



---

# **Evaluation of Hawaii's Weighted Student Formula: Highlighted Findings**

**Jesse Levin, Jay Chambers, Diana Epstein, Nick Mills,  
Mahala Archer, Antonia Wang, and Kevin Lane**  
American Institutes for Research

June 2013



# **Evaluation of Hawaii's Weighted Student Formula: Highlighted Findings**

**June 2013**

**Jesse Levin, Jay Chambers, Diana Epstein, Nick Mills, Mahala Archer, Antonia Wang, and Kevin Lane**



**AIR**<sup>®</sup>

AMERICAN INSTITUTES FOR RESEARCH<sup>®</sup>

2800 Campus Drive, Suite 200  
San Mateo, CA 94403  
650.843.8100 | TTY 877.334.3499

**[www.air.org](http://www.air.org)**

Copyright © 2013 American Institutes for Research. All rights reserved.



## Highlighted Findings

Hawaii has a significant history of exploring alternative funding and governance structures, which culminated in the 2006–07 adoption of a weighted student formula (WSF) as a means to provide a more equitable system of school finance, streamline the allocation of resources to schools, and usher in a process for increasing local authority (including school leadership, parents, and community members) over educational decision making. To this end, the American Institutes for Research (AIR) was asked to conduct an evaluation to investigate five main research questions concerning implementation of the Hawaii WSF. To answer these questions, the AIR research team conducted a series of qualitative and quantitative analyses, the detailed results of which are reported in the full version of the report. This document provides highlights of the main report findings.

### ***Question 1 – How was the WSF originally developed, and what changes to the formula have been made since its initial implementation in 2006–07?***

Investigation of historical documentation shows that the original WSF included funding adjustments that attempted to account for a variety of factors thought to affect the cost of providing educational services including *student characteristics* (students in Kindergarten through grade 2, English language learners, economically disadvantaged and those that were transient), as well as *school and nonweighted characteristics* (attending schools at the elementary or middle grade level, schools that operating year round, those considered geographically isolated, or small schools).

Since its original implementation, the WSF has been modified on an annual basis and now includes three separate student characteristic weights for three different levels of English language learners and an additional weight for gifted and talented students. The current version of the formula also includes a separate weight for students attending schools on islands neighboring Oahu, but has dropped the adjustment for geographic isolation. In addition, the original per-pupil adjustments for school size and year-round schools no longer exist, but instead take the form of lump-sum amounts based on grade configuration.

The investigation also showed that there has been a significant amount of revenue allocated by the WSF. Over the implementation period, the amount allocated to schools through the formula has increased by 11.3 percent (from \$655.4 million in 2006–07 to \$729.7 million in 2012–13), while the average share of the state’s General Fund education appropriation that has been allocated by the WSF was approximately 52 percent, ranging from 49 percent in 2007–08 to 54 percent in 2012–13.

### ***Question 2 –How have other states and districts incorporated weights and WSF structures into their funding systems?***

While the particulars of state and district decisions regarding funding weights (i.e., the types and size of adjustments) vary greatly, there is a growing number that have either implemented or are considering weighted funding initiatives that include adjustments for the additional needs of special education, low income, English language learner, and gifted and talented student populations, as well as small size of operations and geographic isolation. The current investigation found that there are 15 states, including Hawaii, that address all five of these

factors in their state funding mechanisms and zero states that provide no supplemental funding across any of these categories.

Similar to the motivation behind Hawaii's WSF implementation, the evaluation notes that greater efficiency, transparency, innovation, and equity are all desirable outcomes that are associated with the implementation of WSFs in other districts. The investigation also identified 11 other districts that have implemented a WSF. Again, while the different types of weights used by the district-level WSF included the five common adjustment types listed above, the combinations of weighting factors used across these districts and their values varied widely.

***Question 3 – What do the perceptions of principals and stakeholders tell us about the extent to which Hawaii's WSF has: (a) Increased school discretion over funding and the degree to which the local community participates in decision making pertaining to budgeting and planning; (b) Improved innovation and accountability of school leadership; (c) Promoted equity and transparency in how funding is allocated to schools.***

### **Principals Attitudes and Perspectives**

To investigate principal attitudes and perspectives pertaining to the WSF and the effectiveness with which it is meeting its goals, AIR administered a survey to all public school principals (excluding charters) and received a gratifying 83 percent response rate. The main findings from the principal survey are as follows:

***Equity and Transparency of Funding*** – Most principals agreed that WSF funding is equitably allocated to schools, but they did not agree that the amount of funding is sufficient. In addition, most principals understand the WSF and know where to go for more information if required.

***Discretion Over Funding and Innovation*** – Most principals agreed that they had discretion over how funds were spent in their schools and indicated that they exerted control over a wide variety of programmatic components. However, less than one-third of principals agreed that they had sufficient flexibility to be innovative or to try new instructional programs.

***Empowerment and Accountability for Results*** – Principals reported that they are holding regular SCC meetings and that they are communicating—and often also consulting—with the SCC and with faculty about resource allocation decisions. They also tended to agree that they are held accountable for student performance, but most do not agree that the SCC is held accountable.

### **Stakeholder Attitudes and Perspectives**

AIR conducted a limited number (16) of semi-structured interviews with stakeholder to gain a broad understanding of attitudes and perspectives about the goals of the WSF, the implementation process, and the extent to which the policy is achieving its intended outcomes. Our key findings are summarized as follows:

***Understanding of WSF Background, Goals, and Implementation Process*** – Almost all respondents were aware of the goals of the WSF policy; roughly two thirds thought that equity was a goal of the policy, and about half thought that a goal was autonomy and flexibility for school leaders. However, there was wide variation in stakeholders' understanding of how much of a school's resources come from WSF funds.

***Sufficiency, Autonomy, and Alignment of Academic and Financial Plans with Resource Allocation*** – About half of the respondents said that WSF funding was not sufficient to achieve the desired student outcomes, and even more suggested this was true for small and isolated schools. Respondents were divided on whether school leaders have the autonomy to make a difference in student learning.

***Capacity, Support, and Communications*** – Most respondents who were asked about site capacity reported that state and complex area staff have the necessary capacity to support school-level implementation of the WSF program, but only half of the respondents felt the same way about school staff.

***Transparency, Understanding, and Involvement of the School Community*** – Respondents reported that school-level misconceptions about the WSF appear to be connected more with the insufficiency of the available funds than with the WSF approach itself, but almost all respondents said that the WSF calculations and process are transparent.

***Accountability and Innovation*** – Less than half of the respondents felt that there was an increase in innovation and efficiency as a result of the WSF, and some suggested that limits on funding were playing a role in hampering innovation.

### **What Stakeholders Liked About the WSF and Reported Successes**

***Equity is Based on Enrollment and Student Needs*** – Stakeholders like that the WSF is based on enrollment and applied equitably throughout the state so that everyone can anticipate what their budget is going to be.

***School-Level Empowerment, Collaboration, Flexibility and Autonomy*** – Stakeholder interview respondents liked the fact that schools are empowered to increase student achievement, the collaboration with the school community that has occurred, and the flexibility and autonomy that schools now have.

***Reported Successes*** – Stakeholders identified a number of successes under WSF including (a) funding is consistently and equitably applied to all schools; (b) the fact that the budgeting process occurs earlier in the school year which gives principals more time to plan; (c) the creation of SCCs which permits community representatives to be included in the school budgeting conversations; (d) the autonomy and flexibility offered to principals around school budgeting; and (e) the potential to bring about more accountability and less waste.

### **What Stakeholders Did Not Like About the WSF and Reported Challenges**

***Insufficient Funding*** – A majority of the stakeholder respondents said that they would like to see more funding under the WSF and that more funding is necessary to have the flexibility to start new programs.

***Small Schools Get Inadequate Funding*** – Several respondents said that small or isolated schools do not have adequate funding under the WSF and does not adequately account for diseconomies of scale associated with small scale or geographic isolation.

***Federal Policy Barriers to WSF Implementation*** – A number of federal barriers exist, including mandates under No Child Left Behind (NCLB), federal compliance, and standardized testing. There should be alignment with all funding streams in the Academic and Financial Plans instead of having separate plans for Title I and II funding.

***Special Education Funding*** – There are both risks involved with adding special education to the WSF and difficulties in decentralizing funding for these services.

**Miscellaneous Challenges** – There is a need for a better understanding of the WSF and finance training for principals<sup>1</sup>, improved alignment between the timing of the release of enrollment figures and the budgeting process timeline in order to avoid large deviations between projected and official enrollment counts, and improved data and information for stakeholders. Funding fluctuations inherent in the WSF can also pose a challenge.

**Stakeholder Suggestions for Improving the WSF and Its Implementation** – Stakeholders suggested a number of ways of improving WSF such as: increasing funding and providing additional support for small and isolated schools, increased transparency and communication about policy decisions, giving more autonomy and flexibility to schools, providing training for principals to learn how to budget, exploring the possibility of using average daily attendance as a WSF weighting factor, and increasing legislative involvement with the COW.

#### ***Question 4 – Has there been significant improvement in the equity with which resources are allocated to schools?***

An in-depth statistical analysis was conducted to investigate whether the equity with which resources have been distributed to schools has changed since the WSF was implemented. The main findings were as follows:

**Increased Funding Equity** – Funding equity has increased with the WSF, as evidenced by statistically stronger, positive relationships between funding and student need (i.e., schools with higher socioeconomic disadvantage have tended to receive higher funding allocations) across all grade levels since its implementation. Prior to implementation of the WSF, no statistically significant pattern existed between socioeconomic disadvantage and the dollars from revenue sources that would eventually be directed through the formula.

**Improved Funding Predictability** – Funding as a function of student socioeconomic disadvantage has become more predictable with the WSF.

**Sizeable Funding Weight for Student Need** – Our best estimates suggest that the equity with which overall funding has been distributed in Hawaii since implementation of WSF is among the highest found across all states. Based on data for the 2012-13 school year, our analysis suggests that Hawaii allocates 30 percent to 38 percent more for each socioeconomically disadvantaged student than for a student with no socioeconomic disadvantage.<sup>2</sup>

#### ***Question 5 – What have been the major successes and challenges in the implementation of the Hawaii WSF since its inception?***

Implementation of Hawaii’s WSF has been met with a host of major successes and continued challenges that should be reflected upon to inform future changes to the policy. The following lists these in turn.

---

<sup>1</sup> Note that this may seem in contrast to the principal survey analysis finding presented above where most principals reported that they understood the WSF and know where to go for additional information. However, the sentiment of the stakeholders merely suggests that principal knowledge could be improved and points specifically to training in finance.

<sup>2</sup> Formally, this finding suggests that schools with the greatest socioeconomic disadvantage (i.e., where all students are eligible for free or reduced price lunch) are funded between 30 percent and 38 percent higher than those with the least socioeconomic disadvantage (i.e., where no students are eligible for free or reduced price lunch).

## Successes

***Significant and Sustained Commitment to WSF*** – The overview of the WSF showed there has been a significant and sustained commitment to funding the formula.

***School Flexibility and Discretion Over Funding and Innovation*** – Results from both the principal survey and the stakeholder interviews suggest that under the WSF principals have had significant flexibility and discretion over spending at their schools.

***Empowerment of Local Stakeholders and the Community*** – The results of the principal survey analysis suggest that the creation of the SCCs under the WSF has been associated with local community involvement in resource allocation decisions at their schools. The stakeholder interview results corroborate this finding, with many respondents reporting that, under the WSF, the community has been involved in the school budgeting and planning process.

***Improvement in the Equity and Transparency of Funding Under the WSF*** – Results from the statistical analysis that investigated the relationship between per-pupil WSF funding and school-level socioeconomic disadvantage suggest that the equity with which dollars are distributed by the WSF significantly increased in the years following implementation of the formula. Moreover, both the principal survey and stakeholder interview analyses provide suggestive evidence that the goals of the WSF and the process by which dollars are distributed to schools on the basis of the formula are well understood.

## Challenges

***Providing Sufficient Amounts of Funding Through the WSF*** – The most significant remaining challenge concerns the level of funding allocated by the WSF where the results of both the principal survey and stakeholder interview analyses showed that there was a clear perception that the level of available funding distributed under the WSF, to be used at the school's discretion, was not sufficient to allow them to cover their minimum operational costs and still have funds left to implement additional innovate programming.<sup>3</sup>

***Ensuring WSF Weighting Factors Accurately Reflect Differential Costs*** – The weighting factors that make up the WSF should accurately account for the differential costs of providing an equal opportunity for all students to achieve, regardless of their individual needs or circumstances (such as geographic location).

***Determining an Appropriate Central/School Split of Program Discretion*** – An inherent challenge in the design of any WSF is determining how discretion over specific educational services should be divided between the central office and school sites. Decisions surrounding how to split discretion represents a key policy consideration and should take into account both the efficiency and practicality with which the central office (as opposed to school sites) can deliver the services under scrutiny.

***Having Enough Discretion Over Staffing and Other Programmatic Decisions*** – The final potential challenge that emerged was the level of site discretion over hiring and dismissal, as well as the ability to offer large enough incentives to allow hard-to-staff schools to attract and retain qualified staff.

---

<sup>3</sup> It is vitally important to recognize that the challenge of insufficient funding in no way represents a fundamental design flaw in the WSF. The WSF is merely a mechanism for equitably distributing a predetermined amount of funding in a transparent manner and, in this respect, the WSF is working exactly as intended.

## Concluding Statement

The findings of this evaluation have shown that implementation of Hawaii's WSF appears to have gained widespread acceptance among school leaders and some key stakeholders within the state. It has generated an increased awareness among these constituencies of how funding is distributed to Hawaii's public schools and has generally increased the equity with which funds are allocated among schools serving the diverse populations of students across the state.

The investigation findings also suggest that WSF has also resulted in expanded autonomy for school leadership that allows greater flexibility to implement instructional programs that best suit the needs of their unique student populations. In addition, Hawaii's WSF policy has provided the opportunity for local communities to participate in local decision making surrounding their schools and to function in a partnership with the state in an attempt to improve the effectiveness with which children are served.

The evaluation also showed there to be some outstanding challenges that the state still faces. First, one of the main findings suggest that there is a perception among principals and stakeholders that the amount of funding in the education system as a whole may not be sufficient to allow them to both make use of the additional flexibility the WSF has afforded them and consequently inhibits their ability to achieve their goals. Second, there is some question as to whether the existing formula accurately reflects the differential costs of serving the diversity of students attending schools that vary in size and degree of geographic isolation. A related question is what the cost for providing a basic level of services is and how this might vary across schools (especially with respect to size and degree of geographic isolation).

Additional challenges cited involve determining: (1) the optimal split of program discretion between the central office and school sites, (2) whether there is enough site-level discretion with respect to hiring and dismissal, and (3) if the salary structure for teachers is too rigid to allow for meaningful forms of alternative compensation that provide all schools a similar opportunity to attract and retain qualified instructors.

Going forward, the state might choose to engage in future work that investigates the remaining challenges. In addition, because the WSF has been implemented for several years, the state now has an excellent opportunity to undertake a longitudinal analysis that investigates the extent to which the implementation of WSF has had a positive impact on student learning and to assess the factors underlying any observed changes that may have occurred. It is only through a more comprehensive program evaluation analysis of the policy's impact on student learning that the state can explore ways to further improve how resources are distributed and used by schools under WSF. In sum, the suggested next steps are for the state to engage in investigations that will: (1) assess the sufficiency of available funding; (2) determine whether the distribution of resources accurately reflect student needs; and, (3) inform various policies that further support the autonomy, efficiency and innovation in order to promote a positive impact on student outcomes in the future.

## ABOUT AMERICAN INSTITUTES FOR RESEARCH

Established in 1946, with headquarters in Washington, D.C., American Institutes for Research (AIR) is an independent, nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance both domestically and internationally. As one of the largest behavioral and social science research organizations in the world, AIR is committed to empowering communities and institutions with innovative solutions to the most critical challenges in education, health, workforce, and international development.

## LOCATIONS

### Domestic

Washington, D.C.  
Atlanta, GA  
Baltimore, MD  
Chapel Hill, NC  
Chicago, IL  
Columbus, OH  
Frederick, MD  
Honolulu, HI  
Indianapolis, IN  
Naperville, IL  
New York, NY  
Portland, OR  
Sacramento, CA  
San Mateo, CA  
Silver Spring, MD  
Waltham, MA

### International

Egypt  
Honduras  
Ivory Coast  
Kenya  
Liberia  
Malawi  
Pakistan  
South Africa  
Zambia



AMERICAN INSTITUTES FOR RESEARCH®

2800 Campus Drive, Suite 200

San Mateo, CA 94403

650.843.8100 | TTY 877.334.3499

[www.air.org](http://www.air.org)

*Making Research Relevant*