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Instruction Manual for the PPIC School Finance Model

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Summary

This document provides instructions for downloading a series of Excel worksheets that will enable users to calculate the distribution of state revenues within their particular school districts, based upon user-defined proposals intent upon providing more flexibility in the allocation of state funding.

Contents

Tables

Abbreviations

ADA	Average daily attendance
API	Academic Performance Index
CALPADS	California longitudinal pupil achievement data system
CBEDS	California basic educational data system
CDE	California Department of Education
CDS	County-district-school identifying code
COE	County office of education
EIA	Economic Impact Aid
EL	English learner
LEA	Local education agency
JPA	Joint-powers agreement
MSA	Metropolitan statistical area
NPS/LCI	Nonpublic school or licensed children's institution
NSS	Necessary small school
PPIC	Public Policy Institute of California
ROCP	Regional occupational center or program
RWI	Regional wage index
SACS	Standard account code structure
SELPA	Special education local plan area

Introduction

This Excel workbook simulates the effect of alternative funding formulas for allocating state revenue to California school districts. To simulate a formula, you input parameters on two worksheets: "1. Programs" and "2. Funding Formula." The results for individual school districts are displayed on the worksheet under "Calculations" and "Saved Results." The seven worksheets—"Out1" though "Out7"—display various tables and graphs that summarize the revenue distribution before and after your formulas have been applied. This output allows you to compare the distribution of revenue under the current system to the distribution of revenue under your newly created formulas.

In addition to simulating various funding formulas, the "Data" tab of this workbook provides the revenue that each school district received in state revenue programs for 2010–11. Local and federal revenue from 2009–10 is also provided there. PPIC's California School Finance Revenue Manual provides detailed descriptions of each of the programs that existed in 2005–06. Information on programs enacted since 2005–06 can be located at the California Department of Education.

In constructing the simulation model, we assumed that users would be reasonably familiar with Microsoft Excel. If you have comments or suggestions about changes to this model, please email them to schoolfinance@ppic.org.

The prior version of this model accompanies the PPIC Occasional Papers Funding Formulas for California Schools: Simulations and Supporting Data and Funding Formulas for California Schools II: An Analysis of a Proposal by the Governor's Committee on Education Excellence.

Before You Begin

You must download the Excel file from www.ppic.org and enable macros to run on your computer.

Yellow, orange, and green cells indicate places where you can enter your choices.

Warnings and error messages will appear in orange and red.

Throughout the workbook, comments with directions and notes are indicated by little red triangles in the upper corner of certain cells. Positioning your mouse over the cell will display the comment.

The worksheets are locked, so you can only alter cells that we have permitted you to access. This is to prevent users from inadvertently altering formulas. Users can unprotect the sheets. There is no password.

This model is a work in progress. As more people test it, we will update it as necessary.

Instructions

This model was originally constructed to compare school district funding under new proposals by Bersin, Kirst, and Liu (2008) and the Governor's Committee on Education Excellence (2007) to the funding schools receive under the current system. Both sets of new proposals essentially consolidate more than 60 funding programs into just three and then allocate those in a more transparent way. This method of consolidating and reallocating is what drives this simulation model.

Step 1: Define New Programs

Begin at the tab "1. Programs."

Column B lists state programs in which funding is currently allocated. Your goal is to consolidate those 79 funds into a maximum of five new program areas. Detailed descriptions of the current program funds are available in PPIC's California School Finance Revenue Manual.

In row 4, you can label your five new program areas with names.

In the column under each new program, enter a "1" in the row corresponding to each old fund you want to include in that new program. As an example, we have created three programs that correspond to Governor Brown's proposal (2012). There is a base program, a special education program, and a program we call "excluded," which contains the programs that are not included in the governor's proposal. However, you are free to change these.

Row 5 displays the current statewide average spending ($/ADA) in each of the new program areas based on the user's allocation of funds. This total updates as each original fund is assigned to a new program.

Column C shows the current statewide average spending ($/ADA) in each of the original programs.

The purpose of consolidating the current funds into new programs is twofold:

1. You will be able to see how much total money is spent in the funds you are consolidating into a new program area (and for which you will be defining a new formula for distributing in the next step). This will allow you to compare the current funding to new funding in the new program areas you design.
2. You will be able to build in a set of hold-harmless provisions when you define your new formulas in the next step. For example, you may want to define a group of categorical funds as compensatory programs and then ensure that your new compensatory funding formula provides at least as much revenue to districts as they receive from the current funds you have defined as compensatory.

You can put all current funds in one new program and apply a hold-harmless condition to the sum. You also have the option of not applying a hold-harmless condition. You will be asked about hold-harmless conditions when you enter your formulas on the tab, "2. Funding Formula."

Only state funds (and local property taxes that fund revenue limits) that support K–12 services and programs can be used in a new funding formula. Most of these funds fall under the Proposition 98 guarantee, although some do not and other Proposition 98 funds are excluded. The program does not allow you to change funding formulas for federal funds or local funds. However, federal and local funding is

included on the data page and some output pages for those who are interested. We also exclude funds for capital expenses (such as school construction) and child development.

If you assign a current fund to more than one new program area, you will receive an error message in Column J. The Excel program will still run, but the original funding levels and the comparisons to the original funding levels in the output will be meaningless. The individual program comparisons on OUT1, OUT2, and OUT7 may provide useful comparisons for advanced users.

You can omit current funds from your new programs. In this case, the output data will omit those funds from the calculations of original revenue.

Step 2: Define New Funding Formulas

After you have assigned the current funds to your five new program areas, go to the tab, "2. Funding Formula."

Enter New Funding Formulas

In the yellow cells, enter the funding formula for each of your new program areas. The formula must be written using Excel syntax and must be preceded by an equal sign (=). You can use various school and student characteristics when entering your formula. These variable names are listed on the bottom half of the Excel worksheet and in Table 1 below. For each new program area, the formula should describe the total funding you want, not the per-pupil amount. Table 2 provides examples of formulas. As a starting point, the Excel file contains a formula that creates one program that provides each district with $6,000 per ADA and another program that provides each district with $800 for each student on the free or reduced price lunch program. However, you are free to change these.

Table 1.
Variables for Funding Formulas

Variable Name	Variable Description
ADA	District ADA
E_T	Total district enrollment
ADA_K3	District ADA in grades K–3 (actual for charters; based on percent enrollment in K-3 for all others)
ADA_46	District ADA in grades 4–6
ADA_78	District ADA in grades 7–8
ADA_912	District ADA in grades 9–12
ADA_1112	District ADA in grades 11–12
E_K3	District enrollment in grades K–3
E_46	District enrollment in grades 4–6
E_78	District enrollment in grades 7–8
E_912	District enrollment in grades 9–12
E_1112	District enrollment in grades 11–12
ADA_CH	Total charter ADA
ADA_CH_K3	Charter ADA in grades K–3 (locally funded charter ADA is rolled up to their authorizing district)
ADA_CH46	Charter ADA in grades 4–6
ADA_CH_78	Charter ADA in grades 7–8
ADA_CH_912	Charter ADA in grades 9–12
CH_LF	Number of locally funded charters
ADA_NSS	Necessary Small School ADA
ADA_COE_1	County ADA in special schools and classes
ADA_COE_2	County ADA transferred from districts
ADA_COE_3	County ADA for direct services
ADA_COE_4	County ADA for county services
ADA_COE_5	County ADA in county community day school
FM	Number of students on free meals (can exceed enrollment)
RM	Number of students on reduced meals (can exceed enrollment)
FRM	Number of students on free or reduced meals (can exceed enrollment)
EL	Number of English learners (can exceed enrollment)
T	Number of Title I students (can exceed enrollment)
EIA	Economic Impact Aid, eligible pupil count (includes concentration factor, can exceed enrollment)
DISADV	Unduplicated count of targeted students under Governor Brown's proposal (FRM + 0.258EL)
API	2011 API
D	District density (enrollment/square kilometers)
DTYPE	District type (Elementary, High, Unified, Charter, Co-Office)
DSIZE	District size (small, medium, and large for elementary, high, and unified; charter, Co-Office)
RWI	Regional wage index (normalized at ADA-weighted state average)
RWI_F	Regional wage index factor (0.2 + 0.8*RWI)
E_K3_P	Percent of students enrolled in grades K–3
E_46_P	Percent of students enrolled in grades 4–6
E_78_P	Percent of students enrolled in grades 7–8
E_912_P	Percent of students enrolled in grades 9–12
E_1112_P	Percent of students enrolled in grades 11–12
FM_P	Percent of students on free meals
RM_P	Percent of students on reduced meals
FRM_P	Percent of students on free or reduced meals (capped at 100% of enrollment)
EL_P	Percent of students that are English learners (capped at 100% of enrollment)
T_P	Percent of students in Title I (capped at 100% of enrollment)
DISADV_P	Percent of students deemed disadvantaged under Governor Brown's proposal (capped at 100% of enrollment)

Table 2.
Funding Formula Examples

Goal	Formula to Enter in Excel
$6,200 per ADA	=6200*ADA
$6,200 per ADA with regional wage adjustment for 80 percent of expenditures	=(0.2*6200*ADA)+(0.8*RWI*ADA)
$800 per English learner	=800*EL
Targeted program with regional wage adjustments for 80 percent of revenue	=(IF(MIN(FRM_P+0.15*EL_P,1)<0.5, 1500*MIN(FRM_P+0.15*EL_P,1)*ADA, 1500*2*MIN(FRM_P+0.15*EL_P, 1)*MIN(FRM_P+0.15*EL_P,1)*ADA))*RWI_F

NOTES: Targeted program is one proposed by Bersin, Kirst, and Liu (2008) with the target rate of $1,500. The targeted program first defines POOR as POOR = min (FRM_P+0.15*EL_P, 1). The targeted formula is then 1500*POOR, if POOR<0.5; the formula is 1500*2*POOR*POOR, if POOR>0.5

Important notes about Excel formulas

Beware when using max and min formulas. Max(ADA) yields the maximum ADA across all districts. (Excel treats ADA as a list of numbers.) Max(ADA,30) compares the maximum of ADA across all districts (which is LAUSD) to 30. However, Max(ADA*1,30) compares each district's ADA to 30. Excel no longer treats ADA as a list of numbers, because it resolves the formula ADA*1 for each district.

Enter Hold-Harmless Conditions for Each New Program Area

In the orange cells (B5 through B9), specify whether districts are held harmless for each program area. This condition means that the new revenue will be at least as high as the sum of the revenue in the old funds that are included in the new program area. Enter "1" for each program area for which you want to invoke a hold harmless condition.

Table 3 describes the various hold-harmless conditions that can apply to the overall new funding formulas.

Table 3.
Hold-Harmless Conditions

Green Cell	Condition
B10	Indicate whether districts are held harmless overall. This means that the sum of revenue in all new programs must be at least equal to the original sum of revenue in the current allocation. However, districts are not necessarily held harmless in each of the individual program areas (unless you have indicated in the orange cells that they should be).
B11	Indicate whether you would like to change the way ROCP funding is allocated for the hold-harmless provision. The default method is to assign ROCP funding to the district that currently receives the apportionment (the COE for a county-wide ROCP or all district members of a JPA). By entering a "1" in cell B12, ROCP funding that goes to county-wide ROCPs is allocated among its member agencies in proportion to their enrollment in grades 11 and 12.
B12	Specify whether you would like to have the hold-harmless conditions apply to the deficited or undeficited 2010–11 revenue limits and charter school general purpose block grant rates. The default is that hold-harmless conditions will use the deficited revenue LEAs received in 2010–11. By entering a "1" in B12, the hold-harmless conditions you have selected will use the undeficited revenue.
B13	Specify whether you would like to include a district's excess taxes in its total original funding level. If you invoke this option, the new program area, which includes the base revenue limit, will also be assigned the district's new excess property taxes. New excess taxes are the amount by which the district's current local property taxes exceed the new funding total in the program containing base revenue limits (with that program's hold-harmless conditions applied).

Green Cell	Condition
B14	Specify the column in the “saved-results” tab where you would like your results saved. Excel will save the results from applying your new group of funding formulas. The “Saved-Results” tab will show each district and the total revenue it would receive based on your five new programs’ funding formulas. It will save the results for up to five sets of new funding formulas, so you should label each set with either A, B, C, D, or E.
Yellow Cell	
C15	Enter a nickname that you would like to assign for the group of five programs. This nickname will appear on the “saved-results” tab and can be used to help keep track of the various models users estimate.

Run the Program to Apply the New Formula

To simulate the new programs, click on the “RUN PROGRAM” button. This applies your new formulas to each school district. After your program has run, you will be sent to the output worksheet, “Saved – Results.” If you do not end up there, the simulation model is not working.

Important notes about interaction between hold-harmless conditions

It is important to think carefully about how you would like to treat excess taxes in your funding formula. If you do not specify a hold-harmless condition for the program containing base revenue limits but you do invoke an overall hold-harmless condition at the undeficited revenue limit amounts, property taxes will not be used to make up the difference between the deficited and undeficited revenue limit amounts.

Output

This section describes the calculations and output sheets after inputting and running a new formula.

Calculations

The simulation model computes how much revenue each district would receive with your new formulas. The "Calculations" worksheet contains these data as well as others. Each row refers to a district. Table 4 describes the data in each column. If you would like to work with these data directly, we suggest you copy the page and paste the values into a new workbook.

Table 4.
Data Descriptions in Calculations Worksheet

Column	Description
A – C	District and county names and identification codes. These data come directly from the "Data" worksheet.
Original revenue: *Several sets of columns show the total original revenue in each of the five program areas you have defined, as well as the total of those programs based on the ROCP and deficit options you chose.*	
E–J	Original revenue: ROCP to districts only; revenue is deficited.
L–Q	Original revenue: ROCP includes prorated COEs and JPAs; revenue is deficited.
S–X	Original revenue: ROCP to districts only; revenue is at UNdeficited levels.
Z–AE	Original revenue: ROCP includes COEs and JPAs; revenue is at UNdeficited levels.
AG–AL	Original revenue: ROCP with user's choice; revenue is at UNdeficited levels.
AN–AS	Original revenue: ROCP with user's choice; revenue is at deficited levels.
New Revenue (all incorporates user's choice of ROCP treatment).	
AU–AZ	Total revenue in each of the five program areas (and their total) after applying your formula WITHOUT applying any hold-harmless conditions.
BB–BF	Total revenue in each of the five program areas after applying your formula WITH a hold-harmless condition for each program at the deficited revenue levels. It is the maximum of the original deficited amount and your formula amount.
BG	Sum of revenue in the five program areas after applying your formula WITH a hold-harmless condition at deficited levels for each program.
BI	Sum of revenue in the five program areas with the overall hold-harmless condition at deficited levels but no hold-harmless condition for any of the programs.
BK–BO	Total revenue in each of the five program areas after applying your formula WITH a hold-harmless condition for each program at the UNdeficited revenue levels. It is the maximum of the original UNdeficited amount and your formula amount.
BP	Sum of revenue in the five program areas after applying your formula WITH a hold-harmless condition at UNdeficited levels for each program.
BR	Sum of revenue in the five program areas with the overall hold-harmless condition at UNdeficited levels but no hold-harmless condition for any of the programs.
BT–BX	Deficited version: Total revenue in each of the five program areas after applying the formula with the user's choice (UC) of hold-harmless conditions for each program.
BY	Deficited version: Sum of revenue in the five program areas with the user's choice of hold-harmless conditions (does not yet account for overall hold-harmless condition).
BZ	Deficited version: Sum of revenue in the five program areas with the user's choice of individual program hold-harmless conditions and accounting for the overall hold-harmless condition. If there is no overall hold-harmless condition, it is simply the value in BY. Otherwise it is the maximum of that value and the original revenue total from the sum of all programs.
CB–CF	UNdeficited version: Total revenue in each of the five program areas after applying the formula with the user's choice (UC) of hold-harmless conditions for each program.
CG	UNdeficited version: Sum of revenue in the five program areas with the user's choice of hold-harmless conditions (does not yet account for overall hold-harmless condition).
CH	UNdeficited version: Sum of revenue in the five program areas with the user's choice of individual program hold-harmless conditions and accounting for the overall hold-harmless condition. If there is no overall hold-harmless condition, it is simply the value in CG. Otherwise it is the maximum of that value and the original revenue total from the sum of all programs.

Column	Description
CJ – CN	Total revenue in each of the five program areas after applying the formula with the user's choice (UC) of hold-harmless conditions for each program. If there is a hold-harmless condition in place, it draws from the program totals in R–V; otherwise, it draws from D – H.
CO	Sum of revenue in the five program areas with the user's choice of hold-harmless conditions (does not yet account for overall hold-harmless condition).
CQ	Sum of revenue in the five program areas with the user's choice of individual program hold-harmless conditions and accounting for the overall hold-harmless condition. If there is no overall hold-harmless condition, it is simply the value in AF. Otherwise, it is the maximum of that value and the original revenue total from the sum of all programs (I).
CS–CV	New funding level in the program that contains the base revenue limit. There are four cases: no hold harmless, holding harmless at the deficited revenue limit, holding harmless at undeficited revenue limit, the users choice of hold-harmless conditions.
CX	Total local property tax revenue for the district. This is the amount that a district must use toward its revenue limit.
CZ	Original excess local property tax. This is the amount of total property tax above the district's revenue limit. The district gets to keep this amount. Note: This will be zero if the user has chosen not to include excess taxes in their formula totals.
DA–DD	Excess local property tax under the new formula. This is the amount by which local property tax revenue exceeds the funding in the new program area which contains revenue limits. Note: This will be zero if the user has chosen not to include excess taxes in their formula totals.
DF	Total original revenue from the sum of all five programs. (ROCP choice, deficited amounts, and excess taxes if user included them).
DG	Total revenue after applying all user's formulas, hold-harmless conditions, and excess tax choice.
DI	Per-ADA original revenue from the sum of all five programs. (ROCP choice, deficited amounts, and excess taxes if user included them).
DJ	Per-ADA revenue after applying all user's formulas, hold-harmless conditions, and excess tax choice.
DK	Gain from the original (ROCP choice and deficited) to the new total in $ per-ADA.
DM–DN	Local and federal revenue totals for the district.
DQ	Poverty category (L for low and H for high) based on user's cutoff from worksheet "Out4."
DR	Regional Wage Index category (L for low and H for high) based on user's cutoff from worksheet "Out4."
DS	Category based on poverty, RWI, and district size.
DT	"1" indicates that district experiences a gain in revenue from the original to the new program.
DY–EU	Select demographic data from data page.

Saved-Results Tab

This tab compiles the results from five different sets of your programs as well as the original funding level for comparison. Rows 6 through 10 show the formulas you used for each of the program areas. To the left of each funding formula, a "1" indicates that you invoked a hold-harmless condition for that program. Rows 12–15 show your choices for the other program options. A "1" indicates that you selected that option on the Funding Formula Tab. The yellow highlighted cell with "NEWEST" indicates the column with your most recently run set of programs. Your nicknames will be displayed in row 4 to help keep track of your various programs. The district name, CDS code, and district type are also displayed. You can copy and paste these data into a new Excel file if you would like to work with them. You may also want to copy and paste the "programs" tab to help remind you which programs you consolidated in this nicknamed new funding formula. Advanced users can add additional district characteristics by linking cells to the calculations or data page. (Note, if you do this, you should use the cell references rather than variable names, because data on the saved-results tab start at a different row number than the data on the calculations and data pages.) You can clear the results on this page simply by selecting and deleting them. (When doing this, be sure not to select the cells with "HH"; these are locked and cannot be altered.)

Output Tables (OUT1 – OUT7)

OUT1 contains an overview table (in total dollars and in dollars per ADA) showing the revenue in each of the five new program areas before and after the formulas have been applied. Spending per ADA is an average across districts, weighted by each district's ADA.

OUT2 contains tables showing spending by district type (elementary, high, and unified, charter, and COE) and size (small, medium, and large) before and after the new funding formulas have been applied. The tables are presented for total spending and spending in each of the new program areas. In these tables, "after" includes the user's choice of hold-harmless conditions. Spending per ADA is an average across districts, weighted by each district's ADA.

OUT 3 contains tables showing average spending per ADA for each type of district, based on district size (small, medium, and large), district poverty level, and the district regional wage. These are simple averages of district spending per ADA in each group (not weighted by ADA). These tables allow the user to define the cutoff points for high and low district poverty and high and low regional wages. This only includes revenue from the five programs you specified (and excess taxes if you included that option).

OUT4 contains figures plotting each district's current revenue against the revenue it would receive under your new formula. The line in the figures represents the same level of spending in the new and old funding formulas. This only includes revenue from the five programs you specified (and excess taxes if you included that option).

OUT5 contains figures plotting the relationship between spending and the percentage of disadvantaged students in school districts before and after the new formulas have been applied. This only includes revenue from the five programs you specified (and excess taxes if you included that option).

OUT6 contains a table showing spending for each region before and after the formulas have been applied. Spending per ADA is an average across districts, weighted by each district's ADA. There is also a figure that plots the regional wage index against the regional spending levels before and after the new formulas have been applied. This only includes revenue from the five programs you specified (and excess taxes if you included that option).

OUT7 contains two tables (one in total dollars and one in dollars per ADA) showing the revenue in each of the five new program areas before and after the formulas have been applied. It shows program totals both with and without the various hold-harmless conditions invoked. Spending per ADA is an average across districts, weighted by each district's ADA.

Important notes regarding output

If you change the hold-harmless conditions on the "2. Funding Formula" tab without re-running the program, the tables and figures in OUT1–OUT7 will automatically update to reflect your new preferences. However, the saved-results data will not actually change unless you re-run the program.

Data and Methods

This section describes the data used in the simulation model. The "Data" tab provides the revenue that each of the 1,668 local education agencies (LEAs) received in state revenue programs and a few local and federal programs for 2010–11. Because locally funded charters may benefit from other services provided by districts, we combined their revenue and ADA with the district that chartered them.

Student Demographic Data

Data on enrollment, the free and reduced meal program, English Learners, and the Academic Performance Index (API) come from the California Department of Education (CDE). Enrollment characteristics are taken from the California Basic Educational Data System (CBEDS). We adjust schools with ungraded student enrollment by allocating a prorated share of the ungraded enrollment to each grade based on the grade's share of school enrollment. If the entire school had ungraded enrollment, we prorated it based on district enrollment in each grade level. The CDE Free/Reduced Meals Program and CalWORKS data files provide data on the count of students in the subsidized meals programs. The Language Census Student data files provide the English Learner (EL) statistics, and the Academic Performance Index data files provide API scores. However, in 2010–11, one quarter of LEAs, representing about a third of EL students, did not report EL counts under the new CALPADS system. Data for these districts came from CDE (http://dq.cde.ca.gov/dataquest/LC/noncertifiedspring1011.aspx). Data on students in the Title I program come from the Economic Impact Aid (EIA) apportionment calculation and in-lieu EIA calculations for the charter school categorical block grant. The EIA apportionment calculation is available on CDE's website, and in-lieu EIA funds for charters can be found on the Principal Apportionment funding exhibits on CDE's website. To determine percentages of students meeting these characteristics, we divided the count of students by enrollment; the maximum percentage is 100, even if student counts exceed enrollment. Student counts are not capped and may exceed enrollment, which can lead to differences in output depending on whether the user uses percentages or counts in their formula.

Average daily attendance (ADA) counts come from Principal Apportionment data provided by the California Department of Education. In our main ADA variable (dada_08), we created ADA counts for school districts based on current year (2010–11) ADA in district-run schools. This includes ADA in regular district schools, locally funded charter schools, Necessary Small Schools, district community day schools and some district-responsibility NPS/LCI placements. It excludes declining enrollment ADA (greater of prior and current year) and county office transfers. For COEs, the main ADA variable includes special schools and classes, county office transfers, and some other special ADA in county-run programs. Other COE ADA variables include counts for direct and county services. These factor into COE revenue limits, but do not represent direct instructional services provided by counties to students in county-run schools. Direct funded charter ADA is as reported, by grade bands. To compute ADA by grade level for all other LEAs, we multiplied the percentage of enrollment in the specified grade level by the total ADA.

Cost Data

The Regional Wage Index is calculated using the 2000 U.S. Census Bureau PUMS data and the California Employment Development Department Labor Market Division OES data from 2005. It is the average wage of

college-educated non-teachers in each region divided by the state average wage of those non-teachers. In this case, the state average is computed by weighting each regional wage by the total ADA in the region. The thirty regions correspond to the Metropolitan Statistical Areas (MSAs) in the Census data. Rose and Sengupta (2007) provide more details about how the regional wage index is computed. For LEAs not included in prior PPIC school finance simulation models (COEs and direct-funded charter schools), we assigned the regional wage index of its county without making ADA weighting adjustments.

District density comes from the 2000 U.S. Census data. We thank Steve Lipscomb, Mathematica Policy Research, for providing us with the density measure. Density is the number of students enrolled in the district in 2003 divided by the usable land area within the school district boundaries (measured in square kilometers). We do not assign density measures for COEs or charter schools. For districts that have merged or unified since 2003, we updated the density measure to reflect the new boundaries.

Revenue Data

Most of the revenue data were provided by the California Department of Education, either through the P-2 Principal Apportionment Summary or the funding results from individual categorical programs. Our efforts to compile and represent these data were guided by an advisory group with members from the California Department of Education, the Department of Finance, and the Legislative Analyst's Office. However, even with that expert guidance, we confronted a number of difficult issues in constructing this data set. This section outlines how revenue data were treated and any deviations from how funding actually flows to LEAs.

However, in the case of all revenue programs, we strongly suggest reading the California School Finance Revenue Manual to understand the history of the program, find the relevant Education Code, and examine the distribution of funds by various district characteristics, including type and size, poverty, English learners, and density. This may help users determine how to allocate funds to new programs in their formulas. Any questions regarding data, methods, or programs should be directed to schoolfinance@ppic.org.

Revenue Limits

Revenue limits are the single largest source of revenue for school districts and are general purpose funds, meaning that school districts have complete discretion over their use. Each school district has a unique base revenue limit, a dollar amount per pupil based on its 1972–73 expenditures per pupil. This base amount is multiplied by an ADA count of students. This amount is then adjusted by several factors to reach the school district's revenue limit entitlement. A school district's share of local property taxes is then applied to the entitlement. If property taxes are less than the entitlement, the state makes up the difference with aid from the General Fund. If taxes exceed the entitlement, then the district retains this excess amount and receives no revenue limit state aid; however, these districts may still receive other state aid for categorical programs and are generally called basic aid districts.

We represent revenue limit funds as the sum of several components that reflect some of the adjustments made in the actual revenue limit calculation and other forms of in-lieu revenue limit general purpose funding. These components are explained in detail in Weston (2010).

The most important distinctions between actual revenue limit entitlement funds and our representation has to do with locally funded charter schools and county office transfers. Although charter schools are currently funded under a different formula from revenue limits, we have aggregated locally funded charter schools' general purpose revenues to their authorizer's revenue limits. Thus, we treat locally funded charter schools as regular district schools. Under the current system, some district students attend classes at COEs. These students are funded under district revenue limits, and then districts transfer the funds generated by the ADA of those students to counties. Under our representation, we exclude these students from our ADA count and only attribute them and their funding to the receiving COE.

Generally, when modeling any new school finance formula, all of the revenue limit components should be included in the same program. Governor Brown's school finance proposal does not apply to Necessary Small Schools. To aid users in modeling this proposal, we have included total dollars and students in Necessary Small Schools for each district on the data page.

Basic aid districts' excess local property taxes are included on the data page. In addition, to help users determine the extent to which a new funding formula could be financed using these excess property taxes, we have included a column for total local property taxes. In the case of school districts, this is the sum of their revenue limit local offset and in-lieu property taxes transferred to locally funded charters. For direct funded charter schools, it is the in-lieu property taxes from their district of residence. For COEs, it is the local revenue offset in their revenue limit calculation. Users should note that local property taxes do not offset all revenue limit components; in particular, they offset county office transfer ADA in district revenue limits but not COEs.

Finally, as mentioned in the hold-harmless section, both deficited and undeficited revenue limit components are included in the data page.

COEs

County offices of education (COEs) have three basic functions. The first is to oversee the school districts in their county. An important part of this function is to approve the budgets adopted by districts. The second function is to provide to small districts services that larger districts typically provide themselves. These services include health and attendance records and some back-office support. The third function is the schools and classes operated by COEs. These schools and classes serve special student populations, including some special education students, students in juvenile detention, and students expelled from regular districts.

In order to account for the general purpose revenue limits that COEs receive for these various types of students and activities (each with their own revenue limit), we have represented COE revenue limits as we have done with district revenue limits. However, our base is the sum of total revenue limit funding for all COE-operated schools and classes divided by the ADA served in those schools and classes. COEs also receive an adjustment for unemployment insurance costs. All other COE funding is represented in the "all other adjustments, drl_drl06" category.

We have represented two additional types of COE revenue limit funding: direct services and county services. These funds support the small district services and general oversight previously mentioned, respectively. Again, the denominator is the ADA served in COE-operated schools and classes. However, we include the actual ADA that generates direct and county service funding in the data page. These funds are

represented separately because they are not for instructional activities; we do not recommend including these in any new school finance formula unless the user defines a COE-specific funding formula that recognizes the various functions of COEs.

Like regular school district and charter school students, students at COEs are eligible for some categorical programs, such as instructional materials. These funds are represented as they are for all students and LEAs. However, COEs are also eligible for special categorical programs, most of which fund administration or support services, including AB 1200 fiscal oversight, oversight from the *Williams* and *Valenzuela* court cases, and some statewide or regional computer technology. These programs are included primarily because most are now considered flexible.

Charter Schools

Charter schools receive in-lieu revenue limits through the charter school general purpose block grant. The 2010–11 statewide funding rates for each grade level are displayed in Table 5. A charter school's entitlement is the sum of the product of the funding rates and ADA in each grade span. As with revenue limits, this entitlement is funded by in-lieu local property taxes from the district and state aid. In the simulation model, the general purpose block grant is represented as a base revenue limit equal to the total block grant funding divided by all charter school students. Total charter ADA is also included in dada_08, but we separately have columns for charter ADA if users wish to create a specific new charter school funding formula. The default option in the model is to treat all LEAs the same under the new user-defined formulas.

Table 5.
Charter School Funding Rates

Grade level	2010–11 funding rate ($/ADA)
Kindergarten–Grade 3	5,077
Grades 4–6	5,153
Grades 7–8	5,306
Grades 9–12	6,148

Charter schools also receive categorical funds like regular school districts, and these funds are represented as they are for school districts (funds per pupil). However, the primary source of categorical aid is the charter school categorical block grant (See Education Code 47634.1), which was equal to $412 per ADA in 2010–11. The categorical block grant also provides in-lieu Economic Impact Aid funding at $307 per eligible pupil in 2010–11, with minimum grant sizes. We have represented this in-lieu funding under the Economic Impact Aid column rather than in the categorical block grant.

SELPAs

Special education funding and services are delivered through one of 126 Special Education Local Plan Areas (SELPAs). Each SELPA has a governing board composed of representatives from each of its member agencies, and the board allocates special education revenue received by the SELPA among its members. In the case of some small districts, the district may not provide any special education services itself; instead, another unit in the SELPA provides special education services to its students. In other cases, each district provides its own services, and it is the SELPA's revenue that is shared among districts. To represent these sharing arrangements, we have aggregated the special education revenue received by all entities in a SELPA

and then prorated that revenue back to the entities in proportion to their ADA. Thus, in our data set, LEAs receive a certain amount of special education revenue per ADA. That amount varies across SELPAs, but is the same for every district in each SELPA.

SELPA membership was assigned first based on a list provided by CDE. However, some LEAs were not listed (primarily charter schools). For these charters, we assigned them to their authorizer's SELPA. Still, three SBE charter districts were unable to be assigned because they have no district or county authorizer. They, therefore, show no revenue. As with revenue limits, we have represented special education funding as the sum of several components. More information about these components and the actual AB 602 special education funding calculation is available in Weston, Sonstelie, and Rose (2009).

ROCPs

A similar situation exists with regional occupational centers and programs (ROCPs), which provide vocational education to high school students and adults. Some ROCPs are "countywide," meaning that they are operated by COEs with participation by districts; others operate as joint powers agreements (JPA) among districts and COEs. In 2009, ROCP funding became flexible, meaning that the administrative units or JPA-members received funding in proportion to their 2007 statewide funding, though vocational services no longer needed to be provided. It is unclear how various ROCPs have responded since flexibility was enacted. Therefore, the default allocation in our data is by the Principal Apportionment. This typically flows to the COE in countywide ROCPs and to all JPA members in JPA ROCPs in proportion to their 2007 ROCP ADA.

However, as an alternative, we have allocated countywide ROCP funding down to member districts in proportion to enrollment in grades 11 and 12. This is similar to how we have treated SELPA revenues and approximates revenue and service-sharing among members. As previously mentioned, the user can specify that non-JPA ROCP member districts be held harmless to this approximated ROCP revenue.

Other State Categorical Data

Approximately 25 percent of school district revenues are categorical, meaning that there are restrictions on their use. The state has directed LEAs to provide specific services or programs and provides funds to support those activities. In 2009, in response to significant spending cuts, the state removed spending restrictions on approximately 40 programs through 2015.[1] We have therefore represented categorical funds as they have been classified since the enactment of the funding flexibility: as tiers. Tier I funds were not affected by the 2009 funding cuts and are still completely restricted, generally because there are federal restrictions tied to the funds or voter-approved initiatives. Tier II programs saw a reduction in total funding but are still restricted. Tier III programs saw a reduction in total funding and are completely flexible. To aid users, we have classified Tier III programs further by their general purpose or function; for example, Tier III programs that support professional development are grouped together. Governor Brown's proposal generally consolidates Tier III programs into revenue limits and would distribute those funds through a weighted-student funding formula.

Several revenues are not included in the model, because they either support regional or statewide services or do not support K–12 education. The most obvious of these are funds for capital expenses and for state preschool and child care. In other cases, we were unable to obtain data, such as with state lottery and meals funds.

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[1] See Weston (2011) for a description of the categorical flexibility and modeled alternatives to its current structure.

State lottery revenues are allocated through the state controller. We were unable to obtain these lottery data for 2010–11 in time for publication. However, we have created a placeholder column on the data page and will update those numbers as they become available.

We were also unable to obtain state meals reimbursement data in time for publication. However, 2010–11 reimbursements totaled $143 million, including funding that goes to private schools, nonprofits, and county probation departments. We calculated an estimate of state meals funding by taking the 2010–11 statewide reimbursement rate of $0.2195 per meal for Proposition 98 LEAs and multiplying it by the count of students on free or reduced price meals, assuming one meal per eligible student per day for 180 calendar days. This totaled $137 million statewide, meaning that it is a close approximation to total funding in the program. However, not all eligible LEAs (particularly charter schools), apply for reimbursement, and therefore the distribution of funds across LEAs may not be accurate.

Finally, with the exception of ROCP funds to JPAs, we exclude any funds to JPAs, including some home-to-school transportation funds to transportation JPAs and nutrition funding to food services JPAs. Membership data were difficult to obtain and these regional funding structures can be complicated to represent. Many JPAs also receive federal and local funds, which are excluded.

Federal and Local Revenue

We use the 2009 CDE Standard Account Code Structure (SACS) data for local revenue and for federal revenue that is not distributed through the state. Using appropriate SACS codes, we have disaggregated local and federal funds into several categories. Although users may not manipulate federal and local revenue in their simulations, the data are included on the data page and in outputs to help users see the distribution of total dollars.

Only federal and local funding for school districts and COEs is represented in the model. Charter schools also receive some local and federal funds. However, charter school vary in how they report their revenues and expenditures to the state through SACS. Some report through their authorizer while others use an alternative reporting form and file independently. Therefore, we do not report any local or federal funds for charter schools, though it is possible that our district and COE local and federal funding includes some funds that actually go to charter schools.

Other Revenue

Finally, the data page contains other revenues that cannot be included on the data page for allocation under a new school finance formula. These include excess local property taxes and other in-lieu excess taxes. These funds may be useful to users who may use the data page for their own purposes.

References

Bersin, Alan, Michael W. Kirst, and Goodwin Liu. 2008. "Getting Beyond the Facts: Reforming California School Finance." Issue Brief, Chief Justice Earl Warren Institute on Race, Ethnicity, and Diversity. University of California, Berkeley School of Law. Available at www.law.berkeley.edu/files/GBTFissuebriefFINAL.pdf.

Brown, Edmund G. 2012. "Governor's Proposed Budget: K thru 12 Education Summary." California Department of Finance. Available at www.ebudget.ca.gov/pdf/BudgetSummary/Kthru12Education.pdf.

California Department of Finance. 2012. "Weighted Pupil Funding Formula." Proposed trailer bill language. Available at www.dof.ca.gov/budgeting/trailer_bill_language/education/documents/%5B422,%20424%5D%20Weighted%20Pupil%20Funding%20Formula.pdf.

Governor's Committee on Education Excellence. 2007. *Students First: Renewing Hope for California's Future.* Technical Report. Available at www.everychildprepared.org/docs/summary.pdf.

Weston, Margaret. 2010. "Funding California Schools: The Revenue Limit System." Public Policy Institute of California. Available at www.ppic.org/main/publication.asp?i=921.

Weston, Margaret. 2011. "California's New School Funding Flexibility." Public Policy Institute of California. Available at www.ppic.org/main/publication.asp?i=941.

Weston, Margaret, Jon Sonstelie, and Heather Rose. 2009. "California School Finance Revenue Manual." Public Policy Institute of California. Available at www.ppic.org/main/publication.asp?i=893.

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