Costing Out No Child Left Behind

A Nationwide Survey of Costing Efforts

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Abstract

This report was prepared as one component of a project Augenblick, Palaich and Associates, Inc. (APA) undertook for the Hawaii Educational Policy Center (HEPC). The purpose of the project was to estimate the "costs" of No Child Left Behind (NCLB), the federal legislation that reauthorized the Elementary and Secondary School Act (ESEA, 1965) in 2001. The HEPC asked us to review other studies that had been done through March 2004 that purported to estimate the costs of NCLB. There were several reasons for undertaking a review of such studies: (1) to understand the methodologies others were using to analyze NCLB costs; (2) to become familiar with the difficulties others encountered in completing cost studies of NCLB; and (3) to determine whether reliable benchmark cost figures had been developed for any, or all, components of NCLB. Ultimately, we hoped that an analysis of other studies would help us to develop the information collection procedures we would use in working with people in Hawaii. APA asked Dr. Dianne DeVries, an independent consultant, to assist us in identifying, reviewing, and classifying relevant studies.

It is important to note that APA had undertaken studies of the cost of "adequacy" in a number of states prior to starting work with Hawaii; such studies had been done in order to estimate all of the costs likely to be incurred by school districts in meeting the "input" and "outcome" expectations of a specific state's education accountability system. Almost all of that work had been completed before the states had submitted their plans to meet NCLB's requirements. It is our view that costing out NCLB is different from an "adequacy" study. Therefore, as we reviewed other studies of the cost of NCLB, we were cognizant of the possibility that different studies might look at such costs differently.

Between late December 2003 and early February 2004, some 775 calls were placed to identify the appropriate senior educational administrators and analysts at the 49 other SEAs, legislative services or fiscal research staff in the 49 general assemblies, as well as a key contact at each of the 49 state affiliates of American Association of School Administrators (AASA), senior staff from prominent national education organizations, and other researchers active in studying NCLB. Representatives from 18 selected LEAs were also contacted to determine the local perspective on NCLB costs. In all, 180 respondents discussed their understanding of NCLB cost for their state with us. In addition, a comprehensive Internet search was conducted to identify relevant research studies and other ancillary background materials on NCLB costs.

The nationwide search for cost studies identified over 100 studies of aspects of NCLB, including numerous studies that raised questions about costs; of those, 20 studies focused on the cost of NCLB in a significant way, including six state-initiated NCLB cost studies (Connecticut, Ohio, Minnesota, South Carolina, Utah, and West Virginia), three local-level studies (Jordan School District/Utah, Omaha Public Schools/Nebraska, and a large urban LEA that asked to remain anonymous), and 12 other studies that examine NCLB costs either for specific states or for a specific reason. This paper provides an analysis of those 20 studies in terms of scope, methods, and implications for the APA work in Hawaii.

Contents

Abstract i

Introduction 1
- APA's NCLB Costing-Out Template 2
- Survey Methods 5

Findings 6
- State-Initiated Cost Studies 9
  - Connecticut 9
  - Minnesota 10
  - Ohio 12
  - South Carolina 14
  - Utah 15
  - West Virginia 16
- LEA Studies 17
  - Jordan School District (Utah) 17
  - Omaha Public Schools (Nebraska) 18
  - Anonymous LEA 19
- Other Studies That Focus on a Single State 20
  - Connecticut 20
  - New Hampshire 21
  - Vermont 24
- Other Studies That Weigh NCLB Costs More Globally 25
  - National Association of State Boards of Education (NASBE) 25
  - AccountabilityWorks (Response to NASBE) 25
  - The General Accounting Office (GAO) 26
  - Mathis Studies 28
  - AccountabilityWorks 29
  - Peyser and Costrell 34
- Additional Findings of Interest 35
  - NCLB Cost Studies Are Challenging 35
  - Supplemental Educational Services 36
  - NCLB and Educational Adequacy 37
  - District Feedback on NCLB Costs 37

Conclusions 39
- Methodological Implications 40
- Implications for APA's Template for Costing Out NCLB 42

Appendices
- A: Survey Respondents 44
- B: Ancillary Materials 46

Tables

1: Inventory of NCLB Cost Studies 7
2: Alignment of Other NCLB Costing Efforts with APA's Draft Template 43

Introduction

Examining the cost impact of the No Child Left Behind Act of 2001 is becoming increasingly important as states across the nation implement accountability systems and educators grapple with the complexities of implementing this watershed federal legislation. The transformative intents of NCLB, together with the nature and scope of its provisions and enforcement mechanisms, suggest that this reauthorization of the Elementary and Secondary Act (ESEA) of 1965 has the potential to attain landmark status alongside the initial passage of ESEA, the U.S. Supreme Court decision in *Brown vs Board of Education of Topeka*, and the Education for All Handicapped Children Act (known today as IDEA). Like these seminal rulings and legislation, NCLB requires a major reexamination of the purposes of public schooling in America and a refocusing of effort and resources within the schools and local and state education agencies (LEAs and SEAs).

Whether NCLB will succeed as a catalyst for producing better educated high school graduates and usher in a sea change of improved educational opportunity and outcomes for students who are poor, non-white, non-English speakers, handicapped, or otherwise disadvantaged often gets lost in the debate over cost. With schools only now in the second year of NCLB implementation, cost data are still sparse and inconclusive, and few school finance experts have turned their attention to the area. The cost to schools, school districts, and states for implementing NCLB provisions, including the sanctions they can expect to incur should their improvement efforts fail to keep pace with adequate yearly progress (AYP) goals, could be substantial. Whether these costs now or in the future will exceed the federal funding that accompanies the legislation is unknown. Adding to the complexities of studying NCLB costs is the evolving nature of the regulations, guidance, and other advisories issued by the U.S. Department of Education. Equally problematic is a lack of consensus about which state and local costs should reasonably be attributed to NCLB.

NCLB was enacted after most states had begun to pursue standards-based reform (SBR), arguably a response to the Kentucky *Rose v Council for Basic Education* decision (1989). Between 1989 and 2001, most states created education accountability systems, although those systems looked different state to state and were in different stages of implementation. While these state systems may not fully comply with NCLB requirements, it would be inappropriate to ascribe all the costs of designing and building these accountability systems to NCLB. Further, NCLB projects increased student performance through 2013-14, with some costs necessarily incurred at the beginning of implementation and others being incurred as schools and districts fail to meet AYP. Because NCLB costs are incremental, the timeframe for the costs must be specific. Finally, costs associated with NCLB can be divided into one-time developmental costs and ongoing costs. Developmental costs are expected to be substantially higher than ongoing costs in a given time period.

For most policy makers, the primary purposes of NCLB are to improve student performance and close the achievement gap by strengthening education accountability. This requires states to set student performance expectations, to measure how well students meet those expectations, and to compel schools and school districts that do not meet expectations to take action on behalf of

underperforming students. Most policymakers also agree that NCLB requires school districts to employ highly qualified educators. NCLB includes all the elements that had previously been a part of ESEA, such as the provisions that include funding for migrant students, limited English proficient students, and children from low-income families. In addition, NCLB contains a variety of new elements that did not exist previously, such as a requirement related to how students from homeless families should be served. Many state-level policymakers suggest that NCLB implicitly expects schools/districts to take whatever preventive actions are necessary to increase the likelihood that all students can perform at a proficient level. This would allow schools and districts to meet the requirements of AYP and avoid the sanctions spelled out in the legislation.

One of the most important things we discovered in reviewing other studies was the need to define as carefully as possible the scope of NCLB. Some studies focus on certain NCLB cost categories. Others also address the revenues NCLB provides. Some studies use adequacy cost studies as the foundation for costing out NCLB, while others use the state's consolidated NCLB plan. Tentatively, we believe that the costs of NCLB should be thought about in four levels:

(1) those related to the explicit accountability components of NCLB and their consequences, including the "administrative" activities needed to implement those components (such as the development of data management systems);
(2) those activities associated with Level 1 plus those associated with any new explicit requirements of NCLB that were not part of ESEA (such as the definition of high quality teachers), including the administrative activities needed to implement them;
(3) those related to NCLB in its entirety, including associated administrative activities; and
(4) those associated with Level 3 plus all of the implicit activities that would be needed to increase the probability that all students could meet AYP standards and, therefore, avoid the consequences of not meeting student performance expectations.

For the purpose of the study of NCLB costs in Hawaii, we focused on Level 2.

This report identifies the process we used to locate studies, describes the studies we found that provide useful information, and provides an overall set of conclusions. We report some cost figures, but only when we believe they are helpful to our work in Hawaii.

APA's NCLB Costing-Out Template

Over the past several months, APA has been developing a template to help the state of Hawaii estimate the cost of implementing the No Child Left Behind Act. This template is designed to estimate the state's "explicit" costs associated with NCLB requirements, i.e., what the state has proposed in response to the NCLB legislation and has been accepted by the U.S. Department of Education. Attempts to estimate the "implicit" costs associated with NCLB and fold those into an overall cost estimate are more appropriately undertaken using the methodologies associated with school finance adequacy studies. An attempt to estimate the "implicit" costs is not part of this work.

In essence, the template focuses on key provisions of the legislation that are major cost-drivers, organized into seven categories:

- **Standards and Assessment.** This includes, among other cost elements, the specification of grade-level standards and performance score bands; the development and/or purchase, routine updating, and administration of reading, math, and science assessments aligned with those standards, as well as necessary testing accommodations, including alternative assessments and assessments in other languages; and attendant staff time, experts or commission meetings, training costs for teachers and other test administrators, cost of test materials, and scoring of the assessments.

- **Accountability and Adequate Yearly Progress.** This includes, for example, all costs associated with making the annual determination of adequate yearly progress (AYP) for every school and district, disaggregating and reporting achievement test results by student subgroup as specified in NCLB, training administrators and teachers in how to interpret and use such data in their classrooms, creating and annually updating state/district/school report cards, and disseminating AYP and report card results.

- **School Improvement Strategies.** Among other cost elements, this category includes the timely identification of schools and districts that have failed to make AYP for consecutive years and the provision of technical assistance to those schools; the provision of professional development for teachers and administrators related to schools' particular academic deficiencies, including needs assessment, the hiring of distinguished educators or other staff developers, and the cost of supervising and evaluating their efforts; and the design and implementation of two-year school improvement plans that incorporate scientifically based research. It also includes costs related to the provision of public school choice for students from schools identified as in need of improvement, including notification of parents, operation of a "seat lottery," and facilities accommodations that may be necessary to support school choice; programs established to reward, sanction, or recognize schools for their AYP progress; and the many costs associated with corrective actions spelled out in NCLB for schools failing to make adequate progress for a third, fourth, or fifth year, including the implementation of new curricula, new governance, or school restructuring. (Student transportation costs relating to school choice are included under supplementary educational services.)

- **Safe Schools.** Cost elements in this category include all activities related to establishing a statewide "unsafe schools" policy and identifying persistently dangerous schools and types of offenses that are considered to be violent criminal offenses. Also included is the provision of a safe public school choice option, with free transportation, for students enrolled in persistently dangerous schools or who are the victims of a violent crime at the schools they attend.

- **Supplemental Educational Services.** This category includes cost elements pertaining to the NCLB provision requiring LEAs to spend up to 20 percent of their Title I, Part A, funds to pay for supplemental educational services for students from low-income families in schools that have failed to make AYP for a second year and to provide transportation

for those students whose parents utilize the school choice option. In addition, cost elements include establishing criteria for effective supplemental educational services and their providers, maintaining a list of approved providers from which parents may select, informing parents and promoting maximal participation, and monitoring the quality and effectiveness of those services.

- **High-Quality Educators.** Included in this category are costs related to implementing the state's plan for how existing teachers and paraprofessionals and all new hires become "highly qualified." It may also include the cost of developing and validating or purchasing teacher subject-matter competency tests and/or formal academic assessments for paraprofessionals with only a high school diploma; depending on the state plan, it may even entail tuition costs for additional content-related postsecondary courses for teachers and programs leading to certification or associate degrees for paraprofessionals.

- **NCLB Data Management.** Cost elements here include all the implicit data warehousing capacities and technology infrastructure that will be necessary for implementing the various data analyses, monitoring, and reporting provisions of NCLB. This includes, for example, the overall data management and infrastructure development/enhancement (hardware, software, network operations, systems design and integration) necessary to collect, disaggregate, monitor, report, and store student assessment data, generate AYP results, and notify schools and parents. It also includes a data warehouse system capable of integrating individual student records, records pertaining to highly qualified teachers and aides, and other school and district data that will need to be collected, "cleaned," analyzed, and carefully secured; and the costs associated with maintaining and upgrading the system on an ongoing basis. Other costs include the training of state, district, and school personnel in various levels of usage of the data system. For some SEAs, only moderate system expansion and updating will be necessary; for others, this will constitute a major new system design and build-out. In either case, there can be significant cost implications for LEAs, including hardware and software purchases, additional technical personnel, and training aimed at instilling a culture of data-based decision making in school administration and classroom instruction.

APA's NCLB cost template is intended to serve as a guide for SEAs and LEAs to systematically work through a comprehensive series of questions, or prompts, that closely examine the state's operational plan in each of the above seven NCLB categories. The template is organized into the seven major categories, areas, tasks and activities. This process identifies all the NCLB-related actions or tasks and assigns their respective costs to the SEA or LEAs and/or subsets of LEAs (since differently situated districts may be expected to incur different costs). Tasks and their costs are further parsed to delineate activities that were already in place or intended to be undertaken prior to passage of NCLB, have already been completed or partially so, or remain to be completed as part of the state's approved plan and, in the case of LEAs, to recognize local improvement plans already in place.

The foundation of the APA template rests upon calculating the cost of implementing the state's NCLB plan — i.e., costing out just those tasks and activities that states have determined are required by their federally approved consolidated plan and accountability workbook and, in the

case of LEAs, their local consolidated application to the SEA and district school improvement plan. Careful attention is paid to distinguishing between potentially legitimate cost of activities to prevent school or student failure under NCLB and the SEA/LEA plans for complying with its provisions. The former is appropriately part of the costing out of educational adequacy, which carries more expansive resource implications.[1]

Survey Methods

Between late December 2003 and early February 2004, some 775 calls were placed to identify the appropriate senior educational administrators and analysts at the 49 other SEAs, legislative services or fiscal research staff in the 49 general assemblies, as well as a key contact at each of the 49 state affiliates of American Association of School Administrators (AASA). In addition, senior staff from prominent national education organizations, and other researchers active in studying NCLB were contacted. Finally, a representative from each of 18 selected LEAs was contacted to determine the local perspective on NCLB cost. In all, 180 respondents discussed their understanding of NCLB costs with us. (See Appendix A for a list of survey respondents.) Respondents generously forwarded studies, partial calculations, PowerPoint presentations, fiscal notes, and other related materials via email, fax, and U.S. Postal Service and engaged in follow-up telephone conversations.

In addition, a comprehensive Internet search of education databases and other web-based postings was conducted to identify relevant research studies and other ancillary background materials on NCLB costs. (See Appendix B for a list of ancillary materials and website resources.)

[1] The differences between costing out NCLB based on a state's federally approved consolidated plan and estimating costs from an educational adequacy perspective are profound and are not easily interchangeable. Adequacy figures will almost certainly be substantially larger because adequacy considers all resources that are necessary for ensuring that all students receive equal educational opportunity and a quality education that meets each state's constitutional muster, thereby including a breadth and depth of resource needs and costs that go beyond those necessary for strict compliance with NCLB state plans. Moreover, adequacy studies typically do not focus exclusively on student test scores as a measure of school or district performance and seldom account for the unknown costs of bringing the last 20 percent or so of the most-difficult-to-serve students up to the state's high academic performance standards (which in some states are higher standards than those designated as NCLB proficiency levels). While NCLB makes narrower resource demands than those necessary for achieving educational adequacy, NCLB adds new costs not usually accounted for in estimating the cost of adequacy, such as additional testing requirements, sophisticated student information system capabilities, and resource-laden consequences for sanctioned schools, as well as the heretofore unattained requirement to bring 100 percent of students up to proficiency. For these reasons, throughout this report we make careful distinctions between adequacy-like approaches and state plan-based NCLB cost studies.

Findings

The nationwide search for cost studies identified six state-initiated NCLB cost studies. These were undertaken by the states of Connecticut, Ohio, Minnesota, South Carolina, Utah, and West Virginia. Three of the 18 LEAs that were contacted had undertaken cost studies: Jordan School District (Utah), Omaha Public Schools (Nebraska), and one of the nation's largest school districts, which asked to remain anonymous. In addition, twelve independent research studies were identified that examine NCLB costs, either for specific states or more globally. All 20 studies, identified, collected, and analyzed as part of this nationwide survey, are listed in Table 1: Inventory of NCLB Cost Studies.

Because we sought to collect the full range of NCLB costing-out efforts across the nation, we elected to broadly define what constitutes a cost study — i.e., it must provide estimates for one or more of the major NCLB cost drivers and offer at least some explanation of the methods by which those costs were derived. We did not require that cost studies examine the entire range of NCLB requirements, nor that they necessarily afford transparency of assumptions and methodology sufficient for other researchers to replicate their findings (though obviously we hoped to identify such studies). Some of the works we include in our survey are working drafts, and some only cost out a specific NCLB component.[2]

After reviewing the studies, the most striking observation is that the cost of implementing NCLB varied dramatically state to state across the nation due to a number of state and locally specific variables, such as the following:

- the extent to which a state already had in place a system of standards and assessments consistent with NCLB before the law was enacted;
- the historical pattern of student test performance within each LEA and SEA;
- geographic cost differences; and
- the wide diversity of school communities and students served within each state.

We were, therefore, less interested in focusing on actual cost estimates, which have but limited comparative value, than in gaining an understanding of respondents' costing-out methodologies. We especially wanted to learn what processes were used in gathering their data and conducting the studies, the key assumptions that informed their work, what cost categories they examined, and the particular cost elements they identified. Because APA intends to utilize a state plan activity-based costing-out approach in Hawaii, we were also interested to observe whether other researchers were employing similar strategies or pursuing more of an adequacy-based approach that fuses the costs of implementing NCLB and other state or local education reform/improvement goals.

[2] Where studies are publicly available, a footnote provides the corresponding website. A copy of non-public studies analyzed in this paper may be available upon request to the respective study's author(s).

Table 1: Inventory of NCLB Cost Studies

State-Initiated Studies	***Description***	***Paper/ or CD Copy***
CONNECTICUT	"Estimated Unfunded Costs of the Federal No Child Left Behind Act," internal draft analysis by Senate Majority Leader's Office, Connecticut State Department of Education, and various statewide education organizations (Spring 2003)	CD
MINNESOTA	"Evaluation Report: No Child Left Behind," cost templates, and related surveys, Office of the Legislative Auditor (March 2004)	CD
OHIO	"Projected Costs of Implementing The Federal 'No Child Left Behind Act' In Ohio," study prepared for the Ohio Department of Education by Levin, Driscoll & Fleeter, with reviewers' comments (Dec. 2003)	CD
SOUTH CAROLINA	"Cost Estimates for Data Warehouse, Student Identifier, and Web-based Parent Access," South Carolina Education Oversight Committee, working draft (Sept. 2002); "Report of the [State] Superintendent's Ad Hoc Technology Advisory Committee," working draft (Oct. 2002)	Paper
UTAH	"Performance Plus: Investing in Educational Performance," Utah State Office of Education (July 2003)	Paper
WEST VIRGINIA	"Working Document on Federal Funding of State Programs for Implementing No Child Left Behind in West Virginia Schools," West Virginia Department of Education, Division of Administrative Services (Dec. 2003)	Paper
LEA Studies	***Description***	***Paper/ or CD Copy***
JORDAN SCHOOL DISTRICT, Utah	"No Child Left Behind Funding," Superintendent's Office/Curriculum & Instruction (Aug. 2003)	CD
OMAHA PUBLIC SCHOOLS, Nebraska	"Estimate of Expenditures To Be Incurred for Multiple Assessment Measures, 2002-2003," Office of the Superintendent (Spring 2002)	Paper
ANONYMOUS (LARGE URBAN LEA)	"NCLB Cost Analysis, School Year 2003-2004," student choice and supplemental educational services, internal working draft by LEA's NCLB Office (Fall 2003)	CD

Table 1 (Continued)

Other Studies That Focus on a Single State		***Paper/ or CD Copy***
State & Author	***Citation***	
CONNECTICUT John T. MacDonald, New England Center for Educational Policy & Leadership	"Supplemental Educational Services: Estimated Implementation Expenditures for Section 1116(e) of Title I Part A Subpart I of 'The No Child Left Behind Act of 2001,'" Connecticut Association of Public School Superintendents (April 2003)	Paper
NEW HAMPSHIRE New Hampshire School Administrators Association	[a] "Analysis of Cost Impact of ESEA — No Child Left Behind Act on New Hampshire" (Nov. 2002) and [b] "Updated Analysis of Cost Impact of ESEA — No Child Left Behind Act on New Hampshire" (March 2004)	CD
NEW HAMPSHIRE Meave O'Marah & Theodor Rebarber, AccountabilityWorks[a]	"Financial Impact of the *No Child Left Behind Act* on the State of New Hampshire & Review of the Cost Analysis of the NHSAA," The Josiah Bartlett Center for Public Policy (Feb. 2003)	CD
VERMONT William J. Mathis [a]	"The Federal 'No Child Left Behind' Law: Should Vermont Take the Money?" policy discussion paper for the Vermont Society for the Study of Education (Oct. 2002)	CD
Other Studies (by Date) That Weigh NCLB Costs More Globally		***Paper/ or CD Copy***
Author	***Citation***	
National Association of State Boards of Education	"Cost of President's Testing Mandate Estimated As High As $7 Billion," (Apr. 2001)	CD
Theodor Rebarber & Thomson W. McFarland, AccountabilityWorks [b]	"Estimated Cost of the Testing Requirements in the NCLB Act," a rejoinder to the NASBE study (Feb. 2002)	CD
U.S. General Accounting Office	"Title I: Characteristics of Tests Will Influence Expenses; Information Sharing May Help States Realize Efficiencies," GAO-03-389 (May 2003)	CD
William J. Mathis [b]	"No Child Left Behind: Costs and Benefits," *Phi Delta Kappan* 84:9 (May 2003), pp. 679-86	CD
William J. Mathis [c]	"The Federal 'No Child Left Behind Act': What Will It Cost States?" (Nov. 2003)	CD
Meave O'Marah, Kenneth Klau & Theodor Rebarber, AccountabilityWorks [c]	"NCLB Under A Microscope: A Cost Analysis of the Fiscal Impact of the *No Child Left Behind Act of 2001* on States and Local Education Agencies," Education Leaders Council (Jan. 2004)	CD
James Peyser & Robert Costrell	"Exploring the Costs of Accountability," *Education Next* (Spring 2004), pp. 22-29	CD

State-Initiated Cost Studies

The six state-initiated cost studies all look at "marginal" costs — i.e., the additional cost that NCLB requirements impose over and above the cost of meeting previously existing state standards. Four are based on minimal compliance with the SEA's plan for meeting the requirements of NCLB; the other two reflect perspectives that exceed minimal compliance, incorporating resource costs more closely associated with the study of educational adequacy. Taken as a whole, their templates offer substantial detail and organizing schema for cost elements, which result in valuable insights.

Connecticut

The Connecticut study builds upon an earlier costing-out approach developed by the Hawaii Department of Education.[3] As an internal working draft, the Connecticut document is unaccompanied by any narrative discussion of its cost projections. Its layered spreadsheets provide a straightforward presentation of costs, relative transparency of calculations, and convenient side-by-side viewing of state and local cost estimates for FY 2004 through 2007. Three categories of costs and their components are estimated in the spreadsheets: school accountability (assessment, information systems, technical assistance, compliance, consequences, and safe schools); personnel (professional development, high-quality paraprofessionals, recruitment and retention); and student support services (supplemental services, special education, ESL, parent involvement and notification, and homeless education). Most underlying assumptions are spelled out, though simulations of costs using different assumptions are not considered.

Connecticut's consolidated plan, not yet approved when this study was undertaken in spring 2003, guided most of the costing efforts. Led by the Senate Majority Leader's analyst, study team members included representatives from the SEA, the two teacher unions, the statewide association of school boards, and the state's AASA affiliate.

Certain contextual factors influence NCLB costs in Connecticut. For example, the Connecticut State Board of Education and SEA already had in place many of the reform elements required by NCLB, which should lower the state's additional costs. Geographically, however, the state is located in a high-cost region, and the state's per pupil education expenditures and salaries for teachers and administrators are among the nation's highest – factors that potentially raise the cost of fully implementing NCLB. The state's assessments are also considered demanding, and proficiency standards are set relatively high, which may increase the early incidence of student subgroups, schools, and LEAs not making AYP. The stark achievement gaps that Connecticut's students have historically demonstrated, based on racial and economic subgroups, further increase the likelihood of high numbers of schools and districts facing NCLB sanctions.[4]

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[3] At least two other states are now adding their imprint to Connecticut's modifications of the Hawaii template as they attempt to move forward with their own studies.

[4] In contrast, the National Assessment of Educational Progress (NAEP), which does not consider student subgroup performance, repeatedly places Connecticut among its top-ranked states.

In total, for FY 2004 the Connecticut study places a $5.9 million price tag on state costs and $58.8 million on the local costs of implementing NCLB, costs that by FY 2007 are expected to escalate to $7.2 million and $117.2 million, respectively. These costs do not include expanding state assessments to additional grades or adding science tests, as the study team assumed that Title I allocation and state funds will be sufficient to cover those costs. Nor do they include ordinary pre-NCLB Title I program operations, such as classroom interventions, after-school and summer remedial programs, and other strategies and staffing needed for effectively serving at-risk students — i.e., the study's costs address only the additional requirements mandated by the legislation. Since anticipated federal Title I allocations were not used in the calculation, the net cost to the state and its school districts are unknown.

Study team members acknowledged the difficulty of estimating the impact of NCLB accountability provisions on LEAs. For example, the study did not look at LEA costs pertaining to test administration or curricular alignment for the additional tests that must be added under NCLB, or at capital costs necessitated by school choice (portable classrooms and other additional space requirements and facilities improvements). Similarly, the study does not tackle the disparate fiscal impact that NCLB may have on the state's urban, suburban, and rural school districts, whose distinctly different student populations exhibit significantly different student outcomes. Nevertheless, the study's district estimates indicate that LEAs will bear a heavy fiscal burden: In FY 2004, the cost of implementing NCLB is expected to be 10 times greater for LEAs than for the SEA; by FY 2007, LEA costs are projected to have doubled and to exceed by 16 times the SEA's cost burden.

Minnesota

The Minnesota study reflects a state plan-based approach to costing out NCLB.[5] It attributes to NCLB costs only those resources needed to carry out any activity that is newly required and that would not have been carried out by the SEA, LEAs, or schools on their own. It also excludes costs for activities encoouraged in the previous version of the Elementary and Secondary Education Act/Improving America's Schools (ESEA/IASA) or activities required under any other federal or state law. Conducted by the Office of the Legislative Auditor pursuant to a request from the Legislative Audit Commission, the study is the product of three analysts working full time on the project for six months. Their March 2004 report provides a comprehensive examination of how the requirements in Title I, Part A of the NCLB Act are impacting Minnesota schools and the costs associated with those mandates.

The study used the judgment of state and local professionals for collecting data and weighing evidence. The authors depended heavily on an intensive study of nine LEAs; cost estimates and other professional judgments obtained from the SEA and the LEAs; interviews with representatives of Minnesota education advocacy groups, education officials in selected other states, and staff of the National Conference of State Legislatures; and questionnaire survey information from Minnesota school district superintendents and charter school directors (described under "Additional Findings of Interest" later in this paper).

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[5] Available at *www.auditor.leg.state.mn.us/Ped/2004/pe0404.htm*.

The SEA and nine LEAs were asked to estimate their past and future expenditures in some 26 NCLB-related categories that included over 200 activities covering seven broad areas:[6] (1) administering NCLB general provisions, (2) establishing academic content standards and aligning curricula, (3) assessing student proficiency, (4) monitoring and reporting school district and school performance, (5) sanctioning low-performing schools, (6) improving teacher and paraprofessional qualifications, and (7) increasing parental involvement. Estimates included staff time and associated costs to carry out the activities, as well as the cost of significant non-staff items, such as supplies and vendor contracts. For each cost category, the SEA and nine LEAs were asked to estimate (a) the total cost of carrying out the NCLB-related activities, even if they would have been carried out without NCLB, and (b) the portion of the total costs directly attributable to NCLB (i.e., the resources needed to carry out activities newly required under NCLB that would not have been carried out by the SEA, LEA, or schools). Estimates for NCLB activities with more definitive costs (e.g., developing and administering assessments) were sought for FY 2002 through 2008, regardless of how they would be paid for; estimates for activities with more speculative costs (e.g., supplemental services by Title I schools) were sought only for FY 2002 through 2005. All estimates were in current dollars and were treated as informative but not necessarily definitive.

The study concludes that the main fiscal impacts of NCLB in Minnesota will be in the areas of (1) development and administration of assessments, (2) sanctions and services for low-performing Title I schools, and (3) compliance with requirements concerning teacher and paraprofessional qualifications. The authors do not offer a dollar estimate of the overall cost of NCLB, because, they insist, the cost of implementing the law depends largely on events that cannot be accurately predicted. Nevertheless, the final chapter of the study (ch. 4, "Fiscal Impacts") is augmented by qualified estimates of these three high-impact cost areas. Assessments are expected to cost roughly $19 million annually, commencing in 2007-08 (when they are fully operational), with $11 million of those annual costs to be borne by school districts and schools (ranging from $4 to $50 per student being tested) with initial test development costs covered by NCLB. By 2008-09, assuming modest improvements in student test scores, the study projects that 42 percent of Minnesota's Title I elementary schools will be required to offer school choice, which may require an expenditure of some $20 million annually to transfer students out of low-performing schools and to provide supplemental services.

The Minnesota study lists as "unknown" the cost of corrective action and restructuring for failing schools, teacher and paraprofessional qualifications, making all students proficient by 2014, and the total costs of Title I, Part A. The study's authors discuss how extremely difficult it was to ascribe known costs to NCLB (given the state's intentions independent of NCLB and pre-existing Title I requirements under IASA) and to speculate on largely unknowable future costs, particularly inasmuch as they found the cost impact across LEAs to vary widely. For example,

[6] Separate templates were provided to the SEA and nine LEAs listing cost categories and the main activities for each cost category. The SEA template cost categories were as follows: general administrative costs; standards; assessment development, maintenance, and administration; implement a "single accountability system"; sanctions and services; and teacher/paraprofessional qualifications. The LEA template cost categories: general administrative costs; curriculum alignment; assessment administration; AYP determination, reporting, and communication; sanctions and services; teacher/paraprofessional qualifications; and parent involvement. No calculations or cost estimates are included on the templates, however. All such cost estimates are embedded in the report's narrative (ch. 4, "Fiscal Impacts").

standards setting, necessitated in part by NCLB but also by the state's own new actions, has cost the SEA $157,000, and related curriculum alignment efforts by school districts is estimated to cost from $1 per pupil to $100 per pupil annually, depending on the amount of curriculum overhaul required in each district. Similarly, wide variation of cost was found among districts for meeting NCLB teacher and paraprofessional requirements, ranging from less than $1 per pupil to over $60 per pupil. Providing teachers with high-quality professional development, as required under NCLB, is estimated to cost the SEA an additional $187,000 per year, but local costs were too unclear to be calculated. But the authors conclude that the greatest fiscal impact of NCLB on LEAs will be the potentially high costs for curriculum alignment, significant new costs for administering new assessments, and higher costs in some districts to attract, retain, and provide high-quality professional development — with the highest potential cost impact being the school choice and supplemental educational services requirements.

Anticipating that schools will have increasing difficulty meeting NCLB performance targets, the authors conducted simulations using current statewide test data projected under differing assumptions. The simulations showed that between 80 to 100 percent of Minnesota's elementary schools will fail to make AYP by 2014 and that 35 to 76 percent of the state's Title I elementary schools will be subject to NCLB-prescribed restructuring within the next decade. In estimating the range of costs for these sanctions and services, the authors point out that future spending on sanctions to some extent will depend on parents' level of interest in these options, and they note that so far, experiences elsewhere in the nation indicate that only some 10 to 29 percent of students eligible for supplementary educational services are being enrolled.

Concluding that "in the future, it is quite plausible that the cost of NCLB's new requirements for Minnesota could exceed the increase in federal funding that the state receives under the act," the authors caution that "this will be unclear until school districts proceed further with implementing the act and the federal government determines future funding levels" (p.84).

Ohio

The Ohio study uses an adequacy approach to costing out NCLB rather than just minimal compliance to the law's requirements and Ohio's federally approved comprehensive plan.[7] The December 2003 study was conducted by Levin, Driscoll & Fleeter, a Columbus consulting firm, for the Ohio Department of Education pursuant to H.B. 3. A major assumption of the study is the efficacy of early and sustained "preventive intervention." The authors (Driscoll and Fleeter) assume that academic intervention in the first four grades, together with continued "maintenance" interventions thereafter, provides the most efficient method of achieving the 100 percent student proficiency required under NCLB. Based on the current distribution of Ohio student performance and the marginal cost of raising the state's 75 percent standard of achievement to the 100 percent required under NCLB,[8] the study costs out the specific programmatic interventions asked for in H.B. 3. These include summer school, extended school day, intensive in-school intervention, and ongoing "target, teach" assessment interventions.

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[7] Available at *www.ode.state.oh.us/legislator/cost_of_implementing_nclb.asp*.

[8] "Marginal costs" are the additional costs that must be imposed in addition to, or on top of, existing costs.

Other cost categories examined are administrative costs, highly qualified teachers and paraprofessionals, and consequences.

The Ohio study does not differentiate between SEA and LEA costs, treating them all as essentially state expenditures and annualizes the estimated 2014 total costs of NCLB in current dollars. No cost allowance is made for schools and districts that do not meet rising AYP goals. Thus the study provides no estimates for costs related to school choice, transportation to support school choice, supplemental educational services, or other required sanctions. The authors' rationale: Too little data exist to support anything other than speculation about the number of districts and pupils that may be incrementally subject to sanctions, and besides, the (included) intervention investments should minimize the need for severe consequences.

Working within a 90-day turnaround time for the study, the authors admit to having had insufficient time to tap the professional expertise of practicing educators and LEA business officers, though limited consultation with SEA staff and Columbus City School District personnel did occur. Moreover, as comments of outside reviewers indicate, there is little research-based evidence supporting the particular interventions addressed in this study — i.e., they may not be the most effective programs and practices (let alone cost-effective) for bringing all students to proficiency.

Among the Ohio study's more interesting findings is that individual student intervention expenses under the "pay-me-now or pay-me-later" strategy would account for 93 percent of the total cost of raising student achievement to the 100 percent proficiency level. Maintenance costs for interventions in grades four through12 are estimated at half the cost of K-3 intervention programs. All other NCLB-related cost components would account for just seven percent of the total cost. Yet even with initial intervention investments of $450 million in FY 2005 and 2006, increased to $900 million in FY 2007 through 2009, the authors estimate that by FY 2010, the cost to Ohio of complying with NCLB will reach $1.447 billion annually.

The Ohio Department of Education invited ten expert reviewers (economists, education professors, and education policy researchers) from around the nation to critique the study and appended their comments to the final report. Acknowledging that Driscoll and Fleeter had indeed undertaken a daunting task, under extraordinary time constraints, in a credible way, the reviewers nevertheless raised several methodological concerns, including the following:

- the study assumes that current revenue (state and federal) would continue to be used in the same way it has in the past;

- the study assumes (a marginal-cost assumption) that adequate funding to enable all Ohio children to achieve at the state's current 75 percent standard is already provided and will continue at this same level in the future;

- the study assumes the educational appropriateness of the identified intervention strategies, despite a lack of any input-outcome relationship data or other substantive research evidence justifying them;

- the study fails to use unduplicated counts of low-scoring students to calculate the cost of interventions;

- the study fails to consider factors such as the rate of student improvement or incidence and nature of handicapped student needs in estimating the necessary intensity of interventions;

- the study fails to account for the costs of increased high school graduation and middle school attendance rates, which Ohio has included in its accountability plan;

- the study assumes the speculative success of the proposed interventions would minimize substantially, if not altogether zero out, the cost of sanctions that may be incurred under NCLB should schools fail to meet AYP; and finally,

- the study fails to employ alternative methodologies and/or to conduct sensitivity analysis using different assumptions, and to thereby arrive at a range of costs (high, low, middle estimates) rather than a single number, particularly since there is so much uncertainty underlying the costing out of NCLB.

South Carolina

The South Carolina study is narrow in scope, focusing on the state's technology infrastructure needs for complying with NCLB data management, monitoring, and reporting requirements. The fall 2002 study is comprised of two reports: (1) a report of the SEA's Technology Advisory Committee, describing the immediate and long-term needs and challenges of putting into place the sophisticated MIS capabilities necessary for supporting NCLB implementation in South Carolina; and (2) a working draft, produced by the state's Education Oversight Committee, providing cost estimates pertinent to the other report. The two reports are products of SEA/LEA collaboration and large, independently functioning committees. The Technology Advisory Committee consulted with the National Conference of State Legislatures, studied various reports, and reached out to local experts as work progressed on defining NCLB implementation requirements and technology resource needs. The Education Oversight Committee sought input from technology staff in other states.

The Technology Advisory Committee portion of the study specifies the technology requirements and resource needs for student performance and instructional quality, teacher quality, school environment, school quality, district quality, state quality and federal reporting, and technology-specific issues. Some, but not all, of the costs for meeting these requirements are included within the Education Oversight Committee's three comprehensive technology infrastructure elements: data warehouse, unique student identifier, and web-based parent access to student data. Detailed cost breakouts are lacking, as are related LEA technology costs. (This study was never intended for public dissemination, but rather as a working document to guide SEA planning and budgeting.)

The South Carolina study found the following:

- the data warehouse development is estimated at just over $1 million, with annual maintenance and updating costs estimated at $250,000 per year;
- the cost estimate of developing a system using unique student identifiers and the training associated with implementing that system is $200,000 (in-house) to $1 million (external contractor), with system maintenance estimated at $80,000 to $300,000 annually; and
- the development of a system that enables web-based parent access to student data is estimated to range from $1.5 million plus $350,000 for annual maintenance (in-house), to $2.5 million annually for software purchase and maintenance through a vendor, with the costs pertaining to parent access borne by local school districts.

The South Carolina study represents a state plan-based approach to costing out NCLB, even though the study notes that some of its recommended technology infrastructure improvements are consistent with the state's Education Accountability Act of 1998 (EAA). Unfortunately, the study does not distinguish which needed system upgrades and costs emanate from which law, though the report clearly implies that the requirements of NCLB ratchet up those of EAA and "threaten to overwhelm the capacity of our current information systems to collect and analyze data" (p.1).

Since the study's late 2002 completion, the state has continued to suffer a fiscal crisis and the SEA budget has been repeatedly cut. As a result, little progress on the above technology infrastructure plan has been set in motion. Fortunately, the department already had in place prior to 2002 a skeletal MIS system with rudimentary capabilities to collect and disaggregate student assessment data and publish reports for parents in accordance with NCLB requirements. Data warehousing, tracking of teacher and paraprofessional qualifications, and other important features remain unavailable.

Utah

The Utah study costs out Performance Plus, the state's comprehensive school reform plan that incorporates NCLB, the state's assessment system, and the state's efforts to raise the bar on core curriculum competency and graduation requirements. The combined reform legislation reflected in this cost study makes it more of an adequacy study than the costing-out of a minimal state plan for NCLB mandates.

The cost study was conducted by the Utah State Office of Education in July 2003, following on the heels of meetings held with teams of educators and others around the state to build consensus and support for Performance Plus, an initiative of the Governor's Office, Utah State Board of Education, and the SEA. Unfortunately, state budget shortfalls have required a scaling back and slowing down of the implementation of Performance Plus, though the plan's authors remain committed to its investment in improving student academic competencies. The plan's contents do not appear to adequately address the full gamut of NCLB provisions. The cost study therefore fails to capture the full impact of NCLB implementation.

In terms of template design and cost element specification, the study presents a simple format for laying out costs, with a column provided for brief descriptions and/or justifications for each cost element, followed by a column for the estimated total cost. Cost elements are organized into four categories: assessment, highly qualified educators, remediation/interventions, and other (which include external evaluation of programs). Costs are described as one-time or ongoing, and both existing and new (federal, state, and local) funding streams are identified for each cost element.

Among the NCLB cost elements omitted from the template are those that most impact school districts. These include the anticipated costs associated with school choice, supplementary educational services, and other sanctions for Title I schools and districts unable to keep pace with AYP requirements. The template's remediation/ intervention category, amounting to nearly half the cost of the Performance Plus plan, is funded solely from state monies — presumably because these are pro-active, preventive school improvement strategies aimed at raising student achievement and graduation rates, as called for under Performance Plus, rather than the re-active interventions brought about by NCLB sanctions. Certainly the template's description/ justification entries for these costs appear to bear this out. To what extent the preventive interventions and other Performance Plus reform strategies might lessen the incidence and offset the costs of future mandated sanctions on LEAs is, of course, unknown.

West Virginia

The West Virginia study was produced by the Department's Division of Administrative Services as a planning/decision-making tool that will be revised on an ongoing basis to document NCLB costs and corresponding federal funding. The study uses the state's NCLB plan as the basis for costing out NCLB. Having abandoned an earlier costing-out attempt due to dissatisfaction with the complexity of the approach, the current method is intentionally simple and relatively transparent.

The template lists categories and cost elements within those categories, estimates the cost of those programs, lists the federal funds available for each category and cost element, and provides a brief narrative description of the impact of or issues underlying that cost element. Cost categories include assessment, school improvement training, low SES school improvement, special education school improvement, African-American school improvement, limited-English-proficient school improvement, highly qualified teachers, paraprofessionals, high-quality professional development and implementation of NCLB, and evaluation of school improvement programs.

Confounding West Virginia's costing out of NCLB are a Title I compliance agreement and an out-of-court settlement of adequacy claims by one of the state's poorest counties. Indeed, costs pertaining to NCLB sanctions are buried in the low SES school improvement program costs. A few calculations consider out-years, such as for assessments and highly qualified teachers, but most are present-year cost estimates only. It is unclear whether NCLB-related administrative and data management costs are included within estimates for the above cost categories. The study's side-by-side comparison of estimated costs, federal revenues, and net differences shows a

total shortfall of $173.3 million for 2003-04, plus an additional $1.7 million for assessment development not fully covered by Title I funding over the period 2003-07.

Particularly interesting are the study's appended worksheets estimating the cost of NCLB sanctions affecting seven West Virginia schools located in four counties/LEAs in 2003-04. All seven schools are required to offer school choice, but as of the early December 2003 issuance of the cost study, parents of only 90 students (4 percent of those eligible) had opted to move their children, an intra-LEA transfer rate that ranged from 0 to 10 percent. Parents of only three low-income students (1 percent of those eligible) had requested supplemental educational services at one of the two schools in improvement facing year 2 sanctions.

The study elected to estimate potential maximum expenditures for supplementary educational services based on the NCLB provision that LEAs must make available for each student eligible for choice-related transportation and supplementary educational services an amount equal to the LEA's per pupil Title I, Part A total allocation or the actual cost of those services, whichever is the lesser. (Using the per pupil method of projecting costs seemed appropriate, inasmuch as the cost study was conducted three months into the school year, once actual school choice and supplementary educational service enrollment data and choice-related transportation expenditures were available.) Despite the availability of actual participation data, per pupil estimates were projected for 100 percent of eligible students rather than for the substantially lesser proportion that actually use the service.

LEA Studies

The three NCLB cost studies that were identified among the 18 LEAs contacted during this survey were considerably smaller-scale efforts than the SEA studies. LEAs reported being greatly constrained in terms of available staff and technical capacity to undertake such costing-out work. Moreover, not all LEAs have placed the responsibility for NCLB under one umbrella office or individual, making it especially difficult in the largest urban districts to locate a single senior LEA administrator fully knowledgeable about all aspects of the legislation and how the district is (or is not) capturing and projecting the related costs. (Decentralized NCLB policy oversight and operations responsibilities were also encountered within a few SEAs.)

Jordan School District (Utah)

The Jordan School District (Utah) study lists twenty NCLB cost elements, together with the calculation formula and total 2003-04 first-year cost for each. According to the study's author, the cost elements reflect what is minimally required to comply with NCLB (except the sanctions) Titles I and II and Utah's Performance Plus school reform agenda. Most of the cost elements entail across-the-board improvements involving non-Title I schools, such as full-day kindergarten, class-size reduction from 25 to 18 students per teacher district-wide, annual $5,000 pay incentives for staff who teach in low-income schools, and remediation services (extra reading and math teachers, after-school tutoring, and summer school) in every elementary and middle school. The study thus represents an adequacy-based approach, estimating first-year NCLB costs at over 3.5 times the federal revenue.

Jordan School District encompasses eight municipalities and unincorporated areas of Salt Lake County. It is the largest of Utah's 40 school districts and serves 74,500 students in 83 schools. Jordan students hail primarily from moderate to below-average income families; just 18 percent are eligible for free/reduced lunch, four percent are English-language learners, and seven percent are served under Title I. Students routinely rank well above the state and national norms on standardized assessments. Forbes.com recently named Jordan (together with neighboring Granite School District) as "offering the second-best big-city education in the nation."[9] Nevertheless, nearly half of Jordan's schools were recently identified as not having made AYP.

Shortly after the August 2003 cost study was completed, the district's 11 Title I schools were pared to five because new U.S. Census data resulted in a $1.5 million cut in the district's $5 million Title I funding. With so few schools now receiving federal funds, the cost of future NCLB sanctions may not significantly impact the district's budget, though cost elements pertaining to school choice (related transportation), supplementary educational services, or other sanctions will be added to the cost template to capture those additional expenditures in the future. The social and psychological impact of so many of the district's schools failing to make AYP, however, may be substantial. Commented the study's author, "Title I accounts for only 1.44 percent of district revenues, but NCLB now drives 98 percent of our overall budget and has hijacked control of the district's agenda."

Omaha Public Schools (Nebraska)

The Omaha Public Schools study is limited to the cost of additional assessment requirements under NCLB. For example, the study costs out the purchase and/or development of norm-referenced tests (California Achievement Test/5) and locally developed criterion- referenced tests for reading/language arts and math, as well as similar costs associated with the state writing assessment, end-of-unit tests, and a 10th grade test that measures student performance in reading, English, math, and science reasoning. (In Nebraska, LEAs carry the burden for assessment, with the state's STAR program serving primarily as an umbrella oversight and reporting-out mechanism.)

The Omaha template captures the assessment-related burdens for teacher training, test administration, scoring, compiling, and reporting. The template displays columns for assessment measures, description, actions taken, student impact, staff impact, revenue streams, district in-kind costs not chargeable to general or external funds (including research department costs, teacher time and other costs associated with teacher workshops, data center costs, scoring of subtests by reading specialists, and some printing costs), and total cost by assessment type. The assessment cost study was prepared in early 2002, but the Superintendent's Office places current costs (January 2004) for the district's multiple assessment system at $41.35 per pupil. Some of these costs, however, would be incurred even in the absence of NCLB. Separating out which costs are attributable to NCLB should be easy using the district's well-delineated template.

The district serves approximately 47,000 students, of which 5,500 (12 percent) are English-language learners representing over 40 languages. Over 60 percent of all students are eligible for free/reduced-price lunches, and some 500 homeless students are served by the district's 82

[9] *Forbes.com*, February 27, 2004.

schools. Not found among the various tests costed out by the Omaha Public Schools are assessments of English proficiency and other tests necessary for the district addressing the NCLB provisions regarding the inclusion of limited-English-proficient students in the assessment system.

Anonymous LEA

The study conducted by the anonymous LEA is included in this survey because it presents an important glimpse at how a large school system with high poverty, large numbers of ELL and special education students, and great numbers of schools failing to meet AYP has approached the need to project the fiscal impact of NCLB sanctions.

This internal working draft was produced as a quick-turnaround estimate at the beginning of the 2003-04 school year by the district's NCLB program office as the district grappled with implementing school choice and supplemental educational services at increasing numbers of sanctioned Title I schools. The study looked at the cost implications of both 1,000 and 20,000 students moving to other schools, as well as 20,000 and 113,000 students being provided supplemental educational services in schools categorized as being "in need of improvement year 2." For school choice, the assumption is an estimated 20,000 would enter the lottery out of the 270,000 students eligible, competing for approximately 1,000 available seats. For supplemental educational services, 113,000 is 85 percent of the 133,000 eligible students, and 20,000 is the number of funded slots available. The LEA's costing out includes administrative and supervisory costs, employing additional highly qualified teachers, adding ELL and SPED teacher positions, student transportation related to choice, database systems/technology upgrade costs, anticipated capital costs (modular classroom units), the cost of vendor-supplied tutoring services, and additional legal services.

Calculations of special interest include the following: supplemental educational services, $1,000 per pupil for tutoring plus six percent for administration; (district-operated) transportation costs associated with school choice, $3,500 per SPED pupil, $1,500 per non-SPED pupil; lottery-related costs, $410,000 to $450,000; additional data-tracking costs, 1,000 hours; and additional legal fees, $50,000 to $100,000.

As of late February 2004, the district's actual experience with NCLB sanctions is as follows:

- of the 270,000 students eligible, just 1,600 students (0.6 percent) were entered by their parents in the school choice lottery for 1,100 seats that were made available in schools not facing AYP sanctions, but just 600 showed up to take those seats, and 100 eventually returned to their original schools (poor selection odds are thought to have discouraged lottery participation);

- of the 133,000 students eligible for supplemental educational services, just 15,820 (12 percent) were signed up by their parents for tutoring services; and

- vendor costs for supplemental educational services were $1,500 per pupil.

A much greater amount of Title I funding had been set aside for an expected larger number of students to be served. The surplus funds were reallocated to enhance the district-run after-school programs in the sanctioned schools. Now the schools' own highly qualified teachers provide additional remedial and enrichment lessons at a cost of just $300 per pupil, and all children in those schools are free to avail themselves of those extra services. However, because students are taught by the schools' own teachers, these programs do not qualify under NCLB as "supplemental educational services."

Other Studies That Focus on a Single State

The published literature is replete with articles and narrative pieces that incorporate limited research relating to the cost of implementing NCLB. Most neither look nor sound like the cost studies described above, but instead, adopt a more narrative format and present data to support a particular point of view. Nevertheless, each of the studies below estimates the cost of at least one major NCLB cost driver and offers some degree of explanation of the methods by which those costs were determined. We include these studies in our report because they contribute to our discussion of methodology, and also because some of these studies were cited by telephone survey respondents in ways that often ignored the limitations of the study. Intent upon examining their costing-out methodologies, we include a brief summary of the studies below and point out the methodological limitations. We begin with studies that analyze a state's implementation costs but were conducted independently of the SEA.

Connecticut

The Connecticut study by John T. MacDonald, Director of the New England Center for Educational Policy and Leadership at the University of Connecticut, was conducted for the Connecticut Association of Public School Superintendents in April 2003. The study estimates the cost of supplemental educational services that three Connecticut school districts were likely to incur under NCLB in the final three months of the 2002-03 school year. These estimates were then utilized in the full Connecticut cost study (described earlier in this paper) led by the Senate Majority Leader's Office.

When MacDonald conducted his analysis, eight schools located in the state's three largest urban districts were required to offer supplementary educational services for the final three months of the school year because the schools had been subject to corrective action under the state's accountability system prior to NCLB enactment.[10] All together, some 6500 students were eligible for supplemental educational services at these schools. MacDonald projected the range of cost for each district using the five to 20 percent of total Title I, Part A allocation requirement. Estimating that supplemental educational service costs would range between $500 and $1500 per pupil (based on a neighboring state's experience), he also provided a range of estimates using these per pupil costs at a 30 percent level of participation by eligible students.

[10] This was an important undertaking, inasmuch as the state had entered into compliance with NCLB after the start of the 2002-03 school year, when 85 percent of districts' Title I allocations had already been encumbered. If the remaining 15 percent were no longer available or insufficient to cover the mandated spring 2003 supplemental educational services offerings, other monies would have to be found.

For at least one of the LEAs, Bridgeport Public Schools, the 30 percent assumption indeed proved overly generous, as fewer than 50 students (i.e., less than three percent of those eligible) took advantage of the supplementary educational services offered that spring, owing partly to difficulties encountered by the SEA and LEA in finding qualified providers to offer services to just two schools within the high-cost locale.

The range of potential cost for supplemental educational services is illustrated by the multiple estimation methods used by MacDonald. He considered both the five percent minimum threshold and 20 percent maximum expenditure required under NCLB, as well as what costs would be if only 30 percent of eligible students participated in services that would cost either $500 or $1,500 per pupil:

- 5 percent of the district's allocation = $697,649
- 20 percent of the district's allocation = $2,790,598
- 30 percent eligible student participation at $500 per pupil = $273,500
- 30 percent eligible student participation at $1,500 per pupil = $820,000

MacDonald's work was completed some four months before the relevant federal guidance was issued. Even so, he correctly cautioned LEAs with schools in improvement that, unlike the estimates he was asked to prepare, their future calculations and reservation of funds need to reflect the combined costs of supplementary educational services and school choice-related transportation.

New Hampshire

The two New Hampshire studies conducted by the New Hampshire School Administrators Association (NHSAA) illustrate the importance of updating cost studies to better capture the fiscal impact of NCLB as implementation proceeds. The AASA affiliate's 2002 study was one of the first NCLB cost studies formally undertaken. It provoked much interest and controversy across the nation and was viewed by many as early evidence that NCLB is an unfunded (or at least underfunded) mandate. The 2004 update of the study employs essentially the same methodology as the earlier work but offers an expanded list of cost categories.[11] The new cost categories include assessment, highly qualified educators, technology standards, impact on local control, impact on IDEA, impact on local budgets, requirement to share certain information about students with military services, and requirement to alter residency laws and rules for homeless students. For each category, the nature of the impact is described, followed by a brief summary of the impact contained in their 2002 analysis and the new calculation for 2004.

The bottom-line estimates differ substantially: The 2002 NHSAA study concluded that for 2002-03, NCLB appears to bring about $17 million ($77 per pupil) in new federal money to support New Hampshire education, while creating $126.5 million ($575 per pupil) in new financial obligations for local taxpayers. The 2004 study concludes that NCLB brings to the state about $22.4 million ($102 per pupil) in new federal money, but at a cost to local taxpayers

[11] Both studies are available at *www.nhsaa.org*.

of $1,022 per pupil. In other words, for every dollar received in new aid, New Hampshire taxpayers will pay out $10 to implement this law.

In terms of total annual costs, the 2002 NHSAA study projected a figure of some $114 million, and the 2004 study revised those estimates upward to $224.8 million — a 97 percent increase over their earlier projections. Much of the estimated cost increase is due to this year's addition of $100 million for interventions aimed at bringing 100 percent of students up to proficiency: While no one knows what that may require, NHSAA based its calculations on the adequacy-linked work of William Mathis (whose Vermont and other research studies are discussed below). The intervention estimate represents an additional expense of $5,000 per pupil for 10 percent of the state's public school students, but no information is provided concerning what the interventions might look like or why the 10 percent of students figure was chosen. Absent from the above calculations are estimates of LEA assessment-related costs; costs associated with high-quality professional development and the potential cost of school and district sanctions; and the costs of school choice, choice-related transportation, and supplementary educational services are not considered.

Two large cost categories — technology standards and increased special education identification, which together account for nearly $100 million — appear high. Why NHSAA assumes that NCLB requires full implementation of the state's technology plan by LEAs is unclear; NCLB's state and local technology grants, under Title II, Part D, require long-range strategic educational technology plans, for both SEAs and LEAs, to ensure that the grant funds targeted for technology under NCLB will contribute to the long-term achievement of those goals. Some of the NCLB technology funds would need to support necessary upgrading of state and local MIS systems to support disaggregating student assessment and the other monitoring and reporting requirements, but full roll-out and completed implementation of state and local technology plans are not required by NCLB. Another questionable cost category is special education — no argument is presented to explain why special education enrollments should be expected to increase under NCLB.[12]

Turning to the topic of high quality personnel, the NHSAA estimated the cost in 2002 of attracting and retaining highly-qualified teachers as a salary increase and a cost for professional development to meet the state's definition. In 2002 study, estimate was based on a 2% salary increase across the board and $11.7M in professional development costs. To attract and retain highly-qualified paraprofessionals, the NHSAA estimated in 2002 that it would take a 20% salary increase and an investment in professional development of $16.6M.

As informative tools for New Hampshire LEAs and state policymakers, the NHSAA studies provide useful and conveniently summarized briefing material to support the educational leadership and advocacy role of the organization. As objective cost studies, however, both studies have serious limitations. The methodology both studies share remains opaque, though presumably most of the cost estimates and related position statements were generated based on

[12] Indeed, reasonable counter-arguments could be made that NCLB accountability provisions related to sub-group AYP goals may actually deter schools from identifying eligible students for special education services and, at least in principle, ought to increase the numbers of SPED students "graduating" from that service category.

superintendents' judgments. Despite the strong point of view that permeates the two works, we find the new version easier to understand as it attempts to combine measurable cost estimates with those that are, for practical purposes, not measurable.

The AccountabilityWorks response to the New Hampshire School Administrators 2002 study was commissioned by The Business Roundtable and published by The Josiah Bartlett Center for Public Policy in February 2003.[13] Its principal authors, Meave O'Marah and Theodor Rebarber, offer counter-evidence to the above-described study, thus illustrating how two very different costing-out approaches by two very different organizations — each known for their very different perspectives on the workings of NCLB — can yield significantly different findings. The same four cost areas that NHSAA identified as unfunded mandates in its earlier study were addressed in the AccountabilityWorks rejoinder: attracting and retaining highly qualified teachers and paraprofessionals; completing technology plans; increased identification of students for SPED; and developing state tests for grades three through eight and a high-school grade.

The AccountabilityWorks analysis finds that the NHSAA report overstates the costs while underestimating both the federal funding commitment and the flexibility afforded states under NCLB. And they point to substantial problems in methodology and invalid assumptions that informed the NHSAA study. AccountabilityWorks concludes that increased federal education aid to New Hampshire in 2002-03 due to NCLB will be approximately $13.7 million, and that a conservative estimate of the increased costs of NCLB in the four cost categories is about $7.7 million. Thus about $6 million of federal education aid in surplus federal aid would remain for supplementing other state and local priorities. The authors admit that NCLB identified costs are expected to double in 2003-04, but they believe that even then, increased NCLB funding should result in nearly $3 million in new additional resources.

AccountabilityWorks takes issue with the need for a two percent across-the-board raise for teachers and a 20 percent raise for para-professionals, insisting that there is no basis for selecting such expensive options — while noting that ensuring well-qualified staffing is essential regardless of any federal requirements. Instead, the authors propose testing ($1.87 million for the nearly 10,000 teachers who would be affected) and remedial support and re-testing for those who fail (cost = $896,080). They would, however, raise salaries for math and science teachers by 14.4 percent (total cost = $7.3 million) to make those jobs more competitive with private sector math and science employment. Paraprofessionals would similarly be provided testing and remedial assistance ($938,180) and receive a five percent raise for the following year after succeeding to demonstrate competency in reading, writing, and math on the appropriate test (cost = $4.2 million). The authors also argue that purchasing and administering student tests in the additional four grades was overestimated in the NHSAA study, and that development costs would not exceed $4 million, which approximates the $3.91 million provided for this purpose under NCLB.

As for potential new costs New Hampshire school districts may incur in updating their technology to comply with the state's own plans, the authors point to separate federal funding that is available to support technology planning, professional development, and hardware

[13] Available at *jbartlett.org/pdf/NCLB_Report.pdf.*

acquisition and cites the SEA as denying that the new requirements of NCLB are more rigorous than the state's current technology requirements.

The most convincing arguments made in the AccountabilityWorks study are those pertaining to special education. The authors strongly refute the NHSAA claim that special education costs and the number of special education students identified will increase due to NCLB and schools' inability to make AYP. Noting that there is little incentive for such misclassification now that special education students must also be included in the state's single accountability and testing system required under NCLB, the authors suggest that if anything, there may now be less incentive to classify students as requiring special education services. They also point to various calculation errors pertaining to NHSAA's special education estimates. An implied argument by AccountabilityWorks is that states ought to consider federal special education funding alongside their NCLB allocations.

Vermont

The Vermont study conducted by Superintendent William J. Mathis is one of the earliest NCLB cost studies to have been undertaken.[14] Prompted by an inquiry to superintendents by Vermont Governor Howard Dean in spring 2002, the study weighs the potential impact of NCLB costs and considers whether it is cost-effective for the state to accept the federal ESEA funding. Mathis found that NCLB would require a minimum of $158.2 million in new expenditures to provide Vermont's educational system with the improvements necessary to meet the legislation's goals, compared with just $51.6 million the state was then receiving. Alleging that "'adequate yearly progress' requirements are not grounded in any scientific or rational basis" (p.7) and "the consensus of independent scholars is that the law is fundamentally unworkable" (p.1), he concludes that "it is financially prudent for Vermont to reject these monies and the associated mandated programs" (p.1).

Mathis suggests that 80 percent of Vermont schools will be classified as failing within three years. He also notes the differences in standards and test rigor across states, as well as the fact that some states have simply lowered the bar to reduce the incidence of schools failing to make AYP. Drawing on research studies designed to estimate the cost of an adequate education, he extrapolates the cost of providing interventions to moderately impoverished students ($2,938 per pupil) and to high-needs students from "impacted poverty" backgrounds ($7,938 per pupil) over and above Vermont's regular per pupil expenditure. Special education students and those needing only first-level interventions are omitted to diminish double counting. The resulting $149.5 million cost for remediation represented a 14.7 percent increase in the state's education spending at the time of the study. To this sum he adds $0.5 million for the purchase of new tests and $8.25 million for the extra 1.5 days the new NCLB testing requirements would cost in instructional and administrative time. In this manner, he arrives at the total cost estimate of $158.2.

Although this study omitted any consideration of sanctions for schools not making AYP and many other NCLB-related costs, it did break ground in trying to link what is required for

[14] Available at *www.ruraledu.org/docs/mathis.pdf*.

educational "adequacy" and the resources that may be necessary to fully meet the NCLB goal of universal proficiency for all students.

Other Studies That Weigh NCLB Costs More Globally

This final set of published studies address NCLB costs beyond the perspective of a single state or school district.

National Association of State Boards of Education

The study conducted by the National Association of State Boards of Education (NASBE) estimates the cost to states of implementing the annual reading and math assessments in grades three through eight required by NCLB.[15] The estimates do not include the cost of science assessments that must be added by 2007-08; the assessment of reading, math, and science for whichever high-school grade (10, 11, or 12) states elect to test; English-language proficiency tests for immigrant students; or the cost of alternate assessments based on alternate achievement standards for the maximum of onepercent of students with the most significant cognitive disabilities. The NASBE calculations were completed in April 2001, some nine months prior to the signing of NCLB, and were reportedly based upon a current, accepted cost scale for developing and administering assessments. The cost of developing state tests aligned to standards was found to range from $25 to $125 per pupil; administering tests, including scoring and reporting results, costs from $25 to $50 per pupil. State-by-state estimates are provided using 1999-00 school year enrollment statistics. NASBE's total estimate for the tests: nationally, between $2.7 and $7 billion, depending on the sophistication of the tests, or some $385 million to $1 billion per year over seven years.[16]

AccountabilityWorks

The AccountabilityWorks rejoinder to the NASBE study was issued in February 2002, about a month after NCLB was signed into law.[17] Authors Theodor Rebarber and Thomson McFarland argue that for most states in most years, the federal NCLB appropriate for testing is reasonable and should be sufficient to cover the additional testing requirements. They found that the average state faces annual testing costs of between $6.1 million and $7.6 million but will receive approximately $7.1 million per year in federal funding for testing purposes. This puts the total

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[15] Available at *www.nasbe.org/archives/cost.html*.

[16] An interesting policy note: At the time the NASBE study was issued, its figures took lawmakers by surprise. In recognition of these high costs, Congress established a minimum funding "trigger" requiring states to receive threshold funding of at least $370 million per year, increasing incrementally each year, for test development and administration or to be allowed to postpone the implementation (though not the development) of required tests beyond the 2005-06 school year. This funding provision also ensured that each state receive a base allocation of $3 million annually to support NCLB assessment requirements, with the remainder to be allocated on a state's proportion of children ages 5-17. Two years later, results of the GAO's study of NCLB testing costs (reported below) were generally consistent with NASBE's early findings.

[17] Available at *www.accountabilityworks.org/publications.php*.

annual costs nationally at between $312 million to $388 million. However, these estimates and the state-by-state figures assume that states had already implemented the bare minimum in testing that was encouraged under the previous version of ESEA/IASA. The AccountabilityWorks figures include the cost of science assessments and assume that all tests will consist of a significant number of (though not primarily) constructed response items. Development costs are estimated at $500,000 per year over four years for each grade level subject test. Administration costs are estimated at $10 per pupil per year, including vendor costs for scoring and reporting but excluding the cost of SEA staff time and other necessary overhead. The authors point out that states with relatively small populations will incur the same test development costs as larger states, inasmuch as test development is typically a fixed cost and not based on the number of students to be assessed (contrary to the assumptions made in the NASBE study), but small states will receive smaller federal allocations due to their size. Moreover, they predict that total testing costs will be uneven over the course of the act, peaking in FY 2005 and 2006 when most development will be underway.

The Government Accounting Office

The Government Accounting Office (GAO) study on test characteristics, published in May 2003, describes characteristics of states' required Title I tests, provides estimates of what states may need to spend to implement these tests, and identifies factors that explain variation in testing expenses.[18] The study is based upon a survey completed by all 50 states, the District of Columbia, and Puerto Rico, which sought information about their current Title I assessments, the number and types of new tests they needed to develop to meet NCLB requirements, and other details relating to new test development. In addition, the GAO conducted an in-depth analysis of expenditure data obtained from seven states and met with officials from those states to discuss their analysis and elicit additional information. The seven states, selected from the 17 states that had assessment systems in place pre-NCLB and were certified by the U.S. Department of Education as in compliance with the requirements of IASA, were Colorado, Delaware, Maine, Massachusetts, North Carolina, Texas, and Virginia.

Depending on the types of test questions states choose to include, and, more importantly, how the tests are scored and the numbers of questions publicly released each year, three scenarios for total test expenditures for FY 2002 through 2008 are offered by the GAO. The costs range from $1.9 billion to $5.3 billion. The costs include the estimated expenses states will need to add for new assessments, as well as continuing expenditures associated with assessments already in place pre-NCLB. Under the first scenario, if all states were to use tests with primarily multiple-choice questions, which are machine scored, total state expenditures would be approximately $1.9 billion, though this would require some states to scale back the quality of their existing tests. Alternatively, if all states were to use tests with a mix of multiple-choice questions and a limited number of open-ended questions that require hand scoring; spending would reach about $5.3 billion. But, if states retain the status quo and keep the mix of question types that they currently use (and reported to GAO for this study), then spending is estimated to be around $3.9 billion. In this case federal funds would only cover 69 percent of existing test costs.

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[18] Available at *www.gao.gov*; search for report # GAO-03-389.

Assessment expenditures that states could incur during FY 2002 through 2008 for the development and administration of tests in grades and subjects that need to be added specifically due to NCLB are somewhat less. Nationally, GAO estimates that these new costs would total $0.8 billion if all states were to use machine-scored multiple-choice questions, $1.6 billion if states were to use the current mix of question types, and $2.0 billion if both machine-scored multiple-choice questions and some hand-scored open-ended questions were used.

Among the report's many observations that demonstrate the wide variation in testing costs incurred by states are the following:

- tests that consist entirely of multiple-choice questions are used by 12 states;
- just four states (Idaho, Kansas, Pennsylvania, and Nebraska) currently use a combination of state and local assessments, and Iowa currently uses local assessments exclusively;[19]
- just over half of the states release actual test questions to the public; though differing portions of the questions are made available and differing release rules apply (release practices can significantly increase ongoing test development costs).
- Only 12 states currently offer assessments in languages other than English, mostly in Spanish.
- Of the 17 tests required under NCLB, 32 states report a need to develop or augment nine or fewer tests, but eight states need to tackle all 17 tests, and another state must replace its 1994-compliant assessment system because 15 of its tests did not provide scores for individual students.[20]

Of the seven states that were site visited by the GAO, wide variation in development costs and administrative expenditures were verified and subsequently extrapolated to produce estimates for every state. For example, in Massachusetts, average development expenditures per ongoing assessment are $198,870, and administration, scoring, and reporting per assessment taken amount to $12.45, whereas in Texas, test development expenditures per assessment are $61,453 and test administration just $4.72. The GAO estimates do not include either English-language proficiency tests for non-native speakers or alternate assessments for the most cognitively handicapped students, both of which are required under NCLB.

An earlier GAO study found that as of March 2002, only 17 states were in compliance with the assessment requirements of the 1994 IASA law. Whether states' increased assessment costs due to their lack of prior compliance should now be attributed to NCLB is thus an important methodological question.

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[19] For these five states, a reliance on local assessments is particularly significant because test development responsibilities and costs may therefore pass from the SEAs to the LEAs.

[20] See the GAO study; because it is an online publication, no page references can be here provided.

Mathis Studies

The two studies conducted by William J. Mathis extend his use of adequacy cost studies to generate evidence of the high costs and unrealistic underpinnings of NCLB.[21] His May 2003 *Phi Delta Kappan* article touches upon the extra costs of remediation and other needed interventions for ensuring educational adequacy and raising test scores to a specified level in 10 states: Indiana (study performed by Augenblick & Myers), Maryland (Augenblick & Myers), Montana (Augenblick & Myers), Nebraska (Augenblick & Myers), New Hampshire (New Hampshire School Administrators Association)[22], New York (William Duncombe & Anna Lukemeyer), South Carolina (Augenblick & Myers), Texas (Andrew Reschovsky & Jennifer Imazeka), Vermont (Mathis), and Wisconsin (Institute for Wisconsin's Future, Whitney Allgood, & Richard Rothstein). These studies employed a variety of analytic techniques designed to answer specific questions raised by the clients (not all of whom were SEAs). With the exception of the NHSAA study and Mathis' own Vermont work, none of these studies focused on NCLB costs. Further, none collected or analyzed cost data in such a way as to allow other researchers to make post hoc connections between their adequacy estimates and the monies needed to implement and fully realize NCLB goals. Yet from these works, Mathis reports that a number of "unambiguous findings emerge" which show how "providing a 'standards-based' NCLB education for all children will require massive new investments in education spending." Why? Because the adequacy studies determine that additional resources are required in those states for all students to have an equitable opportunity to achieve state standards.

In his November 2003 article, Mathis continues in this same vein, this time looking at the increased spending levels calls for in Alabama (an education adequacy funding plan with broad grassroots support) and adequacy studies in Arkansas (conducted by Lawrence O. Picus and Associates), Illinois (Augenblick, Palaich and Associates), Kansas (Augenblick & Myers), Kentucky (Deborah Verstegen, and Lawrence O. Picus and Associates), Missouri (Augenblick & Myers), North Dakota (Augenblick, Palaich and Associates), and Washington (Rainier Institute). Finding that the average increase sought in these studies is 27.7 percent in total expenditures, Mathis applies this percent increase to Secretary Paige's estimate of $470 billion spent on K-12 education nationally each year and concludes that $130 billion new dollars are needed to meet NCLB.

Mathis fails to recognize that adequacy studies focus on a much richer curriculum and overall educational experience than the more narrow test-driven school environment implied by NCLB. Other reasons that adequacy studies do not directly translate to NCLB cost studies include the following:

- adequacy standards do not necessarily expect 100 percent of students to achieve proficiency on standardized tests;

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[21] The two Mathis studies are available at *www.pdkintl.org/kappan/k0305mat.htm* and *aasa.org/NCLB/What_Cost_States-Mathis.pdf*.

[22] The NHSAA study and Mathis' Vermont study, both discussed earlier in this paper, were intended as NCLB cost studies, not as adequacy studies per se.

- the cost of adequacy differs significantly from state to state due to differences in state standards and assessments; and
- adequacy studies are undertaken almost exclusively in states whose funding levels are suspect.

Inasmuch as Augenblick, Palaich and Associates (formerly Augenblick & Myers) is the source of nine of the 18 studies cited by Mathis, we can authoritatively state that any leap from these adequacy study findings directly to a conclusion that NCLB requires "massive new investments in education" is misleading. The education policy community is not well served by this lack of precision.

The remainder of Mathis' *Kappan* article assails the focus of NCLB on testing and questions whether the goals for public education in a democratic society ought to be fixed on improving test scores. We do concur with one of his key concluding comments, that "Funding for education, prevention, and remediation must be adequate. This will require major new investments — particularly in poor, rural, and inner-city environments. We must undertake this effort not because it is the law but because it is what we should do." This is just not required by NCLB.

AccountabilityWorks

The NCLB cost analysis conducted by AccountabilityWorks examines the costs of compliance in four areas: accountability, personnel, information management, and corrective action for schools in need of improvement.[23] AccountabilityWorks authors Meave O'Marah, Kenneth Klau, and Theodor Rebarber challenge states and districts to be "somewhat creative — in some cases even frugal" in devising cost-effective reform responses to NCLB.[24] They find that for every year studied, NCLB provides revenues that exceed what it will cost SEAs and LEAs for compliance, creating a surplus for states and school districts that amounts to some $1.5 billion in this current school year, $785 million in the 2004-05, and as much as $5 billion in 2007-08 (the furthest year in the future considered).

Revenue calculations are central to AccountabilityWorks' thesis that federal funding available under NCLB is, and is likely to remain, sufficient. Funding assumed available for NCLB includes 50 percent of IDEA special education funding and all ESEA funding (including non-competitive formula-driven programs, competitive programs, and impact aid). The rationale for including half of the IDEA funds: Improving the reading and math skills of special education students is a major purpose of both IDEA and NCLB. Aside from the 17.1 percent increase for NCLB in 2002-03 and 9.2 percent in 2003-04,[25] federal funding increases are projected for 2004-05 through 2007-08 at 7.2 percent (the average annual increase from 1980 to the passage of NCLB), and future inflation is factored at 2.45 percent. From this newly created revenue figure, total "hard costs" of NCLB are subtracted, yielding the surplus amount. "Hard costs" include testing, transportation for school choice, supplemental educational services, etc.

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[23] Available at *www.educationleaders.org/elc/issues/reports.html*.
[24] AccountabilityWorks, "NCLB Under a Microscope," p.3.
[25] Based on Table 2 of "NCLB Under a Microscope," the increases were actually 18.1 and 8.8 percent, respectively.

In this manner, new NCLB dollars over the 2002-03 through 2007-08 school years are projected to total $46.4 billion. The legitimate hard costs of NCLB calculated by AccountabilityWorks over the same period amount to $32.4 billion, leaving states and school districts a net gain or surplus in excess of $14 billion. NCLB, therefore, generates a total surplus nationally over the 2002-03 through 2007-08 school years in excess of $14 billion — a surplus, they suggest, that can be used for general school improvement and raising student achievement levels in ways not specified in the legislation.

One serious difficulty with aggregating revenues at the national level is that it does not address what happens to the revenues for individual states or school districts, since not all states and school districts are "winners." The bulk of ESEA funding is formula-driven, resulting in SEAs and LEAs with lower numbers of poor students receiving less federal monies, but because all states and nearly all school districts in the nation receive some federal support, they all become subject to NCLB requirements and attendant costs of implementation.[26] And not all qualify for the many ESEA grant programs beyond Title I. Nevertheless, we believe AccountabilityWorks correctly includes all ESEA funds in this accounting, since the 2001 ESEA Reauthorization clearly aligns all its provisions and programs — from Title I, Part B through Title IX — to support the overarching goals of NCLB embodied in Title I, Part A.

But revenue is not the sole factor that enables AccountabilityWorks to arrive at surplus NCLB funds. The way in which hard costs are calculated also makes a significant difference, and it is the authors' perspective on what rightly ought to be charged to NCLB that makes their work controversial among K-12 practitioners and state education staff. A brief description of how "hard costs" are identified reveals how tightly-defined the AccountabilityWorks minimal compliance approach is. For assessment and accountability, AccountabilityWorks argues the following:

- Accountability/AYP costs = $0. AccountabilityWorks finds no basis for assuming that SEAs and LEAs are unable to use existing staff and capacities for making annual determinations of AYP – though significant enhancement of state databases will be necessary to permit such calculations.

- Accountability/assessment costs = $2.51 billion for general education plus $0.87 billion for special population assessments which overlap with requirements under IDEA. These estimates assume that:

    a. all states are in compliance with IASA testing provisions – though no state currently has in place an assessment system that fully meets the grade-by-grade testing required by NCLB;

    b. test design will include multiple-choice items, a significant number of short answer open-response items, and a limited number of longer extended-response items;

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[26] Sec. 1125AA(a) of the No Child Left Behind Act notes that nine out of every 10 school districts in the nation receive federal aid under ESEA Title I, Part A, including 58 percent of all schools.

c. new test development will cost $1.2 million per test and require three years to complete, with administration costs for each test calculated at $10 per general education pupil and $20 per special education pupil;

d. annual maintenance for each new test will cost $500,000;

e. approximately five percent of the nation's K-12 students (some 2.3 million pupils) are English language learners and will require four new English proficiency tests to be developed over two years, which will cost the same to develop, administer, and maintain as the general education assessments; and

f. one new alternate assessment will be developed over a 3-year period and administered to one percent of the nation's 46.8 million K-12 students.

These assumptions build on those in the AccountabilityWorks rejoinder to the NASBE assessment cost study (described above), but the total costs are about twice what it estimated in that year-old study.[27] In both studies, AccountabilityWorks argues that costs incurred in developing new assessments that should have been developed pre-NCLB should not be ascribed to NCLB — a particularly significant exclusion, inasmuch as most states were not in compliance with IASA test provisions as of March 2002 (see GAO study above). In addition to NCLB formula-driven funds dedicated specifically to assessment, the authors suggest that half the cost of alternate assessments may be paid from IDEA revenues, LEP test development might be paid from a portion of NCLB Title III revenues, and that consortia of states might share the burden of test development costs via competitive grant funds appropriated by Congress.

For high quality personnel, AccountabilityWorks argues the following:

- Personnel/high-quality teacher and paraprofessional costs = $21 billion. These costs include:

    a. the evaluation of current teachers and intensive content-oriented retraining for those who need it (cost = $598 million) is based on (1) all current teachers being tested to ensure their subject competence, (2) testing costs of $110 per teacher, (3) test study guides being provided to teachers at $25 each, and (4) one-fourth of all current teachers failing to meet subject matter competency requirements and therefore requiring content-based remedial training and retesting;

    b. recruitment and retention of teachers (cost = $16.2 billion) would not require non-inflationary, across-the-board compensation increases but would entail a 14 percent increment to close the gap between teacher compensation in shortage areas (math, science, special education) and compensation levels in the private sector requiring similar skills; and

[27] Even with the exclusion of development costs for tests required pre-NCLB, the $3.38 billion total price tag placed by AccountabilityWorks on new NCLB assessments is consistent with the $2.7 billion to $7 billion range NASBE projected and the $1.9 billion to $5.3 billion range of the GAO.

c. evaluation of current paraprofessionals, content-oriented retraining for those who need it, and additional compensation for recruiting and retaining those with higher skills (cost = $4.2 billion) is based on (1) all current paraprofessionals being tested, (2) testing costs of $40 each, (3) test study guides being provided at $27.50 each, (4) one-third of all current paraprofessionals failing to meet NCLB requirements and therefore requiring remedial, content-oriented training and retesting; and a five percent average increase in compensation to those who meet the higher standards.

These assumptions build on those outlined by AccountabilityWorks in its earlier rejoinder to the NHSAA 2002 cost study of New Hampshire's NCLB-related costs (described above).

For other areas of NCLB cost, AccountabilityWorks argues the following:

- Parent notification of teacher quality (cost = $52 million) includes the proactive reporting and dissemination to parents of teacher quality data and the use of an outside vendor to develop the reports at an average cost of $455 per year per LEA. The cost of data entry would be borne by LEAs from their existing resources.

- Information management costs, based on information obtained by AccountabilityWorks from a number of state officials and commercial vendors, are projected to total $462 million. Reportedly, this would enable a state with limited systems to develop an inexpensive yet NCLB-compliant database for the collection and disaggregation of student data. Cost per state would be approximately $2.5 million for initial development and $1.25 million in ongoing maintenance. AccountabilityWorks argues that more sophisticated systems, such as those that would enable longitudinal tracking of student and teacher quality data, may be preferable but are substantially more expensive and not required by NCLB.

- School improvement/corrective action costs are estimated at $7.5 billion. Projections are based on the assumption that 75 percent of all school districts will be designated in need of improvement. Inasmuch as not all students will elect to exercise their public school choice or supplemental educational services options, total average expenses on school choice transportation and supplemental services is estimated at five percent of Title I funds in 2002-03, 10 percent in 2003-04, and 15 percent in 2004-05 and beyond (i.e., less than the 20 percent maximum allowed under NCLB).

We believe that some of the AccountabilityWorks costing is out of tune with the reality faced by public school administrators. A few examples of what we perceive to be most problematic with the above estimation methods illustrate our concerns. First, the argument to exclude the development cost of tests that should have been undertaken under IASA in pre-NCLB years is problematic. Historically, ESEA/Title I established standards that SEAs and LEAs were expected to strive towards, to implement as fully and speedily as feasible, but compliance enforcement — respective of the principles of federalism and local control of education — was minimal and did not carry substantive consequences. Moreover, if 33 states are now playing

"catch up" with test development, this represents a large hidden cost that policy makers must consider.

Second, the suggestion by AccountabilityWorks that administrative burdens associated with NCLB should be borne by SEAs or LEAs from existing or non-Title I resources similarly belies the severe personnel cutbacks that have afflicted state education agencies and school district central offices in the last few years as a result of local, state, and federal budget cuts and the nationwide economic downturn. Capacity issues were repeatedly raised in APA interviews with survey respondents, and both SEAs and LEAs expressed grave concern that their reduced capacities to fulfill their roles under NCLB threaten both the viability of the law's implementation and its chances for achieving the important goals of ensuring a quality education for all students.

Third, we believe the AccountabilityWorks figures for personnel are low and, at a minimum, should also have included compensation incentives for high-poverty, low-performing schools to attract and retain talented teachers and paraprofessionals — at least at the same order of magnitude that Jordan School District (see above) is offering, i.e., $5,000 per person per year. Many inner-city school districts may need to offer even more than that, particularly inasmuch as compensation rates are often considerably higher in surrounding suburban school districts and/or locales that are perceived to have a more desirable work environments (because student needs are less challenging, school facilities are more modern, and the physical surroundings seem safer). For these same reasons, inner-city schools will need to pay more for high-quality staff in shortage areas than what AccountabilityWorks has assumed. Pay incentives are allowable costs under Title II, Part A, and inasmuch as revenue from that title is included by AccountabilityWorks in its calculations, then so must the attendant costs.

The information management systems response recommended by AccountabilityWorks — i.e., to invest in the simplest, lowest-cost system that will collect and disaggregate student data — risks being "penny wise and dollar foolish." Given the long list of teacher and paraprofessional credential monitoring, AYP oversight, parent notification, and other reporting and analyses functions necessary under NCLB, the lack of sophisticated MIS systems will surely result in substantial operating inefficiencies, further increasing administrative burdens. Upgrading MIS systems is also a necessity for LEAs as well as SEAs, a fact which is not addressed by AccountabilityWorks.

The school improvement/corrective action cost estimates provided by AccountabilityWorks do not project the costs over and above school choice transportation and supplemental educational services that will be incurred by SEAs and LEAs when schools fail to meet AYP goals. As APA's national survey discovered, some schools across the nation have already reached year 5 and 6 sanctions, because of low performance pre-NCLB, and many more schools are scheduled to be at year 5 in the fall of 2004. Moreover, the administrative costs related to school improvement/corrective action are not inconsiderable and are specifically excluded from the required five to 20 percent expenditure set-aside. Also lacking are any estimates of the cost to LEAs of making public school choice available. In many cases, additional space will need to be created; handicap accommodations may also need to be added, along with furniture, instructional materials, teachers, and other staff. Again, any purported national accounting of the costs of

NCLB must be diligent in searching out the practical implications of this legislation and the necessary, direct, and sometimes less obvious costs of even minimal compliance.

To the extent that the AccountabilityWorks authors focus on "hard" costs associated with NCLB compliance and reject the assumptions underlying adequacy-based methods of estimating NCLB costs, APA understands the argument and is in partial agreement. But we also allow for the possibility that a study could cost out both the resources needed for educational adequacy and NCLB, providing that the initial study design established detailed parameters for parsing out the separate cost factors and the researchers were meticulous about applying those rules.[28] What we strongly disagree with are the objections of AccountabilityWorks to educational adequacy cost studies (beyond the domain of NCLB) and, more particularly, use of the professional judgment model. This larger methodological discussion of widely accepted school finance research methodologies, raised in their paper's latter pages, seems oddly out of place in a study aimed at putting NCLB "under a microscope," and, accordingly, we will not address it further here.

Peyser and Costrell

The exploration of accountability costs by James Peyser and Robert Costrell examines NCLB funding issues based on their own experiences in Massachusetts.[29] They consider the cost of designing and implementing a statewide testing system and establishing a state-level system of school and district evaluation and corrective interventions, but they also drift into a discussion of educational adequacy and a defense of their own state's school funding system in light of the most recent court challenge, *Hancock v Driscoll*.

The authors find that the cost for tests of the quality necessary for an effective accountability program may be twice as much as the GAO's estimates of roughly $9 per student tested, but because many states had already committed themselves to such tests prior to the passage of NCLB and some already have them in place, they believe that federal allocations to develop and administer mandated assessments should be sufficient, or nearly so, for now. The authors admit, however, that as the full complement of tests are rolled out and tests are improved by adding more open-response questions, additional funding will be necessary, which they suggest could be made available by reallocating funds from lower-priority programs.

Peyser and Costrell also point out that the federal allocation for school improvement grants falls well short of the minimum set-aside funds needed for SEAs to provide the NCLB required $50,000 to $500,000 grants to schools in need of improvement. The solution offered by the authors: redirect funding from other grants, such as those aimed at supporting innovative programs or improving teacher quality, and target them to low-performing schools. Yet, the authors' admit, these grants are already so targeted, and since they, too, are aimed at improving schools, there would be no net gain to plug the funding hole. Peyser and Costrell contend that an effective state intervention system begins by having an evaluation infrastructure capable of

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[28] It is also not inconceivable that the sum total of adequacy plus NCLB costs is the figure of interest. Such an "adequacy plus" approach, for example, might be preferred by plaintiffs in lawsuits challenging a state's school funding system. Several SEAs and legislative offices raised this concern during APA's telephone survey.

[29] Available at *www.educationnext.org/20042/22.html*.

conducting in-depth analysis and diagnosis of struggling schools and districts, that otherwise it is impossible to determine which schools and districts most urgently require which kinds of treatment. They estimate that to put in place an evaluation infrastructure in every state similar to the one Massachusetts has launched would require $250 million per year, none of which is currently covered under NCLB.

Attacking those who use educational adequacy studies to project a need for 20 to 35 percent increases in NCLB funding, Peyser and Costrell argue that both the professional judgment and successful schools models of costing out adequacy are technically flawed (even though both have been repeatedly accepted by legislatures and the courts). In their view, the professional judgment model is too focused on inputs, and therefore out of sync with standards-based reform, while also failing to tie observed spending levels to student outcomes. Peyser and Costrell admit that any approach to calculating fiscal adequacy will have its limitations and flaws, though they look more favorably on the successful schools model. They suggest, however, that an "improvement version" of the successful schools model should be used to select successful districts based on their academic achievement gains from one year to the next (a modified value-added approach using aggregate school performance in a single school year). Selecting districts that exhibit "moderate" and "above average" improvement rates in English and math, their calculations set the necessary spending level for adequate progress at one standard deviation below the mean of "improving" districts (about 80 percent of Massachusetts' per pupil average).

Taking their Massachusetts benchmark for adequacy one step farther, Peyser and Costrell suggest that inasmuch as only 11 states have average spending levels below that benchmark, there is an estimated national fiscal gap of approximately $8 billion (half of which is in California), which is far below the adequacy/NCLB gap projected by Mathis and other critics. And they conclude that if federal appropriations and state education spending continue to rise, the fiscal gap will either be covered or "come pretty close."

Additional Findings of Interest

APA's nationwide survey yielded additional information that is not well captured in the previous pages. Presented here is a summary of three topics that emerged during the telephone conversations: why NCLB cost studies are or are not underway; problems encountered in complying with NCLB's supplemental educational services requirement; and how NCLB relates to educational adequacy. Also presented below are results of a questionnaire surveys from the Minnesota study on NCLB cost research.

NCLB Cost Studies Are Challenging

NCLB cost studies are understood to be challenging**,** though nearly every SEA and LEA official confessed to having at least one and perhaps on-going "back of the envelope" calculations. Given the high anxiety level of legislatures, state departments and local districts about the potential cost impact of NCLB on their budgets, it is not inconceivable that, for a variety of reasons, some chose not to disclose (and thus make public) more detailed research efforts. Many state departments and districts reported efforts afoot to devise accounting procedures for

separating out and routinely tracking NCLB-related expenditures, but they also noted how difficult they are finding this task to be and how slow real progress is in this area. In several states, legislative services offices are engaged in parallel or collaborative efforts with state departments to monitor NCLB costs.

The state departments, districts and legislative service offices that did not have a formal study of NCLB costs underway were asked whether they were planning to do so in the near future. A few said they were beginning to think seriously about undertaking a study or had already begun to research those NCLB requirements that will most impact their budgets. All agreed that, inevitably, such a study would have to be conducted, either by virtue of a mandate from the legislature, governor, or state board of education, or due to mounting pressures from municipal leaders, local school boards, and other influential bodies. They cited the complexity of costing out NCLB and the shortage of appropriate staff as the primary reasons for not having already initiated a study. Even when there was a specific mandate from the legislature or other authority requiring an NCLB costing-out study, staffing shortages, a lack of fund to hire an outside consultant, and/or the complexities of NCLB were offered as the reasons for not moving forward. Some expressed a concern that such a study was simply undoable, given the lack of clarity about what federal funds are available for NCLB implementation, how the law's provisions continue what had begun under IASA, and the close relationship to the state's own education reform agenda.

In only five states were any comments collected that indicated a belief that NCLB implementation would not cost more than what will be provided by the federal government. Three of the five comments were made by legislative analysts, the other two by SEA officials. All expressed the firm belief that their states would only spend what they receive, but when asked about the impact on school district spending, they expressed less certainty. Will LEAs be able to hold spending on corrective actions to a level commensurate with their federal allocation? Will the SEA be able to provide a sufficient level of technical assistance to schools and districts needing improvement? What will be the reaction of parents and local communities as their schools and districts fall into sanctions? What will happen when schools and districts that do not receive Title I funding are identified as in need of improvement? Neither those who believe that NCLB is adequately funded nor those who felt NCLB is underfunded had any clear notion of how full NCLB implementation will play out.

Supplemental Educational Services

Difficulties with supplemental educational service providers were frequently mentioned by LEAs and AASA affiliates. Finding qualified providers in nearby locations appears to be an especially formidable challenge for rural school districts, with one respondent recounting how students had to be driven 150 miles each way to obtain the NCLB-mandated services. As noted earlier, even mid-sized cities (Bridgeport, Connecticut) have encountered difficulty in finding qualified providers. The anonymous urban district, located in a large metropolitan area where nationally prominent educational vendors have long been well established, noted that district staff were plagued with vendor start-up delays and low-quality services, underscoring a lack of preparedness in the private sector to meet the opportunities afforded them by NCLB. In response to the past two years of experience and ever-growing numbers of sanctioned schools (350 in

program improvement), the district intends to completely restructure its provision of supplementary educational services for the 2004-05 school year. The viewpoint expressed by respondents is that the regulations for supplemental educational services need to be revised to allow more local flexibility and that current NCLB provisions in this area neither ensure the most cost-effective use of federal funds nor make a lasting contribution to improved student learning.

NCLB and Educational Adequacy

Questions and concerns about whether and how NCLB requirements align with educational adequacy were raised during many of the telephone interviews. Most who ventured into this topic of discussion assume that NCLB raises the cost of adequacy — to "adequacy plus," as we refer to it later in this report. A few cautiously suggested, however, that NCLB may actually invite a narrowing of the curriculum and a step back from the broad resources that until now have constituted adequacy, so that the new adequacy definition simply becomes "100 percent proficiency" on the particular set of questions contained in each state's unique English, math, and science tests. Whether this would ultimately happen is unclear, however, the notion that states may be encouraged to lower their proficiency standards was a often stated concern from those interviewed.

Interestingly, the Connecticut cost study (reviewed above) concludes with a comparison of the costs generated by its minimal-compliance analysis and the costs that might be projected using an adequacy-based method. Adequacy estimates for 100 percent of Connecticut's regular education students to meet AYP were supposedly based on the Vermont (Mathis) technique, and estimates of the cost for ensuring that all SPED students meet AYP were calculated at about half the regular program adequacy figure (to account for fewer students but at greater cost). In this manner, total adequacy costs for FY 2004 were derived and each out-year increased by a 3.3 percent inflation factor. Comparison of the FY 2004 estimates obtained using these two competing methodologies revealed that adequacy costs were 6.5 times greater than the estimated cost of implementing NCLB based on Connecticut's federally approved state plan. By FY 2006, when a large proportion of Title I schools are expected to be required to offer supplementary educational services and local district costs therefore escalate accordingly, the adequacy estimates are still projected to be high, nearly four times greater than the state's plan-based costs. Although these were intended only as rough approximations and the actual methods used to arrive at the adequacy figures are unclear, this comparison provides an important insight because it is the only such comparison of a state plan versus an adequacy cost estimate discovered over the course of the study.

District Feedback on NCLB Costs

Questionnaire surveys for collecting LEA feedback about NCLB costs were mentioned as useful tools by respondents in three states: Virginia (results are not yet available), New Hampshire (results incorporated in the March 2004 cost study discussed above), and Minnesota. The Minnesota questionnaire findings were fully integrated into the state's NCLB cost study. The survey instrument sought input from school superintendents and charter school directors about their perceptions of NCLB implementation using Likert-scale and forced-choice items and concluding with an open-ended opportunity for comments. Some 95 percent of the state's 342

school districts and 86 percent of the 92 charter schools responded to the survey. Findings include the following:

- Most superintendents believe that all racial/ethnic student subgroups and free/reduced-price lunch students should be held to the same standards of academic proficiency (72 and 73 percent, respectively). But 80 percent also believe that special education students should not be held to the same standards, and 62 percent believe that limited-English students should not.

- Most superintendents believe that schools should not face the kinds of consequences prescribed by NCLB if there is a persistent failure of student subgroups to make adequate yearly progress: 88 percent believe SPED performance should not trigger consequences, and 85 percent say the same is true for the LEP subgroup. Some 74 percent disagree that consequences should apply if at least one racial/ethnic subgroup falls short of AYP, and 60 percent believe that even the persistent failure of the free/reduced-price student subgroup should not cause mandatory consequences.

- Only seven percent of superintendents believe that the educational benefits resulting from implementation of NCLB will, on balance, outweigh any adverse impacts of the legislation on their district. However, most (82 percent) do not favor opting out of NCLB.

- Only eight of the 326 responding superintendents anticipate that new federal revenues their district will receive under NCLB will be sufficient to cover the cost of any new local spending the law will require.

- About half (53 percent) of all superintendents believe that at some time during the next five years at least one Title I school in their district will be determined to "need improvement" because of failing to make AYP for at least two consecutive years.

- Half (50 percent) of all superintendents believe that to ensure their district, its schools, and student subgroups make AYP, the district will increase its overall spending level (beyond inflation-related increases) during the next two years, and slightly more than half believe this will occur over the next five or 10 years.

- Just 17 percent of the superintendents think it likely that by 2013-14, all students in their district will achieve reading, math, and science proficiency as defined by the SEA.

- Asked which one NCLB requirement will be the most costly for their district to implement, 33 percent of the superintendents say it will be implementing sanctions and additional services for low-performing schools, 26 percent expect implementing additional grade-level tests to be their highest-cost item, and another 26 percent believe it will be complying with new requirements for paraprofessional qualifications.

- Asked to identify major changes made within their district during the past two years, most superintendents (79 percent) say they have revised classroom curricula, and nearly

two-thirds have reassigned or redefined the jobs of existing instructional and administrative staff. About 44 percent have discontinued some standardized assessments not required by NCLB. Over the next two years, even more districts will revise classroom curricula and reassign or redefine the jobs of instructional staff.

Most of the Minnesota charter school directors' responses are consistent with those of school district superintendents. However, charter school directors believe more strongly that all student subgroups, including SPED and LEP, should be held to the same proficiency standards and that schools should face consequences if those groups persistently fail to make AYP. Charter school directors are considerably more confident about having all their students achieve proficiency by 2013-14 (47 percent believe this likely versus only 17 percent of superintendents). Like the public school districts, charter schools have been paying for new requirements under NCLB via spending reductions or reallocations, and that is also the primary way they expect to pay for them over the next two years.

Conclusions

Costing out NCLB is a new research undertaking, one that is necessarily based on a large number of unknowns. NCLB, itself a complex piece of legislation, coupled with the regulation, guidance, and advisory letters from the U.S. Department of Education, generate a myriad of ramifications (still evolving) that must be taken into consideration when costing out the law. As evidenced by the studies identified in the APA survey and discussed in this report, many researchers hesitate to speculate, while others project costs too generously, too conservatively, and/or in unique ways only they can comprehend. We collected and reviewed works that represent a full continuum from minimal compliance to educational adequacy approaches. Each of the works was methodologically instructive.

Whatever strengths or weaknesses of research methodology we may have highlighted in our review of the collected NCLB cost studies, all the studies' authors developed a methodology that went well beyond "back of the envelope" calculations in an attempt to better inform local educational planning and state and federal policymaking. The SEAs and LEAs, in particular, are to be thanked for releasing their early studies, even though some had been intended only as internal working drafts.

Ferreting out the full range of NCLB-related costs, and parsing out those costs from the cost of other federal, state, and local reform initiatives, is an extremely complex process, one that is highly sensitive to potential bias. As our discussion of existing NCLB cost studies has shown, there remain many unresolved conflicts among the education researchers working in this field. And, as many more NCLB cost studies are undertaken in the coming months, even more research quandaries will undoubtedly emerge — including for example, that it should not be assumed that just because a school or LEA makes AYP, it has not incurred NCLB-related costs to ensure its continuing "successful" status.

Practical Implications from NCLB Cost Studies

Many important methodological issues are raised by the NCLB cost studies included in our survey. Among the particularly salient methodological findings are the following:

- **A focus on the explicit costs of NCLB, rather than adequacy or adequacy plus NCLB, provides a sound, conservative cost basis for estimating the implementation of NCLB.** For planning purposes, it is important to enter the more speculative area of NCLB future costs by focusing on students, schools and districts that are identified by NCLB accountability screens. This may best be accomplished by projecting the costs of various "what if" scenarios for numbers of schools, extent of student choice transfers, use of supplemental educational services, and deeper sanctions, such as school reconstitution, for the next several out-years (i.e., until the next ESEA Reauthorization). Ranges of figures for varying scenarios may be the most valid projections, with calculations updated annually to reflect actual implementation costs and to capture ongoing changes in NCLB regulations.

- **The relationship between NCLB and educational adequacy must be carefully delineated.** Tacking previously conducted adequacy cost studies onto some estimate of what it might cost to raise the remaining 20 percent or so of students to 100 percent proficiency (and to meet other NCLB-mandated requirements) is neither a valid approach to calculating the cost of full NCLB implementation nor a sound approach to updating the cost of educational adequacy. The widespread dissemination of this type of study (much of which purportedly rests on APA's prior adequacy cost work) does not serve the education community well, affording little or no transparency of method, generating what we believe to be inflated cost estimates. The resulting journalistic debates are overshadowing substantive progress in getting nonpartisan accounting methods into play nationally. As stated earlier (in our discussion of the recent AccountabilityWorks study), we believe it possible to carefully design educational adequacy studies with NCLB costs in mind — even so, we strongly urge researchers to keep separate the NCLB-related costs that are not directly and incontrovertibly necessary for educational adequacy.[30]

- **The success toward NCLB goals ultimately depends on educational adequacy.** NCLB seeks "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments."[31] Eliminating the achievement gap by bringing all students to proficiency by the year 2014 is an extremely admirable goal of significant national importance. To claim, however, that it can (or should) be achieved solely by means of the annual federal ESEA/NCLB

[30] For example, supplemental educational services would presumably be viewed as adequacy costs, whereas the additional costs incurred due to NCLB's accountability system and school choice requirements would not. Costs associated with high-quality teachers and paraprofessionals might arguably be charged to either adequacy or NCLB or both.

[31] ESEA/Title I, Part A, Sec. 1001. Statement of Purpose.

allocations is obviously absurd. After all, ESEA/Title I funds have never been sufficient to serve the vast numbers of schools across the nation that enroll sizeable numbers or proportions of disadvantaged students, and the increased funding under NCLB similarly remains inadequate for serving all the schools that deserve to receive funds. Certainly the NCLB per pupil allocations cannot reasonably be expected to produce the surge in student performance that the law requires. Thus the overall success of NCLB is rooted in adequate federal funding combined with adequate state and local funding of schools.

- **Adequacy cost studies, like NCLB cost studies, are essential planning tools.** Here we must venture a comment that connects what we have learned in this survey with APA's extensive prior work in conducting adequacy studies. That SEAs and legislatures would want to conduct adequacy cost studies alongside their NCLB cost studies may appear to some policy makers as foolhardy — such findings will only incite school funding lawsuits and place additional fiscal pressure on state and federal coffers. This strikes us as being a very reactive stance to a very aggressive accountability system. For a state to passively observe increasing numbers of its schools and school districts falling into ever more serious and costly-to-remedy sanctions is inconsistent with the proactive educational leadership in which most SEAs, legislatures, and governors take pride. To intervene appropriately and effectively to help schools and students succeed, however, policy makers must have reasonably accurate estimates of just what it will cost to provide adequate educational opportunity to all students in their state, how those costs vary across school districts, and what the additional costs of NCLB may entail in the coming years. This will allow them to better understand the benefits of "upfront" adequacy investments (like the early and sustained intervention approach considered in the Ohio NCLB cost study) as compared with the potential cost of NCLB sanctions, which are perceived by many educators to be punitive consequences.

  Both NCLB and educational adequacy point to the moral course of action, one that strives to equip all students for equal participation in this nation's democratic processes, to ensure continued economic vitality of our states and country, and to foster a well-educated citizenry able to contribute to the common good. Looking the other way, ignoring inequities of educational opportunity and disparities of student outcomes, and disregarding increases in student needs and schooling costs, are precisely how states end up defending themselves against educational adequacy lawsuits. States that proactively balance the delivery of adequate resources and the performance of all their students, and devise appropriate (usually phased-in) remedies when they find state and local funding to be inadequate, are those that will find themselves successful if taken to court. States that ignore or deny funding problems invite their challengers to undertake the adequacy and NCLB cost studies, thereby losing an ability to control research directions, influence methodological choices, and oversee the conduct of the work.

- **Interactive dialogs with knowledgeable SEA, LEA, and school-based personnel are vital to making sound cost estimates.** Scrutiny of fiscal data, historical student performance data, personnel records, data warehousing capabilities, the SEA's written plans and accountability workbook, LEA school improvement plans, or other such analyses of written documentation are simply inadequate in the absence of rich contextual

and probative dialogues with SEA or LEA personnel. Ferreting out differences in the cost of meeting previously existing IASA requirements that were not fully in place prior to the passage of NCLB, determining what long-term improvements would have been implemented in the absence of NCLB, and limiting the discussion from crossing over into the realm of full-blown adequacy require meticulous collection of cost data and extraordinarily adept facilitation of professional judgment interviews or panels at the SEA, LEA, and school building levels. The notion that valid NCLB costs can be generated from one's office using National Center for Education Statistics data and other such global figures, or, alternatively, that the cost of implementing NCLB can be extrapolated from others' adequacy cost studies or other publicly available data are both seriously flawed notions.

Implications for APA's Template for Costing Out NCLB in Hawaii

Structurally, the APA template for costing out NCLB has a high level of content validity, as evidenced by the cost studies identified and reviewed herein. Table 2: Alignment of Other NCLB Costing Efforts with APA's Draft Template summarizes the fit between costs that were addressed in the studies that we identified and those contained in the APA template. What differs most appears to be the organizing schema — i.e., how many categories and which elements are included under them. This is understandable, given the complex, interrelated nature of NCLB provisions. Because the primary purpose of dividing the NCLB template into discrete cost categories is to provide a logical framework within which the law's many provisions can be systematically examined, the necessary SEA or LEA actions categorized and resourced, and appropriate costs determined, it seems especially important to establish cost categories that are intuitive. Just how intuitive the APA categories will be to SEAs and LEAs will be tested out during the Hawaii NCLB cost study, but based on the studies reviewed in this report, there may be a need for modification and/or the addition of an eighth "miscellaneous" category to minimize confusion and uncertainty during professional judgment and other inquiry processes.

The SEA template is readily adaptable for LEA use. The LEA "overlay" (not a substantially different template) will probably need to include more questions/prompts and NCLB guidance. It is at the district and school building levels where the most action-oriented and far-reaching burdens fall. LEAs typically have fewer staff available to concentrate on the cost ramifications of their everyday operations and may be less well informed of NCLB's many provisions. Therefore, concretely spelling things out will help ensure that the right questions are raised locally. Moreover, differences in how NCLB impacts high-wealth and low-wealth districts, or large versus small, urban and suburban versus rural LEAs, must be investigated further before a "one size fits all" LEA overlay is finalized. The LEA overlay must also take into account the fact that most NCLB provisions impact both SEAs and LEAs, albeit differently, and that states do not uniformly delegate responsibility to LEAs in the same way.

Table 2: Alignment of Other NCLB Costing Efforts with APA's Draft Template

Study	*Does Study Address the Seven Major NCLB Cost Categories of APA Template?*							*Other Criteria*				
	Standards & Assessment	*Accountability & AYP*	*School Improvement*	*Safe Schools*	*Supplemental Services*	*Staff Quality*	*NCLB Data Management*	*Basis of Study Calculations?*	*Calculations Transparent?*	*Separates Out LEA Costs?*	*Calculates Out-Years?*	*Comments*
State-Initiated Studies												
CT	a	a	a	a	a	a	a	State Plan	Yes	Yes	to 2007	Prelim. Study w/out LEA Input
MN	a	a	a	a	a	a	a	State Plan	Yes	Yes	to 2006, -14	Program Eval/Cost Study
OH	a	a				a		+/- Adeq	Yes	No	Total Costs	Intervene = No Sanctions?
SC							a	State Plan	No	No	Years 1 & 2	Data Mgt. Costs Only
UT	a					a		+/- Adeq	No	No	Ongoing	Interventions, No Sanctions
WV	a	a	a		a	a		State Plan	Yes	Some	Some	Under Compliance Orders
LEA Studies												
Jordan UT						a	a	+/- Adeq	Yes	N/A	No	Moderate-Wealth LEA
Omaha	a							State Plan	Most	Yes	No	Assessment Costs Only
Unnamed City			a		a	a	a	+/- Adeq	Yes	N/A	No	Large Urban System
Other Studies That Focus on a Single State												
CT/MacDonald					a			State.Plan	Yes	Yes	No	Supp'l Ed Services Costs Only
NH/NHSAA [a,b]	a	a				a	a	+/- Adeq	Some	Some	Ongoing	Old & New Versions
NH/A.Works [a]	a					a	a	NCLB	Yes	No	'02-03, 03-04	Response to NHSAA Study
VT/Mathis [a]	a	a			a			Adeq +	Some	No	No	Earliest Est. of a State's Costs
Other Studies That Weigh NCLB Costs More Globally												
NASBE	a							Test Costs	Most	No	thru 2007-08	Pre-NCLB Test Estimates
A.Works [b]	a							Varied	Most	No	thru 2007-08	Response to NASBE Study
GAO	a							Survey etc	Yes	No	FY02-08	No ELL or SPED Test Costs
Mathis [b]	?	?	?	?	?	?	?	Adeq +	No	No	Total Costs	Widely Disseminated
Mathis [c]	?	?	?	?	?	?	?	Adeq +	No	No	Ongoing ?	Adds to Mathis [b] Discussion
A.Works [c]	a	a	a		a	a	a	Natl. Data	Yes	Yes	thru 2007-08	Excludes Costs Under IASA
Peyser & Costrell	a	a	a		a	a		Varied	Some	No	No	Response to Adeq Costing

Key: +/- Adeq = Based on an adequacy approach; Adeq + = Projections that build upon others' adequacy cost studies
State Plan = Based on SEA's federally approved consolidated plan and accountability workbook

Appendix A:

Survey Respondents

The authors of this study wish to thank the many knowledgeable individuals who ably represented their organizations and discussed their research in responding to this nationwide survey. We apologize if this list of contributors has inadvertently omitted anyone.

National Organizations

Alliance for Excellent Education
American Association of School Administrators (AASA) and all state affiliates
American Federation of Teachers (AFT)
Center on Education Policy (CEP)
Council of Chief State School Officers (CCSSO)
Council of the Great City Schools (CGCS)
Education Commission of the States (ECS)
The Education Trust
National Association of State Boards of Education (NASBE)
National Center for Education Statistics (NCES)
National Conference of State Legislatures (NCSL)
National Education Association (NEA)
National Governors Association (NGA)
National School Boards Association (NSBA) and numerous state affiliates
The Rural School and Community Trust
United States General Accounting Office (GAO)

Other Education Research Sources Contacted

AccountabilityWorks
Advocacy Center for Children's Education Success with Standards (ACCESS)
EdSource (CA)
Education Law Center (NJ)
FairTest: The National Center for Fair & Open Testing
Indiana University Policy Center (Bloomington, IN)
Intermountain Center for Education Effectiveness (ID)
JLMyers Group (CO)
William J. Mathis (VT)
Pennsylvania School Reform Network
Public Affairs Research Council (AL)
Public Affairs Research Council (LA)

State Education Agencies and Legislative Services/Research Offices

All 49 State Education Agencies (excluding HA)
All 49 Legislative Services or Equivalent Research/Analyses Offices (excluding HA)

Local Education Agencies

Anchorage School District (AK)
Bismarck Public Schools (ND)
Bridgeport Public Schools (CT)
Des Moines Public Schools (IA)
Granite School District (UT)
Jordan School District (UT)
Los Angeles Unified School District (CA)
Miami-Dade County Public Schools (FL)
Milwaukee Public Schools (WI)
Minneapolis Public Schools (MN)
New York City Department of Education (NY)
New Town Public Schools (ND)
Oakland Unified School District (CA)
Omaha Public Schools (NE)
Philadelphia Public Schools (PA)
San Diego County Schools (CA)
Seattle Public Schools (WA)
St. Louis Public Schools (MO)
Windham Public Schools (CT)

Appendix B:

Ancillary Materials

NCLB Cost-Related Background Materials Forwarded by the States

Connecticut, Senate Majority Leader's Office. 2003. File note re CT's NCLB cost study.

Illinois State Board of Education. Dec. 2002 meeting notes addressing supplemental educational services providers, criteria for approval, costs, and related information.

Indiana State Budget Agency and Legislative Services Agency. Jan. 2003. Fiscal impact statement, S.B. 541 on academic achievement, cost of 21st Century Scholars program for low-income students, and related academic enhancements.

Indiana State Budget Agency and Legislative Services Agency. July 2003. "Fiscal Impact of NCLB" PPT presentation.

Michigan House Fiscal Agency. Jan. 2004. Memo explaining issues involved in estimating the cost of NCLB in MI.

Minnesota Assocation of School Business Officials. 2003. PPT show on the state of education finance in MN, presented by Superintendents Richardson and Berge.

Minnesota Office of the Legislative Analyst. Nov. 2003 "Survey of School District Superintendents and Charter School Directors," questionnaire being used in state's NCLB cost study (then in progress).

Minnesota Office of the Legislative Analyst. Sept. 2003. Overview of state's NCLB cost study (then in progress).

New Jersey Leadership for Educational Excellence. Sept. 2003. "Standards, Accountability and Common Sense: Solutions to Implementation Issues with the NCLBA."

New York State Department of Education. Nov. 2003. "Field Memo: Updated Guidance: Implementing the NCLB's Requirements for Teachers in New York State."

North Carolina Department of Public Instruction. 2003. "Five Year Costs for Closing the Achievement Gap," 5-yr costs/budget for the state's Achievement Gap Commission.

North Dakota Legislative Council. Oct. 28, 2003. Minutes of NCLB committee meeting.

North Dakota Legislative Council. July 2003. "No Child Left Behind Act of 2001 — Background Memorandum."

Utah Legislative Fiscal Analyst. Jan. 2004. Fiscal impact note re HB 43, opting out of NCLB, and earlier working drafts.

Utah Legislative Services. Nov. 2003. Excel file showing NCLB allocations FY 2002-est. 2005.

Utah State Board of Education. Aug. 2003. "Performance Plus: Tuning-Up Utah's Great Education Engine." Outlines state's school improvement program.

Utah State Office of Education. Jan. 2004. "Utah's Cost of Participating in NCLB," fiscal comments presented to legislature.

Vermont Legislative Council. Jan. 2004. Joint resolution, R-207/JR H.25, expressing state's concern with the potentially unfunded mandates of NCLB.

Virginia Department of Education. Nov. 2003. "Survey of the Cost Impact of the NCLB Act of 2001," questionnaire being administered to LEAs (no data yet).

Virginia Superintendent of Public Instruction. Aug. 2003. "NCLB: Implementation Status of Virginia's Consolidated Plan," PPT presentation to Senate Finance Committee.
West Virginia Department of Education. Jan. 2004. Packet including state's consolidated plan, various rough-draft cost estimates, internal memo on SPED costs, etc.
West Virginia School Boards Association. Dec. 2003. "WVDE Estimates Future NCLB Costs," *The Legislature 22*(26) newsletter.

Background Materials: Policy Studies and Other Publications

Abedi, Jamal. Jan.-Feb. 2004. "The No Child Left Behind Act and English Language Learners: Assessment and Accountability Issues." *Education Researcher 33*(1), 4-14, *www.aera.net/pubs/er/pdf/vol33_01/erv33n1_pp04-14.pdf.*
Alliance for Excellent Education. Nov. 2003. "Left Behind: Six Million At-Risk Secondary Students." Issue Brief, *//web.all4ed.org/publications.*
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American Association of School Administrators and National Association of State Boards of Education. April 2003. "Implementation Guide for Rural and Small School Districts — No Child Left Behind and Rural Education: Implications for Policy and Practice," *www.aasa.org/government_relations/rural.*
American Association of School Administrators. Nov. 2002. "AASA's Score Card on the Final Title I Regulations." w*ww.aasa.org/government_relations/esea/Scorecard.pdf.*
American Federation of Teachers. 2003. "Mid-Term Report on Status of State Efforts to Assist Paraprofessionals in Meeting No Child Left Behind Requirements: State by State Score Sheet." *www.aft.org/psrp.*
Appalachia Educational Laboratory. Dec. 2003. "Recruiting and Retaining High-Quality Teachers in Rural Areas." *www.ael.org/snaps/PBRuralTeachers1.pdf.*
Blank, Rolf K. Oct. 2003. "Meeting NCLB Goals for Highly Qualified Teachers: Estimates by State from Survey Data." Council of Chief State School Officers, *www.ccsso.org/publications/index.cfm.*
Braden, Lawrence S., Chester E. Finn, Jr., Lawrence S. Lerner, et al. Jan. 2000. "The State of State Standards 2000." Thomas B. Fordham Foundation, *www.edexcellence.net/doc/Standards2000.pdf.*
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