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Funding Formulas for California Schools IV

An Analysis of Governor Brown's Weighted Pupil Funding Formula, May Budget Revision

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Summary

In his 2012–13 budget, Governor Brown proposed a new system for allocating state revenue among California school districts. In May the governor revised his proposal. Using the PPIC School Finance Model (available at www.ppic.org/main/dataSet.asp?i=1229), in this update we show how these proposals would guide the allocation of additional revenue among school districts. Under both proposals, school districts educating high percentages of disadvantaged students would receive the largest revenue gains. Compared to the original proposal, the revised proposal provides less funding for disadvantaged students and substantially reduces differences in gains among districts.

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The PPIC School Finance Model can be found in PPIC's Data Depot

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Governor Brown’s May Proposal

In his 2012–13 budget released in January, Governor Brown proposed a new system for allocating state revenue among California school districts, a proposal we analyzed in a previous paper.¹ In the May revision of his budget, the governor also revised his school finance proposal. This paper updates our previous analysis to account for those changes.

The governor proposes to replace the current system with a weighted pupil funding (WPF) formula. The revised proposal addresses many important questions, including the transition from the current system to the new system and accompanying modifications to the state’s accountability system. As in our previous analysis, however, our focus is how the WPF formula would change the allocation of revenue among school districts. In this regard, the revised proposal makes three important changes:

- **Weights for disadvantaged students.** With a weighted pupil funding formula, the revenue a district receives equals a base rate multiplied by a sum of student weights in the district. In the governor’s original proposal, students who are disadvantaged (English learners or students who qualify for free or reduced-price lunch) had a weight of 1.37. This weight increases as disadvantaged students become more than 50 percent of students, the concentration factor. All other students had a weight of 1.0. The revised proposal reduces the weight for disadvantaged students from 1.37 to 1.20. The concentration factor remains, but with the lower weight.
- **Weights for grade level.** In the original proposal, students who were not disadvantaged had a weight of 1.0, regardless of their grade. Under the revised proposal, student weights vary by grade level. Using students in grade 4 through 6 as the base with a weight of 1.0, the grade-level weights are as follows:

Grade level	Student weight
K–3	1.1078
4–6	1.0000
7–8	1.0298
9–12	1.1931

In determining weights for a district, the formula multiplies grade-level weights by weights for disadvantage. For example, a disadvantaged student in grade 3 has a weight of 1.33 (1.11×1.20).

- **Add-ons for Targeted Instructional Improvement Block Grant (TIIBG) and Home-to-School Transportation (HST).** The original proposal consolidated these two programs into the WPF formula. The revised proposal eliminates the two programs but adds the revenue that districts now receive in the two programs to the revenue from the WPF formula. A district would receive its formula revenue, plus the revenue it now receives from those two programs. In 2010–11, these programs totaled \$1.3 billion, 4 percent of all state K–12 funding.

¹ Heather Rose, Jon Sonstelie, and Margaret Weston, “Funding Formulas III: An Analysis of Governor Brown’s Weighted Pupil Funding Formula” (Public Policy Institute of California, 2012).

Modeling the Proposal

The original proposal envisioned phasing in the new formula over six years, with the base rate rising to \$6,990 per student when the formula is fully implemented in 2017–18. We simulated the fully implemented formula and compared the revenue that districts would receive with what they actually received in 2010–11.

To simulate the revised proposal, we used the same demographic and economic assumptions as in the original simulations but applied the new weights for grade level and disadvantage, as well as included the TIIBG and HST add-ons. We chose the base rate to make our simulations with this revised proposal comparable to the original simulation. In particular, we chose the base rate so that the aggregate revenue received by all districts in the new simulation equals the aggregate revenue they received in the original simulation.²

Table 1 shows the average gains districts would receive under the new proposal relative to their current funding. For the sake of comparison, it also shows the gains districts would have received under the original proposal. Districts are categorized by type and by percentage of students who are disadvantaged. For each category, the table reports the average gain in revenue per pupil in moving from the allocation in 2010–11 to the allocation districts received in our simulation. The first column for each district type is the average gain under the original proposal. The second column is the average gain under the revised proposal. For example, unified districts with fewer than 20 percent of students who are disadvantaged would gain an average of \$1,229 per student under the original proposal. Those districts would gain an average of \$1,881 under the revised proposal.

TABLE 1
Average change in funding from 2010–11 to revenue in weighted pupil funding simulation, dollars per student

Disadvantaged students (%)	Unified districts		Elementary districts		High school districts	
	Original proposal	Revised proposal	Original proposal	Revised proposal	Original proposal	Revised proposal
0–20	\$1,229	\$1,881	\$1,241	\$1,585	\$631	\$1,516
20–40	1,576	2,034	1,956	2,083	621	1,717
40–60	2,073	2,278	2,199	2,158	1,134	2,168
60–80	3,124	2,996	3,542	2,946	1,998	2,457
80–100	3,963	3,520	5,287	3,923	3,369	3,391

SOURCE: Authors' calculations based on PPIC School Finance Model.

Compared to the actual revenue that districts received in 2010–11, the revised proposal has two important features. First, it allocates relatively more additional revenue to districts with high percentages of disadvantaged students. Second, for any level of student disadvantage, high school districts receive less additional revenue than other districts. The original proposal also shared these two features; the revisions have merely lessened the differences in revenue gains among districts. Because of the lower weight for disadvantaged students in the revised proposal, districts with high percentages of such students would

² The base rate that equalizes revenue for those two proposals is \$7,014 per pupil. The revised proposal would first restore the revenue limit deficit factor before fully implementing the new formula. In our simulation, only 36 districts with a total of 16,232 students had undecificated revenue limits in excess of their WPF entitlement. We ignored this constraint in our simulation.

receive smaller revenue increases in the revised proposal than they received in the original proposal. Districts with few disadvantaged students would receive relatively larger increases. Because of the grade-level weights in the revised proposal, high school districts would receive relatively larger increases in the revised proposal than in the original proposal. Their revenue gains are still smaller than for other districts, but the revised proposal has reduced the differences.

Overall, the May revisions to the governor’s proposal have maintained differences in revenue gains among districts but reduced their magnitude. This reduction is clearly visible in Table 2. Under the original proposal, 39.9 percent of students attended districts with revenue gains between 30 and 50 percent. Under the revised proposal, 60.1 percent of students attend such districts.³

TABLE 2
The distribution of revenue changes across districts

	Districts		Students		Students (%)	
	Original proposal	Revised proposal	Original proposal	Revised proposal	Original proposal	Revised proposal
less than -10	45	38	61,851	35,793	1.1	0.6
-10–0	51	48	80,749	81,215	1.4	1.4
0–10	38	19	143,834	38,677	2.6	0.7
10–20	64	28	344,654	75,381	6.2	1.3
20–30	152	114	925,465	430,246	16.5	7.7
30–40	165	272	1,502,210	1,680,142	26.8	30.0
40–50	89	142	731,469	1,706,652	13.1	30.5
50–60	68	109	518,398	830,423	9.3	14.8
60–70	58	90	419,109	564,910	7.5	10.1
70–80	56	21	393,665	160,321	7.0	2.9
80–90	48	0	233,660	0	4.2	0
90–100	40	0	206,356	0	3.7	0
100–110	7	0	42,338	0	0.8	0

SOURCE: Authors’ calculations based on PPIC School Finance Model.

In reporting our simulation results, we have focused on average gains by district type and by level of student disadvantage. In “School District Revenue Changes under Governor Brown’s May Proposal,” a spreadsheet available on the [PPIC website](#), we report gains for individual districts. Revenue gains may differ for districts of similar characteristics because they received different revenue per pupil under the current system. Similarly, under the governor’s revised proposal, revenue per pupil can differ for similar districts because of the revenue add-ons. For both TIIBG and HST, revenue per pupil is not evenly distributed across districts. These differences are rooted in the complex history of California’s school finance system and are not apparent in the averages reported in Table 1. However, they are apparent in the [spreadsheet](#).

³ Of the 86 districts receiving less revenue under the revised proposal than in the status quo, 59 are basic aid districts, which are districts with more property tax revenue than their entitlement. Under the WPF program, these districts would continue to have their own property tax revenue but they would lose categorical revenue.

Conclusion

The revisions to the governor’s proposal have reduced differences among districts in how new revenue would be allocated. In the original proposal, high school districts received relatively smaller increases in revenue than other districts. The grade-level weights in the new proposal have lowered that difference. For a given level of student disadvantage, under the new proposal high school districts would receive similar revenue increases as other districts receive. The revised proposal also distributes additional revenue more evenly among districts of the same type. The original proposal channeled proportionally more revenue to districts with high percentages of disadvantaged students. This is still true with the revised proposal, but the differences are smaller among districts with different levels of student disadvantage.

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