

## Estimated Cost of the Testing Requirements in the *No Child Left Behind Act*

Theodor Rebarber and Thomson W. McFarland

### Findings

The purpose of this analysis is to determine if implementing the additional testing requirements of the *No Child Left Behind Act of 2001* will be affordable for most states given the federal funds provided. Using generally conservative assumptions, we find that the federal appropriation for this purpose is reasonable and should be sufficient to cover the additional cost for most states in most years. This contradicts the findings of a widely cited earlier study by the National Association of State Boards of Education (NASBE), which suggested that federal funds fell far short of projected state costs.

According to our analysis, the average state—assuming that it has implemented only the bare minimum required to comply with previous testing requirements of the *Improving America's Schools Act of 1994*—will face annual costs between \$6.1 million and \$7.6 million, while it is expected to receive \$7.1 million in annual federal funding. Across the fifty states, total annual costs—again, assuming that the states have implemented only the bare minimum in testing—are estimated to range between \$312 million and \$388 million, while total federal funding is expected to be nearly \$360 million. (Additional funds are allocated to assist Puerto Rico, territories and outlying areas.)

In comparison, a study by NASBE ([www.nasbe.org/Archives/cost.html](http://www.nasbe.org/Archives/cost.html)) claimed in its press release that the cost of complying with the federal requirements was as high as \$7 billion. It further contrasted projected costs between \$2.6 billion and \$7 billion with expected federal appropriations between \$320 million and \$400 million. The most significant reason for the different findings of the two studies is that NASBE compared the total costs of complying with the new federal requirements *over the life of the federal legislation* with the *annual* federal appropriations designed to pay for these costs. This study compared the *annual* costs of complying with the federal requirements with the *annual* federal appropriations.

In addition, the NASBE study, especially for the higher range estimate, relied on unnecessarily high assumptions for both test administration and development. The assumptions used in this study were validated through actual budgetary costs provided by state departments of education.

Despite the overall positive results regarding state testing costs and revenues, we expect that states will want to continue to work to improve efficiency and lower costs. This is especially true for states with relatively small student populations. Such states will face the same development costs as larger states while receiving a smaller federal allocation due to their size (though all states begin with an allocation of \$3 million each year, before accounting for student population). Further, we find that total costs will be uneven over the course of the act, peaking in the middle years when states will be developing reading, math and science assessments. The greatest cost pressure will occur during these years for most states, while there should be relatively little cost pressure in the first and last years of the legislation.

### Assumptions and Discussion

The 1994 amendments to the Elementary and Secondary Education Act required reading and math tests aligned with state standards at one grade in each of the following grade spans: 3-6, 7-9 and 10-12. The 2001 amendments (*No Child Left Behind Act*) require reading and math assessments at grades 3-8 and at least once in grades 10-12 by 2005-2006. The new amendments also require science assessments by 2007-2008 at one grade in each of the following grade spans: 3-6, 7-9, and 10-12. For the purposes of this study, we assume that all states must develop all of the new tests required by the new legislation: four reading tests and four math tests at grades 3-8 and three science tests. This is likely to be a high estimate, since a substantial number of states have already developed assessments in some of the additional grades required by the 2001 amendments.

Development costs are estimated at \$500,000 per year over four years for each grade level subject test (e.g., a third grade reading test or a fourth grade math test). This assumption was validated by professional staff at the Pennsylvania and Texas departments of education. It is assumed that the development of the new reading and math tests begins in 2002-2003, while development of the science tests begins in 2004-2005. This does not include the cost of state department staff and other necessary overhead, since federal funds seem intended to pay primarily for new costs and not ongoing overhead.

In contrast, the assumptions for development costs used in the NASBE analysis were in terms of per pupil expenditures. Development costs, however, are generally fixed and do not vary according to the number of pupils to be assessed. Further, this study included the development costs of the science assessments, which are not included in the NASBE study.

Administration costs are estimated at \$10 per student per year, including for reading and math tests required under the previous federal legislation. This cost represents the amount to be paid to vendors for annual administration activities for typical reading and math tests, such as scoring and reporting. It is estimated that this figure represents a median cost among the states for such tests, with most states spending between \$5 and \$15 per student per year. This assumption was validated by professional staff at the Pennsylvania and Texas departments of education. The estimate does not include the cost of state department staff and other necessary overhead, since federal funds seem intended to pay primarily for new costs and not ongoing overhead.

It is worth noting that our estimate for the cost of administration is not intended to apply to assessments that are fundamentally essay tests or that consist primarily of extended response test questions, since these are not required by the federal act. Our estimate does, however, assume that a significant number of test questions consist of constructed response items, such as short answer items. Since extended writing is an important skill, we hope states choose to assess students in this area despite the additional costs, even though such assessment is not required by the federal legislation.

Our estimate of administration costs is substantially lower than the estimate used by NASBE—\$25-\$50 per student—which we believe to be too high. No source is provided for the NASBE estimate.

Figures for enrollment, used to calculate total administration costs, are based on figures used by NASBE in its analysis. One exception is that this analysis included the administration costs of high school reading and math tests, which were not included in the NASBE study. To estimate the higher total enrollment, the NASBE figures for grades 3-8 were prorated for an additional grade of high school students; the resulting figure is probably high since enrollment at high school grades tends to be lower than at earlier grades due to dropouts.

The assumption for federal funding is based on the FY 02 appropriation for this purpose. No increase is assumed in annual federal funding, even though authorization levels in the legislation increase slightly in future years. It is assumed that these increases account for cost inflation. No adjustment appears to be made for inflation in the NASBE analysis.

State	Enrollment (3-8, Exit)	02-03, 03-04 School Years		04-05, 05-06 School Years		06-07, 07-08 School Years		Total Costs			FY02 Appropriation	NASBE Estimate	
		Development Costs	Administration Costs	Development Costs	Administration Costs	Development Costs	Administration Costs	02-03, 03- 04	04-05, 05-06	06-07, 07-08		Minimum	Maximum
AL	409,849	\$4,000	\$1,756	\$5,500	\$1,756	\$1,500	\$4,098	\$5,756	\$7,256	\$5,598	\$6,130	\$43,912	\$114,172
AK	74,689	\$4,000	\$320	\$5,500	\$320	\$1,500	\$747	\$4,320	\$5,820	\$2,247	\$3,594	\$8,002	\$20,806
AZ	475,990	\$4,000	\$2,040	\$5,500	\$2,040	\$1,500	\$4,760	\$6,040	\$7,540	\$6,260	\$6,830	\$50,999	\$132,597
AR	246,610	\$4,000	\$1,057	\$5,500	\$1,057	\$1,500	\$2,466	\$5,057	\$6,557	\$3,966	\$4,948	\$26,423	\$68,699
CA	3,226,221	\$4,000	\$13,827	\$5,500	\$13,827	\$1,500	\$32,262	\$17,827	\$19,327	\$33,762	\$28,938	\$345,667	\$898,733
CO	386,873	\$4,000	\$1,658	\$5,500	\$1,658	\$1,500	\$3,869	\$5,658	\$7,158	\$5,369	\$6,138	\$41,451	\$107,772
CT	306,137	\$4,000	\$1,312	\$5,500	\$1,312	\$1,500	\$3,061	\$5,312	\$6,812	\$4,561	\$5,463	\$32,800	\$85,281
DE	62,085	\$4,000	\$266	\$5,500	\$266	\$1,500	\$621	\$4,266	\$5,766	\$2,121	\$3,534	\$6,652	\$17,295
DC	36,906	\$4,000	\$158	\$5,500	\$158	\$1,500	\$369	\$4,158	\$5,658	\$1,869	\$3,275	\$3,954	\$10,281
FL	1,313,971	\$4,000	\$5,631	\$5,500	\$5,631	\$1,500	\$13,140	\$9,631	\$11,131	\$14,640	\$13,568	\$140,783	\$366,035
GA	784,887	\$4,000	\$3,364	\$5,500	\$3,364	\$1,500	\$7,849	\$7,364	\$8,864	\$9,349	\$8,962	\$84,095	\$218,647
HI	102,101	\$4,000	\$438	\$5,500	\$438	\$1,500	\$1,021	\$4,438	\$5,938	\$2,521	\$3,844	\$10,939	\$28,442
ID	131,584	\$4,000	\$564	\$5,500	\$564	\$1,500	\$1,316	\$4,564	\$6,064	\$2,816	\$4,040	\$14,098	\$36,655
IL	1,085,187	\$4,000	\$4,651	\$5,500	\$4,651	\$1,500	\$10,852	\$8,651	\$10,151	\$12,352	\$12,301	\$116,270	\$302,302
IN	539,333	\$4,000	\$2,311	\$5,500	\$2,311	\$1,500	\$5,393	\$6,311	\$7,811	\$6,893	\$7,503	\$57,786	\$150,243
IA	255,695	\$4,000	\$1,096	\$5,500	\$1,096	\$1,500	\$2,557	\$5,096	\$6,596	\$4,057	\$5,168	\$27,396	\$71,229
KS	250,644	\$4,000	\$1,074	\$5,500	\$1,074	\$1,500	\$2,506	\$5,074	\$6,574	\$4,006	\$5,078	\$26,855	\$69,822
KY	341,734	\$4,000	\$1,465	\$5,500	\$1,465	\$1,500	\$3,417	\$5,465	\$6,965	\$4,917	\$5,852	\$36,614	\$95,197
LA	402,927	\$4,000	\$1,727	\$5,500	\$1,727	\$1,500	\$4,029	\$5,727	\$7,227	\$5,529	\$6,536	\$43,171	\$112,244
ME	117,387	\$4,000	\$503	\$5,500	\$503	\$1,500	\$1,174	\$4,503	\$6,003	\$2,674	\$3,901	\$12,577	\$32,701
MD	462,160	\$4,000	\$1,981	\$5,500	\$1,981	\$1,500	\$4,622	\$5,981	\$7,481	\$6,122	\$6,886	\$49,517	\$128,745
MA	535,197	\$4,000	\$2,294	\$5,500	\$2,294	\$1,500	\$5,352	\$6,294	\$7,794	\$6,852	\$7,346	\$57,343	\$149,091
MI	891,015	\$4,000	\$3,819	\$5,500	\$3,819	\$1,500	\$8,910	\$7,819	\$9,319	\$10,410	\$10,697	\$95,466	\$248,211
MN	454,109	\$4,000	\$1,946	\$5,500	\$1,946	\$1,500	\$4,541	\$5,946	\$7,446	\$6,041	\$6,837	\$48,655	\$126,502
MS	271,613	\$4,000	\$1,164	\$5,500	\$1,164	\$1,500	\$2,716	\$5,164	\$6,664	\$4,216	\$5,222	\$29,101	\$75,664
MO	488,494	\$4,000	\$2,094	\$5,500	\$2,094	\$1,500	\$4,885	\$6,094	\$7,594	\$6,385	\$7,185	\$52,339	\$136,080
MT	85,643	\$4,000	\$367	\$5,500	\$367	\$1,500	\$856	\$4,367	\$5,867	\$2,356	\$3,689	\$9,176	\$23,858
NE	151,753	\$4,000	\$650	\$5,500	\$650	\$1,500	\$1,518	\$4,650	\$6,150	\$3,018	\$4,328	\$16,259	\$42,274
NV	182,681	\$4,000	\$783	\$5,500	\$783	\$1,500	\$1,827	\$4,783	\$6,283	\$3,327	\$4,407	\$19,573	\$50,890
NH	119,404	\$4,000	\$512	\$5,500	\$512	\$1,500	\$1,194	\$4,512	\$6,012	\$2,694	\$3,931	\$12,793	\$33,262
NJ	673,904	\$4,000	\$2,888	\$5,500	\$2,888	\$1,500	\$6,739	\$6,888	\$8,388	\$8,239	\$8,895	\$72,204	\$187,730
NM	177,664	\$4,000	\$761	\$5,500	\$761	\$1,500	\$1,777	\$4,761	\$6,261	\$3,277	\$4,471	\$19,035	\$49,492
NY	1,487,560	\$4,000	\$6,375	\$5,500	\$6,375	\$1,500	\$14,876	\$10,375	\$11,875	\$16,376	\$16,028	\$159,381	\$414,392
NC	713,278	\$4,000	\$3,057	\$5,500	\$3,057	\$1,500	\$7,133	\$7,057	\$8,557	\$8,633	\$8,680	\$76,423	\$198,699

State	Enrollment	02-03, 03-04 School Years		04-05, 05-06 School Years		06-07, 07-08 School Years		Total Costs			FY02 Appropriation	NASBE Estimate	
		Development Costs	Scoring Costs	Development Costs	Scoring Costs	Development Costs	Scoring Costs	02-03, 03-04	04-05, 05-06	06-07, 07-08		Minimum	Maximum
ND	50,867	\$4,000	\$254	\$5,500	\$254	\$1,500	\$593	\$4,254	\$5,754	\$2,093	\$3,488	\$6,358	\$16,532
OH	848,082	\$4,000	\$4,240	\$5,500	\$4,240	\$1,500	\$9,894	\$8,240	\$9,740	\$11,394	\$11,494	\$106,010	\$275,627
OK	281,037	\$4,000	\$1,405	\$5,500	\$1,405	\$1,500	\$3,279	\$5,405	\$6,905	\$4,779	\$5,622	\$35,130	\$91,337
OR	256,063	\$4,000	\$1,280	\$5,500	\$1,280	\$1,500	\$2,987	\$5,280	\$6,780	\$4,487	\$5,454	\$32,008	\$83,220
PA	845,909	\$4,000	\$4,230	\$5,500	\$4,230	\$1,500	\$9,869	\$8,230	\$9,730	\$11,369	\$11,642	\$105,739	\$274,920
RI	73,218	\$4,000	\$366	\$5,500	\$366	\$1,500	\$854	\$4,366	\$5,866	\$2,354	\$3,723	\$9,152	\$23,796
SC	314,851	\$4,000	\$1,574	\$5,500	\$1,574	\$1,500	\$3,673	\$5,574	\$7,074	\$5,173	\$5,836	\$39,356	\$102,327
SD	60,191	\$4,000	\$301	\$5,500	\$301	\$1,500	\$702	\$4,301	\$5,801	\$2,202	\$3,599	\$7,524	\$19,562
TN	416,306	\$4,000	\$2,082	\$5,500	\$2,082	\$1,500	\$4,857	\$6,082	\$7,582	\$6,357	\$6,933	\$52,038	\$135,299
TX	1,833,022	\$4,000	\$9,165	\$5,500	\$9,165	\$1,500	\$21,385	\$13,165	\$14,665	\$22,885	\$19,472	\$229,128	\$595,732
UT	212,143	\$4,000	\$1,061	\$5,500	\$1,061	\$1,500	\$2,475	\$5,061	\$6,561	\$3,975	\$5,006	\$26,518	\$68,946
VT	48,157	\$4,000	\$241	\$5,500	\$241	\$1,500	\$562	\$4,241	\$5,741	\$2,062	\$3,433	\$6,020	\$15,651
VA	526,475	\$4,000	\$2,632	\$5,500	\$2,632	\$1,500	\$6,142	\$6,632	\$8,132	\$7,642	\$7,902	\$65,809	\$171,104
WA	466,546	\$4,000	\$2,333	\$5,500	\$2,333	\$1,500	\$5,443	\$6,333	\$7,833	\$6,943	\$7,427	\$58,318	\$151,627
WV	132,200	\$4,000	\$661	\$5,500	\$661	\$1,500	\$1,542	\$4,661	\$6,161	\$3,042	\$4,222	\$16,525	\$42,965
WI	393,473	\$4,000	\$1,967	\$5,500	\$1,967	\$1,500	\$4,591	\$5,967	\$7,467	\$6,091	\$7,104	\$49,184	\$127,879
WY	42,606	\$4,000	\$213	\$5,500	\$213	\$1,500	\$497	\$4,213	\$5,713	\$1,997	\$3,389	\$5,326	\$13,847
<b>Total</b>	<b>21,582,814</b>	<b>\$204,000</b>	<b>\$107,914</b>	<b>\$280,500</b>	<b>\$107,914</b>	<b>\$76,500</b>	<b>\$251,799</b>	<b>\$311,914</b>	<b>\$388,414</b>	<b>\$328,299</b>	<b>\$359,954</b>	<b>\$2,697,852</b>	<b>\$7,014,415</b>
<b>Average</b>	<b>423,192</b>	<b>\$4,000</b>	<b>\$2,116</b>	<b>\$5,500</b>	<b>\$2,116</b>	<b>\$1,500</b>	<b>\$4,937</b>	<b>\$6,116</b>	<b>\$7,616</b>	<b>\$6,437</b>	<b>\$7,058</b>	<b>\$52,899</b>	<b>\$137,538</b>
<b>Median</b>	<b>292,915</b>	<b>\$4,000</b>	<b>\$1,465</b>	<b>\$5,500</b>	<b>\$1,465</b>	<b>\$1,500</b>	<b>\$3,417</b>	<b>\$5,465</b>	<b>\$6,965</b>	<b>\$4,917</b>	<b>\$5,836</b>	<b>\$36,614</b>	<b>\$95,197</b>

## AW Assumptions:

\*Development cost of \$500,000 per test, per year.

\*Scoring costs of \$10 per student tested, per year. High School Test Scoring costs are included.

\*Test development for Reading and Math Assessments takes place during the 2002-03, 2003-04, 2004-05, and 2005-06 school years, after which scoring costs are figured. It is assumed that states are in compliance with the ESEA Reauthorization of 1994, with a Reading and Mathematics Assessment in place in one grade at each of three levels: Elementary (Grades 3-5), Middle (Grades 6-9), and Secondary (Grades 10-12). This leaves 8 tests to be developed: a Reading and Mathematics test for each of the four grades not covered by the 1994 ESEA Reauthorization.

\*Test development for Science Assessments takes place in 2004-05, 2005-06, 2006-07, and 2007-08 school years. NCLB requires a science assessment once during each of three levels: Elementary (Grades 3-5), Middle (Grades 6-9), and Secondary (Grades 10-12). It is assumed that states will develop a Science Assessment from scratch, as there is no requirement for such an assessment in the 1994 ESEA Reauthorization. Thus, 3 Science Assessments must be developed under NCLB.

\*Four-year test development timeframe based on estimates in *Model Contractor Standards & State responsibilities for State Testing Programs*, prepared for ELC Test Summit.

## NASBE Assumptions:

\*Test Development cost of \$25-125 per student.

\*Administrative costs of \$25-50 per student.

\*Science assessment costs not included.

\*High school level tests not included.

Note: \$370,000,000 is available for this purpose under NCLB and the FY02 appropriation. In addition to the \$359,954,000 allocated to the states, the remainder (not shown) is available to schools overseen by the Bureau of Indian Affairs, Puerto Rico, and "outlying areas" such as American Samoa, Northern Marianas, Guam, and the Virgin Islands.