	X*		
3025	NCLB-Title I Part D, Local Delinquent Programs	X*		
3030	NCLB-Title I Part B, Reading First Program	X*	X	X
3180	NCLB: Title I, School Improvement Grant	X*	X	
3181	NCLB: ARRA Title I, School Improvement Grants			X
3185	NCLB: Title I, Part A, Program Improvement LEA Corrective Action Resources	X*		X

Note: * We included these resources in other federal following LAUSD guidance.

Appendix B.4 – SACS Object Codes Included in Other Federal Resources

Other Federal Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
3200	ARRA: State Fiscal Stabilization Fund	X	X	
3310	Special Ed: IDEA Basic Local Assistance Entitlement, Part B, Sec 611 (formerly PL 94-142)	X	X	X
3313	Special Ed: ARRA IDEA Part B, Sec 611, Basic Local Assistance	X	X	X
3315	Special Ed: IDEA Preschool Grants, Part B, Sec 619	X	X	X
3319	Special Ed: ARRA IDEA Part B, Sec 619, Preschool Grants		X	
3320	Special Ed: IDEA Preschool Local Entitlement, Part B, Sec 611		X	X
3324	Special Ed: ARRA IDEA Part B, Sec 611, Preschool Local Entitlement	X		
3385	Special Ed: IDEA Early Intervention Grants	X		
3550	Vocational Programs: Voc & Appl Tech Secondary II C, Sec 131 (Carl Perkins Act)	X		X
3710	NCLB: Title IV, Part A, Drug Free Schools	X		X
4035	NCLB: Title II, Part A, Teacher Quality	X		X
4046	NCLB: Title II, Part D, Enhancing Education Through Technology, Competitive Grants			X
4050	NCLB: Title II, Part B, CA Mathematics and Science Partnerships	X		

Other Federal Resources				
Resource Code	**Description**	**LAUSD**	**PUSD**	**TRUSD**
4110	NCLB: Title V, Part A: Innovative Education Strategies (09–10)	X		
4124	NCLB: Title IV, Part B, 21st Century Community Learning Centers Program	X	X	
4203	NCLB: Title III, Limited English Proficiency (LEP) Student Program	X	X	X
4216	Refugee Children Supplemental Assistance Program			X
4230	Bilingual Education: Discretionary Grants, Title III	X		
4510	Indian Education	X		
5310	Child Nutrition: School Programs (e.g. School Lunch, School Breakfast, Milk, Pregnant & Lactating Students	X		
5320	Child Nutrition: Child Care Food Program (CCFP) Claims-Centers and Family Day Care Homes (Meal Reimbursements)	X		
5330	Child Nutrition: Summer Food Service Program Operations	X		
5340	Child Nutrition: CCFP Cash in Lieu of Commodities	X		
5454	Child Nutrition: Team Nutrition	X		
5575	Calserve: Learn & Serve America	X		
5640	Medi-Cal Billing Option	X		X
5650	FEMA Public Assistance Funds	X		
5810	Other Federal	X		X
5812	Other Federal		X	
5843	Other Federal: Locally Defined			X
5871	Other Federal: Locally Defined			X

Appendix C – Ordinary Least Square Regression Model

We estimated a linear regression of overall and instructional per pupil expenditures out of base state and local revenues controlling for poverty level at the elementary schooling in all three districts. In the case of LAUSD, we also estimated the model for middle and high schooling levels. Additionally, another linear regression model was estimated for LAUSD where we took into account school size, allowing us to control for economies of scale. The models estimated were:

1) $PerPupilExp_s = \alpha + \beta FRL_s + \varepsilon_s$ (LAUSD All Levels, PUSD and TRUSD elementary)

2) $PerPupilExp_s = \alpha + \beta FRL_s + \varphi ENR_s + \gamma ENR_s^2 + \varepsilon_s$ (LAUSD All Levels)

Where,

PerPupilExp = Overall or Instructional per pupil expenditure at the school level supported by state and local (base) revenues[17]

FRL = School percent of students eligible for free or reduced price lunch, which will be our measure of low income students or poverty

ENR = Total school enrollment

ε = Random error term assumed to be independently and identically distributed across schools

s = Subscript indicating index of elementary, middle or high school

[17] This analysis focuses on only those dollars that can be tracked to the school site. Central office expenditures that benefit schools are not included in these analyses.

Appendix C.1 –Summary Statistics LAUSD (traditional schools)

LAUSD Elementary

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	449	$5,645	$1,079	$2,534	$10,254
Instructional per pupil exp. (state and local base funds)	449	$2,671	$355	$1,364	$4,770
FRPL	449	79%	23%	1%	100%
Enrollment	449	632	287	125	2,485

LAUSD Middle

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	78	$4,707	$870	$3,068	$7,613
Instructional per pupil exp. (state and local base funds)	78	$1,859	$244	$1,191	$2,339
FRPL	78	77%	15%	31%	96%
Enrollment	78	1,623	518	420	3,034

LAUSD High

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	64	$5,020	$1,016	$3,516	$9,145
Instructional per pupil exp. (state and local base funds)	64	$1,930	$263	$1,322	$2,927
FRPL	64	74%	14%	24%	95%
Enrollment	64	2,287	1,194	238	4,503

Appendix C.2 –Summary Statistics PUSD (traditional schools)

PUSD Elementary

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	18	$5,829	$1,352	$3,965	$9,765
Instructional per pupil exp. (state and local base funds)	18	$2,488	$376	$1,947	$3,125
FRPL	18	76%	15%	52%	93%
Enrollment	18	476	213	241	1,141

PUSD Middle

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	5	$6,774	$2,686	$4,297	$11,230
Instructional per pupil exp. (state and local base funds)	5	$2,495	$166	$2,251	$2,654
FRPL	5	76%	11%	63%	91%
Enrollment	5	920	514	538	1,779

PUSD High

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	2	$5,895	$40	$5,867	$5,923
Instructional per pupil exp. (state and local base funds)	2	$2,304	$263	$2,118	$2,490
FRPL	2	71%	14%	62%	81%
Enrollment	2	1,610	729	1,094	2,125

Appendix C.3 –Summary Statistics TRUSD (traditional schools)

TRUSD Elementary

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	32	$4,615	$533	$3,713	$6,182
Instructional per pupil exp. (state and local base funds)	32	$2,685	$273	$2,067	$3,284
FRPL	32	86%	10%	57%	98%
Enrollment	32	449	128	289	875

TRUSD Middle

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	5	$5,067	$473	$4,471	$5,657
Instructional per pupil exp. (state and local base funds)	5	$2,373	$103	$2,197	$2,464
FRPL	5	88%	7%	78%	97%
Enrollment	5	566	102	456	723

TRUSD High

	Observations	Mean	Standard Deviation	Min	Max
Overall per pupil exp. (state and local base funds)	4	$5,049	$403	$4,712	$5,623
Instructional per pupil exp. (state and local base funds)	4	$2,629	$74	$2,531	$2,692
FRPL	4	73%	12%	63%	89%
Enrollment	4	1,668	351	1,346	2,009

Appendix C.4 –OLS Estimates for Overall and Instructional Per Pupil Expenditures out of state and local base resources in LAUSD (traditional schools)

Elementary

VARIABLES	Overall S&L Poverty	Overall S&L + Enrollment	Instructional Poverty	Instructional S&L + Enrollment
FRPL	507.57**	1,191.34***	257.29***	455.58***
	(220.62)	(179.35)	(72.10)	(61.08)
Enrollment		-4.92***		-1.62***
		(0.40)		(0.14)
Enrollment squared		0.00***		0.00***
		(0.00)		(0.00)
Constant	5,245.40***	6,999.43***	2,468.31***	3,040.34***
	(180.76)	(195.80)	(59.08)	(66.68)
Observations	449	449	449	449
R-squared	0.01	0.39	0.03	0.35

Middle

VARIABLES	Overall S&L Poverty	Overall S&L + Enrollment	Instructional Poverty	Instructional S&L + Enrollment
FRPL	1,617.57**	1,445.43**	700.67***	659.00***
	(632.14)	(562.42)	(166.06)	(162.86)
Enrollment		-2.20***		-0.51**
		(0.75)		(0.22)
Enrollment squared		0.00**		0.00**
		(0.00)		(0.00)
Constant	3,455.77***	5,926.36***	1,316.83***	1,799.71***
	(498.23)	(813.74)	(130.88)	(235.63)
Observations	78	78	78	78
R-squared	0.08	0.30	0.19	0.25

High

VARIABLES	Overall S&L Poverty	Overall S&L + Enrollment	Instructional Poverty	Instructional S&L + Enrollment
FRPL	328.88	786.48	403.42*	114.18
	(916.60)	(913.06)	(231.63)	(206.17)
Enrollment		0.97**		-0.31***
		(0.39)		(0.09)
Enrollment squared		-0.00***		0.00**
		(0.00)		(0.00)
Constant	4,776.69***	3,867.27***	1,630.47***	2,238.96***
	(692.32)	(871.35)	(174.95)	(196.75)
Observations	64	64	64	64
R-squared	0.00	0.13	0.05	0.34

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix C.5 –OLS Estimates for Overall and Instructional Per Pupil Expenditures out of state and local base resources in PUSD (traditional schools)

Elementary

VARIABLES	Overall S&L Poverty	Instructional Poverty
FRPL	2,722.33	46.78
	(2,206.41)	(642.74)
Constant	3,747.22**	2,452.25***
	(1,716.11)	(499.92)
Observations	18	18
R-squared	0.09	0.00

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix C.6 –OLS Estimates for Overall and Instructional Per Pupil Expenditures out of state and local base resources in TRUSD (traditional schools)

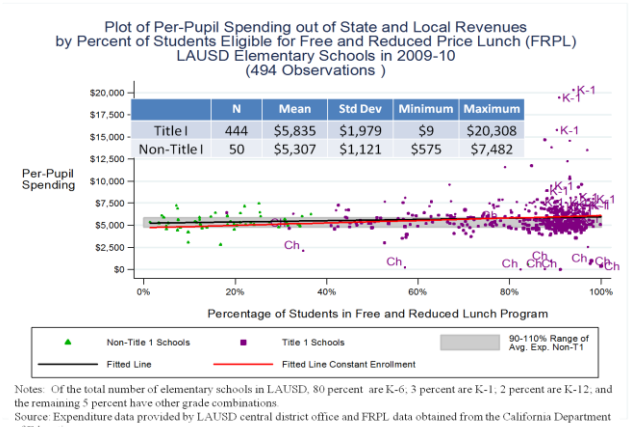
Elementary

VARIABLES	Overall S&L Poverty	Instructional Poverty
FRPL	1568.969	334.503
	(891.899)	(459.367)
Constant	3,265.888**	2381.512**
	(775.124)	(399.223)
Observations	32	32
R-squared	0.093	0.017

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

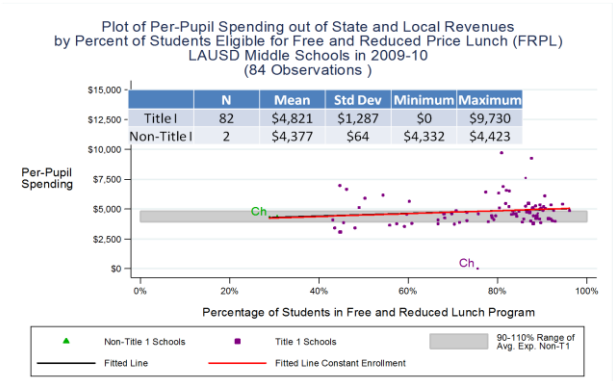
Appendix D – LAUSD Graphs

Graph D1. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Elementary Schools in LAUSD



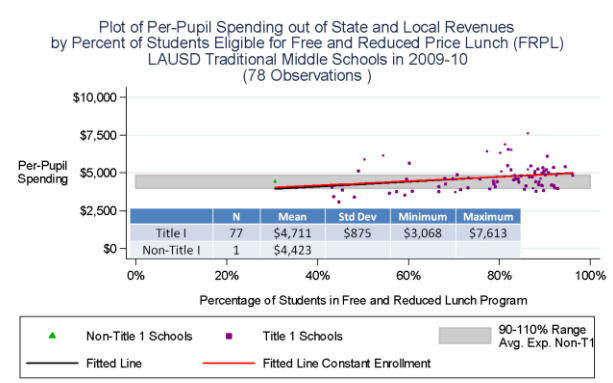
Notes: Of the total number of elementary schools in LAUSD, 80 percent are K-6; 3 percent are K-1; 2 percent are K-12; and the remaining 5 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

Graph D2. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Middle Schools in LAUSD



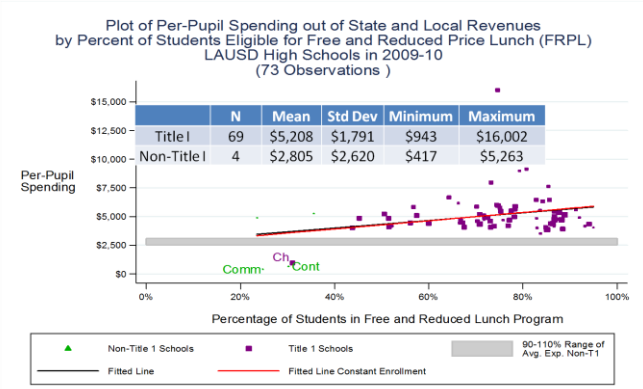
Note: Of the total number of middle schools in LAUSD, 44 percent are 5-8; 16 percent are 6-8; 10 percent 4-8; and the remaining 30 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

Graph D3. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Traditional Middle Schools in LAUSD



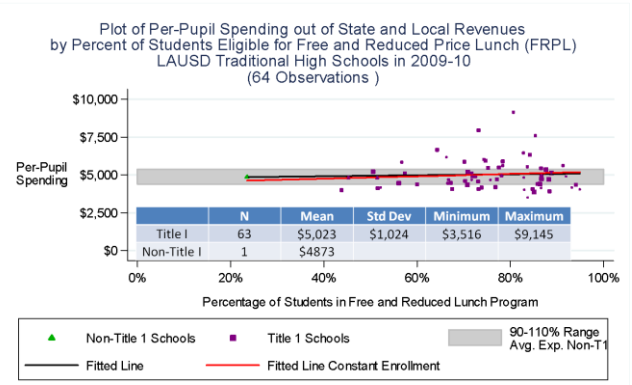
Note: Of the total number of middle schools in LAUSD, 46 percent are 5-8; 18 percent are 6-8; 12 percent are 4-8; and the remaining 30 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

Graph D4. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for High Schools in LAUSD



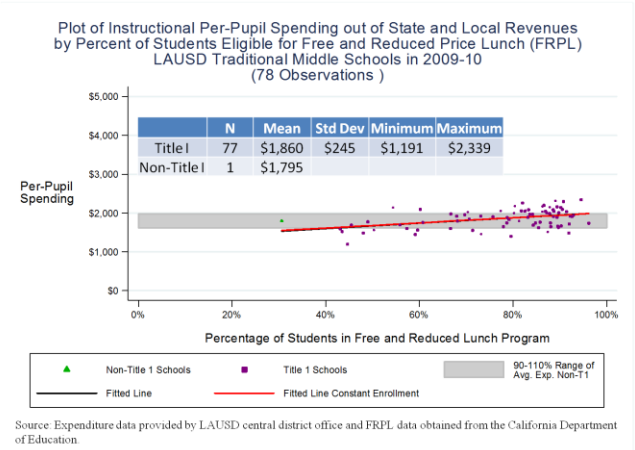
Note: Of the total number of high schools in LAUSD, 47 percent are 8-12; 18 percent are 7-12; 24 percent are 9-12; and the remaining 10 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

Graph D5. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Traditional High Schools in LAUSD



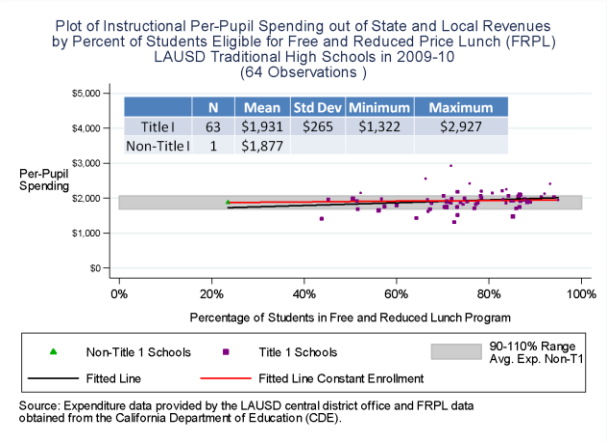
Note: Of the total number of high schools in LAUSD, 53 percent are 8-12; 21 percent are 7-12; 13 percent are 9-12; the remaining 15 percent have other grade combinations.
Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

Graph D6. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional Middle Schools in LAUSD



Source: Expenditure data provided by LAUSD central district office and FRPL data obtained from the California Department of Education.

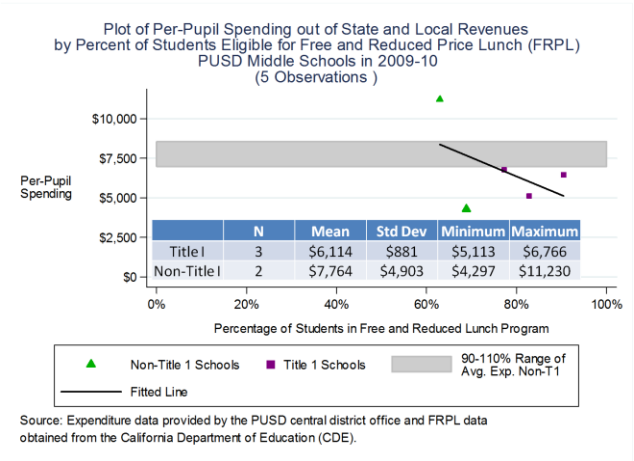
Graph D7. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional High Schools in LAUSD



Source: Expenditure data provided by the LAUSD central district office and FRPL data obtained from the California Department of Education (CDE).

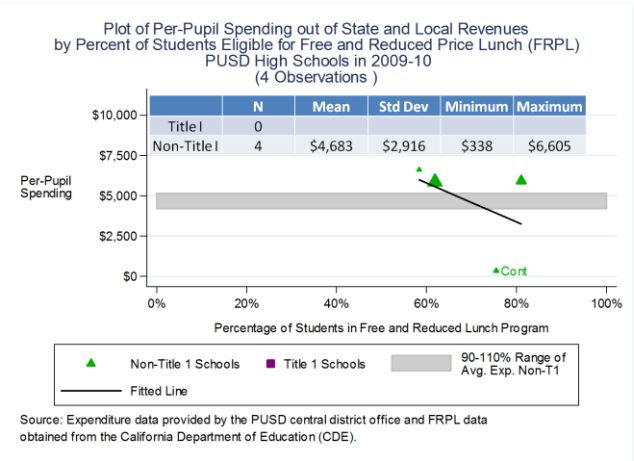
Appendix E – PUSD Graphs

Graph E1. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Middle Schools in PUSD



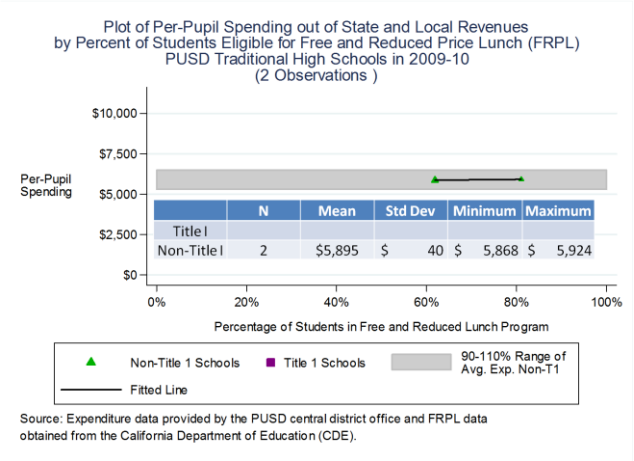
Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph E2. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for High Schools in PUSD



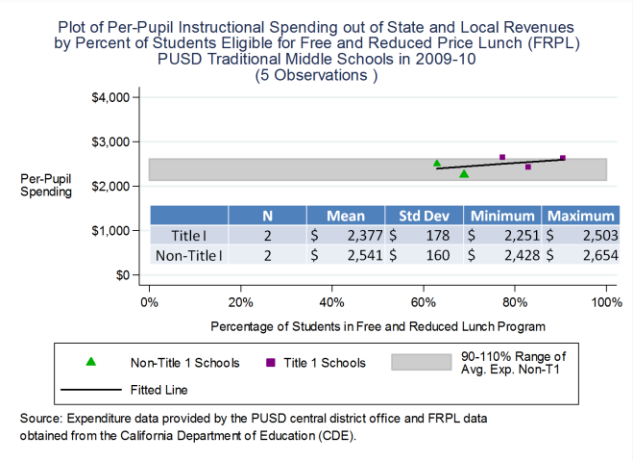
Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph E3. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Traditional High Schools in PUSD



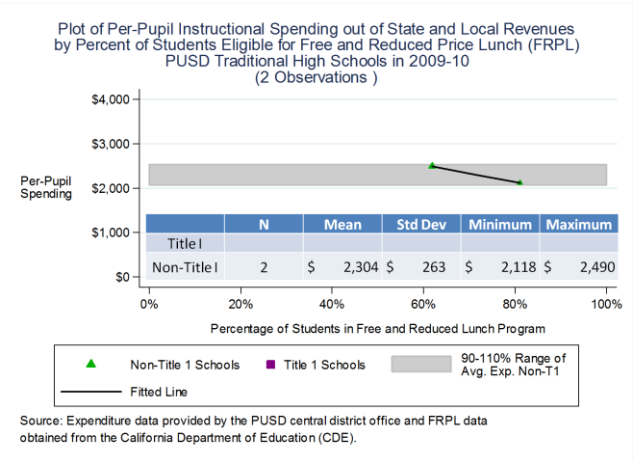
Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph E4. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional Middle Schools in PUSD



Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

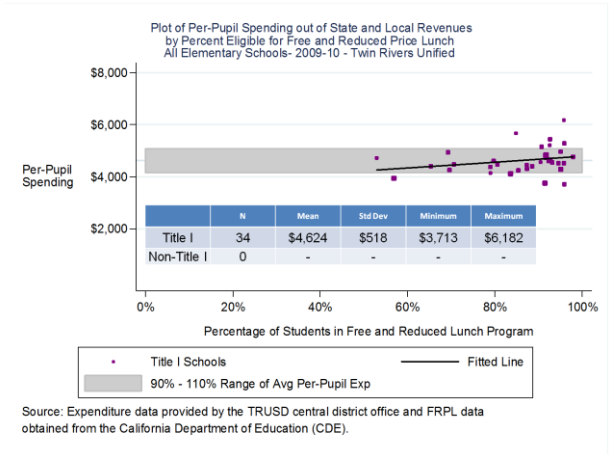
Graph E5. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional High Schools in PUSD



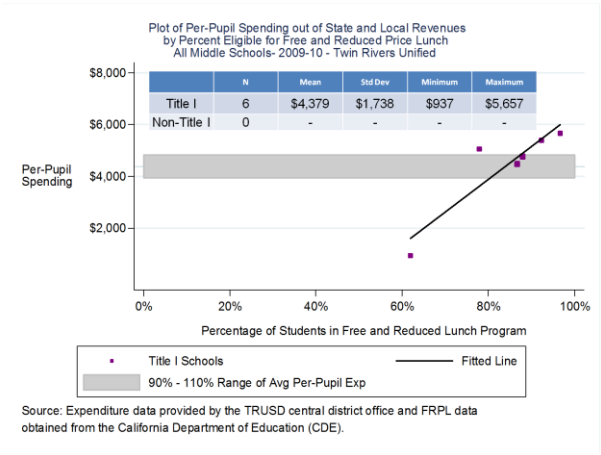
Source: Expenditure data provided by the PUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Appendix F – TRUSD Graphs

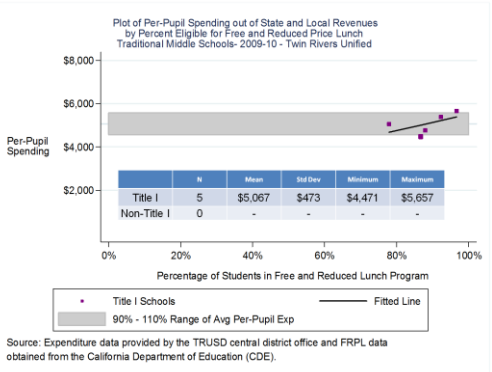
Graph F1. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Elementary Schools in TRUSD



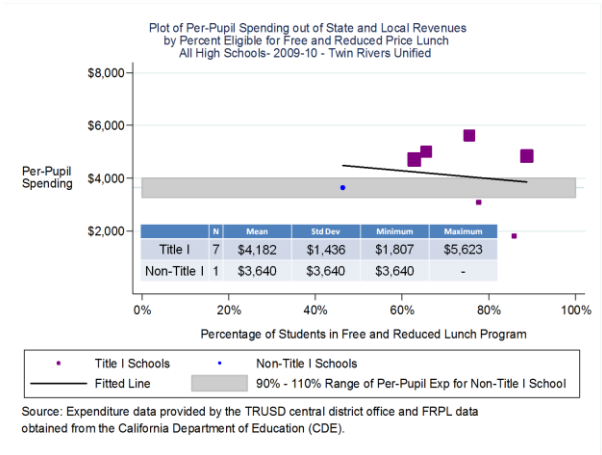
Graph F2. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Middle Schools in TRUSD



Graph F3. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Traditional Middle Schools in TRUSD

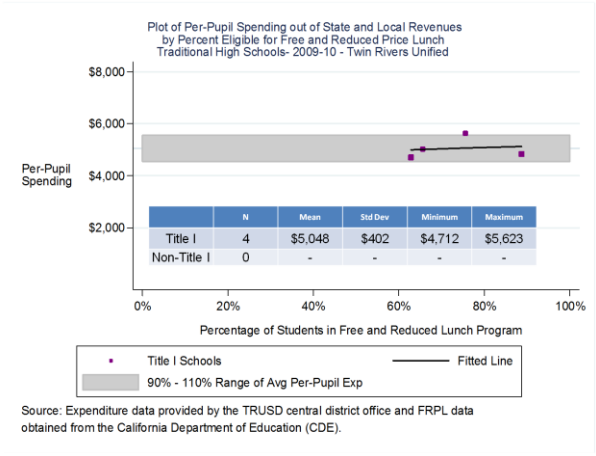


Graph F4. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for High Schools in TRUSD



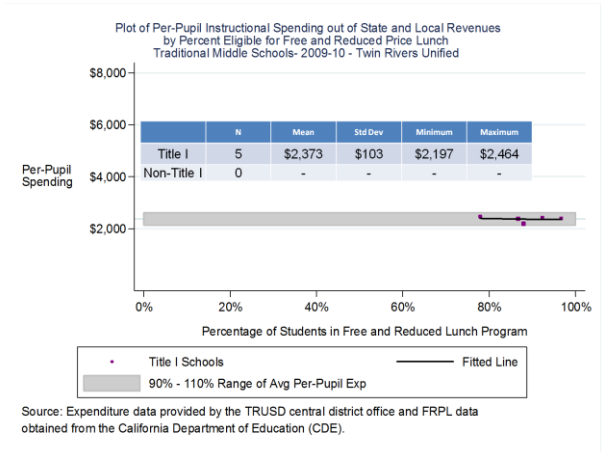
Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph F5. Relates to Exhibit 2. Scatter Plot of Per Pupil Expenditures and Poverty for Traditional High Schools in TRUSD



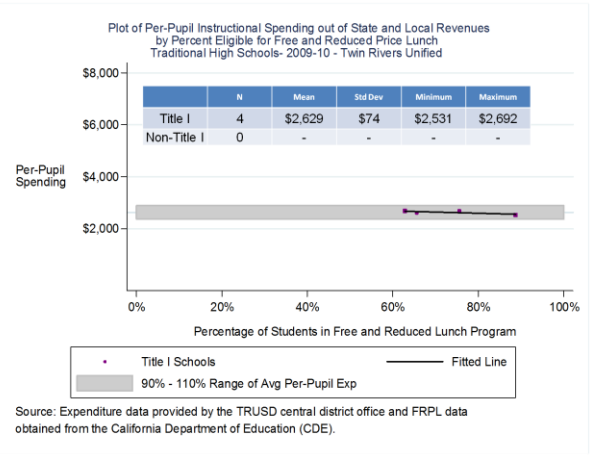
Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph F6. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional Middle Schools in TRUSD



Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).

Graph F7. Relates to Exhibit 3. Scatter Plot of Instructional Per Pupil Expenditures and Poverty for Traditional High Schools in TRUSD



Source: Expenditure data provided by the TRUSD central district office and FRPL data obtained from the California Department of Education (CDE).