

On the Horizon: Calculating and Reporting High School Graduation Rates

Contact: Kim Potts, Principal Legislative Research Analyst
(615) 401-7875 / Kim.Potts@tn.gov

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Key Points

- *In 2011, Tennessee's graduation rate as reported on the Annual State Report Card is expected to drop because of a new calculation method required by the U.S. Department of Education.*
- *New federal regulations require other significant changes affecting high schools: districts and schools will be held accountable for the high school graduation rate for each student subgroup (i.e., economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency), and high schools must demonstrate substantive progress toward improving graduation rates.*
- *More high schools will likely be added to the state's high priority list because of low graduation rates resulting from the new calculation, and from the requirement to hold districts and schools accountable for subgroups' graduation rates.*
- *The impetus for the regulatory changes included inaccurate and misleading graduation rates that could not be compared among states; unacceptably low graduation rates among some student subgroups, reflecting persistent achievement gaps; and high schools that were failing to make real progress toward improving graduation rates.*
- *Tennessee has made significant improvements to its student data system, putting the state on track to use the new formula and to report disaggregated graduation rates by 2011.*
- *Tennessee had already established a single graduation rate goal and meaningful graduation rate targets for its high schools prior to the regulatory changes.*
- *Tennessee may want to consider reporting additional measures on the Department of Education's Annual Report Card that would provide more information to the public and policymakers about high school students' outcomes. Additional measures could include graduation rates for students who take longer than four years to graduate, completion rates for alternative credentials (e.g., the GED), and in-grade retention rates.*

Introduction

In 2011, Tennessee education officials expect the state's high school graduation rate to drop when the state begins using a different formula to calculate the rate. In October 2008, the U.S. Department of Education (USDOE) announced the mandatory formula change – included in revisions to No Child Left Behind regulations – which is meant to ensure greater data accuracy and consistency among states' reported graduation rates.

Officials are not certain how much Tennessee's graduation rate will decrease from the 82.2 percent reported in 2008 or how many additional high schools may be designated "high priority" because of low graduation rates. Some states already using the new formula have seen significant decreases in their graduation rates. North Carolina, which had reported graduation rates of more than 90 percent for several years, reported a significantly lower 68.1 percent rate in 2007, the first year it reported rates using the new

formula.¹ Michigan's graduation rate decreased from 87.7 percent in 2005-06 to 75.45 percent in 2007, when it began using the new formula.²

How will Tennessee's graduation rate be calculated under the new requirements?

The new rate will be calculated using a cohort definition that tracks students from 9th grade through 12th grade, accounting for students who earn a high school diploma, transfer to other schools, drop out, or leave school for any other reason. The calculation for the adjusted cohort graduation rate is fairly simple, as shown in Exhibit 1.

Exhibit 1: Formula for Adjusted Cohort Graduation Rate

$$\text{Graduation Rate} = \frac{\text{on-time graduates in year X}}{\text{(first-time entering ninth graders in year X-4) + (transfers in) - (transfers out)}}$$

Every student entering the 9th grade will be part of a cohort of students. Students may be removed from their cohort only when school officials document in writing that they have transferred to another school or district (where they will be added to another cohort) or have emigrated to another country. If a student leaves school for any other reason (other than death), they remain part of the cohort. At the end of the 12th grade, only those students in the cohort who successfully complete all requirements to achieve a regular high school diploma are then counted as graduates. Students who obtain alternative credentials, such as GEDs, and students who take longer than four years to graduate are not counted as graduates.³ (See the [online exhibit](#) for a graphical representation of how the adjusted cohort rate works.)

To calculate the graduation rate using this method, states need student data systems with the capacity to document student transfers and collect five years of data in order to follow the first full cohort's progress from 9th through 12th grades.⁴ Urban districts in particular often have high student mobility, i.e., many student transfers. If students who transfer and drop out are not accounted for accurately, graduation and dropout rates will be skewed. Under the new

regulations, if states are unable to verify officially that a student transferred to a new school, the student must be counted as a dropout.

The Tennessee Department of Education (TDOE) has made significant changes to its student data system that should allow the calculation of the adjusted cohort rate. Since 2005, the Department has been working under a \$3.2 million federal grant to create a longitudinal data system within a data warehouse, which was rolled out to school districts in the fall of 2008.⁵ Using Tennessee's data warehouse, state education and district officials can access information and generate a variety of student data reports down to the school level. The data warehouse will also allow TDOE to calculate the adjusted cohort graduation rate beginning in 2011.

How has Tennessee been calculating its graduation rate?

Like most other states, Tennessee has long used the 'leaver rate' method of calculating graduation rates, which divides the number of on-time graduates by the number of high school "leavers," i.e., graduates plus dropouts over the last four years.⁶ (See Exhibit 2.) The leaver method relies on the accuracy of dropout reporting and does not reflect a cohort of students who started high school four years previously. The leaver rate formula tends to inflate the graduation rate because 1) it includes all graduates in a given year, whether they have taken four years or longer to complete high school; and 2) may include as dropouts only those students who completed official paperwork.⁷

Exhibit 2: Leaver Graduation Rate Formula

$$\text{Graduation Rate} = \frac{\text{on-time graduates in year X}}{\text{(number of graduates in year X) + (number of dropouts for the last four years)}}$$

Please consult the glossary at the end of this brief for key terms used in this discussion of graduation rates.

Education researchers consider the adjusted cohort definition to be the most accurate basis for determining the graduation rate because, unlike the leaver rate method, it doesn't depend on dropout data and it doesn't assume that all students either graduate or drop out. (See Exhibit 1 and the [online exhibit](#) for a graphical representation of how the adjusted cohort rate works.)

This brief announces that Tennessee's graduation rate will drop, yet a recent news story applauds the state for raising its graduation rate by 11 percentage points between 2002 and 2006. Which statement is true?

The short answer is that both statements are correct.

Here's a longer explanation: In March 2009, Tennessee made national headlines for raising its high school graduation rate by 11 percentage points between 2002 and 2006. The rate rose steadily from 59 percent in 2002 to 70.6 percent in 2006,⁸ the most recent year of data available for the Averaged Freshman Graduation Rate (AFGR) as calculated and published by the National Center on Education Statistics (NCES).

Tennessee's good news followed the release of a report from the Everyone Graduates Center at Johns Hopkins University, which compared states' AFGRs and found that Tennessee had the greatest overall gain among states for the period examined.⁹ (NCES annually publishes each state's AFGR, which is an estimate of the percentage of high school students who graduate on time. See the glossary for more about the AFGR.)

In the 2008 Annual State Report Card, the Tennessee Department of Education reported that its state graduation rate was 82.2 percent, a figure calculated using the leaver method, which is discussed in this brief. (See the previous question: 'How has Tennessee been calculating its graduation rate?') Beginning in 2011, the state will use an adjusted cohort method to calculate its graduation rate. The state's new graduation rate may be close to the AFGR – the USDOE found the AFGR to be “a more valid and reliable graduation rate measure than some States currently use.”¹⁰

Therefore, the state's rate is likely to drop in 2011 compared to the rate reported on the 2008 Report Card.

What do the new federal regulations change about how states determine and report high school graduation rates?

Essentially, the new federal regulations affect states' graduation rates by:

- Requiring that states adopt a uniform method of calculating graduation rates. (See Exhibit 1.) This places into regulation a formula that is similar to one states agreed to adopt in 2005 under the National Governors Association's Graduation Counts Compact on State High School Graduation Data. (See information box titled 'National Governors Association's Graduation Counts.')

National Governors Association's Graduation Counts

In July 2005, all 50 states' governors agreed to implement a four-year adjusted cohort graduation rate when they signed onto the National Governors Association's "Graduation Counts: A Compact on State High School Graduation Data." Through the compact, governors agreed to:

- implement a standard four-year adjusted cohort graduation rate;
- work to improve state data collection, reporting and analysis, and link data systems across the entire education pipeline from preschool through postsecondary education;
- implement additional indicators that provide more information about student outcomes; and
- report annual progress on the improvement of their state high school graduation, completion, and dropout rate data.

In 2008, NGA reported that 36 states, including Tennessee, have the information systems needed to collect longitudinal data and are tracking cohorts of students as they progress through school. NGA predicts that 45 states should have high school cohort data allowing them to use the compact formula by 2012.

States will now be required to use the federal formula placed in regulation in late 2008, which is similar to the NGA method of calculation.

Source: NGA Center for Best Practices, Implementing Graduation Counts: State Progress to Date, 2008.

- Holding states and schools accountable for the graduation rates of each group of students. States must publish in their annual report cards disaggregated graduation rates for students in racial, ethnic, and socioeconomic groups, as well as for students with disabilities and English-language learners. States will also be required to use the disaggregated data to determine schools' AYP status.
- Requiring that schools make real improvements in graduation rates, in part by setting annual graduation rate targets that reflect continuous and substantial improvement from the previous year.
- Allowing states to use an extended-year adjusted cohort graduation rate in AYP determinations, subject to approval by the USDOE. This would allow states to give credit to schools and districts for successfully graduating students who take longer than four years to graduate from high school with a regular high school diploma. The extended-year option would not replace the four-year rate, but could be provided in addition to it. However, USDOE explicitly states a preference that states hold LEAs and schools accountable for graduating most students within four years: "The Secretary offers this flexibility for States but prefers that they adopt AYP definitions that hold LEAs and schools accountable for graduating the vast majority of their students in four years."¹¹

Why are these regulatory changes necessary? What will Tennessee have to do to meet them?

The three major regulatory changes that affect the high school graduation rate address widespread concerns that:

- states were reporting inaccurate and misleading graduation rates
- some minority groups were graduating in extremely low numbers, a fact often masked by the overall graduation rate, and
- high schools were not being required to make substantive improvements to graduation rates.

Education advocates and other public policy groups – such as The Education Trust and The Urban Institute, as well as the National Governors Association – had long urged states and policymakers to address these issues. The resulting regulatory changes are described below, as well as Tennessee's progress in addressing them.

States must adopt a uniform and accurate method of calculating graduation rates.

According to the USDOE:

A uniform and accurate method of calculating graduation rates is needed to raise expectations and to hold schools, districts, and States accountable for increasing the number of students who graduate on time with a regular high school diploma. In addition, a uniform and accurate method of calculating high school graduation rates will improve our understanding of the scope and characteristics of those students dropping out of school or taking longer to graduate.¹²

Until the USDOE released the revised regulations in October 2008, the federal government had not provided states with a uniform definition of or method for calculating the high school graduation rate. States – with federal approval – set their own formulas for calculating graduation rates. As a result, states counted high school students in certain circumstances differently, resulting in graduation rates that were not comparable among states.

The TDOE plans to report graduation rates using the new formula beginning with the 2011 State Report Card.¹³

States must report disaggregated graduation rate data by subgroups and use this information for AYP purposes.

Reports from groups such as The Education Trust have noted significant disparities in graduation rates among subgroups. Exhibit 3 shows the percentage of U.S. and Tennessee high school graduates for school year 2005-06 by ethnicity and shows, for example, a significant difference between the 80.6 percent of white students and the 59.1 percent of African American

students graduating in 2006. The percentages of Tennessee high school graduates reflect similar disparities among ethnicities.

Previous federal regulations required states to use high school graduation rates in the aggregate for the purposes of AYP. The regulations required states to disaggregate graduation rates by subgroups for reporting purposes only – the disaggregated rates, however, were not used to determine AYP.¹⁵

USDOE noted that the simple reporting of disaggregated graduation rate data has not been sufficient to improve graduation rates for all students.¹⁶ Thus, the revised federal regulations require that the disaggregated rates be used for school, district, and state AYP determinations, beginning with those based on school year 2011-12 assessment results. Subgroups are to include economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency. States' annual report cards must include the disaggregated graduation rates as well.

Tennessee is likely to see more schools on the high priority list once AYP is applied to schools' disaggregated graduation rates. TDOE officials are unable to estimate how many more schools might be affected.

The new regulations will also require that states' annual report cards include graduation rates disaggregated by subgroup at the state, district, and school levels. In 2007, the Tennessee General Assembly passed a law requiring that the Annual State Report Card should include disaggregated graduation rates for every school district and high school by gender and subgroup, effective July 1, 2007.¹⁷ In fact, federal law already required that graduation rates be reported by subgroup, but most states have never done so, partly because some state data systems made this kind of calculation difficult. Tennessee has annually reported statewide disaggregated graduation rates by gender and ethnicity to the USDOE but had not included the rates on the state's Annual Report Cards until the 2008 version. TDOE officials explain that the USDOE allowed Tennessee to provide the event dropout rate on its Annual Report Cards in place of providing

disaggregated graduation rates. At present, TDOE is unable to calculate disaggregated rates for economically disadvantaged students, English-language learners, or students with disabilities – additional categories required by federal law – until they have collected a complete cohort's worth of data.¹⁸ By 2011, disaggregated graduation rates will also be provided for those subgroups.¹⁹

States must set a single graduation goal for all schools and make substantive improvements in each high school's graduation rate.

Previous NCLB requirements allowed states to establish different requirements for determining whether a high school makes AYP with respect to improving its graduation rate. Some states have allowed high schools to achieve AYP by making insignificant improvements in their graduation rates – some reportedly as low as 0.1 percent from the previous year.²⁰ In proposing the new regulations, the USDOE pointed out that:

In several states, a school can graduate less than half of its students, year after year, and still make AYP by graduating one more student with a regular high school diploma than it did in the previous year.²¹

The revised regulations address this by requiring that states:

- set a single graduation goal for all high schools and
- set specific targets towards meeting or exceeding that goal

Exhibit 3: Averaged Freshman Graduation Rate (AFGR), United States and Tennessee, School year 2005-06¹⁴

	United States	Tennessee
Overall	73.2%	70.6%
Black, non-Hispanic	59.1%	62.4%
Asian or Pacific Islander	89.9%	93.3%
Hispanic	61.4%	70%
American Indian or Alaska Native	61.8%	66.7%
White, non-Hispanic	80.6%	73.1%

Tennessee had already met both requirements prior to the revised regulations by setting a graduation rate goal of 90 percent for all high schools and setting specific goals for individual high schools that, if achieved, would allow them to reach the 90 percent target by 2013-14.²² Each Tennessee high school that has not achieved the 90 percent graduation rate has an individualized annual improvement goal. A sample improvement track is depicted in Exhibit 4. Schools are expected to make incremental progress toward the 90 percent goal. Those schools with lower graduation rates are expected to make greater gains from year to year.

In Tennessee, high schools can demonstrate AYP on the graduation rate by:

- meeting the 90 percent objective
- meeting incremental targets established in TDOE's graduation rate improvement track – under this scenario, schools with low graduation rates are expected to make improvements at a more accelerated pace than schools with higher rates, or
- beginning in 2009, keeping the graduation rate at least at the same level as the previous year, being within two percentage points of the individual school's prescribed graduation improvement track, and showing overall improvement on the event dropout rate (i.e., the proportion of all students enrolled in school at the beginning of a 12-month period who leave school by the end of that period without graduating).²⁴

Will the state's graduation rate decrease? How many more high schools might be on the high priority list?

TDOE staff believe that the state's graduation rate will decrease with the formula change. However, they are unable to estimate the rate or the number of additional high schools that might be placed on the high priority school list as a result.

Department staff can already point to an increase in the state's 2007-08 event dropout rate as evidence that graduation rates are likely to fall and dropout rates are likely to increase in the next few

years. In moving toward full adoption of the new graduation rate formula, staff applied 'data cleansing rules' to 12th grade graduation data for the 2007-08 school year. This essentially means that students originally reported as transfers who could not be verified as enrolling in another school or system were ultimately counted as dropouts. The result of the 'cleansing' for 12th grade data alone increased the event dropout rate by almost 20 percent (from 8,984 to 10,656 students).²⁵

TDOE staff indicate that the data cleansing rules will be applied to two of the four years of cohort data in 2008-09 and will be applied to all four years in 2009-10, making it likely that the event dropout rate will increase further in both those years. A decrease in the number of verified student transfers in turn will lower the cohort graduation rate.

Number of Tennessee Schools Failing AYP for Graduation Rates

2006	102
2007	76
2008	74

Source: Tennessee Department of Education.

Exhibit 4: Sample Graduation Rate Improvement Track for Schools²³

Sample Schools	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
School A	82.76%	83.43%	84.11%	84.78%	85.46%	86.13%	86.8%	87.48%	88.15%	88.83%	90%
School B	70.42%	72.33%	74.24%	76.15%	78.05%	79.96%	81.87%	83.78%	85.68%	87.59%	90%
School C	50%	53.95%	57.9%	61.85%	65.8%	69.75%	73.7%	77.65%	81.6%	85.55%	90%

What is the Tennessee Department of Education doing to prepare high schools for the new way of calculating and reporting the graduation rate?

The Education Trust cites poor-quality data collected at the local level as a barrier to obtaining accurate graduation and dropout rates. In one North Carolina case, where the NGA calculation method is already in use, an internal audit found multiple errors in the way students were coded:

School staff, misunderstanding state reporting requirements, had coded more than 600 students as transfers when they should have been coded as dropouts under North Carolina's coding rules. These errors meant that though North Carolina was making a good-faith effort to adhere to the NGA compact, Charlotte had inadvertently overstated graduation rates for the city's high schools.²⁶

To avoid similar problems in Tennessee schools, the TDOE has:

- adopted an exit code system that provides districts and schools specific codes to use for students who drop out or transfer to another school or system, as well as other possible reasons students exit school.²⁷
- provided training and online access to information to help school districts ensure that student transfers and dropouts are accurately identified.²⁸
- made the use of all withdrawal codes subject to audit by the Department.²⁹
- provided training to district staff regarding the data warehouse prior to the rollout in the fall of 2008.

Getting an honest picture of who is graduating from high school should be the priority of everyone—educators, policymakers, parents, business and community leaders—who is invested in improving our high schools.

Daria Hall, *Getting Honest About Grad Rates*, The Education Trust, June 2005

What happens next?

To ensure that officials at all levels of government have accurate data about who is and is not graduating in Tennessee, the Department of Education will need to continue its diligence in collecting accurate local data. More accurate data input, coupled with better data analysis, should allow for more appropriate interventions at the student level, and should also result in more efficient use of limited resources.

In addition, Department of Education officials are negotiating with the USDOE for approval to use an extended-year adjusted graduation rate.³⁰ If that option is approved by the USDOE, the state's AYP may be positively affected since schools and districts could get credit for students who take longer than four years to graduate. However, many details remain to be considered and this option would not occur prior to 2011-12.

Policy Consideration

Tennessee could strengthen its Annual Report Card by providing more information to the public and policymakers about high school students' outcomes.

These could include five- and six-year cohort graduation rates (regardless of the outcome of the USDOE negotiations); completion rates for alternative credentials, e.g., GED; and in-grade retention rates. The National Governors Association suggests that states should include additional measures to provide richer information about outcomes for students and how well the system is serving them.³¹

The TDOE currently includes one additional NGA-recommended indicator on the Annual Report Card – the cohort dropout rate, which represents the percentage of an entering 9th grade class that has dropped out by the end of 12th grade. It also provides a completion rate, but the rate includes all completers, including graduates, those who obtain special education diplomas and certificates of attendance, and those who earn the GED credential. Separate completion rates identifying students earning alternative credentials would be more informative about outcomes for those Tennessee students who do not obtain a high school diploma.

TDOE provided technical comments on a draft of this brief, which OEA incorporated prior to publication.

Glossary

Adequate Yearly Progress (AYP) – the measure by which schools, districts, and states are held accountable under Title I of the No Child Left Behind Act of 2001 (NCLB). AYP is used to determine if schools are successfully educating students. NCLB requires states to use a single accountability system for public schools to determine whether all students, as well as individual subgroups of students, are making progress toward meeting state academic content standards. NCLB’s ultimate goal is to have all students reaching proficient levels by 2014 as measured by performance on state tests. The students are required to be tested yearly in grades 3 through 8 and at least once in grades 10 through 12. Results are compared to prior years, and, based on state-determined AYP standards, used to determine if a school has made adequate progress towards the proficiency goal. In addition, Tennessee was approved by the USDOE in 2006 to use a projection model that supplements the statutory AYP model. Schools and districts meet AYP proficiency through the projection model if all subgroups meet the annual measurable objective in reading/language arts and mathematics.

“The state accountability systems mandated under No Child Left Behind must treat academic assessments as the *primary* indicator of performance. To provide some balance, however, the definition of AYP also needs to include a *secondary* academic indicator. For high schools, the law says this must be the graduation rate... This provision is intended to serve as a safeguard to discourage schools from raising their achievement levels by pushing out lower-performing students.”³²

Annual Report Cards – No Child Left Behind requires each state to publish an annual report card that must contain certain information including: data from reading/language arts, mathematics, and science assessments, percentage of students tested, disaggregated information on student achievement at each proficiency level, achievement trend data, comparisons between student achievement and the state’s academic expectations, other academic indicators (which includes graduation rates for high schools), AYP by Title I schools and districts, and teacher quality indicators.³³

Averaged Freshman Graduation Rate (AFGR) – The Averaged Freshman Graduation Rate provides an estimate of the percentage of high school students who graduate on time by dividing the number of graduates with regular diplomas by the size of the incoming freshman class four years earlier, expressed as a percent. The rate uses aggregate student enrollment data to estimate the size of an incoming freshman class and aggregate counts of the number of diplomas by summing the enrollment in 8th grade in one year, 9th grade for the next year, and 10th grade for the year after and then dividing by three. The averaging is intended to account for prior year retentions in the 9th grade. Although not as accurate as an on-time graduation rate computed from a cohort of students using student record data, this estimate of an on-time graduation rate can be computed with currently available data.³⁴

Data warehouse – a repository of student data that links student records over time and across multiple databases, allowing users to query databases and produce reports. The TDOE has been developing a data warehouse housing longitudinal data that it rolled out to districts in the fall of 2008.

Event dropout rate — the percentage of all students enrolled in school at the beginning of a 12-month period who leave school by the end of that 12-month period without graduating or transferring to another school or system.

High Priority School/School System – defined by the TDOE under its accountability system, as “one that has missed the same federal benchmark for more than one consecutive year. The different levels of high priority schools/systems are School Improvement 1, School Improvement 2, Corrective Action, Restructuring 1, Restructuring 2 and SEA/LEA Reconstitution Plan.”³⁵

Longitudinal data – a dataset that tracks the same type of information on the same subjects at multiple points in time. The primary advantage of longitudinal databases is that they can measure change. Longitudinal data can be used, for example, to estimate the effect of various factors on improvement in student achievement. They can also be used to estimate the overall effectiveness of individual teachers by examining the performance of successive classes of students they teach, as well as examine the extent to which teacher effectiveness changes with experience or the composition of their class. The longitudinal data extend into the past as well as the present. So to evaluate the effect of a specific policy researchers can look at student performance or teacher turnover before as well as after the policy was introduced. (definition adapted from National Center for Analysis of Longitudinal Data in Education Research)

Student cohort — refers to a group of students who start 9th grade in the same year at the same school (or a cohort may be measured across a district or state). New federal regulations contain specific requirements that school officials must follow to remove any student permanently from a cohort. The cohort starting the 9th grade together forms the basis for determining the percentage of graduating students at the end of the 12th grade. The new regulations also permit states to calculate an extended-year cohort graduation rate, such as a five-year rate.

Student transfers – term used when students move to another school or system. New federal regulations require that student transfers be officially verified to avoid counting dropouts as transfers.

Student mobility — refers to the frequency with which students change schools for reasons other than grade promotion. Research suggests that students who transfer frequently between schools during the school year are at greater risk for academic and behavioral problems. In addition, high student mobility presents greater data challenges to school administrators.

Subgroups – defined in federal regulations (34 C.F.R. 200.13(b)(7)(ii)) as: economically disadvantaged students; students from major racial and ethnic groups; students with disabilities; and students with limited English proficiency.

Resources

Counting on Graduation: An Agenda for State Leadership by Anna Habash, Education Trust (Fall 2008)
<http://www2.edtrust.org/>

Every Student Counts: The Role of Federal Policy in Improving Graduation Rate Accountability by Eric Richmond, Alliance For Excellent Education (March 2009)
<http://www.all4ed.org/>

Raising Graduation Rates: A Series of Data Briefs, Progress Toward Increasing National and State Graduation Rates by Robert Balfanz and Thomas C. West, The Everyone Graduates Center, Center for Social Organization of Schools, Johns Hopkins University (March 2009)
<http://www.every1graduates.org/>

No Child Left Behind: High School Graduation Rate – Regulatory Guidance, U.S. Department of Education (Dec. 2008)
<http://www.ed.gov/>

Title I—Improving the Academic Achievement of the Disadvantaged; Final Rule, *Federal Register* 73:210 (Oct. 29, 2008)
<http://www.ed.gov/>

Endnotes

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- 7 NGA Center for Best Practices, *Implementing Graduation Counts*, pp. 8-9.
- 8 R. Stillwell and L. Hoffman, *Public School Graduates and Dropouts From the Common Core of Data: School Year 2005–06*, NCES 2008-353rev, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC, 2008, p. 9. Accessed March 16, 2009, at <http://nces.ed.gov/>; J. Laird, M. DeBell, and C. Chapman, *Dropout Rates in the United States: 2004* (NCES 2007-024), U.S. Department of Education, Washington, DC: National Center for Education Statistics, 2006, p. 33. Accessed March 16, 2009, at <http://nces.ed.gov/>.
- 9 Robert Balfanz and Thomas C. West, *Raising Graduation Rates: A Series of Data Briefs, Progress Toward Increasing National and State Graduation Rates*, The Everyone Graduates Center, Center for Social Organization of Schools, Johns Hopkins University, no date, p. 7. Accessed March 12, 2009, at <http://www.every1graduates.org/>.
- 10 "Title I—Improving the Academic Achievement of the Disadvantaged; Final Rule," *Federal Register* 73:210 (29 October 2008) p. 64456.
- 11 "Title I—Improving the Academic Achievement of the Disadvantaged; Final Rule," *Federal Register* 73:210 (29 October 2008) p. 64459.
- 12 "Title I—Improving the Academic Achievement of the Disadvantaged; Proposed Rule," *Federal Register* 73:79 (23 April 2008) p. 22025.
- 13 Jean Sharp, e-mail to author, Jan. 28, 2009.
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