

# Federal Efforts to Improve the Lowest-Performing Schools

## District Views on School Improvement Grant Requirements

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## Introduction

As Congress considers legislation to reauthorize the Elementary and Secondary Education Act (ESEA) of 1965, one topic of debate is the program of school improvement grants (SIGs) authorized by section 1003(g) of Title I. SIGs are intended to help to turn around low-performing schools and are part of the larger ESEA Title I program to improve education for disadvantaged children. The American Recovery and Reinvestment Act of 2009 (ARRA) provided \$3 billion in extra funding for section 1003(g) SIGs, which brought the total funding for fiscal year 2009 to more than \$3.5 billion. This report by the Center on Education Policy (CEP), an independent nonprofit organization, provides information about school districts' experiences in implementing ARRA SIGs that can inform the ESEA reauthorization.

Guidance issued by the U. S. Department of Education (ED) in January 2010 changed the requirements for using section 1003(g) SIGs to target funds on the most persistently low-achieving schools—a smaller and somewhat different pool of schools than those identified for improvement under the No Child Left Behind Act (NCLB). The new SIG guidance also requires grantees to use one of four school improvement models: (1) transformation, which entails replacing the school principal and undertaking three other specific reforms; (2) turnaround, which involves replacing many of the school staff; (3) restart, which means becoming a charter or privately managed school; and (4) school closure.

Much of the policy debate about SIGs has focused on the requirements for identifying and funding schools and limiting schools to the four models. Both the Obama Administration's ESEA proposal and the bill approved in October 2011 by the Senate Health, Education, Labor and Pensions Committee would continue to target SIGs on a small group of the lowest-performing schools.

This report describes school districts' early experiences in using this infusion of ARRA SIG funding and implementing the new SIG requirements. The information comes from a survey of a nationally representative sample of school districts conducted in late winter and early spring of 2011. As explained later, some of the findings are based on responses from all districts in the survey sample, while others are based on responses from the subsets of districts that were eligible for or had received SIG funding. The survey covered a range of topics in addition to SIGs. Other topics in the survey are discussed in a June 2011 report on the fiscal condition of districts (CEP, 2011a) and a September 2011 report on district implementation of the common core state standards (CEP, 2011b).

## Key Findings

- **ARRA SIG funds were concentrated on a small number of districts, as intended.** An estimated 12% of the nation's school districts had at least one school that received ARRA SIG funds for school year 2010-11. These recipient districts comprise almost three-fourths (73%) of the districts eligible for ARRA SIG funds.
- **Most ARRA SIG-funded districts received assistance from their state in implementing improvement models.** About three-fourths (74%) of the districts with one or more schools implementing the transformation, turnaround, or restart models in school year 2010-11 received assistance from the state in carrying out these reforms. The remaining 26% had not received state assistance at the time of the survey.

- **In the early months of 2011, half of the districts receiving ARRA SIG funds said it was too soon to tell about the results of implementing the transformation, turnaround, or restart models.** About one-third of recipient districts reported positive results.
- **ARRA SIG-eligible and ineligible districts differed in their views about the effectiveness of key program requirements.** A larger share of eligible than of ineligible districts agreed that the SIG requirements for identifying low-performing schools, concentrating funds on a small number of schools, awarding funds by competitive grants, and using external contractors are effective, while larger proportions of ineligible districts were not sure about the effectiveness of these key SIG provisions. Notable minorities of both eligible and ineligible districts disagreed that these provisions are effective.
- **Half of the ARRA SIG-eligible districts believe that more than three years may be necessary to improve the lowest-achieving schools.** Seventeen percent of eligible districts were not sure whether three years is an appropriate amount of time. About one-third of eligible districts agreed that three years was enough time to show improvement.
- **Among all the nation's districts, there is no clear consensus about the effectiveness of current ARRA SIG requirements.** Only one-third or less of the nation's districts agreed that key requirements for targeting and distributing ARRA SIG funds are effective. These overall views are likely influenced by the large proportion of districts that were ineligible for ARRA SIG funds for 2010-11.

The sections that follow explain these findings and other observations in more detail.

## Categories of Responding Districts and Caveats about the Data

In each section, we have noted whether a particular finding is based on responses from the following groups of districts:

- All 455 responding school districts in the nationally representative sample
- The 125 responding school districts with any schools that were *eligible for* ARRA SIG funds (“eligible districts”)
- The 87 responding school districts with one or more of schools that actually *received* ARRA SIG funds

In all of these cases, responses from the survey sample have been weighted to produce estimates of the percentage of districts in the nation that would have given the same response. Because only a small number of survey districts were eligible for or received ARRA SIGs, the estimated percentages for survey questions directed to these subsets of districts are considerably less precise than the other estimates in this report and should be interpreted with caution. The estimates from these smaller subsets also have wider confidence intervals. Confidence intervals are a statistical tool, somewhat like a margin of error in an opinion poll, that provide information about the accuracy of the estimated percentages. More about confidence intervals and other methodological issues can be found in the appendix accompanying this report, which is available on the CEP Web site ([www.cep-dc.org](http://www.cep-dc.org)).

In analyzing and reporting the survey data, we have used a cautious approach that takes into consideration the confidence intervals and precision of the data. We have based our findings on only those differences in responses that are statistically significant and have noted where apparent differences are not significant.

This report represents a snapshot of district views and activities at the time the survey was administered in late winter through early spring of 2011. At that point, schools were in the first year of implementing their three-year school reform models. It is possible that the situation has changed since then, as states, districts, and schools continue to implement their school improvement grants.

## Districts with Schools Eligible for and Receiving ARRA SIG Funds

Unlike Title I funds in general, which go to nearly all of the nation's school districts and more than half of the nation's schools (U.S. Department of Education 2011a; 2011b), funds for school improvement grants under section 1003(g) are targeted on a relatively small share of schools—those with the lowest achievement. Districts apply for ARRA SIG funds on behalf of their eligible schools, and funds are awarded on a competitive basis. The grants last for three years. State education agencies must monitor the implementation of the grants and may opt not to renew a grant if a school does not meet its annual achievement goals.

Data from our survey show that funds are indeed being targeted on a limited group of districts and schools. Approximately 15% of the nation's school districts had one or more schools that were eligible for ARRA SIG funds, while 12% had one or more schools that actually received these funds for school year 2010-11. (The apparent difference between the two percentages is not statistically significant.) Framed another way, 73% of *eligible* school districts actually received ARRA SIG funds.

## Implementation of School Improvement Models

Guidance from ED requires districts and schools receiving school improvement funds under section 1003(g) for fiscal years 2009 and beyond to use one of four school improvement models:

- **Transformation:** Implement all of the following strategies: (1) replace the principal and take steps to increase teacher and school leader effectiveness; (2) institute comprehensive instructional reforms; (3) increase learning time and create community-oriented schools; and (4) provide operational flexibility and sustained support.
- **Turnaround:** Replace the principal, rehire no more than 50% of the school staff, and grant the principal sufficient operational flexibility to implement fully a comprehensive approach to substantially improve student outcomes.
- **Restart:** Convert a school into one operated by a charter school operator, a charter management organization, or an education management organization that has been selected through a rigorous review process.
- **School closure:** Close a school and enroll its students in other higher-achieving schools in the district.

The ED guidance contains criteria for identifying three tiers of schools in each state that are eligible for SIG funding under section 1003(g). The first two tiers are considered “persistently lowest-achieving schools” and receive top priority for funding. The guidance prohibits districts that receive SIG grants for nine or more schools in tiers 1 and 2 from using the transformation model in more than half of these schools.

## Types of Models Being Used in Districts

In about three-fourths (76%) of the districts receiving ARRA SIG funds, at least one school was implementing the transformation model in school year 2010-11, as shown in **figure 1**. This was higher than the proportion of ARRA SIG recipient districts with at least one school implementing the restart model (23%). The apparent differences between the proportions of districts with schools implementing the turnaround model (42%) and the transformation (76%) or restart (23%) models are not statistically significant.

Only 12% of the districts with schools that received ARRA SIG funds closed at least one school that was eligible for these grants.

## State Assistance with Implementation

At the time of our survey, schools receiving ARRA SIG funds were in their first year of implementing their reform models. At that point, about three-fourths (an estimated 74%) of districts with ARRA SIG schools had received assistance from their state in implementing the selected reforms. This is significantly higher than the one-fourth (26%) of SIG recipient districts that had not received state assistance at the time of our survey.

## Perceived Effectiveness of Models

Our survey asked districts that *received* ARRA SIG funds about the results that have been achieved in schools implementing the transformation, turnaround, or restart models. Nearly half (an estimated 49%) of these districts indicated that it was too soon to tell about the effectiveness of any of the three models. One-third (33%) of recipient districts saw positive results from implementing the models, while 5% saw negative results and 4% saw mixed results. (The apparent differences between the percentage reporting negative results and the percentages reporting positive or mixed results are not statistically significant.)

**Figure 1. Percentage of ARRA SIG recipient districts with one or more schools implementing various reform models**

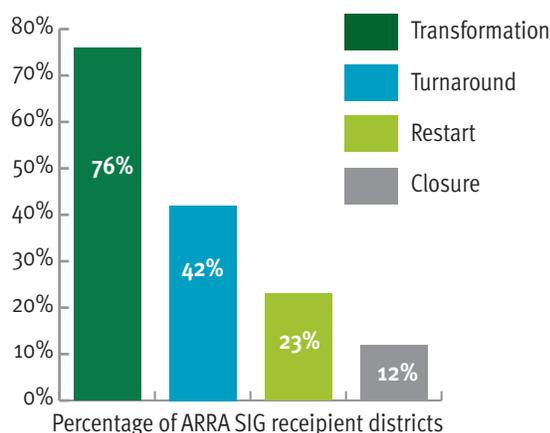


Figure reads: Seventy-six percent of districts in which schools received ARRA SIG funds had one or more schools implementing the transformation model in school year 2010-11.

Note: Districts may be implementing more than one model.

Note: In this figure, the differences between the estimate for the transformation model and the restart and school closure models are statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

## District Views on Various Components of the ARRA SIG Program

Our survey asked all districts in the sample to review a series of six statements about the appropriateness and effectiveness of different components of the ARRA SIG program, including how eligible schools are identified and selected and how funds are distributed to eligible schools. We sorted the responses according to whether districts had indicated, in response to a previous survey question, that they were *eligible* or *ineligible* for ARRA SIG funding. For each statement, respondents were asked whether they agreed or strongly agreed, disagreed or strongly disagreed, or were not sure of their views. For ease of interpretation, we have combined the agree/strongly agree responses into one category and the disagree/strongly disagree responses into another category, with “not sure” as a separate category.

The discussion and figures that follow provide specific data for each of the six statements about ARRA SIG requirements. We first compare the responses of eligible and ineligible districts and then briefly summarize the responses of all districts.

### Appropriateness of Criteria for Identifying Low-Achieving Schools

Under the ARRA SIG program guidance, states must divide their low-achieving schools into three tiers and give funding priority to the lowest-achieving schools in the state. An estimated 65% of the districts with schools eligible for ARRA SIG funds agreed or strongly agreed that the program’s criteria appropriately identified schools that needed the most assistance—a higher proportion than the 27% of ineligible districts that agreed or strongly agreed with this statement. (See **figure 2.**) Uncertainty was greater among ineligible districts, however. An estimated 48%

**Figure 2. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance**

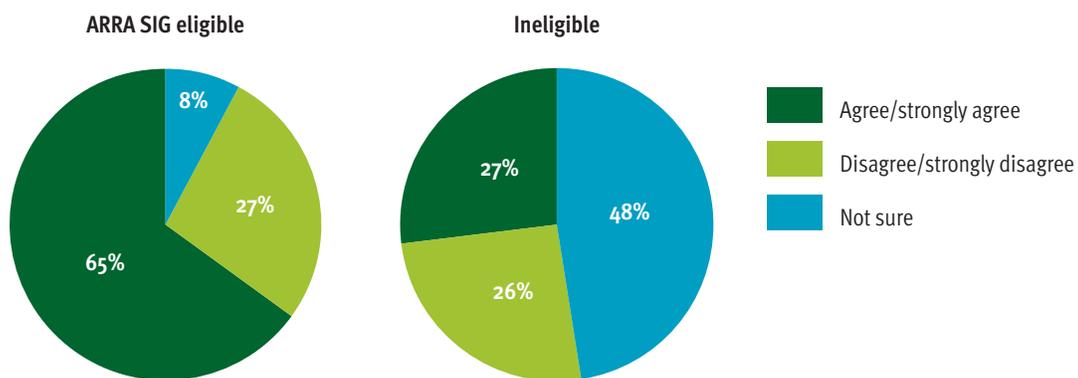


Figure reads: An estimated 65% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance compared with an estimated 27% of districts that had no eligible schools.

Note: In this figure, if the difference between two estimates is 21% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

of ineligible districts, compared with just 8% of eligible districts, were not sure whether the ARRA SIG criteria appropriately identify the schools most in need of assistance. Similar percentages of eligible and ineligible districts *disagreed* or strongly disagreed with this statement.

## Effectiveness of Provisions for Targeting ARRA SIG Funds

The new ARRA SIG requirements target fewer schools with larger grants than the previous SIG requirements did. Under the previous requirements, all schools that received federal Title I funds and were identified for improvement under the accountability provisions of the No Child Left Behind Act were eligible for SIGs. Our survey asked districts about the effectiveness of the new ARRA SIG targeting requirements in general and compared with the previous method of targeting schools.

As shown in **figure 3**, 58% of ARRA SIG-eligible districts agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools—a greater share than the 16% of ineligible districts that agreed. By contrast, a somewhat larger proportion of ineligible (45%) than of eligible (28%) districts disagreed or strongly disagreed that this targeting strategy is effective. In addition, a greater proportion of ineligible (38%) than of eligible (14%) districts were not sure about the effectiveness of this strategy.

**Figure 3. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools**

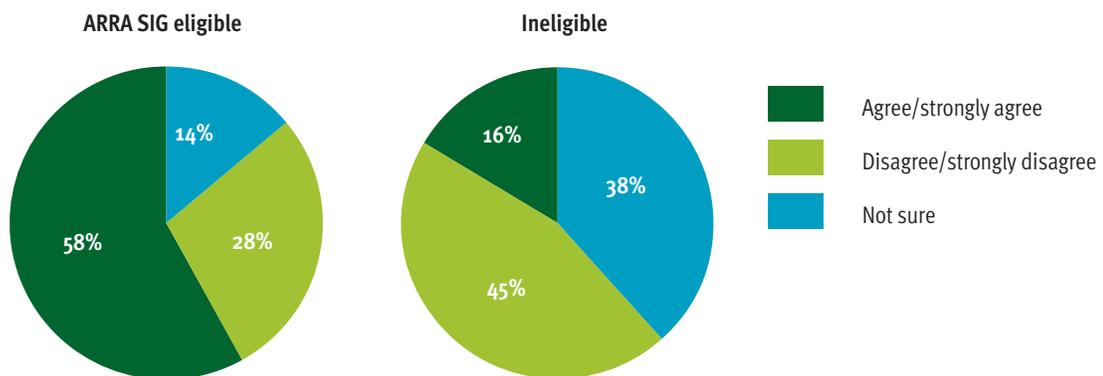


Figure reads: An estimated 58% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools, compared with an estimated 16% of districts that had no eligible schools.

Note: In this figure, if the difference between two estimates is 17% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

Districts were also asked whether the ARRA SIG approach of concentrating large amounts of funds on a small number of schools is a more effective improvement strategy than the previous approach of distributing funds to all schools identified for NCLB improvement. (See **figure 4**). Significantly more eligible (45%) than ineligible (16%) districts agreed or strongly agreed that the new approach is more effective, while significantly more ineligible (37%) than eligible (16%) districts were uncertain.

**Figure 4. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under NCLB**

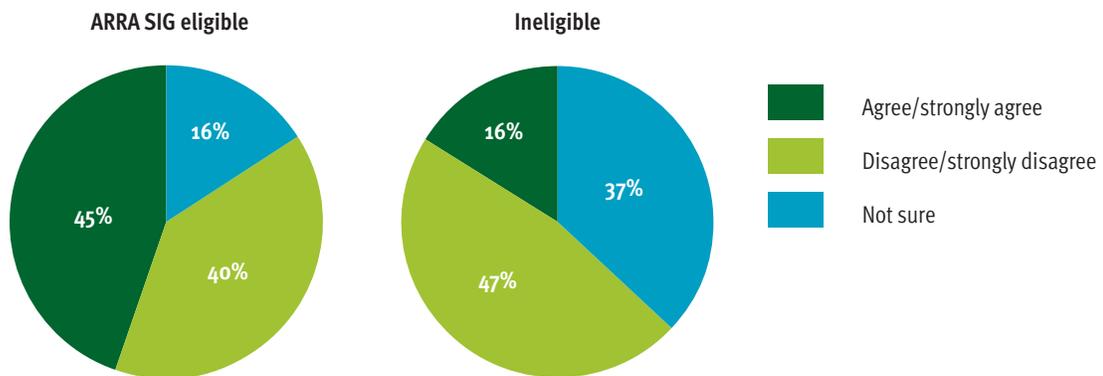


Figure reads: An estimated 45% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under NCLB, compared with an estimated 16% of districts that had no eligible schools.

Note: In this figure, if the difference between two estimates is 21% or greater, then the difference is statistically significant. The exception is that the difference between the 40% and 16% estimates for SIG-eligible districts is not statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

## Effectiveness of Distributing ARRA SIG Funds through Competitive Grants

Districts must apply to the state for ARRA SIGs on behalf of their eligible schools, and then state officials decide which applications to fund. Roughly half of both eligible (47%) and ineligible (50%) districts *disagreed* or strongly disagreed that using a competitive grant application process is an effective way of distributing ARRA SIG funds to support improvement of low-achieving schools. (See **figure 5**.) A greater share of eligible (40%) than ineligible (17%) districts agreed or strongly agreed with this statement. An estimated 33% of ineligible districts were unsure whether this competitive approach is effective—a higher proportion than the 13% of eligible districts that were unsure.

**Figure 5. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that using a competitive grant application process is an effective way of distributing ARRA SIG funds to support improvement of low-achieving schools**

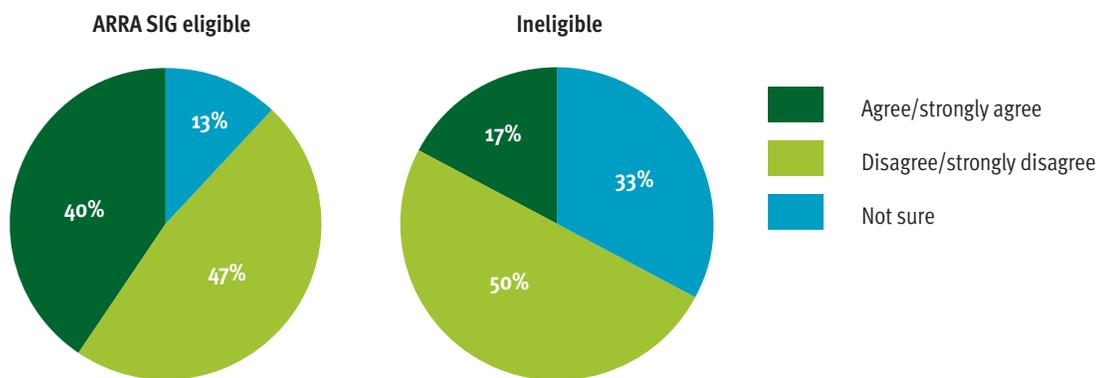


Figure reads: An estimated 40% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that using a competitive grant application process is an effective way of distributing these funds to support improvement of low-achieving schools in their states, compared with an estimated 17% of districts that had no eligible schools

Note: In this figure, if the difference between two estimates is 16% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

## Effectiveness of Using External Providers to Assist Low-Achieving Schools

Federal ARRA SIG guidance allows school districts to contract with outside organizations, such as universities, regional technical assistance providers, or other nonprofit or for-profit organizations, to provide services to SIG schools aimed at improving student achievement. As shown in **figure 6**, nearly half (49%) of eligible districts agreed or strongly agreed that contracting with external entities is an effective way to improve low-achieving schools, a greater share than the 28% of ineligible districts that agreed with this statement. Uncertainty was more prevalent among ineligible districts; 42% of ineligible districts, compared with just 12% of eligible districts, were not sure about the effectiveness of outside contracting.

**Figure 6. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that contracting with external entities to assist low-achieving schools is an effective way of improving those schools**

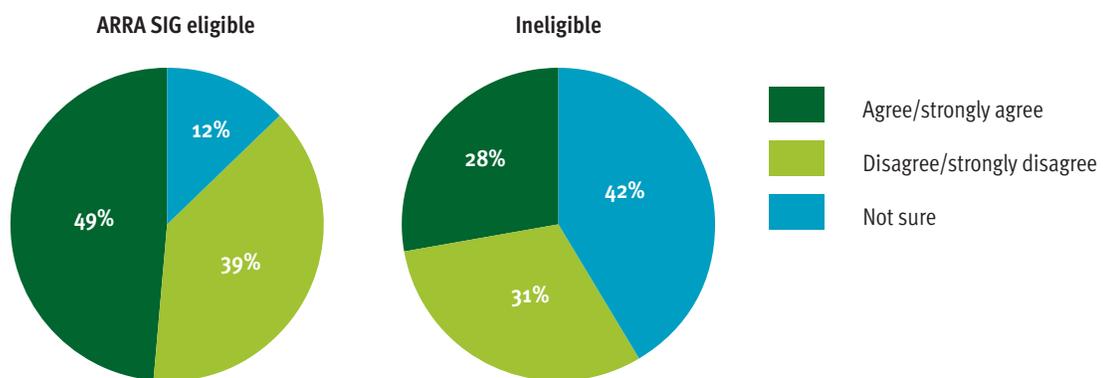


Figure reads: An estimated 49% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that contracting with external entities to assist low-achieving schools is an effective way of improving those schools, compared with an estimated 28% of districts that had no eligible schools

Note: In this figure, if the difference between two estimates is 14% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

### Duration of School Improvement Grants

ARRA SIG grants are for three years, and recipient schools are expected to show gains in students' academic achievement during this time. Similar proportions of eligible (33%) and ineligible (32%) districts agreed or strongly agreed that three years was appropriate. (See **figure 7**.) This was an exception to the pattern of greater agreement among eligible than ineligible districts about the effectiveness of the other five SIG provisions discussed above.

Half of all eligible districts and 28% of ineligible districts *disagreed* or strongly disagreed that three years is an appropriate amount of time to improve the lowest-achieving schools—a statistically significant difference. This was an exception to the general pattern of similar proportions of disagreement among eligible and ineligible districts.

A greater share of ineligible (39%) than of eligible (17%) districts were not sure whether three years was an appropriate period.

**Figure 7. Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that three years is an appropriate amount of time to improve the lowest-achieving schools**

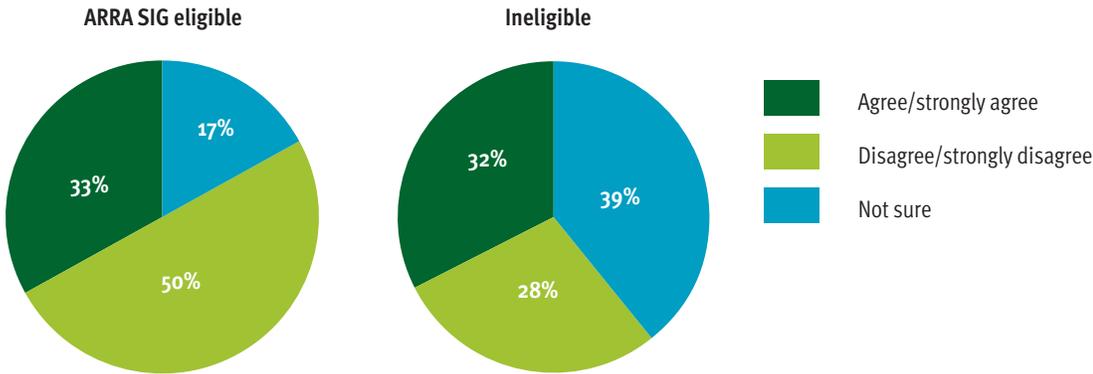


Figure reads: An estimated 50% of districts with schools eligible for ARRA SIG funds disagreed or strongly disagreed that three years is an appropriate amount of time to improve the lowest-achieving schools, compared with an estimated 28% of districts that had no eligible schools.

Note: In this figure, if the difference between two estimates is 22% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

## Lack of Consensus among All Districts about Appropriateness and Effectiveness

**Table 1** shows the responses of all districts to our survey question about the effectiveness of key ARRA SIG requirements. As the table indicates, there is no consensus among the nation's school districts about whether the SIG provisions highlighted in our survey are appropriate or effective. Only one-third or fewer of all districts agreed or strongly agreed that a particular provision is effective. The responses of all districts were likely influenced by the large majority of districts that were ineligible for ARRA SIG funds.

**Table 1. Percentage of all districts that agreed, disagreed, or were not sure about the effectiveness of key provisions of the ARRA SIG program**

ARRA SIG provision	Strongly agree/ agree	Strongly disagree/ disagree	Not sure
The criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance.	33%	26%	41%
Concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools.	23%	43%	35%
Concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under the No Child Left Behind Act.	20%	46%	34%
Using a competitive grant application process for distributing federal funds is an effective way of distributing these funds to support improvement of low-achieving schools in my state.	21%	49%	30%
Contracting with external entities (e.g., institutions of higher education, regional technical assistance providers, other non-profit and for-profit organizations) to assist low-achieving schools is an effective way to improve those schools.	31%	32%	37%
Three years is an appropriate amount of time to improve the lowest-achieving schools.	33%	32%	36%

Table reads: An estimated 33% of the nation's school districts agreed or strongly agreed that the criteria used to identify low-achieving schools for ARRA school improvement grants appropriately identify schools that need the most assistance.

Note: Rows do not add to 100% due to rounding.

Note: In this figure, if the difference between two estimates is 12% or greater, then the difference is statistically significant. Confidence intervals for the estimates in this figure can be found in the technical appendix for this report, available at [www.cep-dc.org](http://www.cep-dc.org).

## Discussion and Conclusion

Funds for school improvement grants provided through the 2009 economic stimulus package were distributed to low-performing schools in an estimated 12% of the nation's school districts for use in school year 2010-11. As intended by the U.S. Department of Education's new requirements for section 1003(g) SIGs, these grants are reaching a more limited group of districts than the previous SIG program and a small minority of the thousands of districts that receive federal Title I funds.

There were significant differences between eligible and ineligible districts in their views of key ARRA SIG provisions. Higher proportions of eligible than of ineligible districts agreed that requirements for identifying schools and distributing and using funds are effective. Among ineligible districts—which comprise a large majority of the nation's districts—a greater proportion were uncertain about the effectiveness of these requirements. In addition, between one-quarter and one-half of both eligible and ineligible districts disagreed that these key requirements are effective.

It is understandable that eligible districts would have a greater tendency to agree with the ARRA SIG eligibility and targeting requirements than districts left out by these requirements. As noted earlier, 73% of the eligible districts actually received ARRA SIG funds, so a large share of the eligible districts would have benefitted from the current requirements. It is also not surprising that a greater share of ineligible districts, which have not had experience implementing ARRA SIG programs, would be unsure about the effectiveness of various provisions.

Across *all* districts there is a lack of consensus about the effectiveness of key ARRA SIG provisions. This may be partly explained by the uncertainty found among ineligible districts, which comprise an estimated 85% of the nation's districts. Although our survey results do not further delve into the factors underlying districts' responses, we can speculate that this lack of agreement may also reflect dissatisfaction among ineligible districts from being passed over for funding or a lack of experience in implementing program requirements. It may also reflect skepticism among various types of districts about SIG requirements or the need for more time for the program to demonstrate its value.

The district perceptions highlighted in this report also raise questions about whether the decision to concentrate section 1003(g) SIGs on a limited number of low-performing schools will affect the program's level of support among policymakers, educators, and the public. If districts that are ineligible for funds are less inclined to view the program as effective, they may be less likely to support continued funding for SIGs. In this era of tight education funding, policymakers may be more inclined to continue programs that directly benefit a broad base of districts and schools than those that benefit a more limited group. Although the particular schools and districts that are eligible for section 1003(g) SIGs may change from year to year depending on school performance, the program requirements ensure that only a small minority will be funded.

The effectiveness of the ARRA SIG program will ultimately be judged by whether student achievement improves in the targeted schools. Most of the districts that received ARRA SIG funds were in their first year of implementing these grants at the time of the survey. Half of these recipient districts said it was too soon to tell about the results of the school reform models. In addition, many districts that were eligible for grants felt that the three-year grant period was not an appropriate amount of time to improve the lowest-achieving schools.

To document whether the desired results are achieved in low-performing schools, districts will need to monitor progress, make mid-course corrections, and report on their results. Sustaining the program for a sufficient time to assess results will also depend on policymakers, educators, and the public recognizing that it's in the national interest to help persistently low-performing schools, even if they are not in one's own community.

## References

Center on Education Policy. (2011a). *Strained schools face bleak future: Districts foresee budget cuts, teacher layoffs, and a slowing of education reform efforts*. Washington, DC: Author.

Center on Education Policy. (2011b). *Common core standards: Progress and challenges in school districts' implementation*. Washington, DC: Author.

U.S. Department of Education. (2011a). *Digest of education statistics 2010*. Retrieved on October 11, 2011, from <http://nces.ed.gov/programs/digest/>

U.S. Department of Education. (2011b). *Report to Congress on the Elementary and Secondary Education Act: State-reported data for school year 2008–09*. Retrieved on October 11, 2011, from <http://www2.ed.gov/about/reports/annual/nclbrpts.html>

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Based in Washington, D.C., and founded in January 1995 by Jack Jennings, the Center on Education Policy is a national independent advocate for public education and for more effective public schools. The Center works to help Americans better understand the role of public education in a democracy and the need to improve the academic quality of public schools. We do not represent any special interests. Instead, we help citizens make sense of the conflicting opinions and perceptions about public education and create the conditions that will lead to better public schools.

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## Appendices

### **Federal Efforts to Improve the Lowest-Performing Schools: District Views on School Improvement Grant Requirements**

#### **Appendix 1: Confidence Intervals and Statistical Significance**

Many of the tables, figures, and footnotes in the report provide information about whether the difference between estimated percentages is statistically significant. Statistical significance signals whether this difference is likely to be due to chance. If it appears that the difference in estimated percentages is due to chance (i.e., the difference is not statistically significant), then we cannot say that districts are more likely to do one thing than another.

For example, we estimate that 65% of districts with schools eligible to receive SIG funds agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance, while 27% of districts that were not eligible to receive SIG funds agreed or strongly agreed with the statement. The difference between 65% and 27% is statistically significant, which indicates that the difference is larger than is likely to be explained by chance alone. Therefore, we can say that a higher percentage of districts that were eligible to receive SIG funds than districts that were not eligible to receive SIG funds agreed with the statement. On the other hand, an estimated 27% of districts that were eligible to receive SIG funds and 26% of districts that were not eligible to receive SIG funds disagreed or strongly disagreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance. The difference between the 27% of eligible districts and 26% of districts that were not eligible to receive SIG funds that disagreed or strongly disagreed is not statistically significant. Therefore, we cannot say that a higher percentage of districts that were eligible to receive SIG funds than districts that were ineligible disagreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance.

One method of determining the statistical significance of the difference between two percentages is to compare the confidence intervals of the two percentages. Confidence intervals provide information about the accuracy of the estimated percentages. If the confidence intervals for two percentages do not overlap, then the difference is statistically significant. Exhibit 1 illustrates how ranges of estimated percentages (the confidence intervals) of SIG eligible and ineligible districts that agreed, disagreed, and were not sure that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance are used to determine statistical significance.

## Exhibit 1: Confidence intervals for Figure 2

Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance

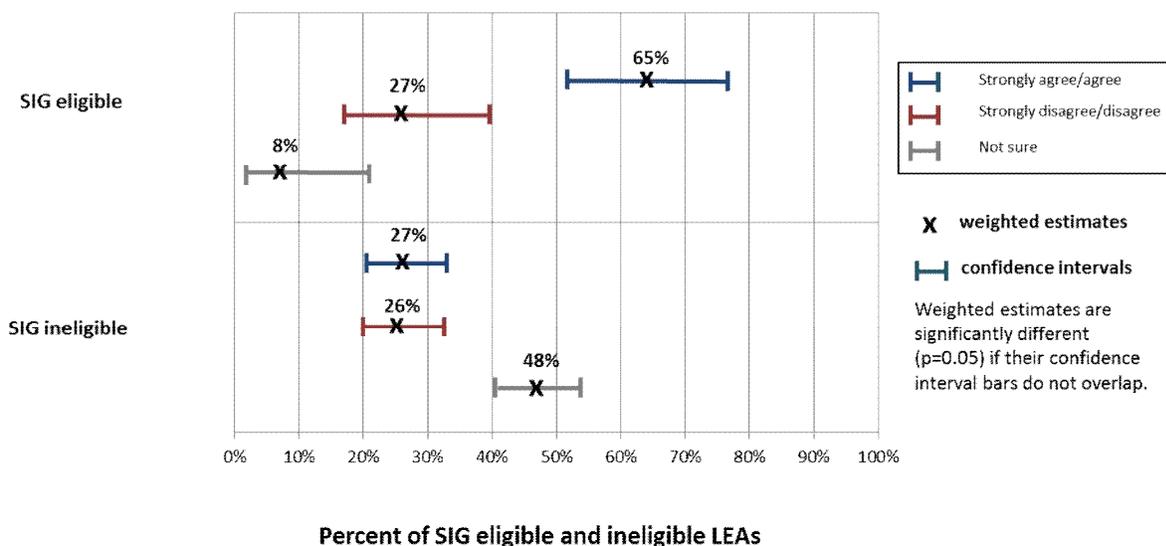


Exhibit reads: An estimated 65% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance, compared to an estimated 27% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 65 (52, 77); 27 (17, 40); 8 (3, 21); 27 (21, 33); 26 (20, 32); 48 (41, 54). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools eligible for ARRA SIG funds that agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance is between 52% and 77%.

In this case, the bars depicting the confidence interval for the estimated percentage of districts that had schools eligible to receive SIG funds that disagreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance and the confidence interval for the estimated percentage of districts that were not eligible to receive SIG funds that disagreed with the statement overlap, indicating that the difference between the two percentages is *not* statistically significant. Conversely, the bars depicting the confidence interval for the estimated percentage of districts that were eligible to receive SIG funds that agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance and the confidence interval for the estimated percentage of districts that were not eligible to receive SIG funds that agreed with the statement do not overlap, indicating that the difference between the percentages *is* statistically significant.

Appendix 3 provides confidence intervals for all the percentages, figures, and tables that are reported in the main body of the report.

## Appendix 2: Study Methods

This appendix describes the sampling procedures used to select potential districts to participate in the *Center on Education Policy's District Survey, 2011*. Also described are the methods used to develop and administer the survey and the analytic process used to obtain population estimates from the survey responses. The survey was developed, administered, and analyzed with support from Policy Studies Associates, CEP's contractor for this project.

### SURVEY SAMPLE

We started with the publicly accessible dataset from the 2007-2008 Common Core of Data Local Education Agency Universe Survey conducted by the National Center of Education Statistics (NCES). This dataset contains information on 18,090 elementary and secondary education agencies located in the 50 states and the District of Columbia; American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands; the Department of Defense schools; and the Bureau of Indian Education.

From the dataset of 18,090 education agencies, we removed the 4,778 agencies that did not match our study population criteria. Specifically, we removed the agencies that were located outside of the 50 states and the District of Columbia; that were not operating; or that were regional education service agencies, federally and state-operated agencies, charter agencies, or designated as "other education agencies."

The dataset also included agencies that were component(s) of a supervisory union, sharing a superintendent and administrative services with other local school districts. In these cases, we retained the agency defined as the "supervisory union" and removed the component agencies associated with the unions. We removed the local education agencies (LEAs) that did not directly educate students through the employment of teachers and the operation of school buildings; many of these agencies represented towns that sent their students to neighboring districts or cooperative districts. Finally, we also removed agencies that solely served special segments of the population, such as vocational centers, correctional facilities, schools for the blind or deaf, and schools of performing arts. Exhibit 1 summarizes the edits that we made to the dataset to arrive at our sample frame.

## Exhibit 1: Variables Used to Build Sample Frame

Variable Name	Variable Description	Use*	LEAs Subtracted	Unduplicated Deletions**
FIPST	Federal Information Processing Standards (FIPS) state code	Eliminated LEAs from locations outside of the 50 states and the District of Columbia (X>56; n=42)	42	42
BOUND07	The boundary change indicator is a classification of changes in an education agency's boundaries since the last report to NCES	Eliminated LEAs that had closed (X=2; n=149), were temporarily closed (X=6; n=35), or were scheduled to be operational in the future (X=7; n=56)	240	282
TYPE07	Agency type code	Eliminated agencies defined as %regional education service agencies+(X=4; n=1,203), %state-operated agencies+(X=5; n=275), %federally operated agencies+(X=6; n=36), %charter agencies+(X=7; n=2,126), and %other education agencies+(X=8; n=195)	3,835	3,925
UNION07	Indicator linking supervisory units and component agencies	Eliminated agencies that were represented in the dataset by a %supervisory union.+Eliminated LEAs from CA (n=12), IN (n=3), NH (n=175), NYC (n=34), VT (n=291), and VA (n=2); eliminated supervisory unions from MT (n=56)	573	4,498
SCH07	Number of schools associated with the agency	Eliminated LEAs that did not directly educate students or that served special populations of students	280	4,778

Exhibit reads: The FIPST variable eliminated LEAs that existed outside the 50 states and the District of Columbia; this variable netted 42 deletions, which brought the total number of unduplicated deletions to 42.

\* The %+stands for the variable name in each row.

\*\* The unduplicated count is cumulative from top to bottom.

To stratify the sample frame by geographic location and area population density, we used the "LOCAL07" variable in the NCES dataset, which is an indicator of a district's location relative to a populous area. The NCES dataset contains four main location types, as well as three subtypes with each location type. We used the four main types but not the subtypes in our stratification – in other words, we used the main location type "city" as a stratum, but we did not create additional strata to distinguish among the subtype locations of "large," "medium," or "small."

Exhibit 2 presents definitions for the main location types, identifies the number of districts in each location type in the sample frame, reports the number of students who attend school in the districts in the sample frame, and identifies the number of districts in each location type that we

sampled. We used disproportional stratification in order to include sufficient numbers of each type of district in our survey.

### Exhibit 2: Definitions and Frequencies of Sample Strata

Location Type	Definition <sup>1</sup>	Number (and percent) of districts in the sample frame	Number (and percent) of K-12 students in the sample frame	Number (and percent) of districts in the sample
City	Territory inside an urbanized area (a densely settled area that has a census population of at least 50,000+) and inside a principal city (the largest city inside the urbanized area+)	751 (5.6)	13,447,851 (28.8)	261 (27.3)
Suburb	Territory inside an urbanized area (a densely settled area that has a census population of at least 50,000+) and outside a principal city (the largest city inside the urbanized area+)	2,741 (20.6)	18,384,606 (39.4)	234 (24.6)
Town	Territory inside an urban cluster (a densely settled area that has a census population of 2,500 to 49,999+)	2,502 (18.8)	5,904,016 (12.6)	226 (23.7)
Rural	Territory outside of urbanized areas (densely settled areas that have a census population of at least 50,000+) and urban clusters (densely settled areas that have a census population of 2,500 to 49,999+)	7,318 (55.0)	8,967,808 (19.2)	234 (24.5)
<b>Totals</b>		<b>13,312 (100.0)</b>	<b>46,704,281 (100.0)</b>	<b>955 (100.0)</b>

Exhibit reads: Locales defined as city+consist of 5.6 percent of the districts in the sample frame, contain 28.8 percent of the students who attend the districts in the sample frame, and represent 27.3 percent of the districts sampled for the study.

<sup>1</sup> We derived the definitions from U.S. Census Bureau definitions: [www.census.gov](http://www.census.gov).

In addition to the four ULOCAL07 location types, we also included a stratification level for districts that belonged to the Council of Great City Schools (CGCS). We sent surveys to all CGCS districts in an effort to include the perspectives of many of the largest school districts in the country. Because of the weighting that we used when we conducted our analyses, the intentional sampling of the CGCS districts does not affect the representativeness of the findings.

### SURVEY DEVELOPMENT

The challenge in developing the survey was to strike a reasonable balance between minimizing the response burden and collecting enough data to describe how LEAs are responding to budget

changes and federal and state reforms. The survey included 28 questions across three sections: district fiscal issues, state standards, and district uses of ARRA funds.

In the section on district fiscal issues, the survey included questions for the 2010-11 and 2011-12 school years regarding the status of funding in the district including and excluding ARRA and/or Education Jobs funds; strategies that the district adopted to account for declining budgets, if applicable; and the status of local progress on education reforms. In the section on state standards, the survey included questions on the ways in which local administrators had learned about the Common Core State Standards (CCSS); the extent to which state education agencies had provided technical support on implementing the CCSS at the local level; administrators' perspectives on the rigor of the CCSS relative to previous standards; strategies that the district was using to implement the CCSS; and challenges that the district was facing as a part of the CCSS implementation process. In the section on district uses of ARRA funds, the survey included questions regarding the use of ARRA SIG funds, ARRA Title I funds, and ARRA IDEA funds in the district.

As part of survey development, we sent a draft of the instrument to central office administrators in LEAs in three states. We asked the administrators to review the instrument and provide feedback on the appropriateness and clarity of the wording and on the focus of the survey questions. We also asked them to estimate the amount of time required to complete the survey and to indicate who else in their districts might be involved in responding to individual items. The final version of the survey reflects the feedback that we received.

## **SURVEY ADMINISTRATION**

In February 2011, CEP contacted the superintendents of the districts in the sample to explain the purpose of the survey and to provide background information on CEP and its previous reports and research on state- and district-level implementation of ARRA. A week later, we sent the survey to the local superintendents. One week after the print version of the survey arrived in the districts, we sent an electronic version of the survey to the superintendents via email. We sent a reminder postcard a few days after distribution of the email. Two weeks later we sent a reminder email. One week after the reminder email, we mailed another copy of the print survey to the superintendents.

Districts returned surveys between the end of February and the beginning of May 2011. We received completed responses from 457 of the 955 districts in our sample; this corresponds to a response rate of 48 percent. Given our previous work with school districts and understanding of the current climate of data requests from districts, we anticipated a 50-percent response rate at the outset of the survey. If we assume that district non-response occurred at random, then the response rate does not affect the representativeness of the survey findings.

## **DATA ANALYSES**

To obtain the population estimates from the sample responses, we multiplied each sample response by a weighting factor specific to that particular stratum and question. The weighting factors were stratum-specific because the proportion of districts included in the sample from

each stratum was not equal (i.e., we used a disproportional stratified sample). The weighting variables were also question-specific because we dealt with missing responses by eliminating the cases from the set of responses used in the analysis. This approach to treating missing data has the advantage of simplifying the reporting of results; it has the disadvantage of increasing the estimated standard errors.

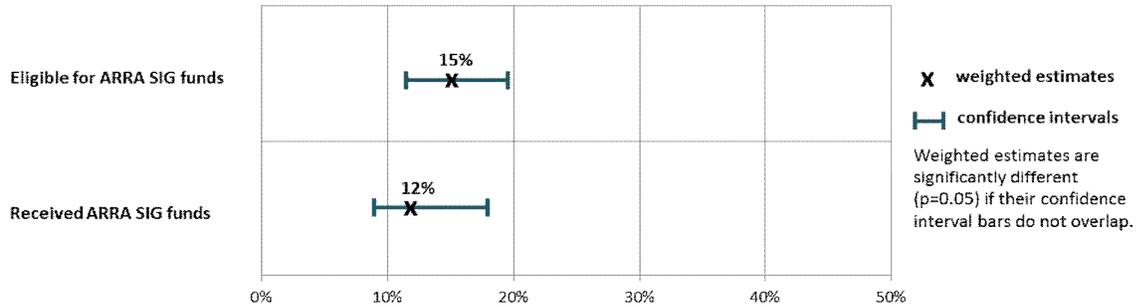
We calculated both the standard error and confidence interval for each of the estimated response frequencies presented in the report that describes the survey findings. The estimated standard error of a proportion provides information about the accuracy of the percentage estimate. The size of the standard error is influenced by the distribution of responses, the number of respondents, and the size of the population. Estimated standard errors are used to construct confidence intervals for the estimated percent. The confidence interval for a proportion indicates the degree of certainty that the true value for the population of all districts in the nation is included in a particular range. For proportions, the confidence interval is not symmetric relative to the estimated percent (except in the case where the estimated percent equals 50); this is because a proportion has a lower and upper bound (0 and 1, respectively), and the boundary affects the calculation of the interval. Additional information about the confidence intervals for specific responses is available in Appendix 3 accompanying the report.

After we drew our survey sample from the sample frame, we discovered that a number of districts that were listed in the Common Core of Data as being operational were, in fact, no longer operating. Because we drew the sample randomly, we could estimate the total number of districts in the Common Core of Data that were listed as open but that were closed; this estimate was 572 districts. We subtracted these districts from the denominator in our analyses. That is, we estimate the size of the sample frame to be 12,740 districts.

**Appendix 3:**  
**Confidence Intervals for Survey Responses**

## Exhibit 1: Confidence intervals for text on Page 3

### Percent of nation's school districts that were eligible for ARRA SIG funds and percent of nation's school districts that received ARRA SIG funds

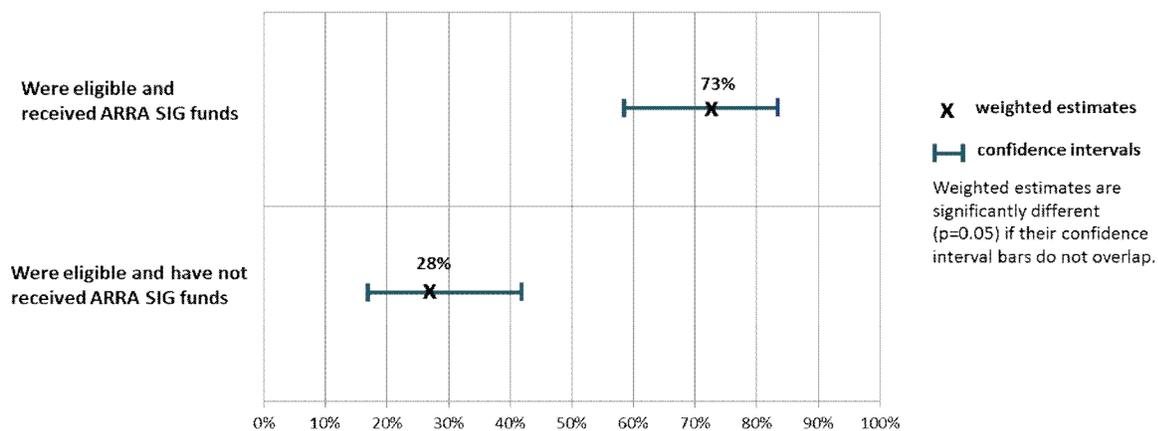


#### Percent of all LEAs

Exhibit reads: An estimated 15% of all school districts had schools in their district identified as eligible for ARRA SIG funds since January 2010 and an estimated 12% had one or more schools in the district that received ARRA SIG funds.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 15 (12, 19); 12 (9, 17). This means, for example, that we are 95 percent certain that the actual percentage of districts that were eligible for ARRA SIG funds is between 12% and 19%.

### Percent of nation's school districts that were eligible for ARRA SIG funds that actually received ARRA SIG funds



#### Percent of SIG eligible LEAs

Exhibit reads: An estimated 73% of districts that were eligible for SIG funds actually received ARRA SIG funds, while an estimated 28% of eligible districts had not received ARRA SIG funds.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 73 (58, 83); 28 (17, 42). This means, for example, that we are 95 percent certain that the actual percentage of districts that were eligible for ARRA SIG funds and also received these funds is between 58% and 83%.

## Exhibit 2: Confidence intervals for Figure 1

### Percentage of ARRA SIG recipient districts with one or more schools implementing various reform models

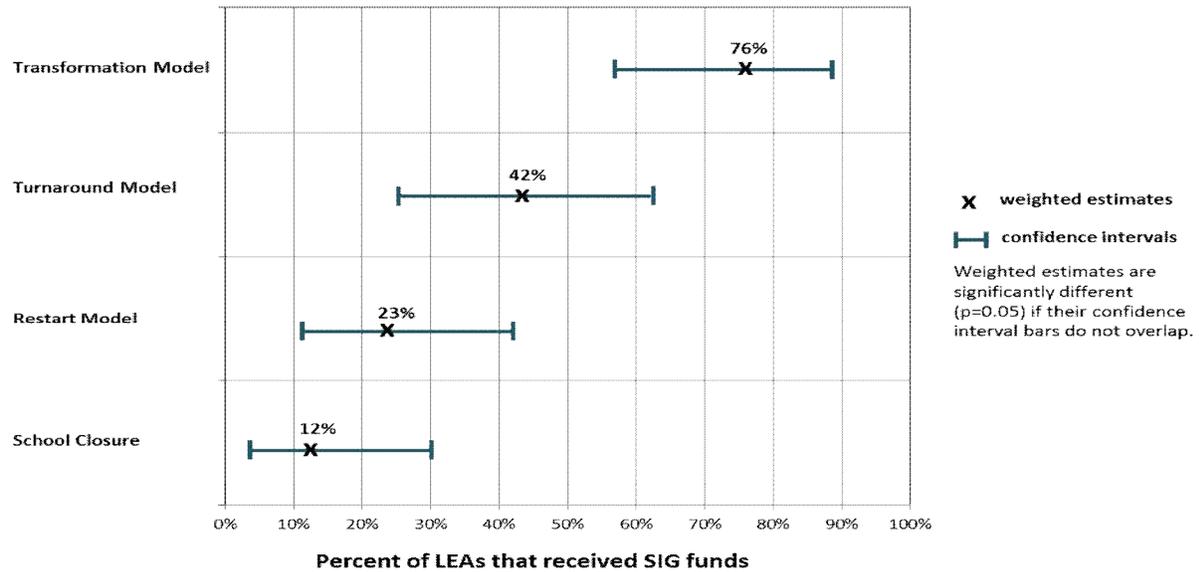


Exhibit reads: An estimated 76% of districts with schools that received ARRA SIG funds had one or more schools implementing the transformation model in school year 2010-11, an estimated 42% had one or more schools implementing the turnaround model, an estimated 23% had one or more schools implementing the restart model, and an estimated 12% had closed one or more schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 76 (56, 88); 42 (25, 62); 23 (11, 42); 12 (4, 30). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools that received ARRA SIG funds that had one or more schools implementing the transformation model is between 56% and 88%.

### Exhibit 3: Confidence intervals for text on Page 4

#### Percent of ARRA SIG recipient districts that had received state assistance in implementing one or more SIG intervention models

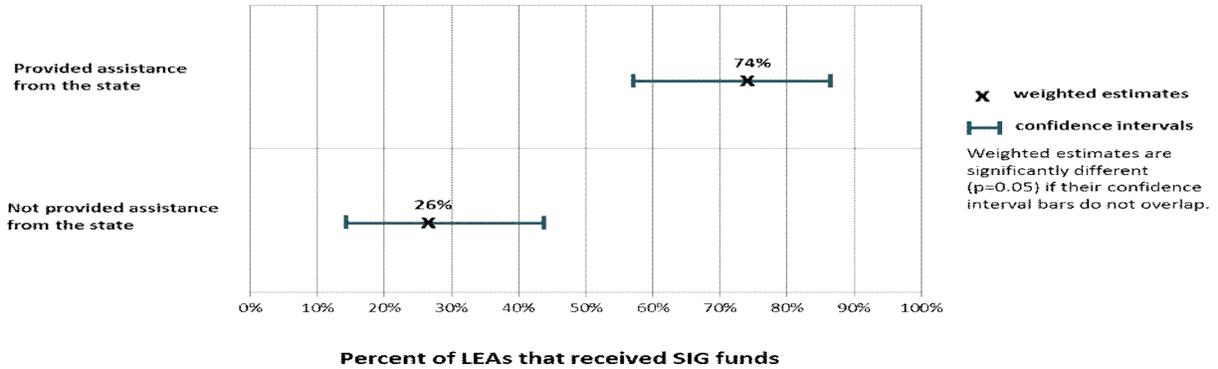


Exhibit reads: An estimated 74% of districts with schools that received ARRA SIG funds had received state assistance in implementing one or more SIG intervention models.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 74 (57, 86); 26 (14, 43). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools that received ARRA SIG funds that had received state assistance in implementing one or more SIG intervention models is between 57% and 86%.

#### Percent of ARRA SIG recipient districts that had positive, negative, mixed, or too soon to tell results in implementing one or more intervention models

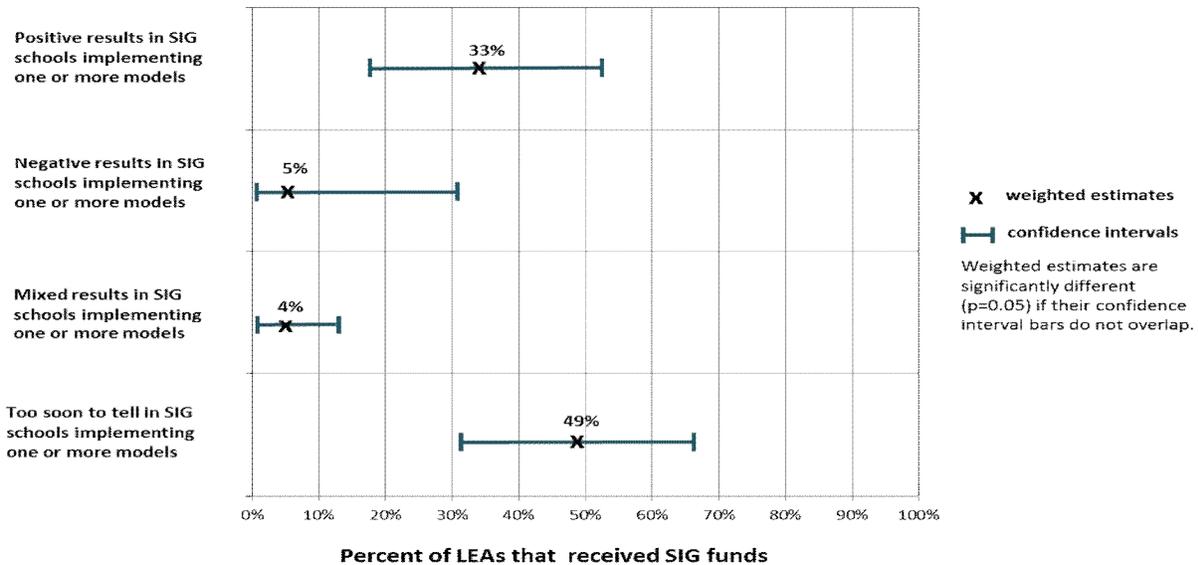


Exhibit reads: An estimated 33% of districts with schools that received ARRA SIG funds had positive results in implementing one or more SIG intervention models, an estimated 5% had negative results, an estimated 4% had mixed results, and 49% said that it was too soon to tell.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 33 (18, 52); 5 (1, 31); 4 (1, 13); 49 (31, 67). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools that received ARRA SIG funds that had positive results in implementing one or more SIG intervention models is between 18% and 52%.

### Exhibit 4: Confidence intervals for Figure 2

**Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance**

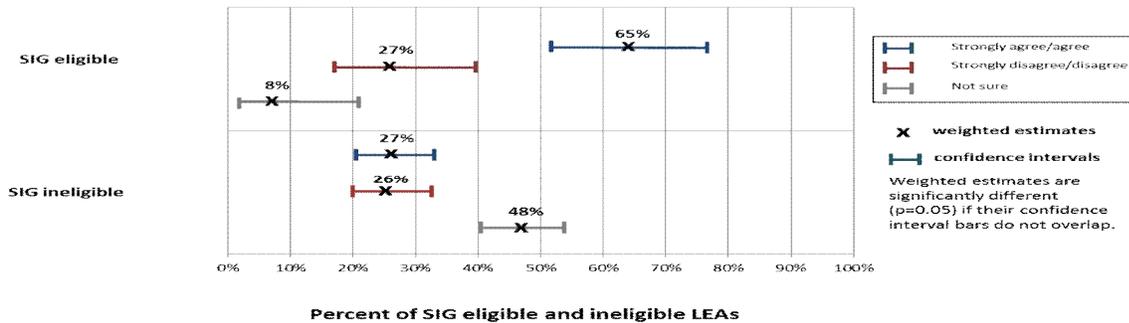


Exhibit reads: An estimated 65% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance, compared with an estimated 27% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 65 (52, 77); 27 (17, 40); 8 (3, 21); 27 (21, 33); 26 (20, 32); 48 (41, 54). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools eligible for ARRA SIG funds that agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance is between 52% and 77%.

### Exhibit 5: Confidence intervals for Figure 3

**Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools**

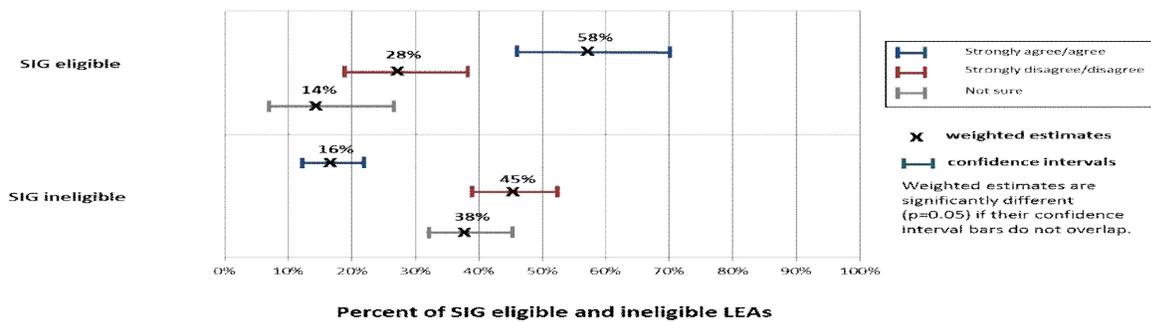


Exhibit reads: An estimated 58% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools, compared with an estimated 16% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 58 (46, 70); 28 (19, 38); 14 (7, 27); 16 (12, 22); 45 (39, 52); 38 (32, 45). This means, for example, that we are 95 percent certain that the actual percentage of districts with

schools eligible for ARRA SIG funds that agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is an effective means of improving these schools is between 46% and 70%.

### Exhibit 6: Confidence intervals for Figure 4

**Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under NCLB**

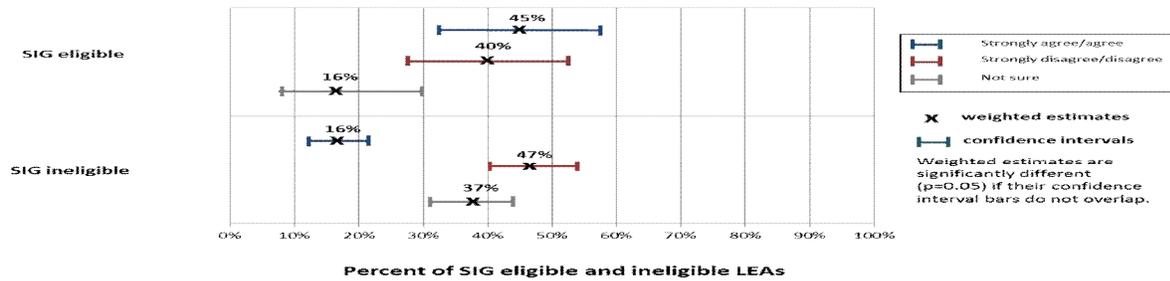


Exhibit reads: An estimated 45% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under NCLB, compared with an estimated 16% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 45 (32, 58); 40 (28, 52); 16 (8, 30); 16 (12, 22); 47 (41, 54); 37 (31, 44). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools eligible for ARRA SIG funds that agreed or strongly agreed that concentrating large amounts of federal funds on a small number of low-achieving schools is a more effective improvement strategy than distributing these funds to all schools identified for improvement under NCLB is between 32% and 58%.

### Exhibit 7: Confidence intervals for Figure 5

**Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that using a competitive grant application process is an effective way of distributing ARRA SIG funds to support improvement of low-achieving schools**

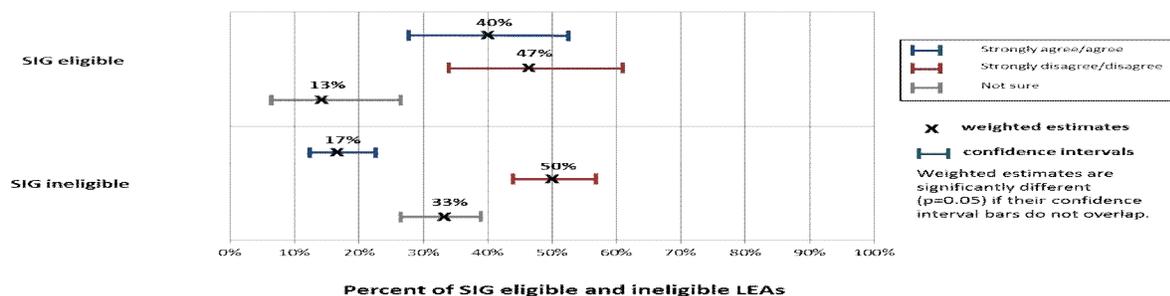


Exhibit reads: An estimated 40% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that using a competitive grant application process is an effective way of distributing these funds to support improvement of low-achieving schools in their states, compared with an estimated 17% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 40 (28, 53); 47 (34, 61); 13 (6, 26); 17 (13, 23); 50 (44, 57); 33 (27, 39). This means, for example, that we are 95 percent certain that the actual percentage of districts with

schools eligible for ARRA SIG funds that agreed or strongly agreed that using a competitive grant application process is an effective way of distributing ARRA SIG funds to support improvement of low-achieving schools is between 28% and 53%.

### Exhibit 8: Confidence intervals for Figure 6

#### Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that contracting with external entities to assist low-achieving schools is an effective way of improving those schools

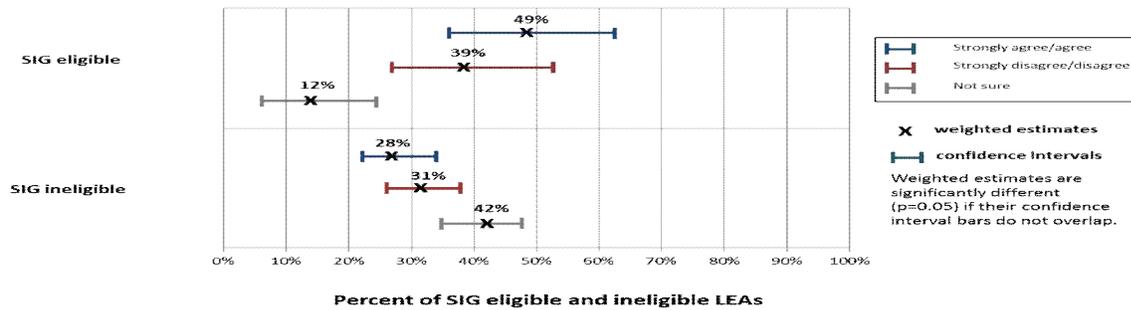


Exhibit reads: An estimated 49% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that contracting with external entities to assist low-achieving schools is an effective way of improving those schools, compared with an estimated 28% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 49 (36, 62); 39 (27, 53); 12 (6, 23); 28 (22, 34); 31 (25, 38); 42 (35, 48). This means, for example, that we are 95 percent certain that the actual percentage of districts with schools eligible for ARRA SIG funds that agreed or strongly agreed that contracting with external entities to assist low-achieving schools is an effective way of improving those schools is between 36% and 62%.

### Exhibit 9: Confidence intervals for Figure 7

#### Percentage of SIG-eligible and ineligible districts that agreed, disagreed, or were not sure that three years is an appropriate amount of time to improve the lowest-achieving schools

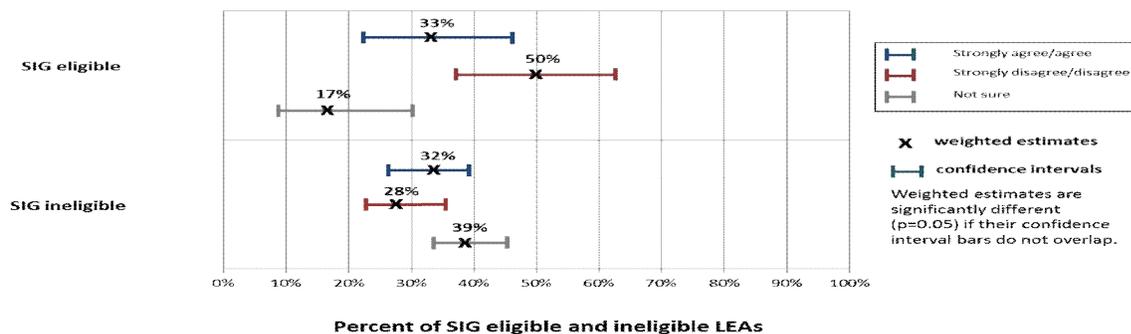


Exhibit reads: An estimated 33% of districts with schools eligible for ARRA SIG funds agreed or strongly agreed that three years is an appropriate amount of time to improve the lowest-achieving schools, compared with an estimated 32% of districts that had no SIG eligible schools.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 33 (22, 47); 50 (37, 63); 17 (9, 30); 32 (26, 39); 28 (23, 35); 39 (33, 46). This means, for example, that we are 95 percent certain that the actual percentage of districts with

schools eligible for ARRA SIG funds that agreed or strongly agreed that three years is an appropriate amount of time to improve the lowest-achieving schools is between 22% and 47%.

### Exhibit 10: Confidence intervals for Table 1

#### Percentage of all districts that agreed, disagreed, or were not sure about the effectiveness of key provisions of the ARRA SIG program

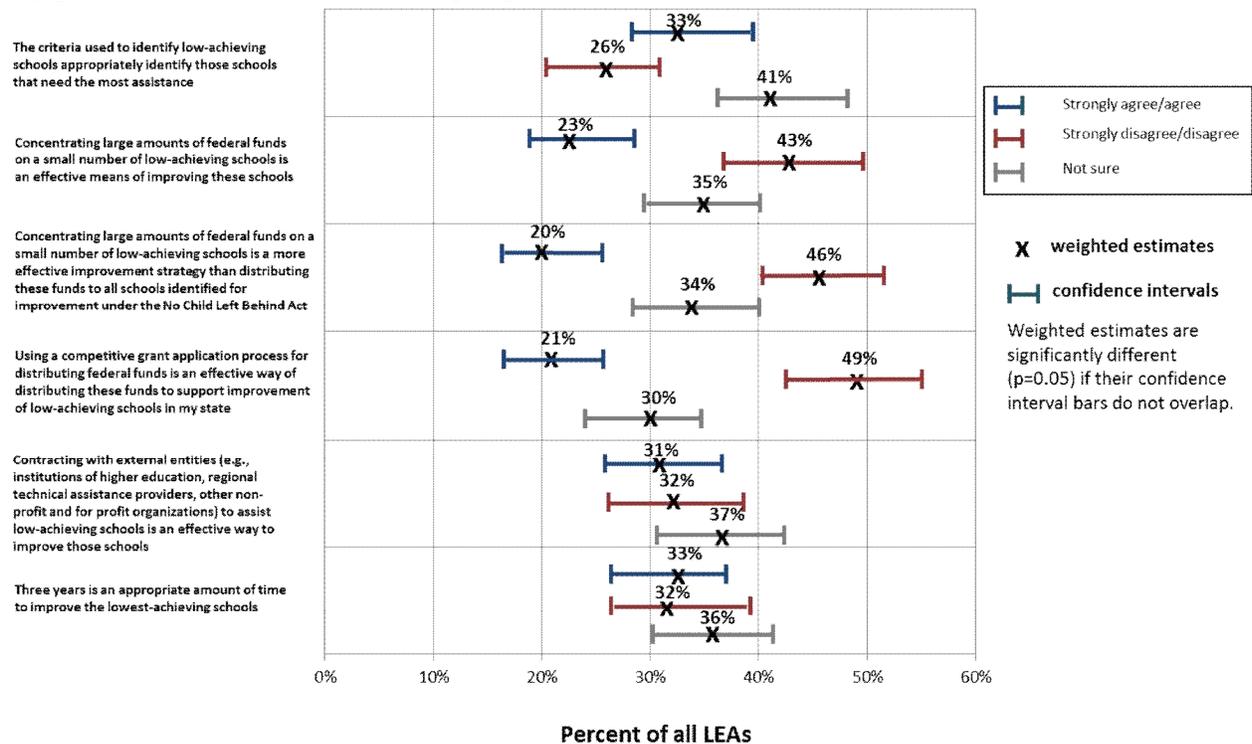


Exhibit reads: An estimated 33% of the nation's school districts agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance.

Note: The 95 percent confidence intervals for the estimates in the figure are as follows: 33 (28, 39); 26 (21, 31); 41 (36, 47); 23 (18, 28); 43 (37, 49); 35 (29, 40); 20 (16, 26); 46 (40, 52); 34 (28, 40); 21 (17, 26); 49 (43, 55); 30 (24, 35); 31 (26, 37); 32 (27, 38); 37 (31, 43); 33 (27, 38); 32 (27, 37); 36 (30, 42). This means, for example, that we are 95 percent certain that the actual percentage of all districts that agreed or strongly agreed that the criteria used to identify low-achieving schools appropriately identify those schools that need the most assistance is between 28% and 39%.