Cities in Crisis 2009

Closing the Graduation Gap

Educational and Economic Conditions in America's Largest Cities

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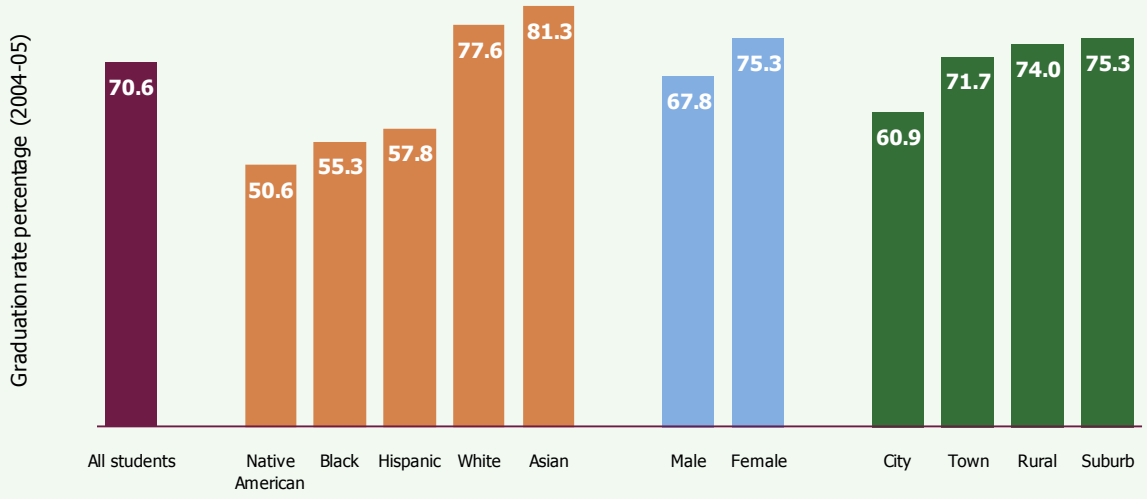
1. Introduction—The Rising Stakes of Graduation

The condition of the nation's high schools stands as a central concern among both educators and policymakers. In particular, independent research—once viewed as controversial but now increasingly acknowledged by elected and appointed officials in the highest levels of government—has revealed a state of affairs in which three in ten students fail to finish high school with a diploma and in which barely half of historically disadvantaged minority students graduate (Exhibit 1.1). The term "crisis" has frequently, and rightly, been used to describe the challenges facing America's high schools.

The extent to which graduation has factored into recent debates over educational reform, the nation's economic vitality, and the direction of the domestic public policy more generally attests to the issue's importance. In the final year of the Bush administration, for example, the U.S. Department of Education issued a series of regulatory changes affecting Title I of the federal No Child Left Behind Act, which governs school accountability. Those regulations bring major changes to the methods used to measure graduation rates, the goals or targets set for high school completion, and the consequences faced by schools and districts that fail to meet those established performance and improvement benchmarks. To a large extent, these changes were the result of criticisms that had mounted over several years regarding flawed and inconsistent approaches for calculating graduation rates and the low standards to which schools were being held in many states, all of which had taken hold under the prior regulatory framework.

High school reform has also become a central component of the new Obama administration's emerging education agenda. Frequently addressed on the campaign trail, the nation's dropout crisis featured prominently in the president's first major address on education. Notably, earning a high school diploma has increasingly been described not just as a source of individual economic benefit but also as an essential foundation for the nation's competitiveness in a rapidly globalizing world economy. The 2007 America COMPETES Act recognized a quality high school education as an essential component of a broader strategy for maintaining America's place in the international economy. More recently, as the country and its leaders at all levels of public life grapple with the severe fiscal crisis of the past year, education continues to garner attention as a crucial path to economic recovery.

1.1. National High School Graduation Rates, Class of 2005



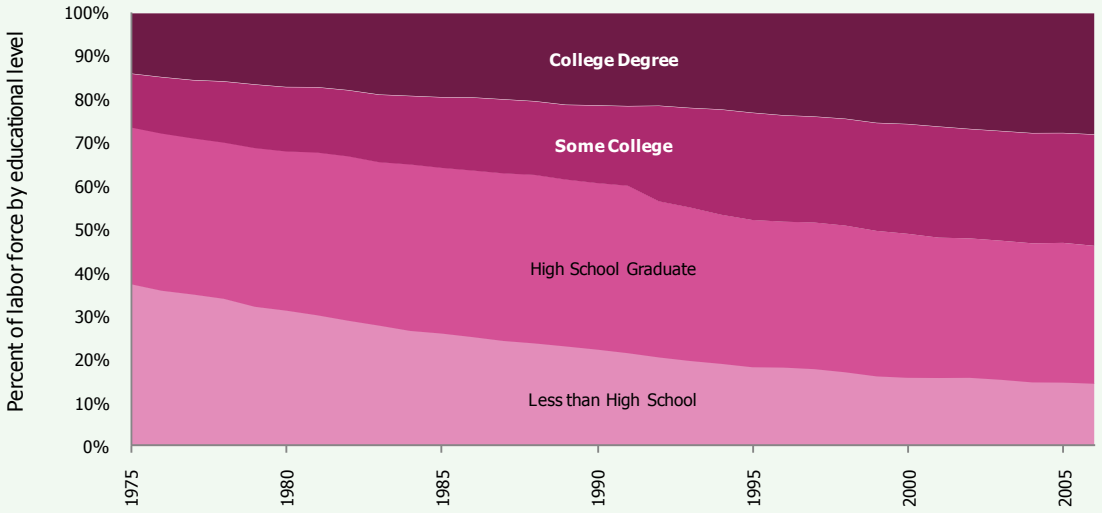
SOURCE: EPE Research Center, 2009. Analysis of data from the Common Core of Data (U.S. Department of Education).

The pivotal role of high school graduation in today's world must be understood in the broader context of the major advances that have been made in educational attainment during the past several decades. As illustrated in Exhibit 1.2, since the mid-1970s, average educational level the nation's workforce has steadily risen. In 1975, a significant share of U.S. workers—38 percent—had not completed a high school education. That group outnumbered college-educated workers by a margin of nearly three-to-one. Three decades later, the situation had essentially reversed, as the percent of nongraduate workers had shrunk by half and the share of workers with a college degree doubled.

Paralleling this upward trend in levels of schooling was a marked shift in the economic returns to education (Exhibit 1.3). From 1975 to 2006, income levels steadily rose for the workforce as a whole, with incrementally larger benefits coming with each successive level of completed schooling. The income of the average high school graduate, measured in constant 2006 dollars, rose by 6 percent over this period. Larger increases were found among workers with some college education (10 percent), a Bachelor's degree (23 percent), or a graduate or professional education (31 percent).

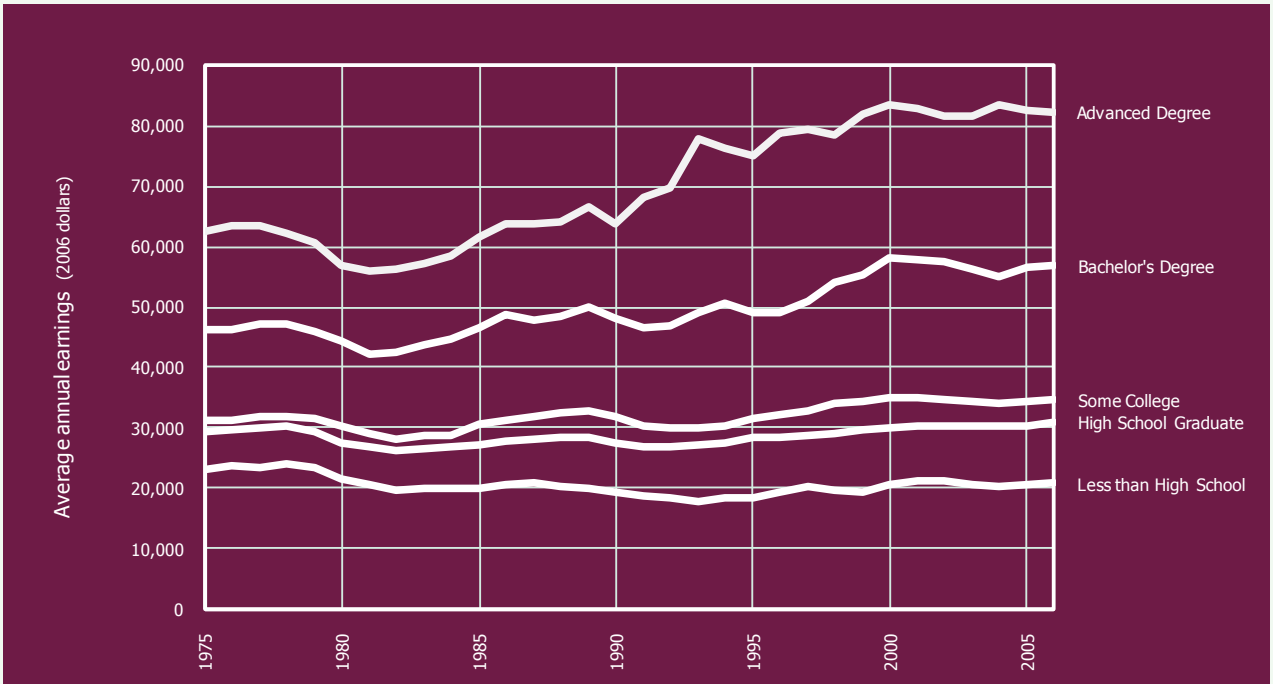
Further examination reveals that income levels declined for only one group. Among workers who had not completed high school, earnings dropped by 10 percent. Together these long-term patterns suggest an emerging economic environment characterized by both greater competition (due to rising schooling levels) and widening disparities in outcomes (as economic returns accelerate with progressively higher levels of education). As of 2007, those without a high school education accounted for 13 percent of the nation's adult population, but only 6 percent of its collective income (Exhibit 1.4). By contrast, those with advanced degrees (who make up 11 percent of the population) account for a disproportionate share of all dollars earned (22 percent).

1.2. Educational Attainment in the U.S. Labor Force, 1975 to 2006



SOURCE: EPE Research Center 2009. Analysis of data from the Current Population Survey (Bureau of Labor Statistics), various years.

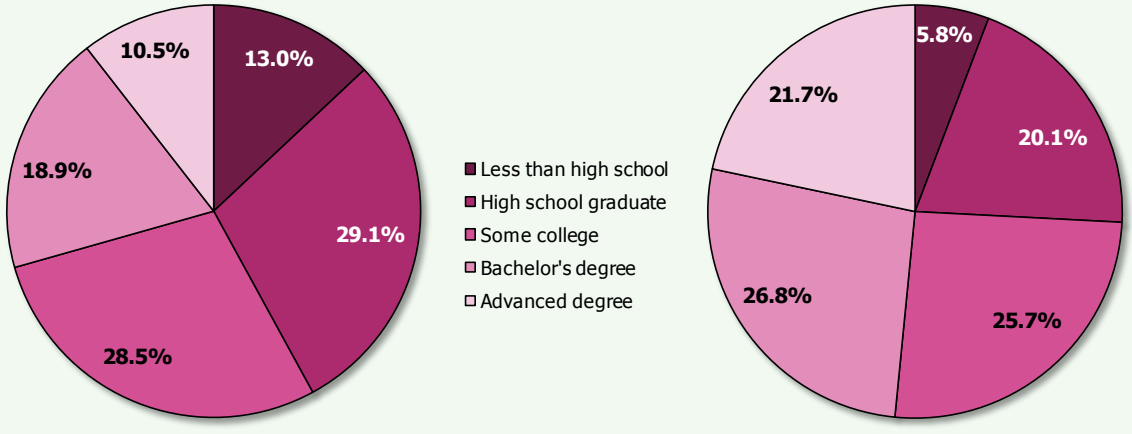
1.3. Trends in Income by Educational Level, 1975 to 2006



SOURCE: EPE Research Center, 2009. Analysis of data from the Current Population Survey (Bureau of Labor Statistics), various years.

1.4. Unequal Shares of Economic Success

This graphic illustrates the distributions of the adult population and of total income earned collectively by all adults, according to the specified levels of education. High school dropouts account for 13 percent of the adult population but less than 6 percent of all dollars earned. By contrast, individuals with graduate and professional degrees comprise only 11 percent of the population but account for 22 percent of all earnings.



Percent of adult population

Percent of total income

SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

This report, a successor to 2008's *Cities in Crisis*, takes stock of high school graduation in the nation's 50 largest cities and their broader metropolitan areas. In addition, we will consider the progress that has been made—or, in some cases, the ground that has been lost—during the past decade. While the scale of the dropout crisis remains troubling, it is worth noting that the majority of the nation's largest cities have seen improvements in their graduation rates over this period and that some of those gains have been substantial.

Closing the Graduation Gap also maps the intersection between education and the economy, as it relates to the impact of schooling on the key economic outcomes of employment, income, and poverty. Specifically, our focus will be on the nation's largest metropolitan areas and the local advantages that accrue to earning a high school diploma. In today's world, of course, finishing high school is probably best thought of as a bare-minimum prerequisite to function successfully in many aspects of adult life, particularly those associated with achieving financial security and career advancement. As our analyses will demonstrate, a high school diploma may offer its greatest benefit by opening doors to further education and training, which in turn afford additional opportunities.

2. The Geography of Public Education

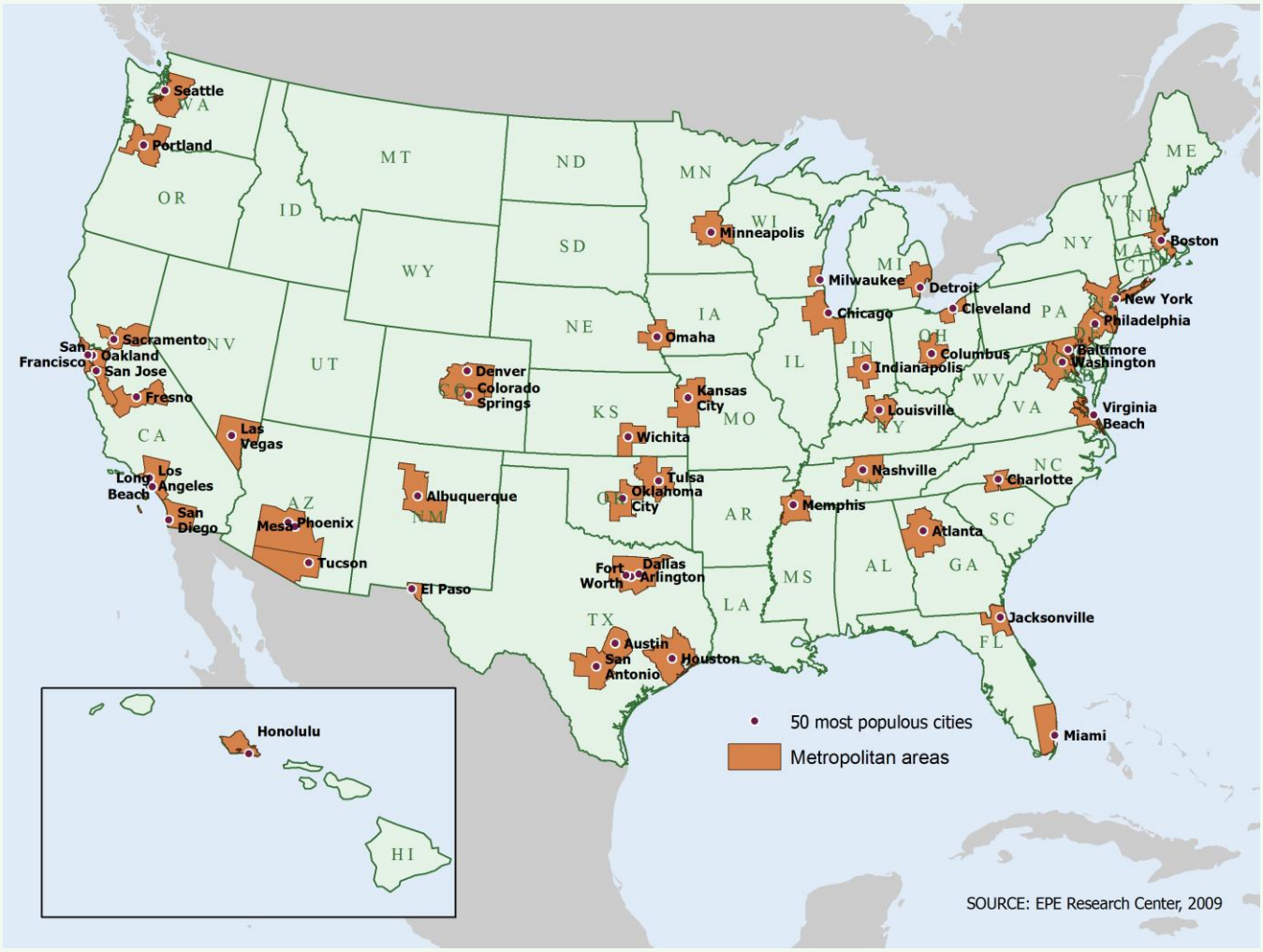
The Nation's 50 Largest Cities

This report adopts a geographically informed approach to the issues of high school completion and economic outcomes. Specifically, we examine graduation rates and the economic returns to education for the nation's 50 most-populous cities as well as the larger metropolitan areas in which they are situated. These metropolitan regions, in many respects the heart of American industry and society, are collectively home to half of all Americans.

The 50 largest cities in the United States were identified using 2006 data from the U.S. Census Bureau. With a population of 8.2 million, New York stands as the largest city in the country and is more than twice the size of the next-largest urban center. Los Angeles and Chicago follow with 3.8 and 2.8 million residents respectively. Home to 358,000 people, Wichita, Kan., rounds out the top 50. The leading city of Kansas is less than one-twentieth the size of New York City.

These major urban areas are widely distributed across the nation, with top-50 cities scattered across 29 states and the District of Columbia (Exhibit 2.1). But we note especially heavy concentrations of these cities along the East Coast, with six large urban centers arrayed between Boston and Virginia Beach in a nearly-continuous swath. Texas contains seven top-50 cities; and California is home to eight of America's most-populous cities, more than any other state. In all, 46 million people live in this group of major American cities.

2.1. The Nation's 50 Most Populous Cities and Surrounding Metropolitan Areas



Principal Urban School Districts

One critical lens for viewing the educational state of the nation's largest cities is the performance of their principal school districts. A preliminary, but essential, step in such an examination involves identifying those school systems. While most members of the public are reasonably familiar with their own local schools, organizational configurations within the wider public education sector can differ greatly from place to place across the nation. In some states, for instance, local education agencies span entire counties, whereas school districts in other regions may be arranged along township or other highly localized lines.

For this study, the EPE Research Center identified the school districts serving each of the nation's largest cities using information from the Common Core of Data (CCD), the U.S. Department of Education's annual census of public schools and local education agencies (school districts). Specifically, the CCD contains directory information documenting the physical location of the district's central office. In this study, we consider only regular school districts and exclude such entities as supervisory unions without student enrollment, purely administrative units, and charter school agencies. Analyses reveal that about half of the nation's largest cities are served by a single school district. However, other cities are home to more than a dozen separate agencies. Exhibit 2.2 provides detailed information about the school systems serving those cities and their metropolitan areas.

2.2. The 50 Largest Cities in the United States and Their Principal School Districts

Top-50 Cities					Metropolitan Areas in which the 50 Largest Cities are Located		
Rank by population	City	Population	Principal School District: Largest/most central district serving city	(type)	School Districts (total)	High School Students: Total for entire metropolitan area	High School Students: Percent served by principal district
1	New York, NY	8,214,426	New York City Public Schools	(urban)	360	731,196	35.4%
2	Los Angeles, CA *	3,849,378	Los Angeles Unified	(urban)	69	623,560	30.5
3	Chicago, IL	2,833,321	City of Chicago School District	(urban)	131	428,984	23.0
4	Houston, TX	2,144,491	Houston Independent School District (ISD)	(urban)	63	260,992	18.6
5	Phoenix, AZ ▲	1,512,986	Phoenix Union High School District	(urban)	30	145,008	17.0
6	Philadelphia, PA	1,448,394	Philadelphia City School District	(urban)	115	221,450	23.8
7	San Antonio, TX	1,296,682	San Antonio ISD	(urban)	39	95,375	14.8
8	San Diego, CA	1,256,951	San Diego Unified	(urban)	22	146,540	24.7
9	Dallas, TX †	1,232,940	Dallas ISD	(urban)	106	250,697	15.6
10	San Jose, CA	929,936	San Jose Unified	(urban)	13	75,684	12.1
11	Detroit, MI	871,121	Detroit City School District	(urban)	99	207,272	18.3
12	Jacksonville, FL	794,555	Duval County School District	(urban)	5	56,004	60.9
13	Indianapolis, IN	785,597	Indianapolis Public Schools	(urban)	48	68,153	12.4
14	San Francisco, CA ‡	744,041	San Francisco Unified	(urban)	38	165,930	11.1
15	Columbus, OH	733,203	Columbus Public Schools	(urban)	53	78,006	20.7
16	Austin, TX	709,893	Austin ISD	(urban)	27	60,868	33.3
17	Memphis, TN	670,902	Memphis City School District	(urban)	11	56,865	56.4
18	Fort Worth, TX †	653,320	Fort Worth ISD	(urban)	106	250,697	7.8
19	Baltimore, MD	631,366	Baltimore City Public School System	(urban)	7	117,120	18.1
20	Charlotte, NC	630,478	Charlotte-Mecklenburg Schools	(urban)	9	68,686	48.6
21	El Paso, TX	609,415	El Paso ISD	(urban)	9	46,373	38.4
22	Boston, MA	590,763	Boston Public Schools	(urban)	130	169,036	10.7
23	Seattle, WA	582,454	Seattle School District	(urban)	43	128,321	11.2
24	Washington, DC	581,530	District of Columbia Public Schools	(urban)	21	239,063	4.9
25	Milwaukee, WI	573,358	Milwaukee Public Schools	(urban)	37	73,611	33.1
26	Denver, CO	566,974	Denver County School District	(urban)	26	108,521	16.2
27	Louisville, KY	554,496	Jefferson County School District	(suburban)	21	51,213	51.8
28	Las Vegas, NV	552,539	Clark County School District	(suburban)	1	64,228	100.0
29	Nashville, TN	552,120	Nashville-Davidson Co. School District	(urban)	13	60,957	32.2
30	Oklahoma City, OK	537,734	Oklahoma City Public Schools	(urban)	42	38,127	23.3
31	Portland, OR	537,081	Portland School District	(urban)	46	97,881	12.9
32	Tucson, AZ	518,956	Tucson Unified District	(urban)	10	36,810	45.9
33	Albuquerque, NM	504,949	Albuquerque Public Schools	(urban)	10	34,348	78.3
34	Atlanta, GA	486,411	Atlanta City School District	(urban)	36	233,152	5.6
35	Long Beach, CA *	472,494	Long Beach Unified	(urban)	69	623,560	4.5
36	Fresno, CA	466,714	Fresno Unified	(urban)	21	56,723	41.3
37	Sacramento, CA	453,781	Sacramento City Unified	(urban)	21	101,781	13.9
38	Mesa, AZ ▲	447,541	Mesa Unified District	(urban)	30	145,008	3.5
39	Kansas City, MO	447,306	Kansas City School District	(urban)	78	85,504	9.4
40	Cleveland, OH	444,313	Cleveland Municipal City School District	(urban)	66	93,429	18.3
41	Virginia Beach, VA	435,619	Virginia Beach City Public Schools	(urban)	14	80,841	29.3
42	Omaha, NE	419,545	Omaha Public Schools	(urban)	40	40,786	33.0
43	Miami, FL	404,048	Dade County School District	(suburban)	3	235,588	45.3
44	Oakland, CA ‡	397,067	Oakland Unified	(urban)	38	165,930	6.6
45	Tulsa, OK	382,872	Tulsa Public Schools	(urban)	43	26,116	37.3
46	Honolulu, HI	377,357	Hawaii Department of Education	(suburban)	1	54,182	100.0
47	Minneapolis, MN	372,833	Minneapolis Public Schools	(urban)	71	122,394	9.9
48	Colorado Springs, CO	372,437	Colorado Springs School District	(urban)	17	31,557	32.2
49	Arlington, TX †	367,197	Arlington ISD	(urban)	106	250,697	6.7
50	Wichita, KS	357,698	Wichita Public Schools	(urban)	31	30,317	44.3
	50-City Total	46,311,583			2,096	6,199,249	27.0%

* Los Angeles and Long Beach, Calif., are part of same metropolitan area.

▲ Phoenix and Mesa, Ariz., are part of same metropolitan area.

† Dallas, Fort Worth, and Arlington, Texas, are part of same metropolitan area.

‡ San Francisco and Oakland, Calif., are part of same metropolitan area.

Note: Population statistics for the 50 largest cities are based on 2006 data from the U.S. Census Bureau. School district data are from the U.S. Department of Education's Common Core of Data 2004-05. School district locations are determined by the physical address of the local education agency office.

SOURCE: EPE Research Center, 2009

The analyses conducted for this study also required designating one school system as the principal district for each of the focal cities. For single-district cities, this determination is straightforward. But, as noted above, about half of the nation's largest cities are served by multiple local education agencies. When such situations were encountered, status as a principal school district was established on the basis of a school system's size and centrality. In all cases, however, a principal district was easily recognizable. For instance, nine different school systems are headquartered within the city limits of Houston, Texas. Among those, the Houston Independent School District—identified as the principal district—serves three times as many students as the next-largest agency.

In other instances, a much different configuration of city and agency jurisdictions prevails. Several of the cities ranking among the nation's largest represent only one of the municipalities served by an expansive countywide education system. Those include: Las Vegas (served by the Clark County School District), Miami (Dade County), and Louisville, Ky., (Jefferson County). In addition, Honolulu falls within the purview of Hawaii's statewide school district. These particular countywide and statewide school systems are classified as suburban by the U.S. Department of Education. It should also be noted that the frame of reference for this study is the nation's largest cities, rather than the largest school districts in the country. For example, Florida and Maryland each contain multiple countywide districts that rank among the 20 largest in the U.S. but do not encompass one of the nation's most-populous cities.

Metropolitan Areas

This study also examines graduation-rate and economic patterns for the broader metropolitan areas in which the nation's 50 largest cities are situated. In most instances, a single city represents the dominant urban core of its respective geographical region (e.g., Albuquerque, Atlanta, or Las Vegas). But in a number of cases, a single metropolitan area encompasses multiple major urban centers. For example, a trio of top-50 cities—comprised of Dallas, Fort Worth, and Arlington—are located within the same densely populated region of Texas. In a similar fashion, metropolitan areas are also shared by the following pairs of cities: Los Angeles and Long Beach, Calif.; Phoenix and Mesa, Ariz.; and San Francisco and Oakland, Calif.

Much as was the case for individual cities, the numbers of school districts associated with particular metropolitan areas vary tremendously (Exhibit 2.3). In southern Florida, for example, Miami is part of a metropolitan area that contains just three large countywide school districts. It is common, though, for several dozen districts to occupy the same metropolitan area. But in a handful of places, metropolitan areas may contain more than 100 school districts. The New York City region, an extreme example, is home to 360 school systems spanning three states. Many of those districts are quite small, owing to the extremely localized nature of public schooling in much of Long Island and northern New Jersey.

Terminology

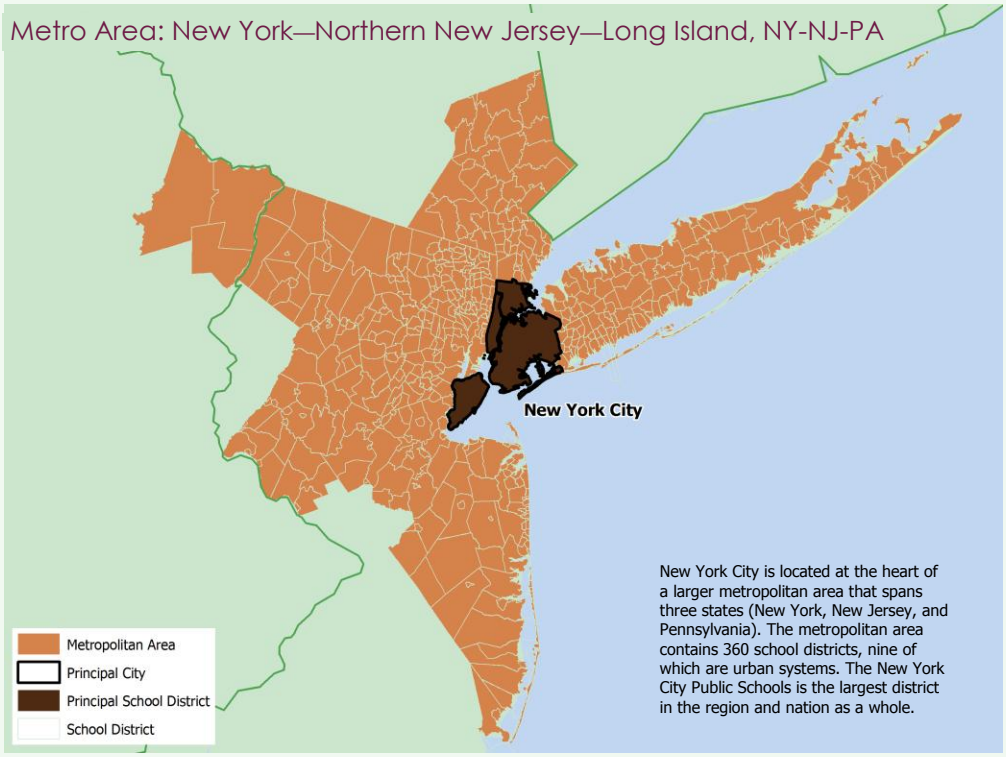
Metropolitan Area—As used in this report, the term *metropolitan area* refers to a Core Base Statistical Area (CBSA) as employed by the U.S. Bureau of the Census and defined by the Office of Management and Budget. CBSAs include both Metropolitan and Micropolitan Statistical Areas. A Metropolitan Statistical Area has at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties. Micropolitan Statistical Areas are similar but smaller geographies, containing at least one urban cluster with a population between 10,000 and 50,000. Metropolitan and Micropolitan Statistical Areas are defined in terms of whole counties (or equivalent entities) and may span state borders.

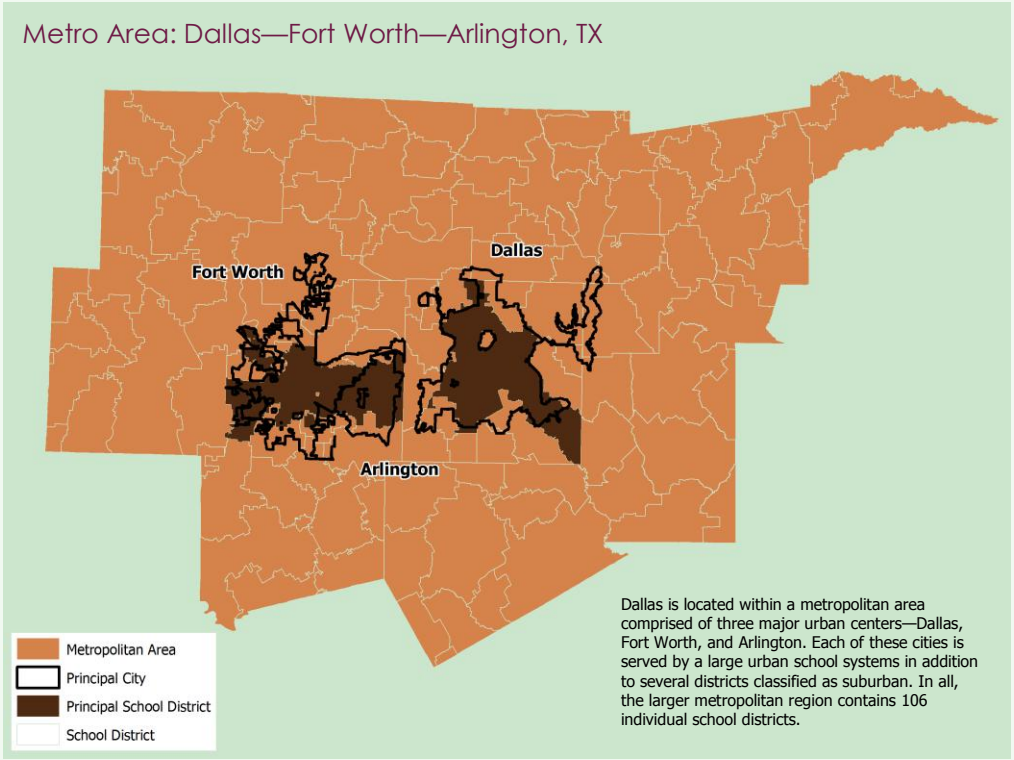
Principal City—Within each metropolitan or micropolitan area, the largest city is designated a *principal city*. Other cities that meet specified criteria related to population and employment may also qualify for this designation. By convention, the title of each Metropolitan Statistical Area includes the names of up to three of its principal cities and the name of each state into which the Metropolitan Statistical Area extends.

Principal School District—For each of the 50 largest cities in the nation, the EPE Research Center identified a principal school district. This is the largest or most central local education agency serving the city. A district's location is determined by the street address of its central office.

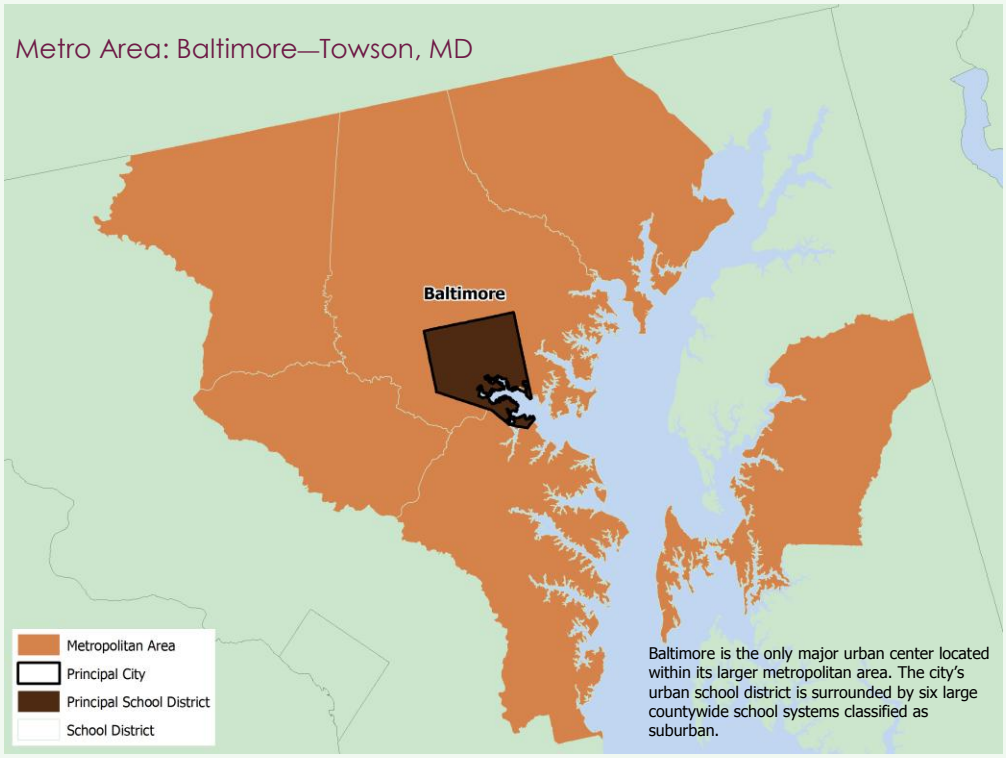
Urban and Suburban School Districts—The U.S. Department of Education classifies the service area of a school district based on the locales (e.g., urban vs. suburban) of schools within the district. Urban districts, as defined in this report, serve a principal city of a metropolitan area. Suburban districts serve regions of a metropolitan area other than principal cities.

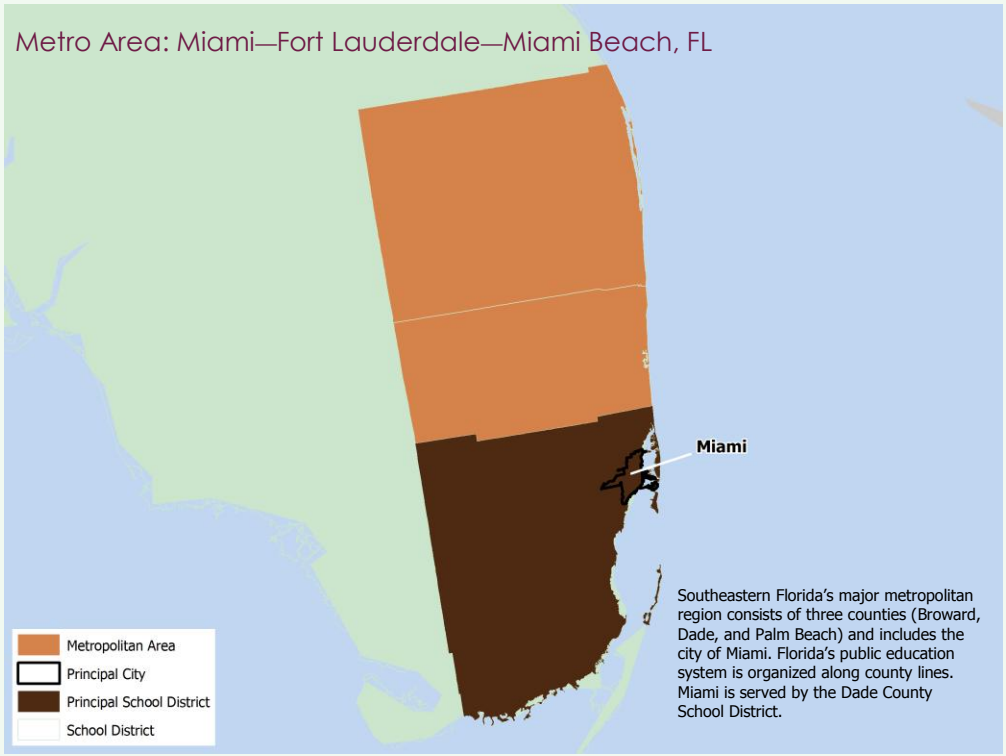
2.3. Illustrations of Metropolitan and Educational Geography





2.3. Illustrations of Metropolitan and Educational Geography (cont.)





3. Methodology

Educational Data—The Common Core of Data (CCD)

The analyses of high school graduation rates performed for this study employ data from the Common Core of Data (CCD). Conducted by the U.S. Department of Education, the CCD is a census of public sector local education agencies (districts) and schools for the 50 states, the District of Columbia, and several other non-state jurisdictions. The CCD data collection is intended to capture all settings in which a free public education is provided at the elementary and secondary levels. Annual surveys of basic demographic and educational information at the state, district, and school levels are submitted by staff of the respective state education agencies.

Detailed methodological descriptions of the Common Core of Data can be found in technical documentation published by the National Center for Education Statistics (available online at nces.ed.gov/ccd). For the 2004-05 school year, a key data point (number of diplomas issued) was not reported to the CCD for districts in Alabama. The EPE Research Center obtained those data directly from the state education agency.

The CCD is the primary source of data used by independent researchers studying high school graduation rates. Two principal features of the database recommend it for such analyses. The first is the CCD's inclusiveness and the systematic nature of the data. The information contained in the Common Core of Data conforms to common definitions, a feature that entails a degree of standardization in the data collection and reporting procedures used across the states. In fact, it is the only database from which it is possible to calculate graduation rates that can be compared across states with confidence. The second noteworthy feature of the Common Core of Data is its public availability. A well-known and frequently used database in the field of educational research, the CCD can be accessed nearly in its entirety by the public. As such, results from this study can be replicated using information resources readily available to other researchers, policymakers, educators, and the public at large. State accountability and administrative data systems do not typically offer this high level of accessibility.

Using data from the U.S. Department of Education's Common Core of Data and the Cumulative Promotion Index (CPI) methodology (described below), we calculated graduation rates for school districts in the nation's largest cities and the surrounding metropolitan areas. The report's main analysis examines graduates for the 2004-05 school year. National and state results for the graduating class of 2005 were published in *Diplomas Count 2008: School to College: Can State P-16 Councils Ease the Transition?*, a special issue of *Education Week* (available online at www.edweek.org/go/dc08). District-level data on graduation rates as well as customized, downloadable reports for every school system in the country can be accessed using the GIS-powered EdWeek Maps Web site (maps.edweek.org). This online data and mapping service also allows users to create and navigate local maps of graduation patterns anywhere in the country.

Calculating Graduation Rates

The Editorial Projects in Education Research Center uses the Cumulative Promotion Index (CPI) method to calculate graduation rates. The CPI envisions graduating from high school as a process rather than a single event. Specifically, the method 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 following equation illustrates the CPI formula for calculating graduation rates. The class of 2004-05, the most recent year of data available, is used as an example.

$$\textbf{CPI} = \frac{\text{10th graders, fall 2005}}{\text{9th graders, fall 2004}} \times \frac{\text{11th graders, fall 2005}}{\text{10th graders, fall 2004}} \times \frac{\text{12th graders, fall 2005}}{\text{11th graders, fall 2004}} \times \frac{\text{Diploma recipients, spring 2005}}{\text{12th graders, fall 2004}}$$

The CPI formula contains four individual components, each of which corresponds to a grade-to-grade promotion rate (e.g., the ratio of 9th- to 10th-graders). Then, by multiplying these four elements together, the CPI method produces the graduation rate. This indicator measures the percent of 9th graders who complete high school on time with a regular diploma, given the schooling conditions prevailing during a particular school year.

Different methods for calculating a graduation rate may employ different definitions of a "graduate." The CPI method adheres to the guidelines established under the federal No Child Left Behind Act, by counting only students receiving standard high school diplomas as graduates. Recipients of GEDs, certificates of attendance, and other non-diploma credentials are treated as nongraduates in this context. States are also mandated to adopt a similar definition of a graduate for the rates they calculate for adequate yearly progress (AYP) under the federal law (although they may adopt different definitions for other purposes).

We can use a simplified example to further demonstrate how to 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), about 82 out of every 100 9th graders would be expected to finish high school with a diploma.

Although the dropout rate in this hypothetical example is constant across grades, one notable feature of the CPI method is that the graduation rate can be broken into its four individual components to examine the diploma pipeline. In particular, it is possible to determine the point during high school at which the greatest number of students leave the path to graduation.

Using the Common Core of Data, the CPI graduation rate can be calculated for public school districts that have students enrolled in the secondary grades (9 through 12). Statistics for larger geographical areas or jurisdictions—nation, state, metropolitan areas—are generated by aggregating district-level data upward.

Notes on the Interpretation of Graduation Rates

Like any other approach to calculating graduation rates, the Cumulative Promotion Index used in this study has both benefits and limitations. Key considerations to keep in mind when interpreting gradation rate analyses are noted below.

Consistent Measurement

Among the chief strengths of the CPI approach is that it allows for the calculation of graduation rates using a single formula and a single database for every public school district in the nation. This enables valid apples-to-apples comparisons of graduation rates across the nation using the CPI. As required by the federal No Child Left Behind Act, states must calculate graduation rates for all districts and schools as part of the law's Title I accountability mandate. States, however, currently employ a variety of different methods and formulas to calculate their respective rates. As noted earlier, recent regulatory changes should bring greater consistency to state-reported rates over the next few years. But it is not currently advisable to directly compare officially reported rates across states.

Comprehensive Data

A major advantage of the data source used for this study (the Common Core of Data) is its broad scope, encompassing every school district in the country. The CCD contains very complete information for the indicators used in this study. In fact, the EPE Research Center is able to directly calculate the graduation rate for the districts serving 95 percent of all high school students nationally.

Data Limitations

One unavoidable trade-off that often comes with large-scale databases is limited detail on particular topics that might be of importance. The CCD, for example, consists of data points captured at an aggregate level at a single point in time. It does not have the ability to track individual students longitudinally, a capability being developed by an increasing number of states. In addition, the CCD does not collect information about several key issues (e.g., grade retention, student mobility, time to diploma) that might permit the development of a more refined graduation-rate calculation. The CPI method is designed in such a way that such factors are expected to have a minimal effect on the accuracy of the graduation rates for the large majority of school systems. However, exceptional situations can arise, where an event such as an extremely large and rapid decline in district enrollment could temporarily bias the CPI measure. Readers are encouraged to keep such limitations in mind.

Ultimate Data Source

The data contained in the CCD are submitted by the states to the National Center for Education Statistics, the statistical branch of the U.S. Department of Education. Although participating states must adhere to common definitions, the CCD is a voluntary data system. Owing to that consideration and the scale of the data collection, the CCD assumes that information provided by the states is correct as reported and has been subjected to data-quality controls by the states. Years of experience working with both the CCD and comparable state data suggest that reporting errors in the CCD are rare. Nevertheless, readers should be aware that, even if rarely, data may be misreported and that the CCD system possesses no mechanism to identify such situations.

Timeliness

For the CCD, as with most federal data systems, there is a significant lag between the time raw data are collected and the point at which they are released to the public. Graduation data is a notable case in point. More than two years typically elapse between the time that a student earns a diploma and the release of the CCD database capturing that event (as part of a district-level count of diplomas issued). As a result, research using the CCD is already slightly dated by the time it is released. While graduation rates for the average district typically change slowly (a fraction of a percent each year), more rapid gains or declines are possible. Readers should be aware that recent changes in high school graduation (within the past several years) would not be reflected in the analyses featured in this report. Given the significant high school reform efforts underway across the nation, and particularly within large urban systems, this caveat is well worth noting.

Economic Data—The American Community Survey (ACS)

Analyses of economic conditions and returns to education in the nation's largest metropolitan areas employ data from the 2007 American Community Survey (ACS). An exceptionally large-scale household survey, the ACS is now conducted annually by the U.S. Census Bureau and is slated to replace the long form of the decennial Census in 2010. More information about the technical design of the ACS can be found online at www.census.gov/acs.

Each annual installment of the American Community Survey contains information on approximately 3 million individuals and includes a wide variety of data points related to demographic characteristics, educational background, labor force participation, employment, income, and other economic indicators. The ACS also collects information on a person's place of residence, which this study uses (together with other data from the U.S. Census Bureau) to identify individuals living in the metropolitan areas containing the nation's largest cities. The same set of 50 major urban centers is examined in the portions of this study focusing respectively on graduation rates and economic conditions.

The analytic sample employed for this study's economic investigation consists of adults from 25 to 64 years of age. It should be noted that these analyses are not limited to individuals currently participating in the labor force. Rather, the study attempts to capture the full pool of adults in their prime working years, who represent the potential labor force for a particular metropolitan area. Most adults have also reached their highest level of educational attainment by the age of 25, an important consideration when gauging the economic impacts of schooling. The key ACS-based educational and economic indicators used in this study are briefly described below.

Educational Attainment—The American Community Survey provides information about an individual's educational background, reporting the highest level of schooling completed at the time of the survey in one of 15 detailed categories. For the current study, those educational attainment levels have been collapsed into five categories: less than a completed high school education (i.e., a nongraduate); high school graduate (with a diploma or equivalent); some college (including an associate's degree); bachelor's degree; and advanced degree (which could include a master's, professional, or doctoral degree).

Steady Employment—This indicator captures an individual's engagement in regular employment over the course of the prior year. Specifically, this measure identifies those who were employed year-round (at least 50 weeks) and who worked full time (at least 35 hours during a typical per week).

Income—The study also examines the total annual income of respondents from all sources, expressed in 2007 dollars. Income statistics are reported in the form of median levels, rather than averages. Using averages (or means) for these analyses would have carried the risk of producing misleading results because such statistics could be skewed or distorted by a small number of individuals with extremely high earnings.

Poverty—The ACS includes information that indicates how far above or below the poverty level an individual is living. The American Community Survey adheres to guidelines for determining household poverty status established by the Office of Management and Budget (OMB). This framework takes into account total household income, as well as family composition and size. For example, in 2007, the poverty threshold for a family of four with two children under 18 years of age was $21,027. The current study includes analyses of the poverty rate—the percent of adults living in households below the poverty line—for the metropolitan areas of the nation's 50 largest cities.

4. Amid Improvements, Cities Continue to Struggle

In 2008, the *Cities in Crisis* report found that graduating from high school in America's largest cities amounted, essentially, to a toss of the coin. The updated analyses conducted for the current study paint a very similar portrait of these communities. Just over one-half of students (53 percent) in the principal school systems of the country's 50 largest cities complete high school with a diploma. That rate remains well below the national graduation rate of about 71 percent, and even falls short of the average for all urban districts across the country (61 percent). Only three of these 50 principal districts—all located in the Southwest—reach or exceed the national average. Those top-ranking school systems can be found in: Mesa, Ariz.; Santa Fe, N.M.; and Tucson, Ariz.. In the most extreme cases, fewer than 40 percent of students in big-city districts graduate with a diploma. Cleveland, Detroit, and Indianapolis all fall below that threshold.

Further analysis illustrates that the extremely low graduation rates for these large urban school systems contribute disproportionately to the nation's graduation crisis. The principal school districts of America's 50 largest cities collectively educate 1.7 million public high school students, one out of every eight in the country. However, these 50 education agencies produce about one-quarter (279,000) of the 1.2 million students nationwide who fail to graduate (Exhibit 4.1).

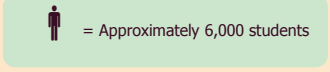
It should be noted that these findings capture the likelihood that the *average* student in the nation's largest cities will successfully complete high school. In past studies examining national and state data, we have consistently found that certain demographic groups graduate at much lower rates than the student population as a whole. Male students, on average, have graduation rates 8 percentage points lower than females. The gaps between whites and historically disadvantaged minority groups can exceed 25 percentage points nationally. If those patterns hold for the nation's largest cities, it is possible that graduation rates for certain subgroups in these communities may fall even lower than those presented in this report.

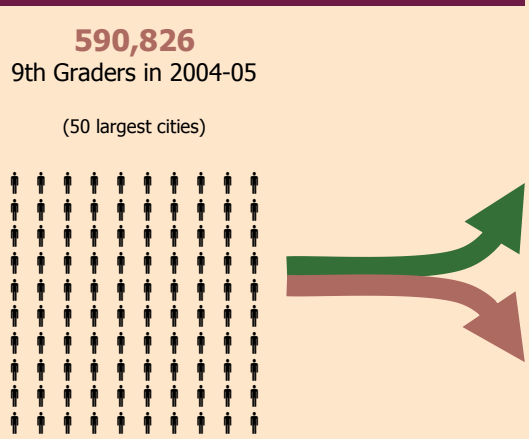
As described earlier, one valuable feature of the CPI approach to calculating graduation rates is the ability to identify the point during their high school careers at which students are leaving school. Exhibit 4.2 reports the grade level at which the greatest number of students fall through the cracks in the high school pipeline. For 31 of the principal school districts, the 9th grade proves to be the leading source of loss, a pattern that largely mirrors past findings. That critical transition into high school during the freshman year appears to pose the greatest challenge on the road to graduation, for the nation as a whole, the majority of states, and most large urban school systems. The problem of freshman loss, however, appears to be particularly acute for certain large cities—in 13 principal urban districts, 9th graders account for at least half of nongraduates.

4.1. Largest Urban Districts Fuel the Graduation Crisis

One-Quarter of a Million Students Fail to Graduate in 50 Largest Cities

In 2004-05, the principal school districts of the nation's 50 largest cities enrolled about 591,000 9th graders. Projecting forward using the 50-city graduation rate from this report (52.8 percent), we find that more than one-quarter of a million students in the nation's largest cities failed to graduate with a diploma in the class of 2008. These cities account for one out of every four nongraduates nationwide, but only one in eight 9th graders.





SOURCE: EPE Research Center, 2009

4.2. Graduation Rates for the Principal School Districts Serving the Nation's 50 Largest Cities

City (ranked by class of 2005 graduation rate)	Principal School District	Class of 2005		High School Pipeline (2005)	
		Graduation rate (2004-05)	Rank	Grade at which largest number of students are lost	At least half of loss occurs at 9th grade
Mesa	Mesa Unified District	76.6%	1	10	
San Jose	San Jose Unified	73.3	2	12	
Tucson	Tucson Unified District	71.6	3	10	
Seattle	Seattle School District	68.9	4	12	
Colorado Springs	Colorado Springs School District	68.8	5	12	
Portland, Ore.	Portland School District	68.6	6	12	
Virginia Beach	Virginia Beach City Public Schools	68.5	7	9	
Honolulu	Hawaii Department of Education	67.4	8	9	
Long Beach	Long Beach Unified	64.0	9	12	
San Diego	San Diego Unified	63.7	10	11	
Louisville	Jefferson County School District	63.4	11	9	
Sacramento	Sacramento City Unified	62.1	12	11	
Philadelphia	Philadelphia City School District	62.1	13	10	
El Paso	El Paso ISD	60.6	14	9	
Charlotte	Charlotte-Mecklenburg Schools	60.5	15	9	
Arlington, Texas	Arlington ISD	60.3	16	9	X
Austin	Austin ISD	58.9	17	9	X
Denver	Denver County School District	58.6	19	9	
Boston	Boston Public Schools	58.6	18	9	X
Phoenix	Phoenix Union High School District	58.0	20	12	
Washington, D.C.	District of Columbia Public Schools	57.6	21	9	
San Francisco	San Francisco Unified	57.1	22	11	
Fort Worth	Fort Worth ISD	56.5	23	9	X
Miami	Dade County School District	55.9	24	9	
Wichita	Wichita Public Schools	54.5	25	12	
Kansas City, Mo.	Kansas City School District	53.3	26	9	
Houston	Houston ISD	52.9	27	9	X
Fresno	Fresno Unified	51.9	28	10	
Memphis	Memphis City School District	51.2	29	9	
Chicago	City of Chicago School District	51.0	30	9	
Jacksonville	Duval County School District	50.8	32	9	X
Dallas	Dallas ISD	50.8	31	9	X
Oakland	Oakland Unified	50.5	34	10	
New York City	New York City Public Schools	50.5	33	10	
Omaha	Omaha Public Schools	49.6	35	9	X
Albuquerque	Albuquerque Public Schools	49.0	36	9	
Tulsa	Tulsa Public Schools	48.5	37	9	X
San Antonio	San Antonio ISD	47.3	38	9	
Oklahoma City	Oklahoma City Public Schools	47.0	39	10	
Minneapolis	Minneapolis Public Schools	45.3	40	12	
Nashville	Nashville-Davidson Co. School District	45.2	41	9	
Columbus	Columbus Public Schools	44.7	42	9	X
Las Vegas	Clark County School District	44.5	43	10	
Los Angeles	Los Angeles Unified	44.4	44	9	
Atlanta	Atlanta City School District	43.5	45	9	
Baltimore	Baltimore City Public School System	41.5	46	9	X
Milwaukee	Milwaukee Public Schools	41.0	47	9	X
Detroit	Detroit City School District	37.5	48	9	X
Cleveland	Cleveland Municipal City School District	34.4	49	9	
Indianapolis	Indianapolis Public Schools	30.5	50	9	
50-City Avg.		52.8%		9th grade (31 districts)	13 districts
National Avg.		70.6%		9th grade	

NOTE: Graduation rates are calculated using the Cumulative Promotion Index method with data from the U.S. Department of Education's Common Core of Data. Rankings may be based on unrounded statistics.

SOURCE: EPE Research Center, 2009

Signs of Improvement in Major Cities

A cross-sectional view of graduation for the class of 2005 shows that most of the nation's principal urban school districts are still struggling to reach levels of high school completion typical of the average district in the country. Snapshots, however, tell only one part of the story. Educational change is a dynamic process more analogous to a motion picture than a still life. And data from a single instant in time offer no way to examine trajectories of change or to assess whether conditions are improving or worsening over time.

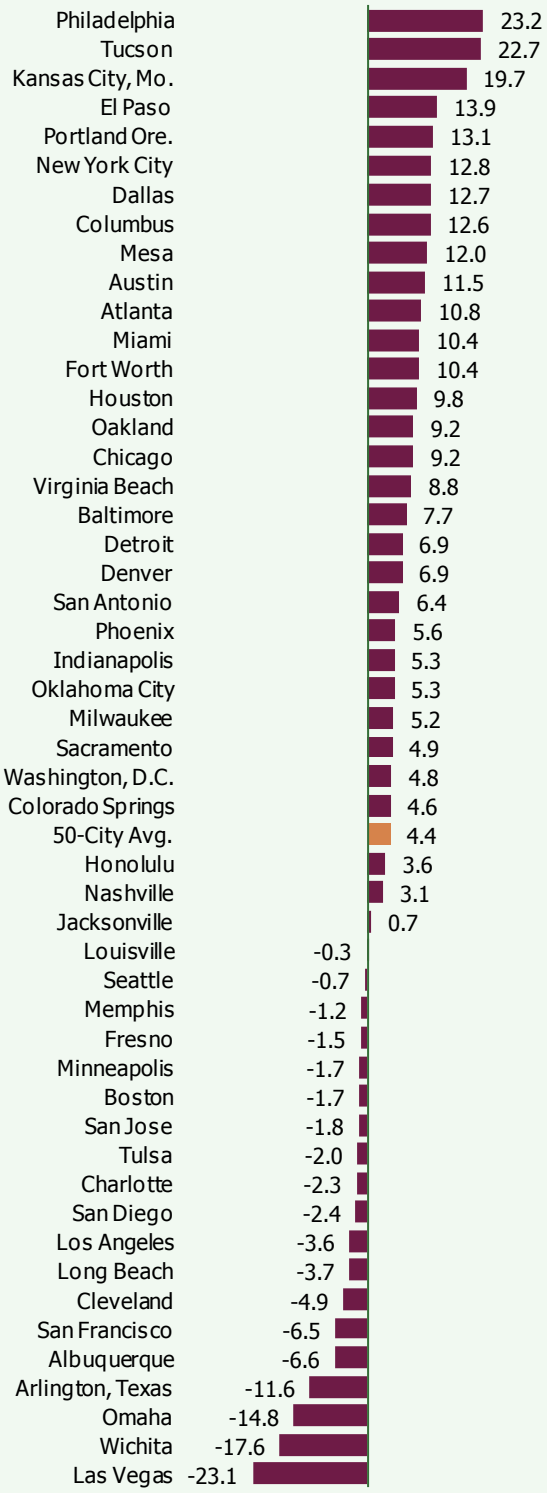
Exhibit 4.3 reports the percentage-point change in graduation rates during the past decade (1995 to 2005) as one way to gauge the longer-term trends in these school systems. This perspective on the graduation crisis offers some noteworthy signs of hope. Overall, the outlook has brightened during the last decade. Graduation rates have improved in 31 of these 50 school districts. The average gain was 4.4 percentage points during this period, close to a half-point per year.

A number of cities, however, far outpaced that average rate of improvement. Philadelphia, for example, showed a much large gain, with a 23 percentage-point increase in its graduation rate. Tucson, Ariz., and Kansas City, Mo., posted gains of 23 and 20 points respectively. Improvements of at least 10 percentage points (roughly 1 point per year) were found for 13 of the principal districts serving the nation's largest cities. Particularly strong gains are evident among initially low-ranking districts. We find improvements in all 10 districts where the graduation rates was less than 39 percent in 2005. In fact, most of those systems posted double-digit gains between 1995 and 2005.

Nineteen of the nation's largest city districts saw declines in their rates of high school completion over the past decade. However, many of those changes were quite minor, on the order of a fraction of a percentage point annually. Such drops may represent minor fluctuations relative to the baseline year rather than a marked and steady trend. Nevertheless, four principal districts—Arlington, Texas; Las Vegas (Clark County), Omaha, Neb.; and Wichita, Kan.—posted substantial declines of 10 percentage points or greater.

As a nation, it is entirely appropriate to judge performance relative to normatively-defined aspirations and goals. By such standards, few of the school systems serving our largest cities are likely to receive high marks. At the same time, improvements, when they are in evidence, should be acknowledged. Progress may be slow to materialize and rather modest in the short term, particularly for as serious and intractable an educational problem as high school dropout. But the strong gains found in many of the nation's largest cities—including New York, Chicago, Philadelphia, and Houston—show that change may not always be easy but it is possible, even under the most challenging circumstances.

4.3. Percentage-Point Change in Graduation Rates, 1995 to 2005



SOURCE: EPE Research Center, 2009. Analysis of data from the Common Core of Data (U.S. Department of Education).

The Urban-Suburban Divide

An investigation limited to the principal school districts serving America's most-populous cities may overlook critical dimensions of the larger educational context within which the nation's graduation crisis exists. As noted earlier, a major city may be served by more one than school district. And the larger metropolitan orbits of these urban cores may be extensive, consisting of dozens or even hundreds of local education agencies. In fact, the principal school districts of America's 50 largest cities generally account for a relatively modest share of all students within their larger metropolitan areas (27 percent on average). Forty-four of the 50 principal city districts educate fewer than half of the students in their respective regions (see Exhibit 2.2). The next set of analyses conducted for this study examines high school graduation patterns within the larger metropolitan environs of America's largest cities. Specifically, we are concerned with the potential for significant disparities in graduation rates between the urban and suburban school districts of the same metropolitan area. In addition, we chart the change in these urban-suburban gaps over time.

Exhibit 4.4 reports results for 41 of the metropolitan areas that are home to the nation's largest cities. Among those 50 cities, five are located in the same region as another top-50 city. For example, Los Angeles and Long Beach share a single metropolitan area, as do: Dallas, Fort Worth, and Arlington; Phoenix and Mesa; and San Francisco and Oakland. In addition, four metropolitan areas do not include a school district classified as urban by the U.S. Department of Education. These regions are home to: Honolulu, Las Vegas, Louisville, Ky., and Miami. As noted earlier, these areas are served by countywide school systems (or, in the case of Honolulu, a statewide system) designated as suburban in character.

Taking the metropolitan areas of the 50 largest cities as a whole, urban districts lag well behind neighboring suburban systems. About 59 percent of students served by the urban districts of these major metropolitan areas graduate, compared with 77 percent in nearby suburban communities. Only in the case of the El Paso, Texas, metropolitan area does the graduation rate in the urban core surpass that of the metropolitan area's suburban periphery. In addition, the urban and suburban districts of the Colorado Springs area post matching rates of 75.5 percent. The 18-percentage-point urban-suburban graduation disparity for these major metropolitan locales exceeds the 14-point gap found nationwide by a modest margin.

Unusual cases like El Paso and Colorado Springs excepted, the more typical situation is characterized by sharply lower rates of high school completion for the city districts. Metropolitan locales with the most severe urban-suburban disparities also display a marked geographical clustering. Among the 10 metropolitan areas with the largest urban-suburban gaps, seven are located in the Northeast and Midwest regions of the country. The largest gaps emerge in the vicinities of Baltimore, Cleveland, Columbus, Ohio, and Milwaukee, where urban students have graduation rates at least 35 percentage points lower than their suburban neighbors. In the most extreme cases, students in the urban portions of these regions are half as likely to complete high school with a diploma.

A Narrowing Gap

As was the case for earlier analyses, it is useful to place the current pattern of urban and suburban graduation rates in a broader historical context. When viewed over the past decade, we find that the urban-suburban graduation gaps in the largest metropolitan areas have been gradually closing. One-third of these metropolitan regions (14 of 41) saw their gaps diminish over this period, in some case by substantial amounts. On average, urban-suburban disparities narrowed by 1.6 percentage points, less than a quarter point annually. During this same period, the nationwide gap remained essentially unchanged.

The urban-suburban divide narrowed the most in Philadelphia, where the gap shrunk by 19 percentage points. That trend was driven by significant improvements in the Philadelphia City School District. As earlier findings revealed, Philadelphia ranks first among the 50 principal urban school districts for graduation-rate gains during the past decade. Similar dynamics prevailed among many of the regions with narrowing gaps, including: Atlanta; Chicago; Columbus, Ohio; El Paso, Texas; and New York. That is, improvements (declines) in gap size were generally the result of improvements (increases) in urban graduation rates.

4.4. Graduation Rates in the Nation's Largest Metropolitan Areas

Major Metro Areas (ranked by improvement in urban-suburban gap)	Metropolitan Graduation Rate (2005)	Within Metropolitan Area (2005)		Urban-Suburban Graduation Gap (2005)		Gap Closing (1995 to 2005)	
		Urban districts	Suburban districts	Suburban rate higher if value is positive (percentage point)	Rank (by gap size)	Gap closing if value is negative (percentage point)	Rank (by gap closing)
Philadelphia	77.2%	61.1%	82.7%	21.6%	15	-19.0%	1
Washington, D.C.	74.9	64.5	75.9	11.4	27	-14.4	2
New York City	71.4	54.1	82.6	28.6	8	-14.1	3
Columbus	74.9	44.7	82.8	38.1	3	-8.1	4
Atlanta	63.0	46.1	64.2	18.1	20	-7.4	5
Indianapolis	70.9	51.8	79.2	27.4	10	-6.0	6
El Paso	63.8	64.5	54.5	-10.0	41	-5.5	7
Chicago	75.6	55.7	83.9	28.2	9	-5.2	8
Kansas City, Mo.	79.0	72.3	83.1	10.8	30	-4.9	9
Baltimore	73.6	41.5	80.7	39.2	2	-4.4	10
Tucson	70.7	67.9	74.1	6.2	33	-4.3	11
Portland, Ore.	72.8	70.5	74.2	3.7	37	-4.0	12
Seattle	65.9	62.9	67.1	4.2	35	-2.0	13
San Francisco/Oakland	75.1	68.1	79.2	11.1	28	-0.5	14
Milwaukee	71.4	51.5	86.8	35.2	4	0.1	15
Houston	69.9	57.9	75.2	17.3	23	0.1	16
Detroit	68.6	55.0	76.6	21.6	16	0.3	17
Denver	73.1	58.0	78.0	19.9	18	0.4	18
San Antonio	65.9	62.7	73.0	10.2	31	1.1	19
San Jose	80.6	80.2	83.2	3.0	38	2.6	20
Los Angeles/Long Beach	63.8	56.2	75.9	19.7	19	2.7	21
Austin	71.7	65.5	78.0	12.5	26	2.9	22
Virginia Beach	64.1	59.3	73.3	14.1	25	3.0	23
Dallas/Fort Worth/Arlington	68.2	58.5	75.3	16.8	24	3.5	24
Colorado Springs	75.5	75.5	75.5	0.0	40	4.2	25
Phoenix/Mesa	76.3	72.4	81.1	8.7	32	4.5	26
Sacramento	76.1	72.6	77.5	4.9	34	4.8	27
Boston	78.3	61.8	83.8	22.0	14	5.0	28
Memphis	58.9	51.2	68.7	17.5	22	6.0	29
Minneapolis	75.5	63.1	81.0	17.9	21	6.2	30
Tulsa	66.9	48.5	77.9	29.4	6	7.3	31
Oklahoma City	69.5	52.5	81.7	29.2	7	7.4	32
Nashville	67.7	45.2	78.4	33.3	5	7.8	33
Fresno	66.5	54.9	77.4	22.5	13	7.9	34
San Diego	72.8	70.3	74.4	4.1	36	8.3	35
Jacksonville	58.7	50.8	71.0	20.1	17	9.9	36
Charlotte	66.2	60.5	71.6	11.1	29	10.5	37
Albuquerque	49.4	49.0	51.1	2.2	39	11.5	38
Cleveland	71.8	38.0	80.5	42.6	1	11.9	39
Omaha	73.8	65.3	88.3	23.0	12	15.7	40
Wichita	69.6	54.5	81.6	27.1	11	25.1	41
Honolulu	67.4	—	—	—	—	—	—
Las Vegas	44.5	—	—	—	—	—	—
Louisville	69.9	—	—	—	—	—	—
Miami	57.2	—	—	—	—	—	—
Major Metro Avg.	69.9%	59.3%	77.3%	18.0%		-1.6%	
National Avg.	70.6%	60.9%	75.3%	14.4%		0.1%	

NOTE: Graduation rates are calculated using the Cumulative Promotion Index method with data from the U.S. Department of Education's Common Core of Data. Rankings may be based on unrounded statistics.

SOURCE: EPE Research Center, 2009

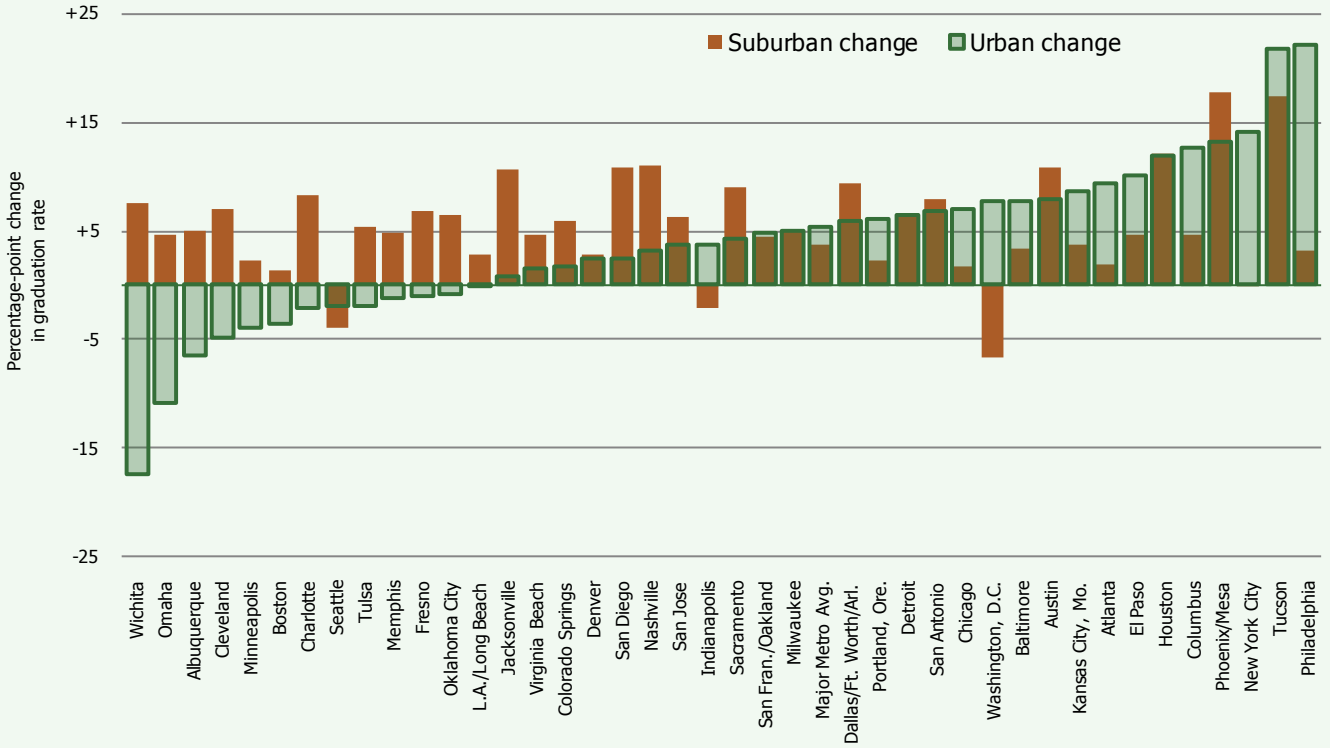
As illustrated in Exhibit 4.5, however, there are several instances where the closing of the urban-suburban gap can be attributed, at least in part, to declining graduation rates in suburban districts. For example, in the Indianapolis and Washington, D.C., metropolitan areas, graduation rates rose for urban districts while dropping on average in the nearby suburbs. Across the Seattle region, graduation rates decreased in both urban and suburban districts during the past decade.

In all, urban graduation rates improved in 29 of the 41 major metropolitan areas examined in this study. The average gain for these big-city districts was slightly more than 5 percentage points. Among the areas experiencing urban declines during this period, some saw substantial drops. Urban graduation rates for Omaha, Neb., and Wichita, Kan., declined by more than 10 percentage points from 1995 to 2005. Overall, improvements were more uniform in the suburban portions of the nation's major metropolitan areas, with only three instances of falling graduation rates (noted above).

Graduation gaps will close in a desirable way when urban districts improve faster than neighboring suburban school systems. Further analysis also reveals that metropolitan areas with larger urban-suburban gaps in 1995 tended to experience more dramatic narrowing of that gap over time. This pattern is illustrated below in Exhibit 4.5.

For each major metropolitan area (represented by a dot in the figure), the horizontal axis charts the initial size of the urban-suburban gap in 1995, while the vertical axis measures the amount of gap-closing between 1995 and 2005. The overall downward tendency of the scatter cloud (also reflected in the trajectory of the trend line) indicates a strong negative relationship between these two factors. That is, we find more narrowing of the urban-suburban divide in areas where that gap was larger to start with (in 1995). For the most extreme cases, the turnaround can be quite remarkable. In Philadelphia, for example, the gap—initially gauged at 40 percentage points—was essentially cut in half over the course of a decade. However, a more typical trend can be found in Chicago, where an initial urban-suburban gap of 33 percentage points in 1995 had narrowed by about 5 percentage points as of 2005.

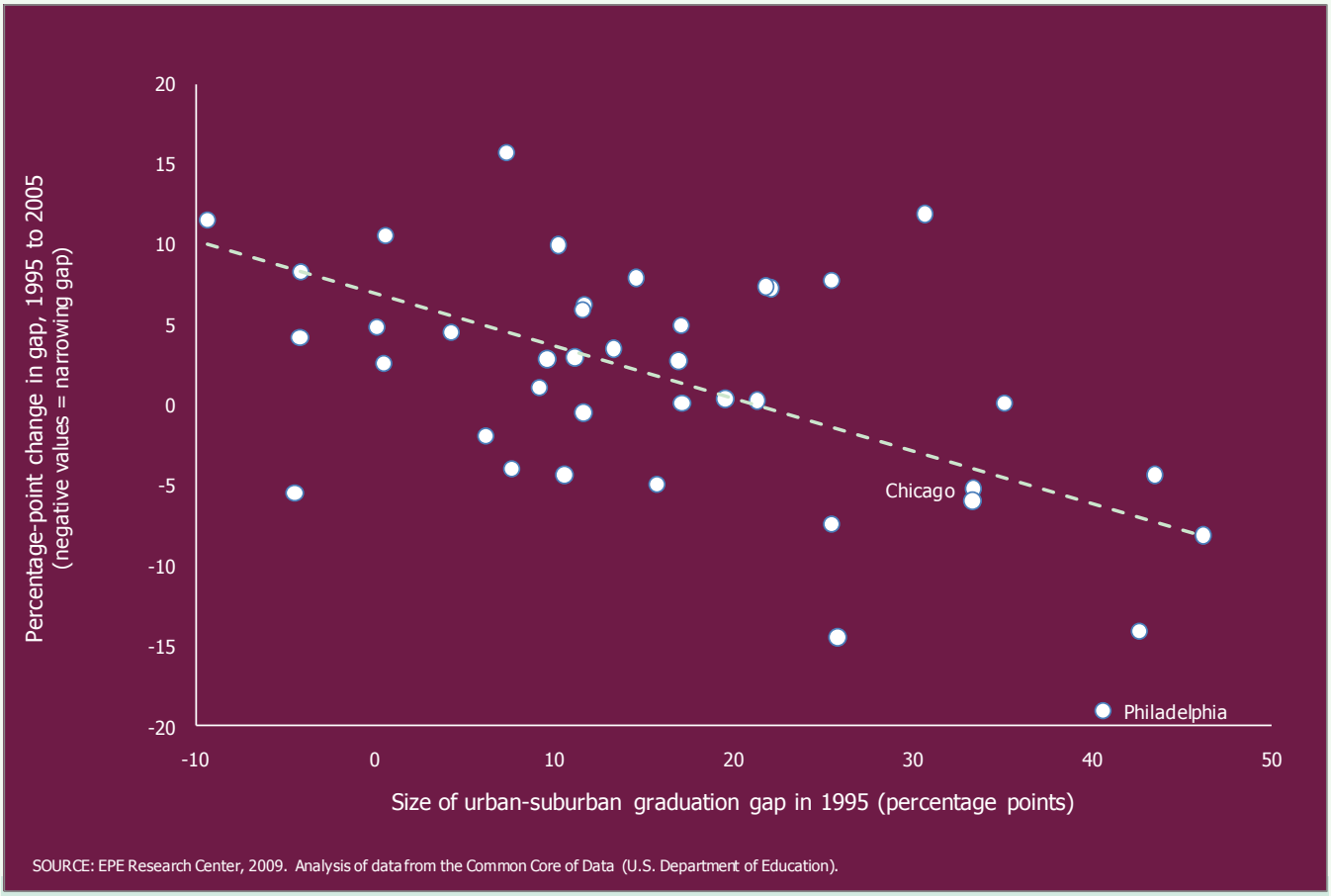
4.5. Urban and Suburban Graduation Trends, 1995 to 2005



SOURCE: EPE Research Center, 2009. Analysis for Data from the Common Core of Data (U.S. Department of Education).

4.6. Historically Large Gaps Narrow More Over Time

Although the Philadelphia metropolitan area historically had one of the largest urban-suburban graduation gaps in the nation, it has also shown the most improvement. The divide separating its urban and suburban school districts narrowed by 19 percentage points between 1996 and 2005.



SOURCE: EPE Research Center, 2009. Analysis of data from the Common Core of Data (U.S. Department of Education).

Notes on Interpretation: Scatter Plots

A scatter plot, like the one shown above, is a graphic that helps to visualize the direction and strength of the relationship between two variables or characteristics of interest. Each dot in a scatter plot represents one observation, such as the metropolitan areas featured in the figure above. The location of a dot within the scatter cloud is determined by the respective observation's values for the characteristics represented on the horizontal and vertical axes of the graph. In Exhibit 4.6, for example, Philadelphia appears in the lower right-hand quadrant of the graph. This means that this metropolitan areas has a high value for the characteristic measured on the horizontal axis (i.e., a 1995 urban-suburban gap of 40 percentage points) and a numerically low value for the factor measured on the vertical axis (i.e., a decline of 19 percentage points in the gap over time).

When the two variables are strongly related (or correlated), the scatter cloud displays a visually noticeable upward or downward tendency. Trend lines can be used to statistically characterize and visually depict the overall direction and strength of a relationship. A trend line that rises from the lower left of a chart to the upper right indicates a positive relationship. A negative relationship between two variables is captured by a downward trend from the upper left to the lower right. Steeper trend lines indicate stronger statistical relationships between the two characteristics.

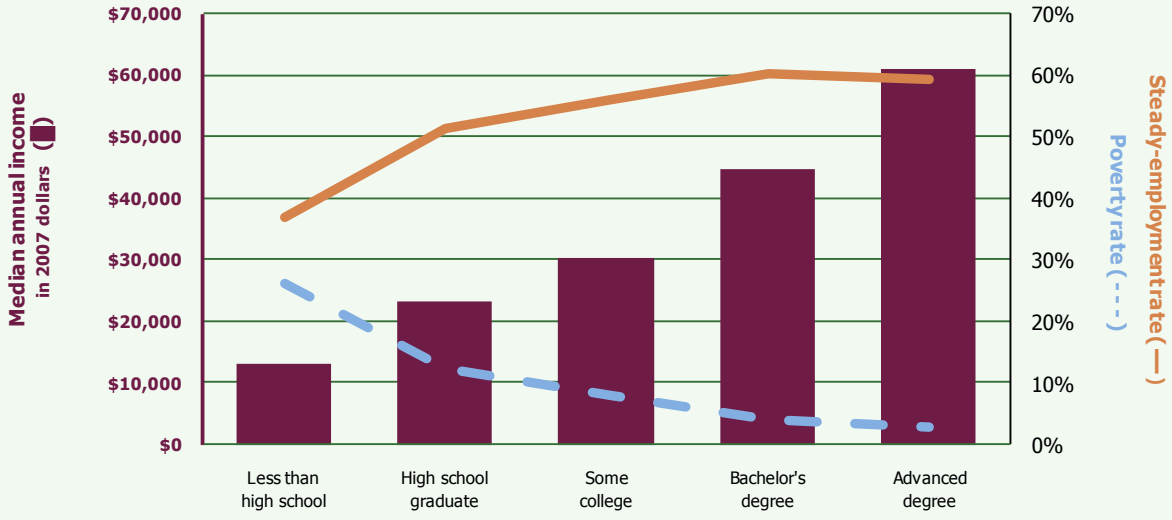
5. Education and the Economy

The opening section of this report broadly characterized the long-term upward trend in the educational level of the U.S. workforce and the strong connections between schooling and earnings. In short, the American workforce is more highly educated now than it was three decades ago. About half of all workers now have some form of postsecondary education or training, compared with roughly one-quarter in the mid-1970s. Further, the economic advantages that accrue to more advanced schooling are also at historic highs.

In this section, we engage in an examination of contemporary data to unpack the education-workforce connection and to investigate the economic implications of the graduation crisis for the nation's largest metropolitan areas. In particular, we will quantify the incremental advantages associated with earning a high school diploma, which offers a way to better appreciate the socioeconomic consequences of chronically low-performing school systems. The nation's graduation crisis exacts a toll on individuals in terms of their own diminished labor-market opportunities. But importantly, it also impacts communities in the form of reduced economic vitality and health on a broader collective scale.

A person's education and training may be related in complex ways to experiences on the job and in the economic marketplace more broadly. Much of that fundamental connection can be understood in terms of a simplified school-to-work pipeline. As suggested earlier, an individual's level of education emerges as a major predictor of his or her ability to secure steady employment. Exhibit 5.1 shows that the chances of working full time and year-round rise as an individual completes progressively higher levels of schooling. The greatest incremental boost, however, comes upon earning a high school diploma, which raises the steady-employment rate by 15 percentage points.

5.1. The Education-Economy Connection



SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

All else being equal, more-educated workers will tend to enjoy greater earnings, simply because they work more steadily than those with less schooling. As is often the case, however, all else is not equal; there is an important multiplier effect to consider. Beyond the benefit of greater general employability, higher educational attainment levels also carry the additional advantage of higher wage rates. This further amplifies the benefits of steady employment, with respect to earnings. Owing to these dual factors, annual income rapidly increases as individuals acquire more education (Exhibit 5.1). As would be expected, poverty displays the opposite relationship, with more education strongly associated with lower rates of poverty.

While this characterization can help to explicate the basic connections between education and several key economic outcomes, it does admittedly oversimplify some rather complicated processes. Whether a person is considered to be living in poverty, for instance, is a determination based on several factors—income levels (combined for all wage-earners within a household), family size (number of household members), and family composition (the configuration of adults and dependent children, and their relationships to one another). The preceding discussion also focuses on broad classifications of educational attainment without addressing the issue of educational quality, which is likely to be quite variable and to play some role in determining economic success. In addition, the benefits of earning a diploma are clear and often dramatic when compared with the outcomes of high school dropouts. But even greater economic returns are linked to further education and training past high school. Consequently, it should be noted that earnings, employment prospects, and other labor force experiences of those who terminate their education with a high school diploma lag far behind those who continue their schooling and earn a college degree.

Educational Attainment Patterns

Exhibit 5.2 provides an overview of the educational landscape in each of the nation's largest metropolitan areas, reporting the distribution of the prime working-age population according to educational attainment levels. The analyses in this section are not restricted to individuals in the labor force, a strategy intended to offer a more consistent and comprehensive assessment of the economic impact of finishing high school. Our frame of reference here can be thought of as the larger pool of potential workers upon which employers in a particular region may draw to staff their businesses.

Across these major metropolitan areas as a whole, 13 percent of adults have not completed high school, while about one-quarter have earned a high school diploma as their most advanced level of education. Another 28 percent of adults have acquired at least some college education (which includes earning an associate's degree); and one-third of the population holds bachelor's, graduate, or professional degrees. Educational attainment in the largest metropolitan regions tracks very closely to overall national patterns. However, the major urban areas have slightly higher proportions of adults with more advanced levels of schooling, relative to national benchmarks.

Among the leading metropolitan centers, the percent of adults with less than a completed high school education varies dramatically, from 6 percent in Minneapolis, Minn., (less than half the national average) to 26 percent in Fresno, Calif., (twice the national average). Educational attainment displays a distinct geographical patterning. All but one of the 12 metropolitan areas with a higher-than-average percentages of nongraduates can be found in the West and Southwest regions of the country. Three-quarters of those located in California and Texas alone. Miami, where 14 percent of adults have not completed high school, stands as the lone geographical exception. The patterns observed here may reflect regional concentrations of recent-immigrant populations and the limited schooling these groups may have acquired in their native countries (and after immigrating). It is worth noting that immigrants may be past mandatory school-going age at the time they entered the United States. Such adult immigrants may be unlikely to enroll in American schools.

Again, it is important to recall that the point of reference for our analysis is the residential adult population that represents the potential workforce for a particular locality. Due to patterns of international immigration and internal migration within the United States, the performance of local school systems (e.g., graduation rate) is not the only factor determining the educational levels of the local populace. However, it is certainly one of the most critical and policy-relevant factors.

5.2. Adult Educational Attainment Levels in the Nation's Largest Metropolitan Areas

Major Metro Areas (ranked by percent less than high school)	Percent of Adult Population (Age 25-64) by Highest Level of Education Completed					
	Less than high school	High school graduate	Some college (incl. AA degree)	Bachelor's degree	Advanced degree	Rank (by percent less than high school)
Fresno	25.9%	26.3%	29.4%	12.8%	5.6%	1
El Paso	24.8	25.5	28.7	14.2	6.9	2
Los Angeles/Long Beach	21.3	23.3	26.8	19.2	9.4	3
Houston	19.8	25.4	26.6	18.9	9.4	4
Dallas/Fort Worth/Arlington	17.1	23.6	28.5	21.4	9.5	5
Las Vegas	16.3	32.3	31.4	13.6	6.5	6
Phoenix/Mesa	16.3	24.9	31.9	17.9	9.0	6
San Antonio	15.9	29.2	30.3	16.7	8.0	8
Miami	14.3	29.0	26.8	19.5	10.4	9
Austin	14.1	21.2	26.1	25.4	13.3	10
San Diego	13.8	19.9	31.2	22.7	12.4	11
San Jose	13.4	17.3	24.2	26.0	19.1	12
Memphis	12.9	30.3	31.2	16.9	8.7	13
New York City	12.5	27.2	22.6	22.5	15.2	14
Albuquerque	12.4	27.0	31.2	17.3	12.2	15
Chicago	12.3	25.6	27.2	22.0	13.0	16
Nashville	12.2	29.3	27.0	21.3	10.1	17
Sacramento	11.9	23.0	33.7	21.3	10.0	18
San Francisco/Oakland	11.9	19.2	26.9	26.4	15.6	18
Tulsa	11.9	29.8	32.6	17.2	8.5	18
Charlotte	11.8	25.6	28.6	23.8	10.2	21
Atlanta	11.6	25.8	26.2	24.4	12.0	22
Louisville	11.3	31.4	30.4	16.9	10.1	23
Oklahoma City	10.9	27.2	32.6	19.9	9.4	24
Tucson	10.9	25.0	34.2	18.4	11.5	24
Denver	10.7	22.0	28.6	25.2	13.5	26
Indianapolis	10.6	29.6	28.1	21.4	10.5	27
Portland, Ore.	10.5	24.4	32.7	20.9	11.5	28
Baltimore	10.4	27.0	26.8	20.7	15.2	29
Wichita	10.4	29.8	32.2	18.6	9.1	29
Detroit	10.0	30.0	31.5	17.4	11.2	31
Philadelphia	10.0	31.8	25.5	20.2	12.6	31
Jacksonville	9.7	31.3	31.9	18.9	8.3	33
Milwaukee	9.7	29.5	28.2	21.0	11.5	33
Virginia Beach	9.3	29.3	33.4	18.2	9.8	35
Washington, D.C.	9.1	21.5	22.8	25.2	21.4	36
Cleveland	8.8	32.9	28.9	18.2	11.1	37
Columbus	8.8	28.7	27.2	23.6	11.8	37
Kansas City, Mo.	8.4	27.1	29.5	23.2	11.9	39
Boston	8.1	25.1	24.6	25.0	17.2	40
Omaha	7.6	26.7	33.1	22.1	10.5	41
Seattle	7.3	22.3	34.0	23.6	12.7	42
Colorado Springs	7.0	23.6	34.4	22.8	12.3	43
Honolulu	6.8	26.6	33.8	21.5	11.3	44
Minneapolis	6.2	24.8	32.0	25.7	11.2	45
Major Metro Avg.	13.0%	25.8%	27.5%	21.4%	12.3%	
National Avg.	13.0%	29.1%	28.5%	18.9%	10.5%	

SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

Generally speaking, a community can work to bolster the educational level of its workforce through two major strategies. First, it might home-grow well-educated workers by producing more and better-prepared graduates through the local schools. Those graduates would also need to be retained in the local vicinity as they enter the workforce. Second, a community might seek to attract desirable, highly educated workers from elsewhere to fill unmet needs in the local economy. In reality, most areas probably attempt to strike a balance between such strategies.

Education Promotes Steady Employment

In the nation's largest metropolitan areas, the rate at which individuals are steadily employed consistently increases as they acquire higher levels of education (Exhibit 5.3). Forty percent of nongraduates are employed full time and year-round, compared with 52 percent of high school graduates. The steady-employment rate rises to 61 percent among those who have attained a four-year college degree. Statistics for the entire nation display a largely comparable pattern.

Another way to quantify the value of a diploma is in terms of the incremental economic advantage it offers. On average in the largest metropolitan areas, earning a diploma can be expected to increase the chances of steady employment by 30 percent. The diploma advantage as well as the steady-employment rate for nongraduates both differ considerably among these metropolitan regions. In top-ranked Austin, Texas, half of those without a high school education hold down steady jobs. But at the other extreme, only 25 percent of nongraduates are engaged in steady employment in Cleveland.

A closer examination of these results reveals a much higher degree of variation in the employment outcomes of nongraduates than is found for high school graduates (or other more-educated segments of the population). As a result, it is the particularly poor employment prospects for non-graduates in certain regions that tend to drive the diploma-advantage rankings. In other words, the significant incremental benefits of a diploma are, to a large extent, a product of the extreme detriment associated with failing to complete high school. A similar pattern will emerge for other economic outcomes examined later in this report.

Education Accelerates Earnings

The next analysis assesses the impact of education on an individual's income. As Exhibit 5.4 shows, the median income level in our set of major metropolitan centers exceeds the national average for all adults and for each educational strata (although particularly so among the most highly educated). This pattern may reflect a combination of distinctive labor market conditions and occupational structures in such locations. For instance, higher costs of living in certain metropolitan areas may be reflected in wage premiums that employers must offer to compete for talented workers. Such regional cost dynamics may also factor into variations in overall wage levels across metropolitan the areas in different parts of the country.

For the nation's largest metropolitan regions, median income for an individual without a completed high school education is slightly more than $14,000 annually. That figure is significantly lower than the $24,000 earned by graduates in the same areas. Median income levels for nongraduates rise as high as $19,522 in Las Vegas and falls as low as $7,728 in El Paso, Texas. A closer examination of these results shows that deflated income levels are found for all workers in the El Paso area, rather than being limited to the least-educated segment of the workforce. It will be recalled that El Paso also ranked low in terms of both the educational level of the population and rates of steady employment. That metropolitan area excepted, the distributions of income for high school graduates and nongraduates are almost entirely non-overlapping. In fact, San Antonio, Texas, is the only other area in which the earnings of graduates falls within the range of the income levels observed for nongraduates in the nation's major metropolitan regions.

As in the earlier analyses of employment outcomes, the rate of educational returns for income can likewise be summarized using a single diploma-advantage metric. In this case, income of graduates is expressed as a percentage of the median income for adults who have not completed high school. Our analyses produce a diploma-advantage score of 171 percent for the nation's largest metropolitan areas. In other words, earning a diploma would be expected to incrementally raise an individual's annual income by about 71 percent on average (a difference of more than $10,000 annually in absolute terms).

5.3. Economic Returns to Education—Steady Employment in the Nation's Largest Metropolitan Areas

Major Metro Area (ranked by economic advantage of diploma)	Steady Employment Rate by Educational Attainment Level							Diploma Advantage	
	Less than high school	High school graduate	Some college	Bachelor's degree	Advanced degree	Average (all education levels)	Rank (by less-than-high-school employment)	Graduate vs. Nongraduate Percentage increase in employment	Rank (by diploma advantage)
Cleveland	25.0%	51.1%	56.0%	61.7%	59.3%	53.0%	45	104.4%	1
Columbus	26.6	52.7	58.5	65.3	62.4	56.1	43	98.1	2
Kansas City, Mo.	32.6	54.0	59.6	64.7	61.8	57.2	37	65.6	3
Oklahoma City	31.3	51.6	58.2	60.1	64.4	54.4	39	64.9	4
Detroit	25.2	41.1	49.7	58.1	56.7	46.9	44	63.1	5
Louisville	31.2	50.2	57.8	62.0	60.0	53.3	40	60.9	6
Philadelphia	31.7	51.0	58.2	62.3	61.0	54.5	38	60.9	7
Milwaukee	33.0	53.0	57.2	63.8	61.5	55.5	36	60.6	8
Nashville	37.1	56.2	59.9	66.5	61.0	57.6	26	51.5	9
Baltimore	35.2	53.2	61.4	63.3	64.0	57.2	33	51.1	10
Colorado Springs	29.7	44.4	55.7	58.5	64.3	52.9	41	49.5	11
El Paso	29.3	43.8	54.6	59.0	61.1	46.6	42	49.5	12
Jacksonville	35.8	53.5	59.6	59.3	57.2	55.2	31	49.4	13
Memphis	33.7	50.3	60.6	64.1	61.0	54.7	34	49.3	14
Virginia Beach	37.7	55.9	61.9	60.8	61.2	57.6	24	48.3	15
Boston	35.9	53.1	55.3	61.8	60.8	55.7	30	47.9	16
Tulsa	37.1	54.0	56.9	61.7	61.4	54.9	26	45.6	17
Albuquerque	35.4	50.2	54.4	53.9	58.1	51.3	32	41.8	18
Atlanta	38.2	53.5	58.1	62.8	64.9	56.6	23	40.1	19
Fresno	33.3	46.5	50.9	56.8	49.4	45.9	35	39.6	20
Charlotte	40.3	56.2	58.2	60.2	60.5	56.3	15	39.5	21
Omaha	41.4	56.8	64.1	66.5	65.1	61.1	13	37.2	22
Indianapolis	38.9	53.2	60.4	64.5	59.5	56.8	19	36.8	23
New York City	38.9	53.1	56.4	62.1	60.4	55.2	19	36.5	24
Wichita	44.6	60.6	60.4	60.0	60.5	58.8	7	35.9	25
San Antonio	37.4	50.6	56.7	61.1	63.8	53.2	25	35.3	26
Minneapolis	39.3	53.1	59.4	63.4	62.6	58.0	18	35.1	27
Seattle	38.8	51.9	52.5	55.8	56.3	52.6	21	33.8	28
Sacramento	36.0	47.9	52.7	57.5	59.1	51.2	29	33.1	29
Honolulu	39.7	51.9	58.6	60.8	65.8	56.8	16	30.7	30
Miami	43.5	56.3	58.8	63.0	62.4	57.1	9	29.4	31
San Francisco/Oakland	38.5	49.0	51.7	56.6	58.1	51.9	22	27.3	32
Tucson	36.9	46.8	53.6	53.3	54.4	50.1	28	26.8	33
San Jose	39.4	49.9	51.7	54.0	61.1	52.1	17	26.6	34
Denver	44.1	55.4	55.8	60.5	58.0	55.9	8	25.6	35
Washington, D.C.	45.9	56.9	61.3	64.2	68.0	61.1	5	24.0	36
Chicago	41.2	50.9	56.7	61.8	62.2	55.1	14	23.5	37
San Diego	42.6	52.1	54.3	58.2	57.4	53.5	12	22.3	38
Los Angeles/Long Beach	43.4	52.1	52.9	57.4	58.1	52.1	11	20.0	39
Dallas/Fort Worth/Arlington	46.7	55.9	58.8	63.0	66.1	57.7	3	19.7	40
Houston	46.3	54.9	59.0	60.5	63.7	56.2	4	18.6	41
Phoenix/Mesa	45.3	53.3	56.6	61.0	56.6	54.7	6	17.7	42
Portland, Ore.	43.5	49.5	51.5	55.3	50.8	50.9	9	13.8	43
Las Vegas	48.1	53.6	54.5	59.6	61.1	54.3	2	11.4	44
Austin	50.2	55.5	59.4	60.5	62.0	57.9	1	10.6	45
Major Metro Avg.	40.2%	52.3%	56.2%	60.8%	60.9%	54.7%		30.1%	
National Avg.	36.9%	51.5%	55.9%	60.3%	59.4%	53.3%		39.6%	

NOTE: Rankings may be based on unrounded statistics.

SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

5.4. Economic Returns to Education—Increased Income in the Nation's Largest Metropolitan Areas

Major Metro Area (ranked by economic advantage of diploma)	Median Annual Income (2007 dollars) by Educational Attainment Level							Diploma Advantage	
	Less than high school	High school graduate	Some college	Bachelor's degree	Advanced degree	Average (all education levels)	Rank (by less-than-high-school income)	Graduate income as percent of less-than-high-school income	Rank (by diploma advantage)
Columbus	$10,981	$25,420	$32,537	$47,047	$64,058	$32,537	41	231%	1
Cleveland	10,676	24,403	30,504	44,739	61,007	30,504	42	229	2
Louisville	11,185	24,403	30,504	40,671	55,090	28,877	39	218	3
Philadelphia	12,201	26,233	35,588	50,839	69,142	34,977	34	215	4
Baltimore	13,218	27,453	38,333	50,839	69,142	37,316	27	208	5
Detroit	10,371	21,353	30,504	46,772	68,125	30,504	44	206	6
Kansas City, Mo.	12,710	25,420	31,520	44,759	56,940	32,537	32	200	7
Milwaukee	12,710	25,420	32,537	48,094	61,007	32,537	32	200	7
Boston	15,252	29,385	35,588	50,839	66,091	38,638	9	193	9
New York City	13,218	25,420	34,876	50,839	71,175	34,774	27	192	10
Oklahoma City	10,656	20,346	27,657	38,638	50,839	26,640	43	191	11
El Paso	7,728	14,743	23,996	40,671	52,873	17,743	45	191	12
Minneapolis	15,150	28,470	36,604	47,586	67,108	37,418	14	188	13
Albuquerque	12,201	22,369	28,470	38,638	54,906	27,453	34	183	14
Memphis	11,185	20,336	29,487	43,722	58,465	27,352	39	182	15
Nashville	14,235	25,420	30,504	45,450	54,906	30,504	23	179	16
Colorado Springs	13,218	23,386	30,504	40,722	59,990	30,504	27	177	17
Tulsa	12,201	21,353	27,962	40,671	50,839	26,436	34	175	18
Virginia Beach	14,337	24,932	33,554	41,688	61,007	31,520	22	174	19
Jacksonville	14,235	24,403	32,537	43,722	53,941	30,504	23	171	20
Sacramento	14,947	25,420	35,588	50,839	66,091	33,757	18	170	21
San Francisco/Oakland	14,947	25,420	36,635	52,873	79,106	38,638	18	170	21
Omaha	15,048	25,420	30,504	40,671	53,890	31,520	17	169	23
Indianapolis	14,845	25,054	32,537	45,755	61,007	31,520	20	169	24
Fresno	12,201	20,336	26,436	46,162	64,261	22,573	34	167	25
Denver	15,252	25,420	35,588	46,772	61,007	35,588	9	167	26
Seattle	17,285	28,470	34,571	50,026	64,363	36,604	3	165	27
San Jose	15,659	25,420	36,604	55,923	91,511	39,655	8	162	28
Phoenix/Mesa	15,150	24,403	32,537	46,569	61,007	30,504	14	161	29
San Diego	15,150	24,403	34,571	50,636	70,158	33,554	14	161	29
Chicago	15,252	24,403	33,147	48,806	66,091	32,537	9	160	31
Dallas/Fort Worth/Arlington	15,252	24,403	32,537	47,789	63,041	30,504	9	160	31
Atlanta	14,642	23,386	32,537	46,264	61,516	32,537	21	160	33
Washington, D.C.	18,302	29,080	40,671	55,923	84,393	43,722	2	159	34
Miami	12,812	20,336	30,504	40,671	56,940	26,436	31	159	35
Houston	14,235	22,369	30,504	48,806	66,142	28,470	23	157	36
Los Angeles/Long Beach	14,235	22,369	32,130	48,806	70,158	28,267	23	157	36
Tucson	13,218	20,336	26,436	35,588	49,823	25,521	27	154	38
Charlotte	16,167	24,403	30,504	44,739	61,007	30,504	7	151	39
San Antonio	12,201	18,302	28,877	42,705	61,007	25,420	34	150	40
Honolulu	17,285	25,420	32,537	43,722	58,872	33,656	3	147	41
Wichita	17,285	25,420	30,504	40,671	57,957	30,504	3	147	41
Portland, Ore.	15,252	22,369	29,995	41,485	52,873	29,487	9	147	43
Austin	16,574	23,691	30,504	45,755	61,007	30,809	6	143	44
Las Vegas	19,522	26,436	32,537	40,671	58,974	30,504	1	135	45
Major Metro Avg.	$14,235	$24,403	$32,537	$48,602	$66,315	$31,927		171%	
National Avg.	$13,218	$23,386	$30,504	$44,739	$61,007	$29,894		177%	

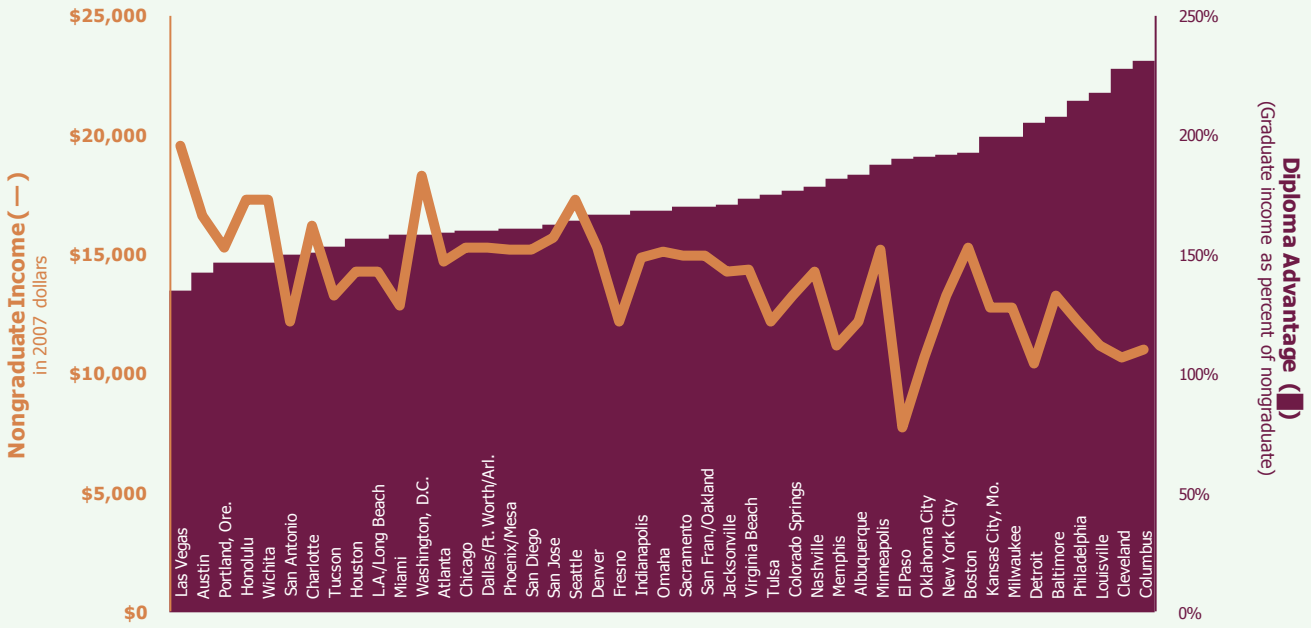
NOTE: Rankings may be based on unrounded statistics.

SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

In the eight metropolitan regions with diploma advantage scores of 200 percent or higher, graduates earn at least double what nongraduates earn. Columbus, Ohio, and Cleveland rank at the top of the nation, both with scores around 230 percent. The least incremental advantage to earning a diploma can be found in Las Vegas. However, this is a relative distinction; even there, graduates still earn 35 percent more than nongraduates.

Much as was the case for employment outcomes, we find that the incremental benefits of finishing high school tend to be strongest in areas where earnings for nongraduates are especially depressed. Exhibit 5.5 illustrates this relationship. In this figure, metropolitan areas are arrayed by their diploma-advantage score (represented as bars that rise steadily from left to right). The graph also includes an overlay line that charts the median income of nongraduates for each metropolitan area. Although there are some fluctuations, the overall trajectory of the trend is downward. In other words, the advantage of earning a diploma generally rises as the income level of the typical nongraduate declines.

5.5. Diploma Advantage Rises as Nongraduate Income Falls



SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

Education Reduces Poverty

Our final economic analysis examines the influence of educational attainment on the likelihood that an individual will live in an impoverished home environment. As discussed previously, poverty status is a designation that takes into account both a household's family structure (i.e., size and composition) and its collective income level. Because poverty is related directly to income and indirectly to employment status (which is a major determinant of earnings), we can anticipate that the relationship between education and poverty will largely reflect the patterns observed in earlier portions of this study.

This is, in fact, the case. As reported in Exhibit 5.6, nearly one-quarter (24 percent) of adult nongraduates live in households where the income level fall below the poverty line. Poverty rates for those with low levels of educational attainment vary considerably across the major metropolitan centers of the country, with values as high as 44 percent (El Paso, Texas) and as low as 16 percent (Honolulu). On average, earning a diploma cuts a person's chances of experiencing poverty in half, with the poverty rate falling from 24 percent for nongraduates to 12 percent for those with a high school diploma. However, benefits can be even more dramatic in some areas. In Minneapolis, Minn., and its environs, for example, the poverty rate among high school graduates is just one-third of that found for nongraduates. That amounts to a 65 percent reduction in poverty, as expressed in the diploma advantage scores of Exhibit 5.6.

But even in places where the returns to a diploma are more modest, in relative terms, it is important to recognize that the benefits remain substantial. In each of the nation's major metropolitan areas, graduating from high school reduces the likelihood of living in poverty by at least a third. Of course, as was also the case for other economic outcomes, acquiring education and training beyond high school offers further substantial benefits. Among adults who have earned at least a four-year college degree, poverty rates fall below 4 percent.

Prior analyses have demonstrated the clear and significant economic advantages that come with earning a high school diploma. In virtually every respect measurable, graduates are better positioned to lead successful adult lives than are nongraduates. Similarly, it is worth noting that the strength of a regional economy, more generally, is built on the educational foundations of its population. Just as a strong educational background is a key ingredient of employability for an individual, a well-educated workforce can attract business and industry to an area and help to keep it there.

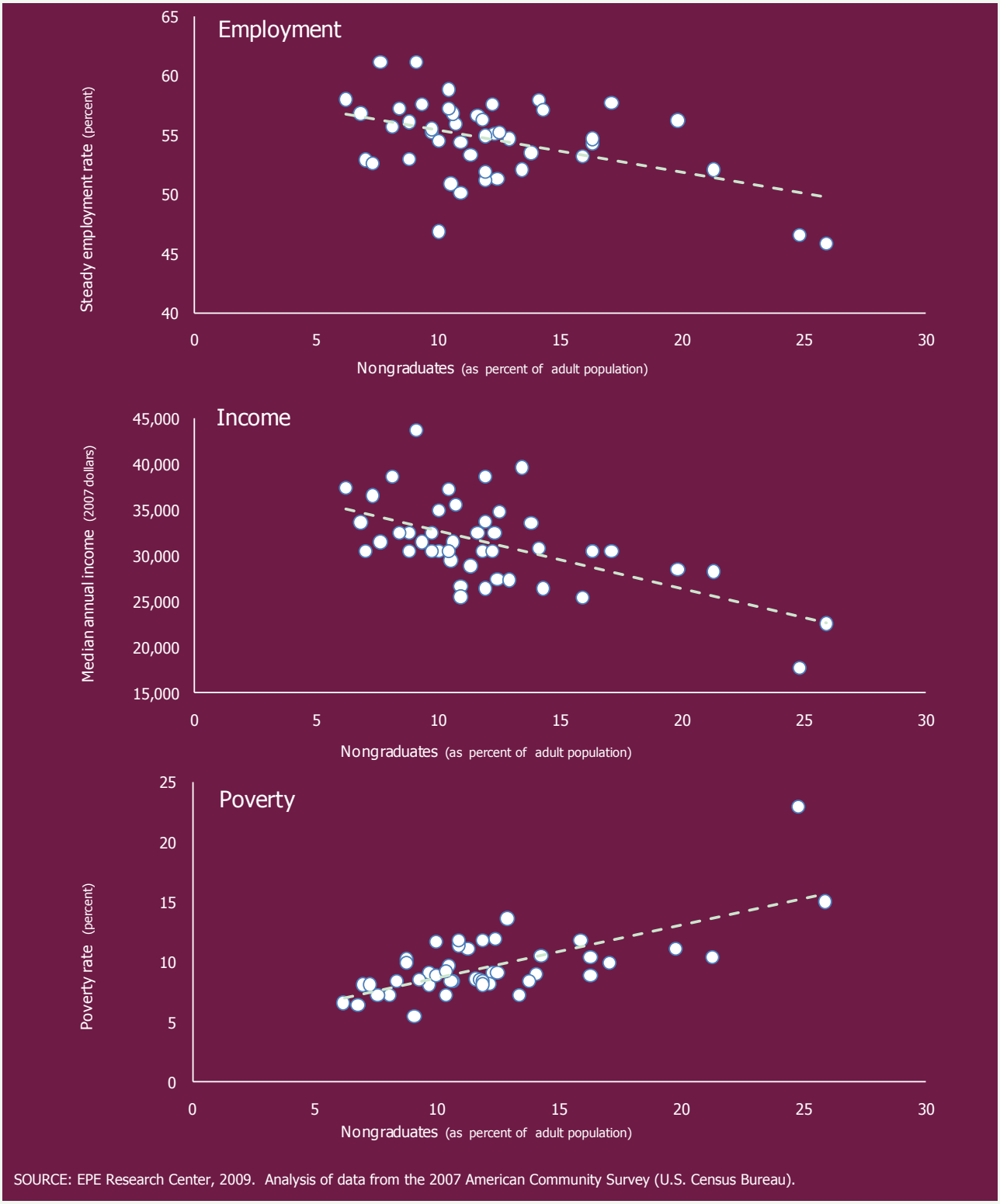
Exhibit 5.7 shows in clear and simple terms the overall connection between education and the broader economy for the regions that are home to the nation's largest cities. This series of scatter plots graphs a metropolitan area's nongraduation rate (horizontal axis) against several key economic indicators (vertical axis). As a metropolitan area's educational base weakens—measured here as an increasing share of the population with less than a high school education—we find a steady deterioration of an area's economic vitality. The same pattern can be found across multiple economic benchmarks: employment, income, and poverty. The costs associated with poor rates of high school completion are indisputable. But in a similar vein, the potential benefits associated with putting a diploma in the hands of more adults are also high, whether measured by the material improvements in an individual's quality of life or the economic and social health of the larger community. For every 5 percentage-point reduction in the nongraduation rate, we would anticipate: boosting the steady-employment rate by nearly 2 percentage points; increasing income levels by $3,200 per year; and lowering the poverty rate by 2.2 points.

5.6. Economic Returns to Education—Reduction in Poverty in the Nation's Largest Metropolitan Areas

Major Metro Area (ranked by economic advantage of diploma)	Poverty Rate by Educational Attainment Level							Diploma Advantage	
	Less than high school	High school graduate	Some college	Bachelor's degree	Advanced degree	Average (all education levels)	Rank (by less-than-high-school income)	Graduate vs. Nongraduate Percentage reduction in poverty	Rank (by diploma advantage)
Minneapolis	27.2%	9.4%	5.6%	2.6%	1.5%	6.6%	18	65.4%	1
Colorado Springs	30.3	10.9	7.2	3.5	2.0	8.1	6	64.0	2
Philadelphia	29.9	10.8	6.7	2.9	2.2	8.9	8	63.9	3
Kansas City, Mo.	28.6	10.7	7.0	3.1	2.7	8.4	11	62.6	4
Wichita	28.5	10.7	7.5	3.4	0.7	9.2	12	62.5	5
Omaha	26.4	10.3	6.2	1.7	1.4	7.2	19	61.0	6
Cleveland	31.1	12.6	8.8	3.2	2.3	10.2	4	59.5	7
Boston	23.5	9.8	6.4	3.5	2.6	7.2	27	58.3	8
Baltimore	22.8	9.8	5.1	3.4	1.5	7.2	33	57.0	9
Washington, D.C.	18.6	8.1	4.6	2.5	1.8	5.5	43	56.5	10
Detroit	33.5	14.6	9.6	3.6	3.0	11.7	3	56.4	11
Tulsa	29.9	13.1	9.9	5.2	2.6	11.8	8	56.2	12
Indianapolis	24.6	10.8	7.0	2.6	1.4	8.4	24	56.1	13
Columbus	30.6	13.5	7.3	4.2	4.1	9.9	5	55.9	14
Atlanta	24.6	11.1	7.2	3.1	2.3	8.6	24	54.9	15
New York City	25.1	11.4	7.4	3.8	2.4	9.1	21	54.6	16
Jacksonville	22.8	10.4	5.8	3.0	2.8	8.1	33	54.4	17
San Diego	22.9	10.5	6.7	3.4	2.7	8.4	30	54.1	18
Nashville	22.2	10.3	6.3	3.3	1.0	8.2	36	53.6	19
Virginia Beach	25.3	11.8	6.1	2.7	2.0	8.5	20	53.4	20
Milwaukee	27.6	12.9	7.3	2.0	1.9	9.1	16	53.3	21
Oklahoma City	30.1	14.3	8.5	6.2	3.4	11.4	7	52.5	22
Denver	24.4	11.9	7.0	3.5	2.8	8.4	26	51.2	23
Phoenix/Mesa	25.0	12.4	7.0	4.3	3.3	10.4	22	50.4	24
Sacramento	22.9	11.4	6.6	3.3	2.0	8.4	30	50.2	25
Louisville	28.7	14.4	8.4	3.7	2.4	11.1	10	49.8	26
Albuquerque	28.5	14.4	9.6	5.9	4.5	11.9	12	49.5	27
Austin	23.4	11.9	7.3	3.1	3.6	9.0	28	49.1	28
Houston	24.9	12.8	7.6	3.7	3.2	11.1	23	48.6	29
Fresno	28.1	14.5	11.2	3.4	5.1	15.0	14	48.4	30
Seattle	21.6	11.2	8.0	4.1	3.0	8.1	38	48.1	31
Dallas/Fort Worth/Arlington	23.3	12.1	7.3	3.5	2.7	9.9	29	48.1	32
Las Vegas	18.1	9.4	6.5	4.8	3.3	8.9	44	48.1	33
San Antonio	27.4	14.3	9.2	2.7	2.0	11.8	17	47.8	34
Charlotte	22.3	11.7	6.5	3.3	2.4	8.5	35	47.5	35
Honolulu	15.9	8.4	5.3	4.7	2.8	6.4	45	47.2	36
Chicago	22.9	12.4	7.3	3.6	2.6	9.1	30	45.9	37
San Jose	19.3	10.6	6.4	3.4	2.2	7.2	42	45.1	38
Tucson	28.1	15.8	9.9	5.7	3.9	11.8	14	43.8	39
El Paso	44.2	25.0	13.8	9.7	5.2	22.9	1	43.4	40
Memphis	34.1	19.5	9.0	3.4	1.3	13.6	2	42.8	41
Los Angeles/Long Beach	20.7	12.0	7.3	4.8	3.3	10.4	39	42.0	42
San Francisco/Oakland	20.2	12.2	6.9	3.9	3.4	8.1	41	39.6	43
Portland, Ore.	20.5	13.2	8.7	5.1	3.8	9.7	40	35.6	44
Miami	21.7	14.1	7.9	5.0	3.2	10.5	37	35.0	45
Major Metro Avg.	24.0%	11.9%	7.3%	3.7%	2.6%	9.2%		50.4%	
National Avg.	26.0%	12.2%	7.9%	3.8%	2.7%	10.1%		53.1%	

NOTE: Rankings may be based on unrounded statistics.
SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

5.7. Strength of the Economy Rests on Well-Educated Workforce in the Nation's Largest Metropolitan Areas



SOURCE: EPE Research Center, 2009. Analysis of data from the 2007 American Community Survey (U.S. Census Bureau).

Conclusion

This report shows that the American public education system continues to struggle through the challenge of significantly raising high school graduation rates. We have also found that perhaps nowhere is this challenge greater than in the school systems serving the nation's very largest cities.

Many observers would agree that the current state of the nation's high schools—three out of every 10 students failing to earn a diploma—represents a legitimate reason for concern. But by the same token, the fact that barely half of students educated in America's largest cities are finishing high school should truly raise an alarm among those who care about the future of public education and the nation as a whole. The much higher rates of high school completion found among their suburban counterparts, who may literally live and attend school right around the corner, shines a particularly harsh light on the deep undercurrents of inequity that have beleaguered American public education for generations.

Despite these troubling conditions, we also find clear evidence that the nation's largest cities are in fact gaining significant traction on the dropout problem and, to paraphrase the title of this report, starting to close the graduation gap. Over the past decade, the 50 largest cities in the country have markedly improved their graduation rates. In doing so, these urban centers have helped to narrow the divide that separates themselves from their suburban neighbors. This trend is particularly heartening because some of the greatest successes can be found in communities that were home to the nation's lowest rates of high school completion and largest urban-suburban disparities just 10 years ago.

Few of America's largest cities can currently point to graduation rates with which we, as a nation, should be content. Nevertheless, it is important to identify and acknowledge progress when it is being made and to further investigate those school systems showing the most significant improvements so that we can learn from their examples. Each community—whether a major metropolis, suburb, small town, or rural area—has been shaped by a distinct set of historical, social, educational, and economic conditions. The same could be said of the schools that serve these communities. Even so, much can be gained by looking beyond apparent differences to seek out innovative solutions to common challenges.

At no point in our nation's recent history has the economy found itself in such dire straits. And at no point has the critical role of a quality education been more evident. For individuals facing a worsening economy and weakening labor market, a strong education may offer the best protection for weathering the economic storm. Likewise, it is also clear that the brunt of the crisis will be borne by those with the least education—those without a high school diploma.

For the nation at large and for its leading metropolitan centers, a well-educated workforce represents the foundation of the broader economy, with the public schools standing as a key economic pillar. Communities whose citizens have engaged in more extensive, higher-quality, and more relevant education will find themselves better positioned to adapt to a rapidly changing economic environment, to protect core industries and interests from competition, and to seize upon new opportunities for growth when they arise. Such communities, in turn, will be better able to navigate a course to a more secure and prosperous future.

As this report and other research have shown, two very different worlds exist within American public schooling. In one, earning a diploma is the norm, something expected of every student; in the other, it is not. The stakes attached to graduating have never been higher. This applies equally to the individual dropouts facing diminished prospects for advancement and to the nation whose prosperity and place in the world in the years to come depends on the next generation's ability to rise to the challenges that await. What this means is that efforts to end the graduation crisis must be serious and relentless. And they must proceed hand-in-hand with a fundamental commitment to create a public education system where earning a meaningful diploma that prepares youth for college and career is the expectation for all students and where dropping out becomes a rare exception.

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ABOUT

Christopher B. Swanson, Ph. D is the director of the EPE Research Center, a division of Editorial Projects in Education. In this capacity, he oversees a staff of full-time researchers who produce independent studies and contribute research and analysis to *Education Week*, the newspaper's special reports, and other EPE publications. Much of Swanson's work has focused on the implementation of state and federal education policy, including the persistent challenges associated with accurately measuring high school graduation rates. Swanson's body of research on those topics has been widely profiled in the national and regional media and has provided policy leaders with important insights into critical educational issues. He is also the author of recent EPE Research Center reports entitled *Special Education in America* and *Perspectives on a Population: English-Language Learners in American Schools.*

The EPE Research Center, the research arm of Editorial Projects in Education, houses a full-time staff of researchers, analysts, and librarians that conducts annual policy surveys, collects data, and performs analyses that appear in the *Quality Counts*, *Technology Counts*, and *Diplomas Count* annual reports. The center also produces independent research reports, contributes original data and analysis to special coverage in *Education Week* and edweek.org, contributes to the monthly *Research Connections* e-Newsletter, hosts live Web chats on research topics, and maintains the Education Counts and EdWeek Maps online data resources.

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