

High School Graduation in Texas

Independent Research to Understand and Combat the Graduation Crisis

Editorial Projects in Education Research Center

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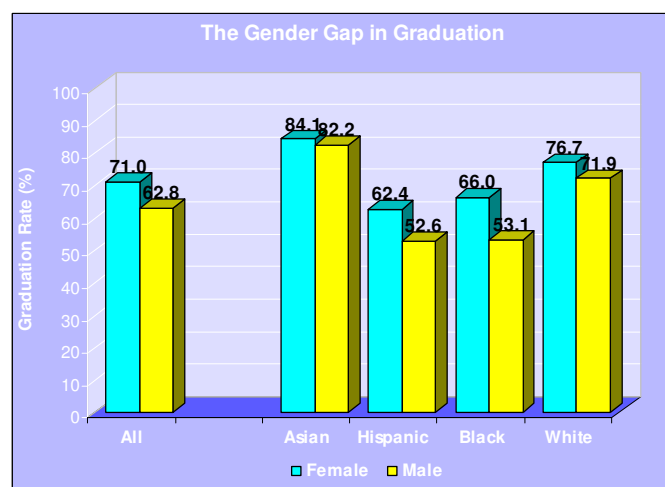
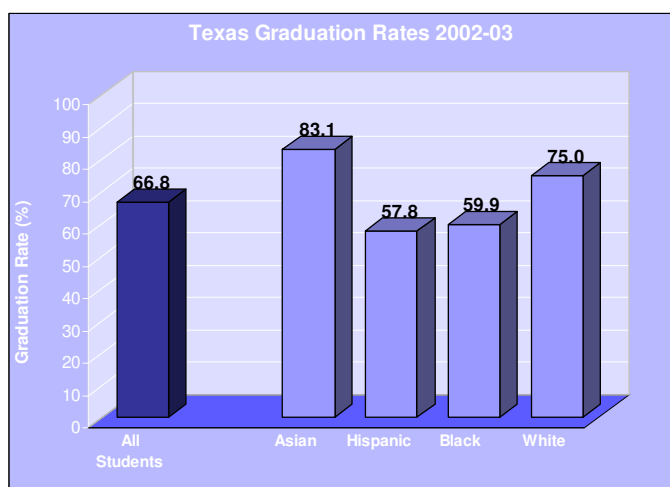


Over 120,000 Students in Texas Failed to Graduate in 2006, Most were Minorities

Analyses from the Editorial Projects in Education Research Center estimate that over 120,000 public high school students in the state of Texas failed to graduate with a regular diploma last school year. To put this crisis in perspective, the number of non-graduates is about double the combined number of students entering 9th grade in the state's seven largest school districts. Seventy percent of all non-graduates were members of minority racial and ethnic groups, indicating that minority students are disproportionately affected by this graduation crisis.

Graduation rates for the 2002-03 school year show that only about two-thirds of all public school students in Texas complete high school with a standard diploma. Texas falls below the national graduation rate of 69.6 percent and ranks 35th among the states. Analyses reveal large disparities in high school completion across different student groups. Fewer than 60 percent of black and Hispanic students graduate with a diploma, compared to over three quarters of whites and Asians. Statistics were calculated by the EPE Research Center using a method known as the Cumulative Promotion Index (CPI).

Male students are also consistently less likely to graduate, with female students enjoying a graduation advantage of over 8 percentage points. Gender gaps exist for all racial and ethnic categories, with the largest difference (13 percentage points) found among black students. Hispanic males are the lowest-performing group, graduating at a rate of less than 53 percent.

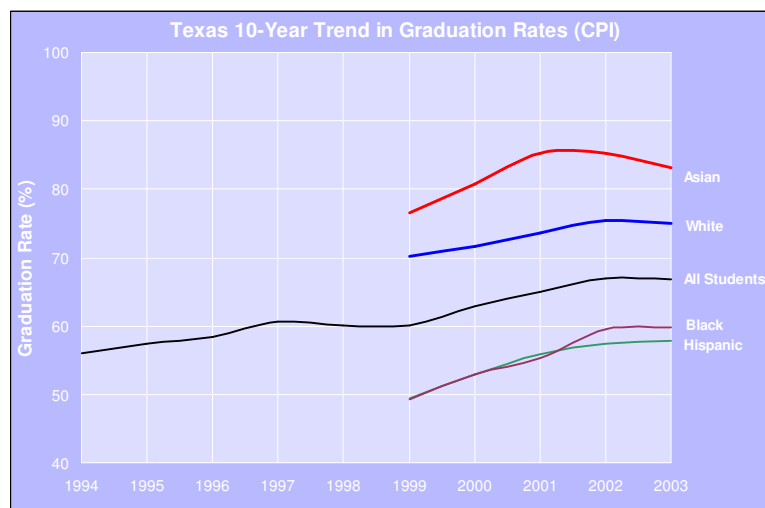


Graduation Rates Show Improvement over Past Decade

High school graduation rates in Texas have gradually improved over the course of the past decade. This trend closely parallels patterns found for the nation as a whole.

Between 1994 and 2003, the state's graduation rate increased by almost 11 percentage points (from 56.0 to 66.8 percent). Initially around 55 percent in the early 1990s, the graduation rate in Texas rose to about 60 percent before stagnating during the latter part of the decade. Since 1999, graduation rates have generally been on the rise, although there are signs that improvements have leveled off in the most recent years for which data are available.

The proportion of students graduating from public high schools with a diploma has risen across all racial and ethnic groups. As a result, disparities in graduation between whites and historically-disadvantaged minorities remain substantial (17 and 15 points for Hispanics and blacks respectively), despite some narrowing of the gap.

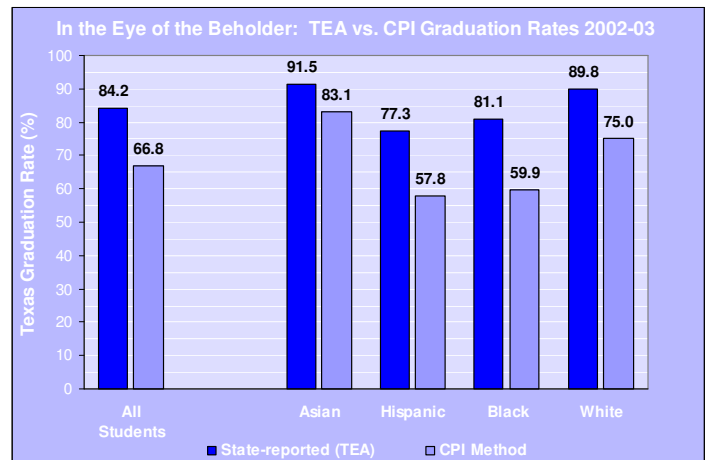


For more information on the Cumulative Promotion Index method used in this report, see page 6.

Official State Statistics Inflate Graduation Rates

In analyses conducted for the 2006 *Diplomas Count* report, the EPE Research Center calculated 2002-03 graduation rates for each state using the Cumulative Promotion Index (CPI). Official statistics released by the states for that same year were almost always higher, sometimes much higher. In North Carolina and New Mexico, for example, state-reported rates exceeded the CPI by over 30 percentage points. As reported in *Diplomas Count*, a major reason for these discrepancies is the wide variety of methods the states use to calculate their own graduation rates.

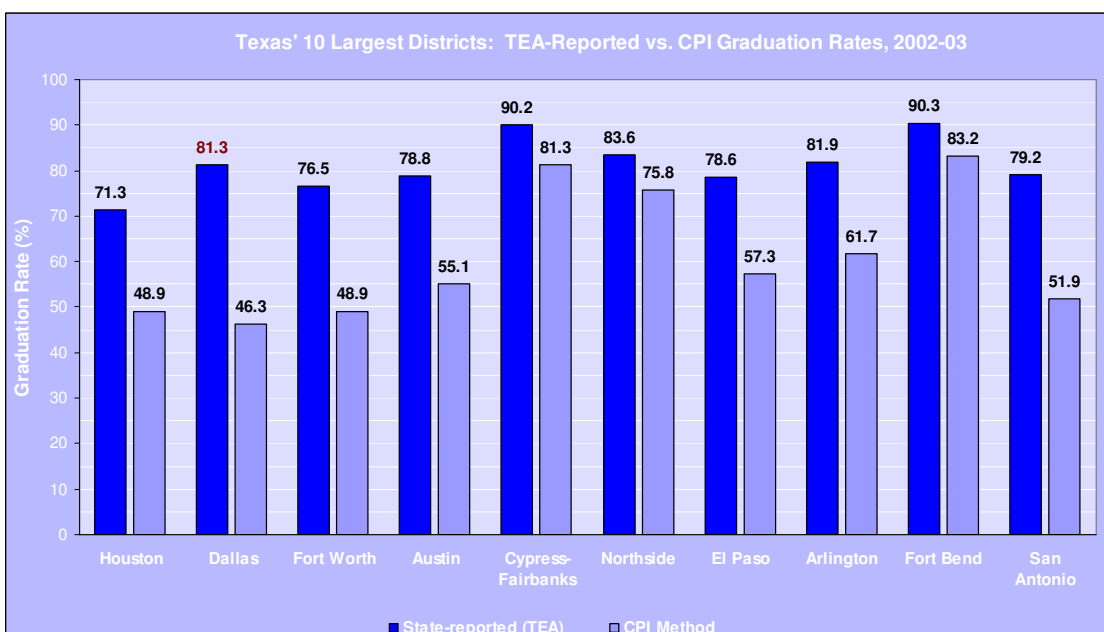
The Texas Education Agency (TEA) reports that 84.2 percent of all students in the high school class of 2003 graduated. That rate is 17 percentage points higher than our estimate using the CPI, suggesting that rates are more inflated in Texas than in most states. The average state overestimated its graduation rate by about 12 percent relative to the CPI.



Texas Rate Inflation More Extreme for Minorities and Large Urban Districts

Graduation-rate inflation in Texas appears to be a very widespread phenomenon. It is found for the state's overall graduation rate and when we examine rates for specific racial and ethnic groups. In fact, this overestimation is more extreme among historically-disadvantaged minority groups. Official graduation rates for black and Hispanic students are overestimated by 20 percentage points or more, relative to CPI estimates. By comparison, rates are inflated by 15 points for whites.

TEA-reported figures are also higher than CPI rates for each of the state's 10 largest school districts, although the size of the discrepancies vary considerably. The official TEA graduation rate for the Dallas ISD is 35 percentage points higher than the CPI rate, with a 28-point difference found for the Fort Worth ISD. District context also appears to matter greatly, with official rates inflated to a larger degree in highly-disadvantaged communities. For example, we find an overestimate of 22 percentage points for the Houston ISD but only 9 points for the more affluent Cypress-Fairbanks district in suburban Houston.



Source for TEA Rates

The TEA graduation rates appearing in this report were obtained from final state and district Adequate Yearly Progress (AYP) data tables posted on the state agency's website:

www.tea.state.tx.us/ayp/2004

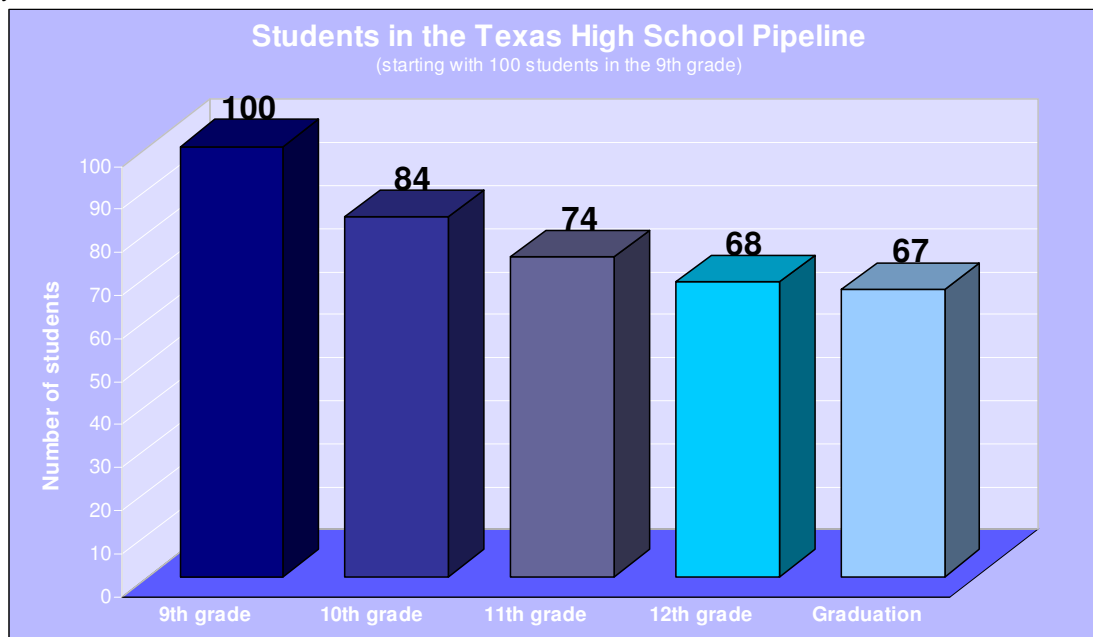
The TEA also releases an annual report on dropout and completion rates in the state, which includes statewide analysis and detailed reporting for individual districts and campuses. That information is also accessible online:

www.tea.state.tx.us/research

Leaks in the High School Pipeline

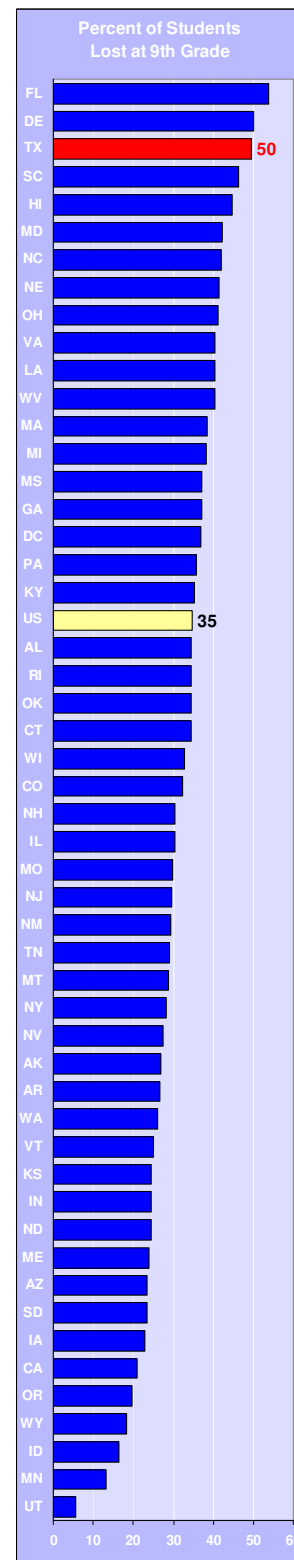
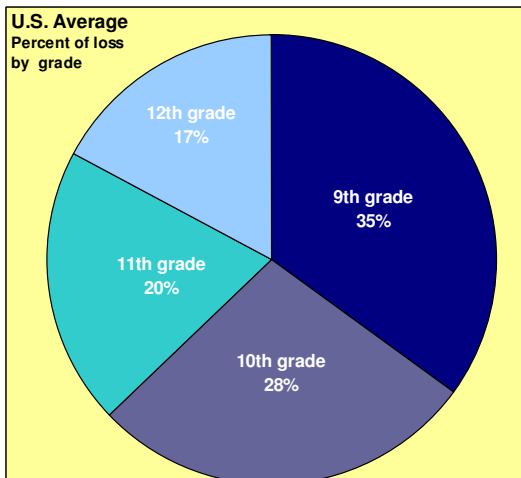
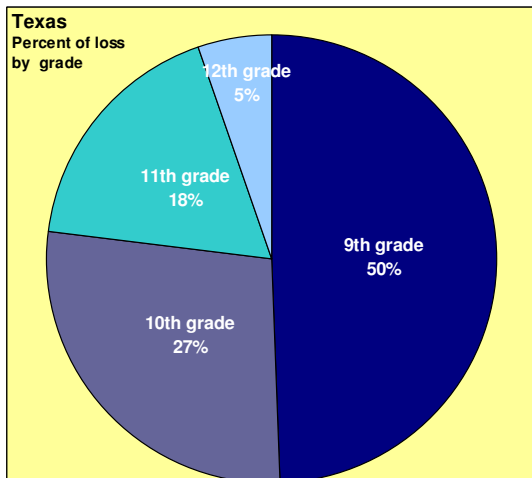
The Cumulative Promotion Index (CPI) method for calculating graduation rates can be used to examine the high school pipeline. Specifically, we can estimate the numbers of students who fall off track for earning a diploma at various points between the 9th grade and the expected time of graduation.

For every 100 students enrolled in 9th grade in the Texas public schools, we find that 84 will remain in the high school pipeline until at least their sophomore year. But only 67 will make it until graduation four years later.



The Freshman Blues – 9th Grade the Leading Source of Loss

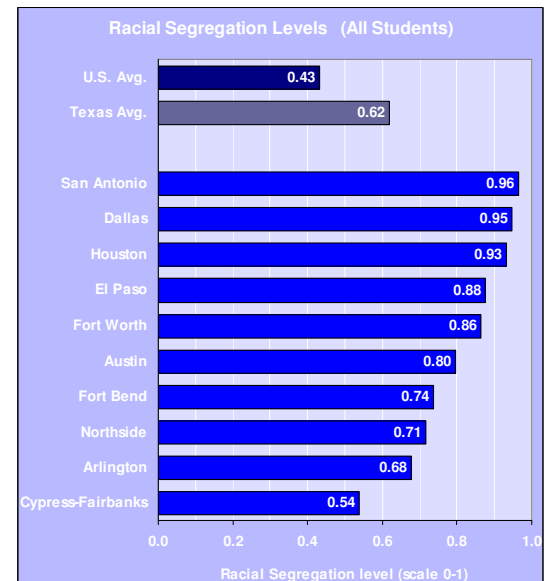
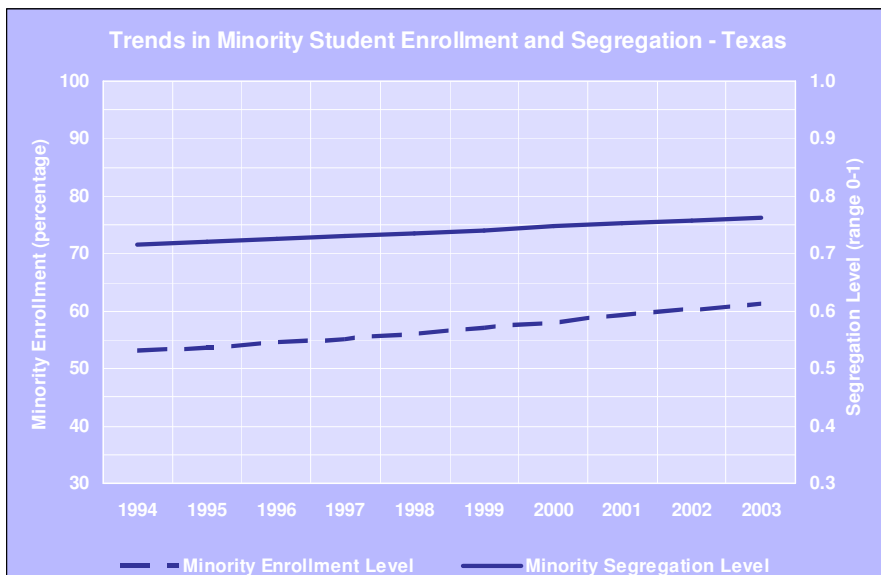
Another way to examine loss or leakage from the high school pipeline is to examine the rates at which students are lost from one grade level to the next. Nationally, we find that just over one third (35 percent) of the students lost from the pipeline fail to make the transition from 9th to 10th grade. However, the rate of 9th grade loss is much higher in Texas than in most states, with half of all Texas non-graduates lost during the freshman year.



Growing Diversity and Increasing Segregation in Texas

For over a decade, Texas has been a majority minority state. That is, non-white students make up more than half of student enrollment in the state's public school system. Over time, this trend has continued as the state becomes even more diverse. Between 1994 and 2003, minority enrollment increased from 53 to 61 percent.

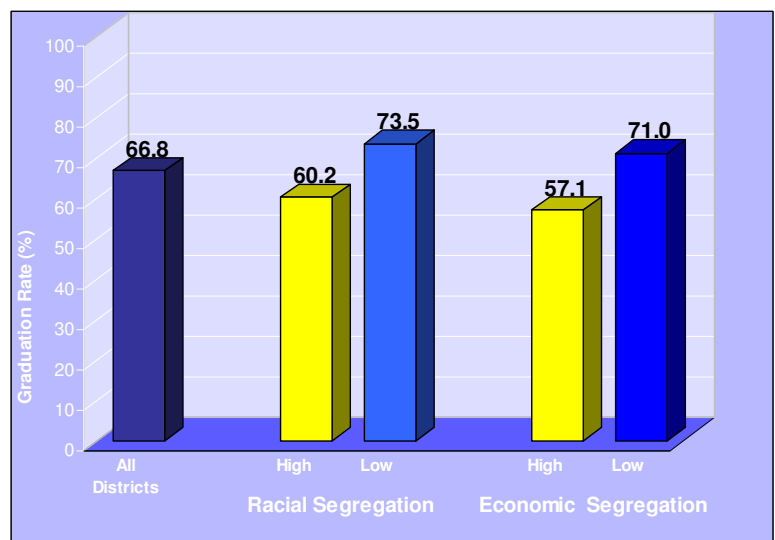
During the same period, however, the degree of isolation between racial and ethnic minorities and their white peers has also increased at a similar rate. So, as the state has become more diverse it has also become more segregated. This trend is particularly troubling because the levels of racial isolation experienced by minority students in Texas are already considerably higher than for the nation as a whole. On a scale of 0 to 1, Texas public schools receive an isolation rating of .76 compared to the national average of .69. In addition, the degree of racial isolation experienced by the average student (including both minorities and whites) reaches extremely high levels in the state's largest districts.



Links between Segregation and High School Graduation

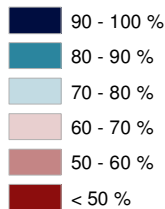
The racial and socioeconomic composition of school systems are strongly related to graduation rates. Texas districts with high levels of racial isolation have graduation rates about 13 percentage points lower than school systems with lesser degrees of segregation. A very similar pattern of disparities emerges when we examine the relationship between the concentration of poverty (economic segregation) and graduation rates.

In this study, racial segregation is measured using an *isolation index*. This indicator reflects the extent to which members of racial and ethnic minority groups attend school in isolation from their white peers. In a district with a high level of racial segregation, minority children are twice as likely to attend school with other minority students than with whites. Levels of economic segregation are measured in a similar manner, using eligibility for free or reduced-price lunch as a proxy for poverty.



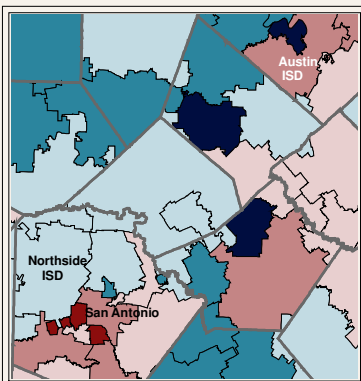
Mapping Graduation Rates

2002-03 CPI
Graduation Rate (%)

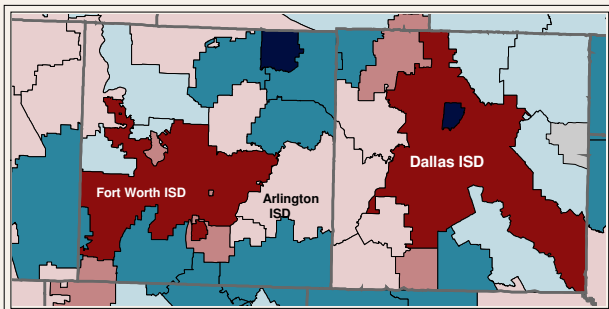


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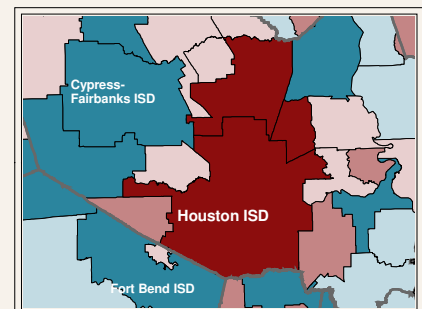
**Austin and
San Antonio**



Dallas-Fort Worth



Houston



How does the EPE Research Center calculate graduation rates?

In this report, the Editorial Projects in Education Research Center uses the **Cumulative Promotion Index** (CPI) method to calculate graduation rates. The CPI represents graduating from high school as a process rather than a single event. Specifically, it captures the four key steps a student must take in order to graduate: three grade-to-grade promotions (9 to 10, 10 to 11, and 11 to 12) and ultimately earning a diploma (grade 12 to graduation).

The formula below illustrates the CPI formula for calculating graduation rates. The class of 2002-03, the most recent year of data available, is used as an example.

$$\text{CPI} = \frac{\text{10th graders, fall 2003}}{\text{9th graders, fall 2002}} \times \frac{\text{11th graders, fall 2003}}{\text{10th graders, fall 2002}} \times \frac{\text{12th graders, fall 2003}}{\text{11th graders, fall 2002}} \times \frac{\text{Diploma recipients, spring 2003}}{\text{12th graders, fall 2002}}$$

By multiplying grade-specific promotion ratios together, the CPI estimates the likelihood that a 9th grader will complete high school on time with a regular diploma, given the schooling conditions prevailing during a particular school year. The CPI counts only students receiving standard high school diplomas as graduates, following the definition of a graduate adopted by the No Child Left Behind Act.

We can use a simplified example to further demonstrate the way we calculate the CPI. Let us suppose that a particular school district currently has 100 students enrolled in each grade from 9 through 12. We will also assume that 5 percent of students currently in grades 9, 10, and 11 will drop out of school this year and that 5 percent of seniors will fail to earn a diploma at the end of the year. So, for example, we would count 100 9th graders at our starting point but only 95 10th graders the following fall.

$$\text{CPI} = \frac{95}{100} \times \frac{95}{100} \times \frac{95}{100} \times \frac{95}{100} = .815$$

Carrying out the calculation (shown above), we arrive at a graduation rate of 81.5 percent for this district. Given conditions in this hypothetical district (an effective 5 percent annual attrition rate for students at each grade level), only about 82 out of every 100 9th graders would be expected to finish high school with a diploma.

The CPI can be calculated for public school districts that have students enrolled in the secondary grades (9 through 12). State and national statistics are generated by aggregating the district-level data upward.

Notes on Our Methodology

Graduation rates and other indicators presented in this report are created using data from the Common Core of Data (CCD). The CCD is an annual census of public schools and school districts in the United States conducted by the U.S. Department of Education. Detailed methodological descriptions of the CCD can be found in technical documentation published by the National Center for Education Statistics (available online at nces.ed.gov/ccd).

Our goal is to provide a direct measure of the graduation rate for each of the roughly 11,000 school districts in the nation that enroll high school students. We were able to do this for districts serving the vast majority (93 percent) of all public school students nationwide. But in a small number of cases – for example, if a particular piece of information needed to calculate the CPI indicator was missing – we could not directly compute the graduation rate.

To avoid unintentional disclosure of information about individual students, we do not report results for very small demographic subgroups, those with fewer than five students in a given category.

Facts and Figures

United States

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	46,993,268	Minority	40.6			All Students	69.6	Native Am. 47.4
		Eng. Lang. Learner	9.2	Racial	.43			Asian 77.0
Schools	92,253	Free/Red. Lunch	38.7			Male	65.2	Hispanic 55.6
		Special Ed.	13.2	Economic	.43	Female	72.7	Black 51.6
								White 76.2

Texas

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	4,201,792	Minority	60.3			All Students	66.8	Native Am. ---
		Eng. Lang. Learner	14.8	Racial	.61			Asian ---
Schools	7,809	Free/Red. Lunch	46.0			Male	65.2	Hispanic 83.1
		Special Ed.	11.7	Economic	.53	Female	72.7	Black 57.8
								White 59.9

Houston ISD

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	212,099	Minority	90.7			All Students	48.9	Native Am. ---
		Eng. Lang. Learner	28.5	Racial	.93			Asian 80.9
Schools	308	Free/Red. Lunch	72.5			Male	43.1	Hispanic 43.3
		Special Ed.	9.9	Economic	.81	Female	55.0	Black 48.7
Locale	Urban							White 69.0

Dallas ISD

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	163,347	Minority	93.3			All Students	46.3	Native Am. 33.5
		Eng. Lang. Learner	32.0	Racial	.95			Asian 60.2
Schools	228	Free/Red. Lunch	75.9			Male	40.4	Hispanic 43.6
		Special Ed.	7.9	Economic	.80	Female	53.0	Black 48.6
Locale	Urban							White 54.5

Fort Worth ISD

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	81,081	Minority	81.2			All Students	48.9	Native Am. ---
		Eng. Lang. Learner	25.6	Racial	.86			Asian 74.7
Schools	146	Free/Red. Lunch	64.2			Male	43.1	Hispanic 45.7
		Special Ed.	9.8	Economic	.74	Female	54.9	Black 45.5
Locale	Urban							White 59.4

Austin ISD

		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	78,608	Minority	68.8			All Students	55.1	Native Am. ---
		Eng. Lang. Learner	20.7	Racial	.80			Asian 79.7
Schools	111	Free/Red. Lunch	52.9			Male	49.4	Hispanic 42.8
		Special Ed.	12.1	Economic	.72	Female	61.6	Black 44.7
Locale	Urban							White 77.3

Cypress-Fairbanks ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	71,165	Minority	45.9	Racial	.54	All Students	81.3	Native Am. ---
		Eng. Lang. Learner	12.1					Asian 96.4
Schools	59	Free/Red. Lunch	24.1	Economic	.35	Male	77.4	Hispanic 72.0
		Special Ed.	9.7					Black 80.6
Locale	Suburban					Female	85.1	White 82.8
Northside ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	69,409	Minority	67.2	Racial	.71	All Students	81.3	Native Am. ---
		Eng. Lang. Learner	6.2					Asian 96.4
Schools	89	Free/Red. Lunch	44.8	Economic	.57	Male	77.4	Hispanic 72.0
		Special Ed.	15.2					Black 80.6
Locale	Urban					Female	85.1	White 82.8
El Paso ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	63,185	Minority	86.0	Racial	.88	All Students	57.3	Native Am. ---
		Eng. Lang. Learner	30.4					Asian 65.6
Schools	94	Free/Red. Lunch	67.3	Economic	.76	Male	52.6	Hispanic 54.8
		Special Ed.	9.0					Black 61.0
Locale	Urban					Female	62.4	White 68.9
Arlington ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	61,928	Minority	58.1	Racial	.68	All Students	61.7	Native Am. 43.1
		Eng. Lang. Learner	15.7					Asian 73.7
Schools	76	Free/Red. Lunch	43.2	Economic	.60	Male	55.3	Hispanic 49.0
		Special Ed.	9.8					Black 56.8
Locale	Urban					Female	67.8	White 71.1
Fort Bend ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	59,489	Minority	66.4	Racial	.74	All Students	83.2	Native Am. ---
		Eng. Lang. Learner	9.6					Asian 97.7
Schools	60	Free/Red. Lunch	23.6	Economic	.41	Male	80.7	Hispanic 67.8
		Special Ed.	10.0					Black 79.6
Locale	Urban					Female	85.8	White 83.6
San Antonio ISD								
		Student Composition (%)		Segregation Levels (scale 0-1)		High School Graduation Rates CPI Method 2002-03		
Enrollment	57,120	Minority	96.2	Racial	.96	All Students	51.9	Native Am. ---
		Eng. Lang. Learner	19.0					Asian ---
Schools	107	Free/Red. Lunch	37.8	Economic	.57	Male	44.8	Hispanic 53.0
		Special Ed.	12.9					Black 46.5
Locale	Urban					Female	60.1	White 46.3

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