



High school dropout and graduation rates in the Central Region



Institute of Education Sciences

U.S. Department of Education



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July 2008

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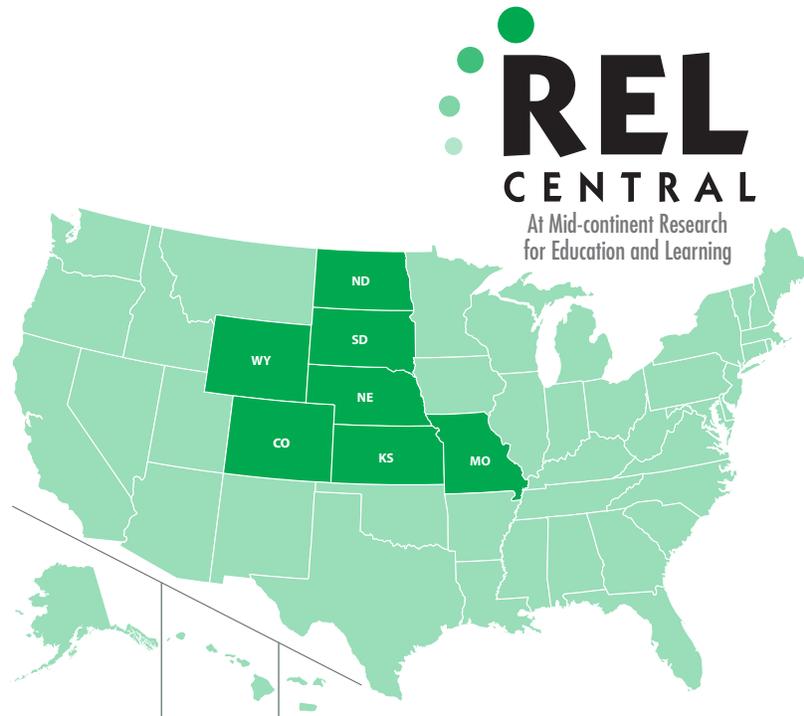
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High school dropout and graduation rates in the Central Region

This report presents comprehensive and detailed information on grades 7–12 dropout rates and on high school graduation rates in the Central Region. Dropout and graduation rates are presented for the region as a whole and for each state in the region, by gender, race/ethnicity, locale, and grade. The rates provide a comprehensive reference for state and local educators and policymakers on the student subgroups most at risk of not completing high school.

Failure to finish high school is troubling because individuals without a high school diploma have lower incomes and higher rates of unemployment and are more likely to be incarcerated than individuals with a high school diploma or its equivalent, such as a General Education Development certificate (U.S. Census Bureau, 2003; U.S. Department of Education, National Center for Education Statistics, 2007; Harlow, 2003). Almost 5 percent of high school students nationwide dropped out of school between October 2003 and October 2004, while approximately 75 percent of students who enrolled in grade 9 in 2000 graduated with a high school diploma in 2004 (Laird, DeBell, & Chapman, 2006).

In a recent survey principals and curriculum coordinators in the Central Region identified

improving high school students' outcomes as a critical issue (Gallup Organization, 2007). In the same survey middle school educators gave improving middle school student outcomes the highest rating ("very high priority"). Even more important, at a meeting of the region's chief state school officers the need for support for improving high schools was identified as critical. The state school officers requested assistance in examining their states' statistics on student dropout and high school graduation.

The current study was conducted to meet this regional need through a comprehensive and detailed analysis of dropout rates and high school graduation rates in the region. The results presented in this report provide much-needed assistance to the region, as few such data are currently available. For example, national reports of dropout and high school completion rates do not provide rates at state levels disaggregated by gender, race/ethnicity, locale, or grade. Further, the dropout and high school completion literature includes few, if any, reports that directly address states in the Central Region. Finally, few, if any, data are available on dropout rates among grades 7–9 students in the region.

This study used data from the Common Core of Data from the National Center for Education Statistics to calculate dropout rates and

high school graduation rates. Dropout rates tell educators how many students left school in a single year. These rates are particularly useful for estimating the percentage of students leaving school in specific grades and for identifying grade levels in which dropping out is a greater risk. Graduation rates provide information about the percentage of students who complete high school on time and with a regular diploma and help educators understand progress toward an important indicator of adequate yearly progress under the No Child Left Behind Act.

In the Central Region states, dropout rates for public school students in grades 7–12 ranged from 1.4 percent to 4.0 percent. Within the region as a whole and its individual states dropout rates were 0.3–0.9 percentage point higher for male students than for female students. Dropout rates varied greatly across ethnic groups, particularly when such rates are compared across states. The highest dropout rates by ethnic group exceeded 8 percent for American Indian/Alaska Native students in South Dakota and for Hispanic students and American Indian/Alaska Native students in Wyoming. Dropout tended to be higher in urban areas and lower in rural locales. In

grades 7 and 8 dropout rates were typically less than 0.5 percent, both in the region as a whole and in its individual states. Dropout rates were higher in grades 9–12—ranging from 1.1 percent to 7.5 percent—and generally increased by grade level, with some exceptions.

On-time graduation rates (defined as earning a regular diploma in four years) ranged from approximately 76 percent to almost 85 percent in the Central Region states. In the region as a whole and in each of the seven states a higher percentage of female students graduated on time than did male students. Graduation rates varied markedly across ethnic groups in each state. The highest graduation rate was more than 95 percent (Asian/Pacific Islander students in Missouri and Nebraska); the lowest was approximately 32 percent for Black students in South Dakota. For students in large urban areas graduation rates were approximately 72 percent in Colorado and Nebraska and 58 percent in Kansas and Missouri. Graduation rates for students from rural areas ranged from 74 percent to more than 92 percent across states in the region.

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This report presents comprehensive and detailed information on grades 7–12 dropout rates and on high school graduation rates in the Central Region. Dropout and graduation rates are presented for the region as a whole and for each state in the region, by gender, race/ethnicity, locale, and grade. The rates provide a comprehensive reference for state and local educators and policymakers on the student subgroups most at risk of not completing high school.

WHY THIS STUDY?

In a recent survey principals and curriculum coordinators in the Central Region identified improving high school students' outcomes as a critical issue (Gallup Organization, 2007). In the same survey middle school educators gave improving middle school student outcomes the highest possible rating ("very high priority"). Even more important, at a meeting of the chief state school officers in the region's seven states (Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming) the need for support for improving high schools was discussed and identified as critical by all present. The state school officers requested assistance in examining their states' statistics on losing students during their adolescent years. Further, the stakes attached to dropout and high school graduation have increased since passage of the No Child Left Behind (NCLB) Act of 2001, which requires schools to track and report student on-time graduation as a component of adequate yearly progress. But state school officers lacked the data required for a careful analysis of the issues necessary to develop a plan for improvement. For that, they needed access to data disaggregated by grade and gender, beginning at grade 7, when students start dropping out of school.

This report aims to address these expressed needs by providing comprehensive and detailed analyses of dropout and high school graduation in the Central Region. The analyses conducted in this study yield dropout rates and high school graduation rates for the region as a whole, each state in the region, and subgroups of students in the region and in each state using the most recent data available when this study was conducted, that for the 2001/02 school year. The results tables in appendix C serve as a comprehensive reference for state and local educators and policymakers interested in dropout and high school graduation for student subgroups (such as gender and race/ethnicity) within their states and within specific settings, such as large cities or rural areas.

Dropout and high school graduation in context

Dropout is a national as well as a regional issue. Between October 2003 and October 2004 approximately 4.7 percent of the nation's high school students dropped out of school (Laird, DeBell, & Chapman, 2006).¹ Dropout rates were higher for male students (5.1 percent), Black students (5.7 percent), Hispanic students (8.9 percent; Laird et al., 2006), and American Indian/Alaska Native students² (15 percent; U.S. Department of Education, National Center for Education Statistics, 2005a). Approximately 75 percent of the nation's students who enrolled in grade 9 in 2000/01 graduated with a high school diploma in 2004 (Laird et al., 2006). As of October 2004, 86.8 percent of the nation's youth ages 18–24 had earned a high school diploma or its equivalent, such as a General Education Development (GED) certificate (Laird et al., 2006). Nationwide, graduation rates were lower for Hispanic students (69.8 percent) and Black students (83.4 percent) and higher for White students (91.7 percent) and Asian/Pacific Islander students (95.1 percent; Laird et al., 2006).

These rates are troubling because students without a high school diploma have lower incomes and higher rates of unemployment and are more likely to be incarcerated than individuals who possess a high school diploma or its equivalent (such as a GED certificate). In 2006 the median income of men ages 25 and older working full time was \$22,710 for those with less than a grade 9 education, \$27,650 for those with some high school

education, and \$37,030 for those who had completed high school (U.S. Department of Education, National Center for Education Statistics, 2007a). In 2006, 59 percent of individuals ages 25–64 who had not completed high school were employed in the U.S. labor force, whereas 73 percent of individuals with a high school diploma or equivalent were employed (U.S. Department of Education, National Center for Education Statistics,

2007b). Approximately 75 percent of state prison inmates are high school dropouts, and 59 percent of federal prison inmates do not have a high school diploma or GED certificate (Harlow, 2003).

The negative consequences of dropping out of school and failing to earn a high school diploma suggest cause for concern for the Central Region, which serves large numbers of Hispanic and American Indian/Alaska Native students, two subgroups with dropout rates that are higher than the national average. For example, Hispanic students born outside the United States have dropout rates more than double the rate of second- and third-generation Hispanic students (Laird et al., 2006), and 48 percent of Central Region Hispanics fall into this group (U.S. Census Bureau, 2003). In 2004 Hispanics made up 26.2 percent of the students enrolled in public elementary and secondary schools in Colorado, compared with 19.2 percent nationally (U.S. Department of Education, National Center for Education Statistics, 2005c). Further, both North Dakota and South Dakota have relatively large percentages of American Indian students enrolled in their public elementary and secondary schools—8.3 percent and 10.9 percent—again higher than the national percentage of 1.2 (U.S. Department of Education, National Center for Education Statistics, 2005c).

Little data available regarding dropout and high school graduation in the Central Region

Despite the importance of graduating from high school and the need in the Central Region to address high school outcomes, there have been no studies that provide detailed data on dropout and high school graduation in the region, its states, or in urban or rural settings within the states. This report directly addresses identified Central Region needs by providing much greater detail on school dropout and high school graduation in the Central Region than do other reports.

National reports typically go no further than to provide rates by race/ethnicity for entire states, or by urban and rural areas within an entire

Despite the importance of graduating from high school and the need in the Central Region to address high school outcomes, there have been no studies that provide detailed data on dropout and high school graduation in the region or its states

region, such as the Midwest (see, for example, Sable & Gaviola, 2007).³ Other reports present dropout and high school graduation rates by gender or race/ethnicity for an entire state but do not provide more detail, such as dropout rates for Hispanic students in grade 11 or graduation rates for American Indian/Alaska Native male students (see, for example, Greene & Forster, 2003; Greene & Winters, 2002; Laird et al., 2006). Finally, few, if any, data are available on the dropout rates among grade 7, 8, and 9 students in the Central Region.

The national literature does not provide detailed or disaggregated information on dropout and high school graduation rates for rural students by state or by ethnicity. This information is of critical concern for Central Region educators, as the Central Region has a larger percentage of rural students and schools than does any other region. Approximately 27 percent of the region's public school students are enrolled in rural schools, compared with 19 percent nationally (Johnson & Strange, 2005). In addition, six of the seven states in the Central Region have higher percentages of public schools in rural areas than the national average of 30 percent. Only Colorado has a lower percentage, at 29 percent (Johnson & Strange, 2005). In five of the Central Region's seven states the percentages of public schools located in rural areas are among the highest in the nation: South Dakota (78 percent), North Dakota (72 percent), Nebraska (60 percent), Wyoming (53 percent), and Kansas (50 percent; Johnson & Strange, 2005).

Calculating dropout and high school graduation rates for the Central Region

To fill the gap in the literature and address the priority in the region for improving middle school and high school outcomes, comprehensive and fine-grained analyses of dropout and high school graduation rates in 2001/02 were conducted for the Central Region as a whole and for each of its states. The goal of this study was to answer the following research questions:

What were the dropout rates in 2001/02 for grades 7–12 and the high school graduation rates:

- For the Central Region as a whole?
- For each of the seven states in the region (Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming)?
- For subgroups (gender, race/ethnicity, locale, and grade) within the region and in each of its states?

To answer these questions and broaden the value of the report, data on two measures—*event dropout rate* and *averaged freshman graduation rates*—are presented. (See box 1 for definitions.) Event dropout rates tell educators how many students left school in a single year—useful for estimating the percentage of students in particular grades who have left school and for identifying student subgroups that may be at greater risk of dropping out. But the event dropout rate does not

BOX 1

Key terms

Event dropout rate is an estimate of the percentage of public high school students who left high school between the beginning of one school year and the beginning of the next without earning a high school diploma or its equivalent (Chapman & Hoffman, 2007; Laird et al., 2006). The event dropout rate for a given school year is

calculated by dividing the dropouts in the target grade or grades by the total number of students enrolled in the target grade or grades on October 1 of the same school year. (See appendix A for a technical definition of the event dropout rate used in this study.)

Averaged freshman graduation rate is an estimate of the proportion of public high school freshmen who graduate from high school on time, with a

regular high school diploma (Seastrom et al., 2006b). The freshman graduation rate calculated for this report is the sum of high school diplomas awarded at the end of the 2001/02 school year divided by the average of the number of students enrolled in grade 9 in the fall of 1998 and the number of student enrolled in grade 10 in the fall of 1999. (See appendix A for a technical definition of the averaged freshman graduation rate used in this study.)

provide information on the percentage of students in a particular graduating class who actually finish high school on time and earn a diploma. The averaged freshman graduation rate does. Earning a diploma is an important outcome that relates directly to the regional need for improving high school outcomes. The averaged freshman graduation rate also can help educators understand progress toward adequate yearly progress under the NCLB Act.

To create the clearest possible picture of dropout in the Central Region, this report includes dropout data for grades 7–9, which are not typically included in dropout analyses. No published data are available on the dropout rates among students in grades 7–9 in the Central Region. This report calculates event dropout rates for grades 7–12 to address the critical regional need for improving middle school and high school outcomes. The report aims to offer greater detail than any previous report on school dropout and high school graduation in the Central Region.

Although the total dropout rates are calculated for grades 7–12 combined, they are also calculated for each grade separately. The focus on grades 7–12 allows rates for each grade to be disaggregated by gender, race/ethnicity, and locale to provide a detailed description of grade by grade dropout from middle school through the end of high school, for the Central Region and for each state (see appendix C). This level of disaggregation permits the presentation of such detailed results as the dropout rate for grade 8 male students in the Central Region or the dropout rate for grade 10 Black students in Nebraska. This approach provides specific, disaggregated information about dropout rates in each grade in a way that the typically presented grades 10–12 combined dropout rate does not.

The comprehensive and fine-grained analyses in this report were achieved by calculating event dropout rates and averaged freshman graduation rates disaggregated by gender, race/ethnicity (White, Black, Hispanic, American Indian/Alaska

BOX 2

Definitions of locale

Event dropout rates and averaged freshman graduation rates were disaggregated by locale to provide detailed information on the dropout rates and high school graduation rates for student living in different settings. Event dropout rates and averaged freshman graduation rates were disaggregated using the National Center for Education Statistics (NCES) locale codes assigned to each local education agency included in the Common Core of Data. The following definitions are from *Documentation to the NCES Common Core Data Public Elementary/Secondary School Universe Surveys: School Year 2001–02* (Sable, Naum, & Thomas, 2004 p. A-1).

Large city. A central city of a consolidated metropolitan statistical area (CMSA) or metropolitan statistical area (MSA), with the city having a population greater than or equal to 250,000.

Mid-size city. A central city of a CMSA or MSA, with the city having a population less than 250,000.

Urban fringe of large city. Any incorporated place, Census designated place, or nonplace territory within a CMSA or MSA of a large city and defined as urban by the Census Bureau.

Urban fringe of mid-size city. Any incorporated place, Census designated place, or nonplace territory within a CMSA or MSA of a mid-size city and defined as urban by the Census Bureau.

Large town. An incorporated place or Census designated place with a population greater than or equal to 25,000 and located outside a CMSA or MSA.

Small town. An incorporated place or Census designated place with a population less than 25,000 and greater than 2,500 and located outside a CMSA or MSA.

Rural, outside MSA. Any incorporated place, Census designated place, or nonplace territory designated as rural by the Census Bureau.

Rural, inside MSA. Any incorporated place, Census designated place, or nonplace territory within a CMSA or MSA of a large or mid-size city and defined as rural by the Census Bureau.

Native, and Asian/Pacific Islander), locale (box 2), and for event dropout rates, grade. Disaggregating event dropout rates by grade from middle school through high school allows for the calculation and examination of a rate as specific, for example, as the event dropout rate for American Indian/Alaska Native students in grade 8.

This study calculates and reports event dropout rates in October 2001 and averaged freshman graduation rates for the class of 2002 using data from the Common Core of Data (CCD) from the National Center for Education Statistics (NCES) for all Central Region states except Colorado. Colorado is excluded from the CCD because Colorado's definition of a dropout is inconsistent with that of the NCES. (See appendix A for a complete description of the data used in this study.) The data for this report do not include private school students, and so the results are relevant only for public school students.

Colorado enrollment and dropout data were obtained directly from the Colorado Department of Education. The event dropout rates for Colorado were calculated using the same method as that used for the other Central Region states. Colorado's graduation rates, however, which were also obtained directly from the Colorado Department of Education, were calculated using a different measure than that used for the other Central Region states. The Colorado Department of Education calculates and reports a graduation rate for each graduating class. The rate is calculated by dividing the number of graduates by the membership base. The membership base is derived from the end-of-year count of 8th graders four years earlier and adjusted for the number of students who have transferred into or out of the district during the years covering grades 9 through 12 (Colorado Department of Education, 2002b). For this reason Colorado graduation rates are not included in the averaged freshman graduation rates for the Central Region as a whole. (See appendix A for a complete discussion of the Colorado data and calculation methods.)

Event dropout rates and averaged freshman graduation rates are estimates and become less stable and more susceptible to fluctuations as the enrollment numbers used to calculate the rates get smaller. (See appendix A for a description of the limitations of the data.) Because the averaged freshman graduation rate requires data from multiple school years, it is particularly sensitive to small enrollment numbers, and so changes in the enrollment data for any year used in the analysis can have a relatively large effect on the rate. Thus, caution is advised in interpreting rates calculated from small numbers of students (fewer than 200), since rates based on small numbers may not be reliable. And estimates based on small numbers of students should not be used to identify groups at special risk.

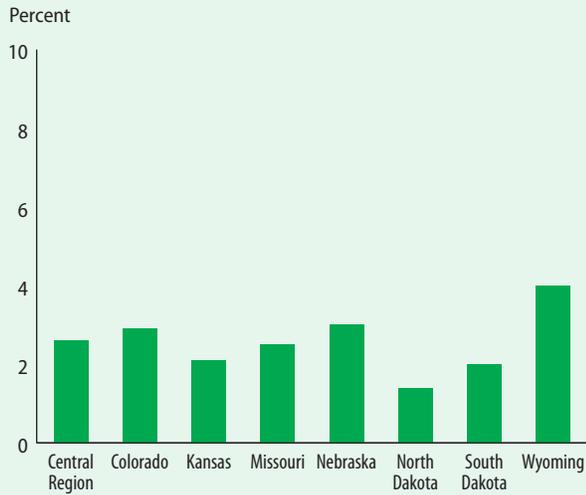
SUMMARY OF EVENT DROPOUT RATES

This section describes the event dropout rates in the Central Region as a whole, in each of the seven states in the Central Region, and for specific student subgroups (by gender, race/ethnicity, locale, and grade) within the region and in each of its states (see box 3 for a comparison with the national rate). The event dropout rates in this report are estimates of the numbers and percentages of public school students in grades 7–12 who left school between October 2000 and October 2001 without earning a high school diploma or its equivalent. Event dropout rates are displayed in figures 1–3, tables 1 and 2, and appendix tables C1–C40.

The event dropout rate for the region as a whole was 2.6 percent in October 2001, and state total event dropout rates for October 2001 ranged from 1.4 percent in North Dakota to 4.0 percent in Wyoming (figure 1).

The event dropout rate for the region as a whole was 2.6 percent in October 2001, and state total event dropout rates for October 2001 ranged from 1.4 percent to 4.0 percent

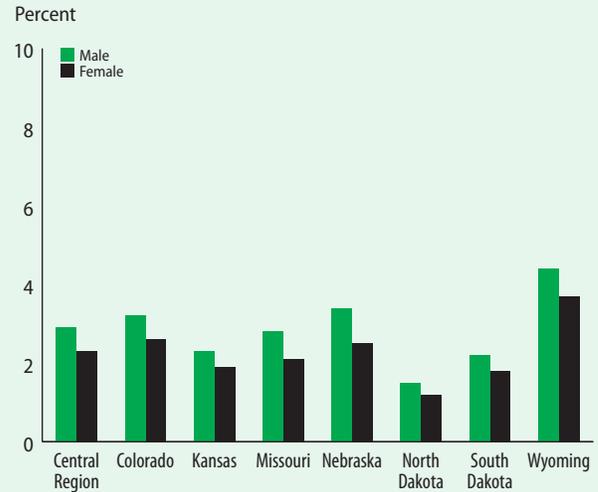
FIGURE 1

Central Region event dropout rates for public school students in grades 7–12, October 2001

Note: The event dropout rate estimates the percentage of public school students in grades 7–12 who left school between October of one school year and October of the next without earning a high school diploma or its equivalent. Event dropout rates are from tables C1, C6, C11, C16, C21, C26, C31, and C36.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

FIGURE 2

Central Region and state event dropout rates by gender for public school students in grades 7–12, October 2001

Note: The event dropout rate estimates the percentage of public school students in grades 7–12 who left school between October of one school year and October of the next without earning a high school diploma or its equivalent. Event dropout rates are from tables C1, C6, C11, C16, C21, C26, C31, and C36.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

Dropout rates for male and female students

Event dropout rates were higher for male students than for female students in the Central Region and in each state (figure 2). This is consistent with the most recent national data (Sable & Gaviola, 2007). Differences between the male and female rates ranged from 0.3 percentage point in North Dakota to 0.9 percentage point in Nebraska.

Dropout rates for racial/ethnic groups vary greatly across the region

Event dropout rates for specific racial/ethnic groups vary considerably from state to state and within states as well (figure 3). The lowest dropout rate was for White students in North Dakota (1.0 percent), and the highest was 8.5 percent for American Indian/Alaska Native students in South Dakota and Wyoming. Nebraska's Hispanic, Black, and American Indian/Alaska native students had some of the highest dropout rates in the region,

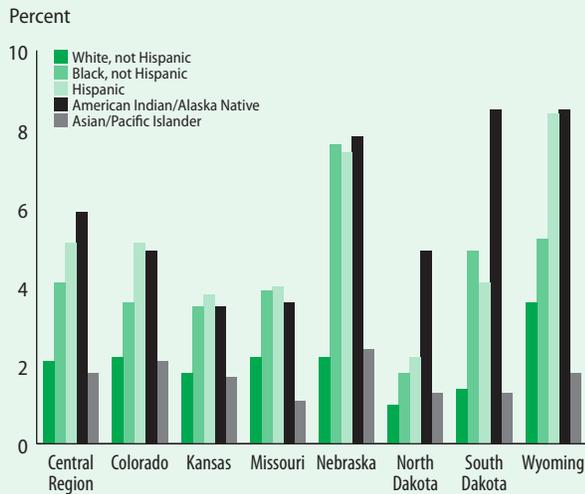
as did Hispanic students in Wyoming. Higher dropout rates for Hispanic students, lower dropout rates for Black students, and lower rates still for White and Asian/Pacific Islander students are a trend that has been continuing in the United States for several decades (Laird et al., 2006, p. 15).

Urban areas experienced higher event dropout rates than did rural locales

Dropout rates were calculated for different locales in the region (see box 2). In general, dropout rates were higher in urban locales and lower in rural ones (table 1). In the region as a whole, for example, dropout rates ranged from 4.5 percent in large cities to 1.7 percent in rural areas outside metropolitan statistical areas and 1.4 percent in rural areas inside metropolitan statistical areas (see appendix C, table C1). Wyoming had the highest dropout rates in the three most rural locales of small towns, rural areas inside metropolitan statistical areas,

FIGURE 3

Central Region and state event dropout rates by racial/ethnic groups for public school students in grades 7–12, October 2001



Note: The event dropout rate estimates the percentage of public school students in grades 7–12 who left school between October of one school year and October of the next without earning a high school diploma or its equivalent. Event dropout rates are from tables C1, C6, C11, C16, C21, C26, C31, and C36.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

and rural areas outside metropolitan statistical areas, whereas North Dakota and South Dakota had some of the lowest dropout rates in these rural locales.

Event dropout rates were higher in the higher grades

Dropout rates were calculated separately for grades 7–12 for male and female students, each racial/ethnic group, and each locale for the region as a whole and for each state to provide a detailed analysis by grade of dropout from middle school through high school in the Central Region (table 2). In the region as a whole the event dropout rate jumped from 0.4 percent in grade 8 to 2.6 percent in grade 9. A large increase in the dropout rate from grade 8 to grade 9 was a consistent trend across the states and student subgroups. The highest event dropout rate for the region was for grade 11, at 4.4 percent.

Disaggregated results by grade for the Central Region can be found in appendix table C4. Data in table C4 reinforce the finding that event dropout rates increase greatly from grade 8 to grade 9. The increase is particularly high for American Indian

TABLE 1

Central Region and state event dropout rates by locale for public school students in grades 7–12, October 2001 (percent)

Region and state	Large city	Mid-size city	Urban fringe of large city	Urban fringe of mid-size city	Large town	Small town	Rural, outside metropolitan statistical areas	Rural, inside metropolitan statistical areas
Central Region	4.6	3.2	2.0	2.1	2.5	2.4	1.7	1.5
Colorado	3.8	3.6	2.1	1.4	na	3.1	1.7	1.5
Kansas	5.9	2.3	1.3	2.4	2.4	1.9	1.2	1.5
Missouri	4.5	3.0	2.2	2.5	2.4	2.5	2.1	1.7
Nebraska	5.1	4.3	1.9	3.8	2.8	2.3	1.9	0.8
North Dakota	na	1.5	na	1.7	1.6	1.3	1.3	0.7
South Dakota	na	2.6	na	1.7	na	1.9	1.8	0.6
Wyoming	na	6.4	na	na	4.3	3.4	2.2	2.4

na is not applicable.

Note: The event dropout rate estimates the percentage of public school students in grades 7–12 who left school between October of one school year and October of the next without earning a high school diploma or its equivalent. Numbers might not sum to total because data on gender or ethnicity were missing for some students. Event dropout rates are from tables C1, C6, C11, C16, C21, C26, C31, and C36.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

TABLE 2

Central Region and state event dropout rates by grade for public school students in grades 7–12, October 2001 (percent)

Region and state	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Central Region	0.3	0.4	2.6	3.7	4.4	4.2
Colorado	0.4	0.4	3.2	4.2	4.8	3.8
Kansas	0.1	0.1	1.4	2.9	3.7	4.6
Missouri	0.2	0.4	2.5	3.8	4.5	4.1
Nebraska	0.4	0.5	3.6	3.8	4.7	4.7
North Dakota	<0.1	<0.1	1.1	2.1	2.2	2.6
South Dakota	0.3	0.3	2.0	2.7	3.0	3.7
Wyoming	0.4	0.4	2.5	6.1	7.5	7.3

Note: The event dropout rate estimates the percentage of public school students in grades 7–12 who left school between October of one school year and October of the next without earning a high school diploma or its equivalent. Numbers might not sum to total because data on gender or ethnicity were missing for some students. Event dropout rates are from tables C1, C6, C11, C16, C21, C26, C31, and C36.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

BOX 3

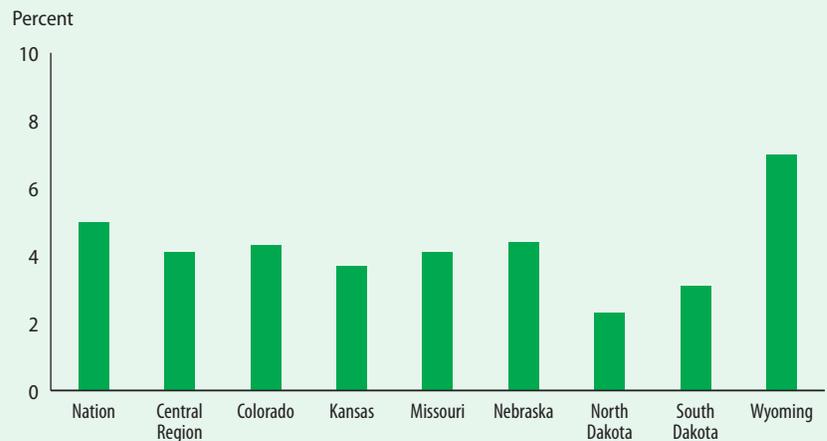
A national barometer for the Central Region

The National Center for Education Statistics (NCES) calculates national event dropout rates for youth ages 15–24 who have dropped out of grades 10–12 using the Current Population Survey (CPS; Laird et al., 2006). The CPS, a nationally representative sample of the civilian, noninstitutionalized population of the United States, is the only source of data on national dropout rates (Laird et al., 2006). It covers public and private school students who drop out of grades 10–12.

To provide some reference to better understand dropout in the Central Region, the Common Core of Data was used to calculate dropout rates for the Central Region and each state for public school students in grades 10–12 who left school between October 2000 and October 2001 without earning a high school diploma or its

equivalent (U.S. Department of Education, National Center for Education Statistics, 2002a,b). The dropout rates for the Central Region do not include private school students, whereas the national dropout rate from the CPS does. Caution is thus warranted when comparing these rates.

Dropout rates were lower than the national rate for the region as a whole and for all of its states except Wyoming (see figure). Dropout rates for grades 10–12 were lowest in North Dakota and South Dakota. Dropout rates were fairly similar to the national rate in Colorado, Kansas, Missouri, and Nebraska.

Central Region and state event dropout rates for public school students in grades 10–12 compared with national rate, October 2001

Source: National rate, Laird et al. (2006, p. 18); Central Region and state rates, authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

students, going from 1.0 percent in grade 8 to 7.1 percent in grade 9. The increase from grade 8 to grade 9 is also large for Black and Hispanic students. Event dropout rates peaked in grade 11 for Hispanic and American Indian students and in grade 12 for Black students. The event dropout rate for large cities increased from 1.2 percent in grade 8 to 6.3 percent in grade 9 and peaked at 7.3 percent in grade 12. The event dropout rates for each state disaggregated by grade can be found in tables C9, C14, C19, C24, C29, C34, and C39.

SUMMARY OF GRADUATION RATES

This section describes graduation rates for the Central Region as a whole, for each Central Region state, and for specific student subgroups in each state. The averaged freshman graduation rates in this report estimate the proportion of public high school freshmen who graduated from high school on time at the end of the summer 2002 with a

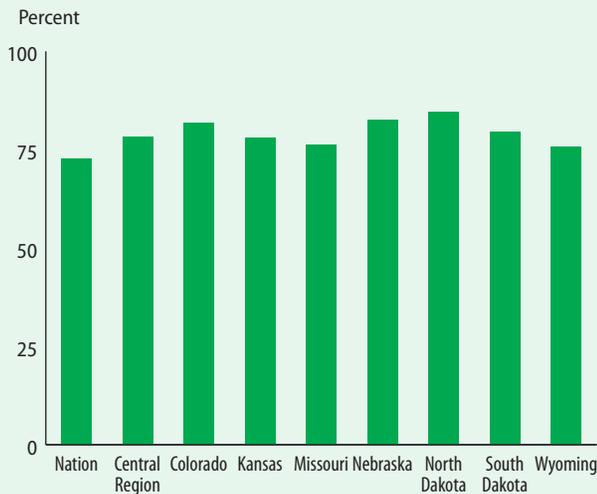
regular high school diploma. Averaged freshman graduation rates for the Central Region as a whole do not include Colorado because Colorado's method for calculating graduation rates differs from that of the other states (see appendix A for full details). Averaged freshman graduation rates are displayed in figures 4–6, table 3, and appendix tables C41–C69.

The regional averaged freshman graduation rate was 78.3 percent. In the Central Region states rates ranged from 75.7 percent in Wyoming to 84.6 percent in North Dakota (figure 4). By comparison, the averaged freshman graduation rate for the nation as a whole was 72.6 percent for the 2001/02 school year (Laird, Lew et al., 2006, p 38).

Female students were more likely to graduate from high school on time

Across the region a higher percentage of female students graduated from high school on time than

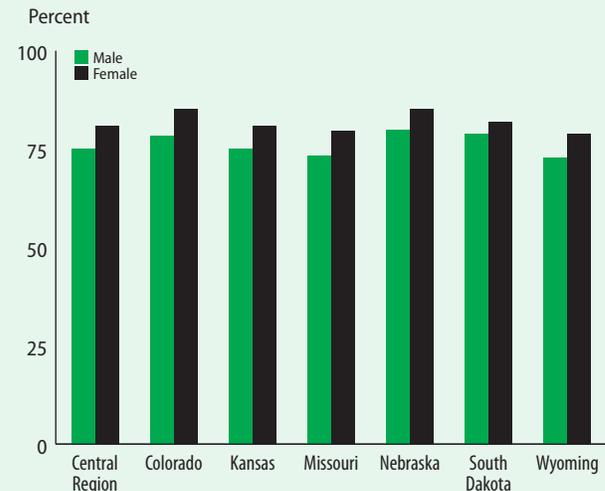
FIGURE 4
Central Region and state grades 9 and 10 averaged freshman graduation rates for class of 2002



Note: Colorado's graduation rate is calculated using longitudinal data, rather than the grades 9 and 10 averaged freshman graduation rate; Central Region averaged freshman graduation rate does not include Colorado. Regional and state averaged freshman graduation rates are from tables C41, C45, C49, C53, C57, C61, C62, and C66.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

FIGURE 5
Central Region and state grades 9 and 10 averaged freshman graduation rates by gender for the class of 2002



Note: Colorado's graduation rate is calculated using longitudinal data, rather than the grades 9 and 10 averaged freshman graduation rate; Central Region averaged freshman graduation rate does not include Colorado. Disaggregated data by gender were not available for North Dakota; see appendix A for details. Averaged freshman graduation rates are from tables C41, C45, C49, C53, C57, C62, and C66.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

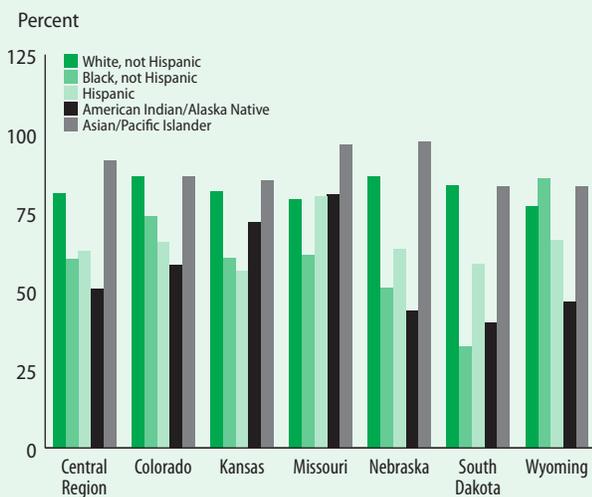
did male students (figure 5). This trend mirrors national estimates that show higher high school graduation rates for female than male students for every year since 1976 (Laird et al. 2006, p. 29). Data were not available to calculate disaggregated averaged freshman graduation rates for North Dakota (see appendix A).

Graduation rates varied widely for racial and ethnic groups

By student race and ethnicity averaged freshman graduation rates in the region as a whole varied from 50.5 percent for American Indian/Alaska Native students to 91.3 percent for Asian/Pacific Islander students (figure 6). Graduation rates among Black (60.1 percent), American

Indian/Alaska Native (50.5 percent), and Hispanic (62.5 percent) students were approximately 20–30 percentage points lower than the rate of their White (81 percent) classmates. The lowest graduation rate among the seven states was 32.4 percent for Black students in South Dakota—far below any of the state total averaged freshman graduation rates and the regional averaged freshman graduation rate for Black students of 60.1 percent—but the South Dakota rate for Black students is based on only about 100 students and so may fluctuate widely from year to year. The highest graduation rate observed was 97.4 percent among Asian/Pacific Islander students in Nebraska. They or White students generally had the highest graduation rates in each state, although the Asian/Pacific Islander graduation rates in South Dakota and Wyoming were based on fewer than 100 students each.

FIGURE 6
Central Region and state grades 9 and 10 averaged freshman graduation rates by race/ethnicity for the class of 2002



Note: Colorado's graduation rate is calculated using longitudinal data, rather than grades 9 and 10 averaged freshman graduation rate; Central Region averaged freshman graduation rate does not include Colorado. Disaggregated data for race/ethnicity were not available for North Dakota; see appendix A for details. Graduation rates for the following subgroups were based on 200 students or fewer, so should be interpreted with caution: American Indian/Alaska Native students in Missouri; Blacks, Hispanic, and Asian/Pacific Islander students in South Dakota; Black, American Indian/Alaska Native, and Asian/Pacific Islander students in Wyoming. Averaged freshman graduation rates are from tables C41, C45, C49, C53, C57, C62, and C66.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

While the pattern of high school graduation rates among racial and ethnic groups was similar across the states, there were some exceptions. For example, Hispanic students had the lowest graduation rate in Kansas, whereas Black students had the highest graduation rate in Wyoming, but this rate was based on approximately 50 students.

These data on the graduation rates of ethnic groups suggest that many students in these groups are at risk of not completing high school in four years. The detailed results presented in this report illustrate such general observations and suggest student subgroups that may be at greater risk of not completing high school on time.

Graduation rates were lower in urban than in rural areas

Mirroring the findings for the dropout rate, averaged freshman graduation rates were lower in large cities and higher in rural locations. For example, among students attending high schools in the region, 62.7 percent in large cities graduated on time by the summer of 2002, compared with 78.1 percent in small towns, 83.5 percent in rural areas outside metropolitan statistical areas, and 82.6 percent in rural areas inside metropolitan

TABLE 3

Central Region and state averaged freshman graduation rates by locale for public school students for the class of 2002 (percent)

Region and state	Large city	Mid-size city	Large urban fringe of large city	Urban fringe of mid-size city	Large town	Small town	Rural, outside metropolitan statistical areas	Rural, inside metropolitan statistical areas
Central Region	62.7	77.3	81.2	78.6	77.3	78.1	83.5	82.6
Colorado	72.4	78.0	84.7	74.0	na	82.4	92.6	74.0
Kansas	58.4	72.4	84.9	90.5	75.1	75.2	85.4	86.8
Missouri	58.4	77.9	79.7	77.3	75.1	77.6	79.2	79.0
Nebraska	72.5	76.5	86.5	83.8	77.4	85.3	90.2	90.9
North Dakota	na	85.9	na	81.4	84.7	87.3	85.1	74.0
South Dakota	na	83.9	na	76.6	na	74.1	82.0	89.7
Wyoming	na	72.0	na	na	85.2	74.7	82.1	81.7

na is not applicable.

Note: Colorado's graduation rate is calculated using longitudinal data, rather than grades 9 and 10 averaged freshman graduation rate. Colorado is excluded from the regional graduation estimates. Graduation rates for the following subgroups were based on 200 students or fewer and should be interpreted with caution: urban fringe of mid-size city in Kansas and rural inside metropolitan statistical area in Wyoming. Averaged freshman graduation rates are from tables C41, C45, C49, C53, C57, C61, C63, and C69.

Source: Authors' analysis based on data from U.S. Department of Education, National Center for Education Statistics (2002a,b) and the Colorado Department of Education (2002a).

statistical areas, the region's three most rural locales (table 3). The averaged freshman graduation rate in large cities was 58.4 percent in both Kansas and Missouri, compared with 72.4 percent in Colorado and 72.5 percent in Nebraska. North Dakota, South Dakota, and Wyoming lack cities large enough to be classified as large cities by the NCES system. Across all the states the lowest averaged freshman graduation rate for mid-size cities was in Wyoming, 72.0 percent. The highest rate in all locations was 92.6 percent for students in rural locales outside metropolitan statistical areas in Colorado.

example, how do locale and school size relate to the dropout and graduation rates of students from different subgroups? Are students of a particular subgroup at greater risk of dropping out if they enroll in an urban or a rural school? Does the percentage of minority students in a school play a role in the dropout rate of minority students? Are low-performing students more likely to drop out of high-performing schools?

This study of dropout and graduation rates used the most recent data available at the time of the study. Further research could examine dropout trends in the region to shed more light on whether rates are increasing or decreasing among different student subgroups or in different locales. Research might also explore the role of exit exams in dropout, including the raising or lowering of performance standards on the exams. Another area for potential exploration might be the relationship between dropout and other education policies, such as course requirements.

CONCLUSION

The report provides a detailed description of dropout and graduation rates in the Central Region. Future research could explore the relationships between district and school characteristics and between dropout and graduation rates. For

NOTES

1. Although more recent national dropout rates are available from the National Center for Education Statistics (NCES), the 2004 data have been retained to reduce the time spread between the national data and the state and regional data. The most recent NCES dropout report is available at <http://nces.ed.gov/pubs2007/dropout05/>.
2. The American Indian/Alaska Native dropout rate is the status dropout rate from 2003. Dropout rates for American Indians/Alaska Natives are typically not calculated. For example, NCES reports, such as Laird et al. (2006), do not report American Indian/Alaska Native graduation rates separately.
3. NCES reports dropout rates by region, but its regions and their states do not correspond to those of the regional educational laboratories.