



# **Montana Statewide Dropout and Graduate Report**

**2004-05 School Year**



Office of Public Instruction  
Linda McCulloch, Superintendent  
PO Box 202501  
Helena, MT 59620-2501

**April 2006**

# Table of Contents

Introduction.....	2
The Impact of Dropping Out of School .....	2
Graduate and Dropout Definitions and Data Collections .....	2
Graduate Definitions and Data Collection.....	3
Dropout Definitions and Data Collection .....	3
Data Limitations.....	3
Analysis of Montana 2004-05 Dropout Rates .....	4
Calculating a Dropout Rate.....	4
2004-05 Montana Statewide Dropout Rate Summary .....	4
Distribution of Dropout Rates.....	6
Dropout Rates for Disaggregated Student Populations .....	7
Dropout Rates by Gender.....	7
Dropout Rates by Race/Ethnicity Categories .....	9
Analysis of Dropout Rates by Race/Ethnicity Categories .....	9
A Closer Look at American Indian Dropout Rates.....	11
Dropout Rate by Size of District.....	14
Other Types of Dropout Indicators— The Completion and Graduation Rate.....	16
The Completion Rate .....	16
The Adequate Yearly Progress Graduation Rate .....	17
What Helps Prevent Students from Dropping Out?.....	18
Final Note.....	19
References.....	20
Additional Dropout Resources on the Web .....	20

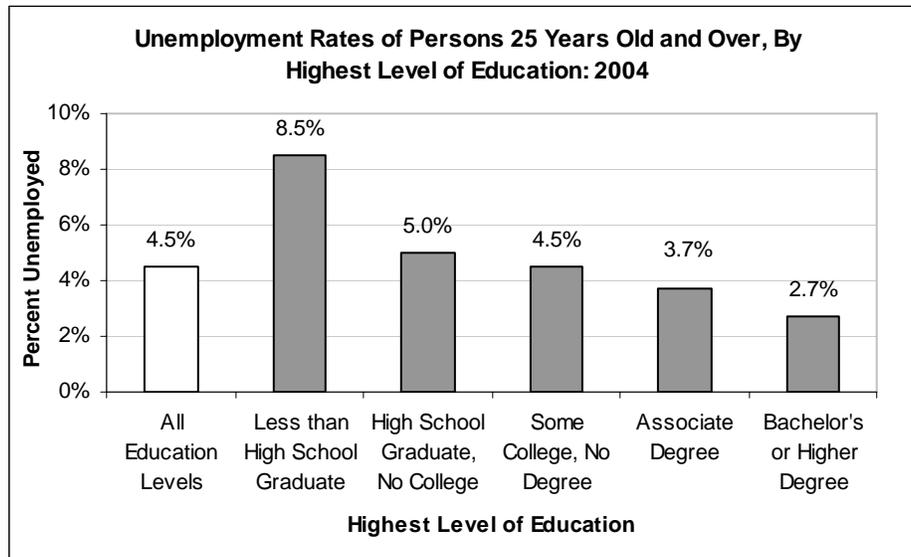
This report was prepared by the Office of Public Instruction, Measurement & Accountability Unit  
Contact information can be obtained by calling Lindy Miller, (406) 444-6774 or e-mail, lindmiller@mt.gov.

## Introduction

The Montana School Accreditation Standards (10.55.603, ARM) require schools to do follow-up studies of graduates and students no longer in attendance. This report provides information on students who graduated or dropped out of Montana public, state-funded and nonpublic, accredited schools during the 2004-05 school year.

## The Impact of Dropping Out of School

Students who drop out of school face a bleak economic world to a much greater degree than youths in general. According to the Digest of Education Statistics, as of October 2000, 28 percent of the 1999-00 dropouts were unemployed. By way of comparison, only 13 percent of 1999-00 recent graduates not enrolled in college were unemployed. (NCES, 2001) As shown in the chart below, employment opportunities for high school dropouts continue to lag far behind their counterparts who attain a high school diploma or a college degree.



(Labor, 2004)

As recently as the 1970s, holding a high school diploma was considered an adequate, but not an essential, asset for entering the labor market. The technological advances of the last 30 years have fueled the demand for a more highly skilled work force. Employers increasingly require at least a high school diploma and look for employees with good communication, math and reading skills; computer skills; problem-solving and critical thinking; and the ability to work on a team. Dropouts who do manage to find employment can expect to earn approximately 35 percent less than the average salary of a high school graduate. (NCES, 2001)

Dropouts are three times as likely as high school completers that do not go on to college to receive public assistance. (NCES, 1998) Approximately one-third of female dropouts are pregnant and facing child-rearing responsibilities without an education or job experience to support their children adequately. (NEGP, 2001) In addition to these grim economic statistics, dropouts also make up a disproportionate percentage of the prison population, comprising 26.5 percent of federal prison population, 39.7 percent of the state prison population, and 46.5 percent of the local jail inmate population. (Justice, 2003) This is far costlier to both the individual and to society than a high school and/or college education.

## Graduate and Dropout Definitions and Data Collections

Montana public, state-funded, and nonpublic, accredited schools are provided with the Montana Graduate and Dropout Data Collection Handbook that provides detailed instructions for collecting and reporting graduate and dropout data. Reports were received from all accredited schools for graduate and dropout data for the 2004-05 school year. \*Northern Cheyenne Tribal 7-8 and High School Dropout Data are not included.

Traditionally, each fall schools report graduate data for all high schools and dropout data for grades 7 through 12 by gender and race/ethnicity categories for the previous school year. However, on January 8, 2002, President George Bush signed into law the reauthorization of the Elementary and Secondary Education Act (ESEA), otherwise known as the No Child Left Behind Act of 2001 (NCLB), which increases accountability for student academic achievement for all public schools. The Adequate Yearly Progress (AYP) of NCLB requires that public high and 7-8 schools disaggregate both dropout and graduate data not only by gender and race/ethnicity, but also by the following subgroups: economically disadvantaged, students with disabilities, limited English proficient, and migrant. In addition, public high schools must also report graduate data by whether or not graduates graduated “in the standard number of years” (i.e., “on-time”).

The Office of Public Instruction began collecting graduate and dropout data by these additional disaggregations for the 2002-03 school year (2004-05 for grades 7-8). The OPI did not collect corresponding enrollment data by these additional categories; therefore, dropout rates can not be calculated. Since the graduation rate formula requires four years of dropout data, graduation rates for these additional disaggregations will not be available until the 2005-06 data is collected.

#### ***Graduate Definitions and Data Collection***

Montana accredited high schools report graduate numbers to the OPI each fall by for the previous school year using the definition in the box to the right.

#### ***Dropout Definitions and Data Collection***

Dropout rates can be calculated and reported in three different ways: event rates (snapshot of those who drop out in a single year), status rates (proportion of population who have not completed school and are not enrolled), and cohort rates (a more comprehensive picture which follows a sample group of students over time and generalizes their rate to a larger group). The collection method used in this report is an event rate adapted from the National Center for Education Statistics (NCES) at the U.S. Department of Education and is consistent with the requirements of the NCES Common Core of Data (CCD) reporting. This method has been used by Montana schools to report dropout data to the OPI since 1994-95.

#### ***Data Limitations***

Because the number of students enrolled for small schools and racial minority groups is relatively low, small annual changes in data can cause wide variations in annual completion, graduation, and dropout rates. For

***Graduates*** are the count of individuals who:

- 1) completed the high school graduation requirements of a school district, including early graduates, during the previous school year,
- or*
- 2) completed the high school graduation requirements of a school district at the end of summer prior to the current school year.

General Education Development Test (GED) recipients **are not** counted as graduates.

***Standard Number of Years (i.e., “On-time”) Graduate*** is an individual who:

- 1) completes a district’s graduation requirements in four years or less from the time an individual enrolled in the 9<sup>th</sup> grade,
- or*
- 2) has an Individualized Education Program (IEP) allowing for more than four years to graduate.

***Dropouts*** are the count of individuals who:

- 1) were enrolled in school on the date of the previous year October enrollment count or at some time during the previous school year and were not enrolled on the date of the current school year October count,
- or*
- 2) were not enrolled at the beginning of the previous school year but were expected to enroll and did not re-enroll during the year (“no show”) and were not enrolled on the date of the current school year October count,
- and*
- 3) have not graduated from high school or completed a state or district-approved high school educational program,
- and*
- 4) have not transferred to another school, been temporarily absent due to a school-recognized illness or suspension, or died.

example, in a class with 10 students, one dropout would translate to a 10 percent dropout rate. A more realistic indicator of for small schools and racial minority groups is an average of several years.

Currently, Montana does not have an individual student information system and, therefore, cannot track individuals across schools and school years. The OPI collects aggregate enrollment, graduate, and dropout counts each fall from schools, which carries with it the risk of misclassification of student data (i.e., reporting a student's race/ethnicity inconsistently between enrollment and dropout data collections, reporting a transfer student as a dropout). In 2007 OPI does plan to rollout a new Statewide Information System which will increase the accuracy of this report.

## Analysis of Montana 2004-05 Dropout Rates

### *Calculating a Dropout Rate*

Dropout rates are calculated by dividing the number of dropouts as defined above by the October enrollment total. Dropout rates vary for disaggregated student groups (i.e., race/ethnicity, gender). Calculating and analyzing disaggregated dropout rates is key in determining if certain groups of students are more likely to drop out and can be used in developing and targeting dropout prevention efforts.

#### ***Dropout Rate Formula***

$$\text{Dropout Rate} = \text{Number of dropouts/October enrollment} \times 100$$

Example:

The 2004-05 Dropout Rate for Montana Accredited Schools = 1,690 Dropouts for grades 7 through 12 divided by 73,524 students enrolled in October 2004 multiplied by 100 = 2.3%

### ***2004-05 Montana Statewide Dropout Rate Summary***

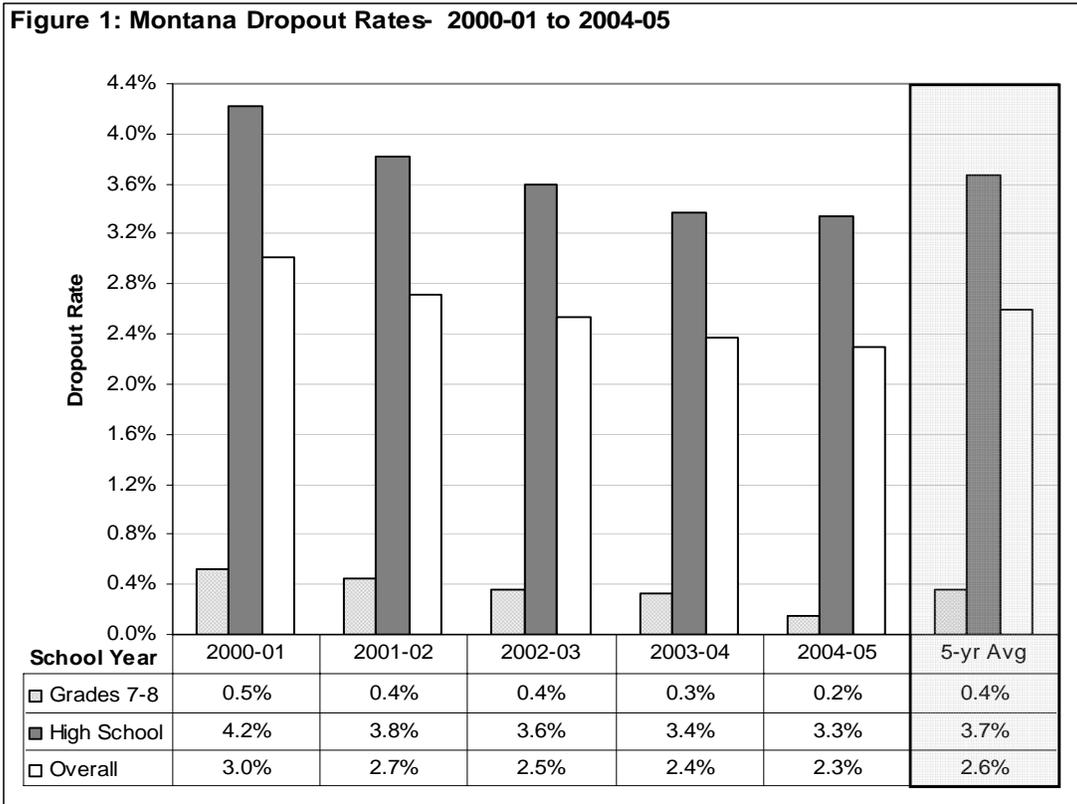
- ✓ Montana accredited schools reported that 1,690 students dropped out of grades 7 through 12 during the 2004-05 school year. The corresponding October enrollment was 73,524 yielding a dropout rate of 2.3 percent for the 2004-05 school year (see Table 1 on following page).
  - The 2004-05 dropout rate for Montana grades 7 and 8 was relatively low (0.2 percent), but represent 37 students leaving school at a very early age.
  - The 2004-05 dropout rate for Montana high schools was 3.3 percent.
- ✓ Peak dropout rates have traditionally been observed in 10<sup>th</sup> grade, when many students turn 16 and students can legally exit the school system. (Montana law states: "Except as provided in [Montana Code Annotated §20-5-102(2)], any parent, guardian, or other person who is responsible for the care of any child who is 7 years of age or older prior to the first day of school in any school fiscal year shall cause the child to be instructed in the program prescribed by the board of public education pursuant to 20-7-111 until the later of the following dates: (a) the child's 16<sup>th</sup> birthday; (b) the date of completion of the work of the 8<sup>th</sup> grade." Montana Code Annotated §20-5-102(1) (2001).) For the 2004-05 school year, however, peak dropout rates were observed in 12<sup>th</sup> grade with the 11<sup>th</sup> grade not far behind.
- ✓ Males drop out of school at a higher rate than do females. Males represent 51 percent of the total school enrollment for grades 7 through 12 and 56 percent of the dropouts, whereas females represent 49 percent of the total school enrollment for grades 7 through 12 and 44 percent of the dropouts.
- ✓ For the 2004-05 school year, American Indian students represented 10.7 percent of the total school enrollment for grades 7 through 12, but account for 26.7 percent of the total dropouts.
  - The 2004-05 American Indian dropout rate for Montana grades 7 and 8 was 0.9 percent.
  - The 2004-05 American Indian dropout rate for Montana high schools was 8.4 percent.
- ✓ Statewide dropout rates have been on the decline for the past 5 years. It is unclear, however, whether this decline is due to improved dropout rates or improved dropout data collection procedures and increased

emphasis placed on dropout data with regards to new federal accountability requirements for public high schools (see Figure 1).

**Table 1**  
**2004-05 Montana Dropout Rate Summary**

	Dropout Rates	Dropout Count	Enrollment
<b>Overall Total</b>	<b>2.3%</b>	<b>1,690</b>	<b>73,524</b>
<b>HS Total</b>	3.3%	1,653	49,490
Gr 12	4.0%	455	11,498
Gr 11	3.8%	446	11,775
Gr 10	3.3%	410	12,340
Gr 9	2.5%	342	13,568
Ungraded* HS	0.0%	0	309
<b>7 &amp; 8 Total</b>	0.2%	37	24,034
Gr 8	0.1%	17	12,011
Gr 7	0.2%	20	11,977
Ungraded* 7-8	0.0%	0	46
<b>Gender</b>			
Male	2.5%	940	37,840
Female	2.1%	750	35,684
<b>Race/Ethnicity</b>			
American Indian	5.8%	451	7,841
Asian	1.3%	9	716
Hispanic	3.0%	45	1,494
Black	1.3%	6	449
Pacific Islander	3.0%	3	100
White	1.9%	1,176	62,924

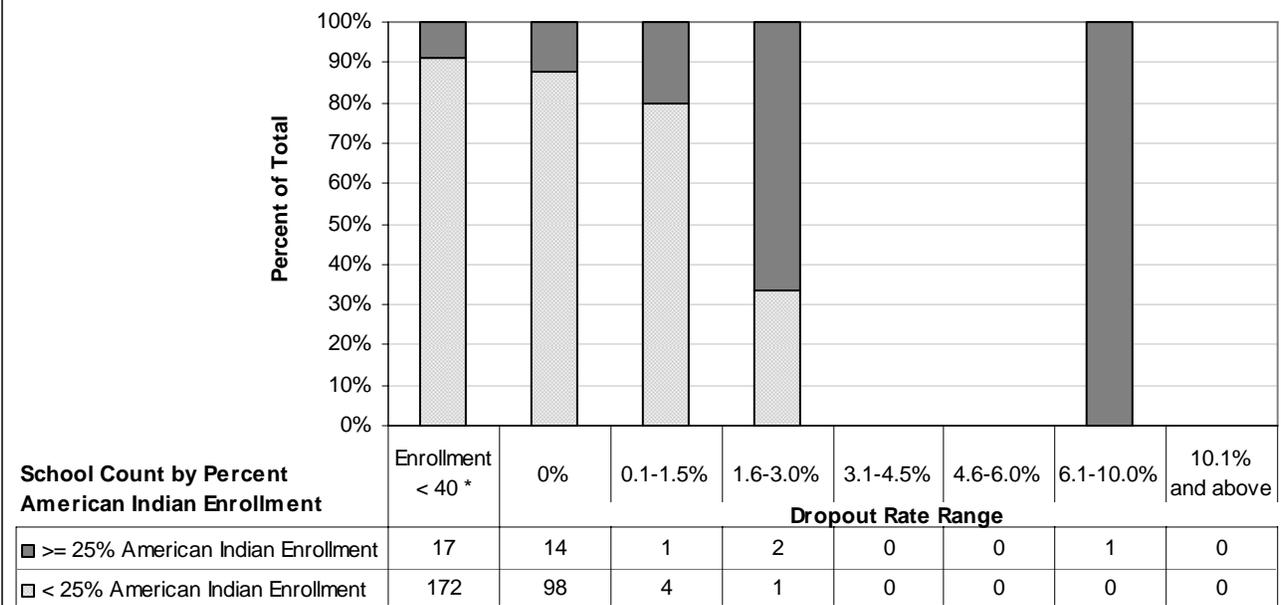
\* "A class that is not organized on the basis of grade grouping and has no standard grade designation."  
(NCES)



**Distribution of Dropout Rates**

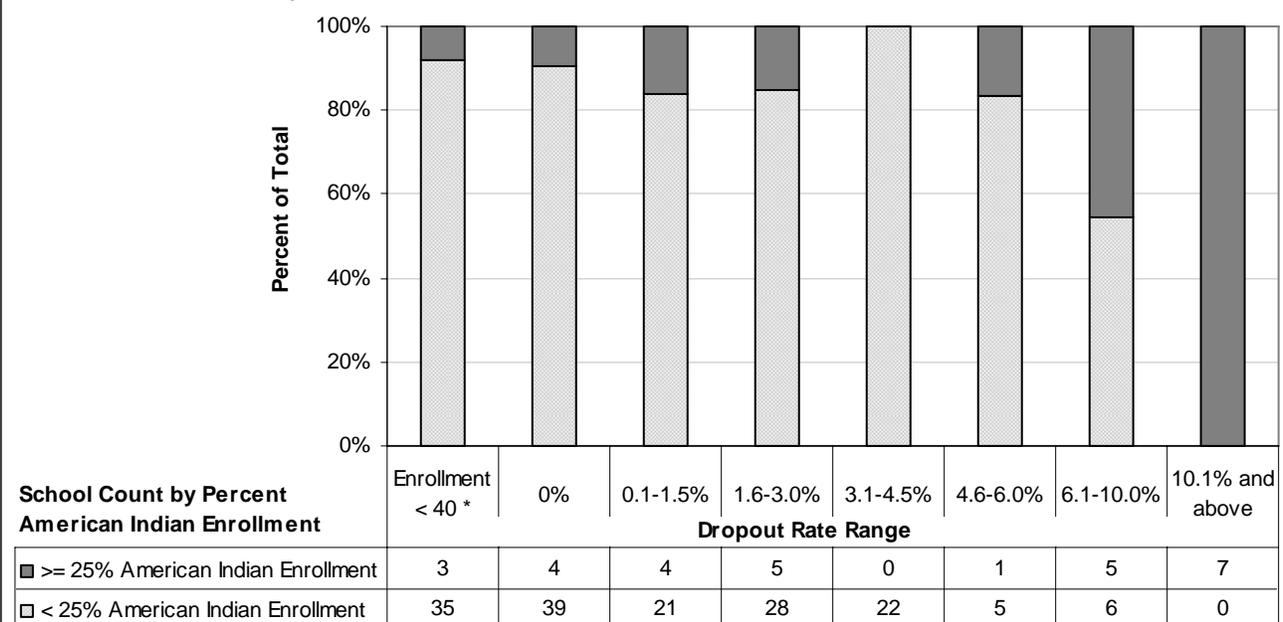
Although statewide dropout rates are useful, they can disguise differences observed between various types of schools. Figures 2 and 3 show the distribution of 2004-05 dropout rates across Montana schools by percent of American Indian students enrolled. Although schools with 25 or more percent American Indian students enrolled represented 10 percent of the total schools serving grades 7 through 12, they accounted for 68 percent of the schools with dropout rates greater than 6 percent. Because small annual changes in the number of dropouts can cause wide variations in dropout rates for schools with low enrollments, schools with enrollments fewer than 40 students are excluded from this analysis.

**Figure 2: Distribution of 2004-05 Dropout Rates for Grades 7-8 for Montana Schools by Percent American Indian Enrollment**



\*Schools with enrollments fewer than 40 are excluded from analysis.

**Figure 3: Distribution of 2004-05 Dropout Rates for Grades 9-12 for Montana Schools by Percent American Indian Enrollment**



\*Schools with enrollments fewer than 40 are excluded from analysis.

## Dropout Rates for Disaggregated Student Populations

Since dropout rates can vary greatly between certain student populations, calculating and analyzing disaggregated dropout rates is key in developing and targeting dropout prevention strategies. The data collected by the OPI allows for the analysis of dropout rates by grade, gender, race/ethnicity, and various types of schools.

### *Dropout Rates by Gender*

In Montana schools, more males than females are enrolled at every grade level. For the 2004-05 school year, about 51 percent of the total school enrollment for grades 7 through 12 was male and 49 percent was female. Males have also traditionally had higher dropout rates than females for most grade levels, although the gender difference appears to be narrowing somewhat.

### Analysis of Dropout Rates by Gender

- ✓ Consistent with previous years, the 2004-05 dropout rate for grades 9 through 12 for males, 3.6 percent, was greater than for females, 3.1 percent (see Table 2).
- ✓ The 2004-05 dropout rate for grades 7 through 8 for males (0.2 percent) was greater than for females (0.1 percent).

**Table 2**  
**2004-05 Montana Dropout Rates by Grade and Gender**

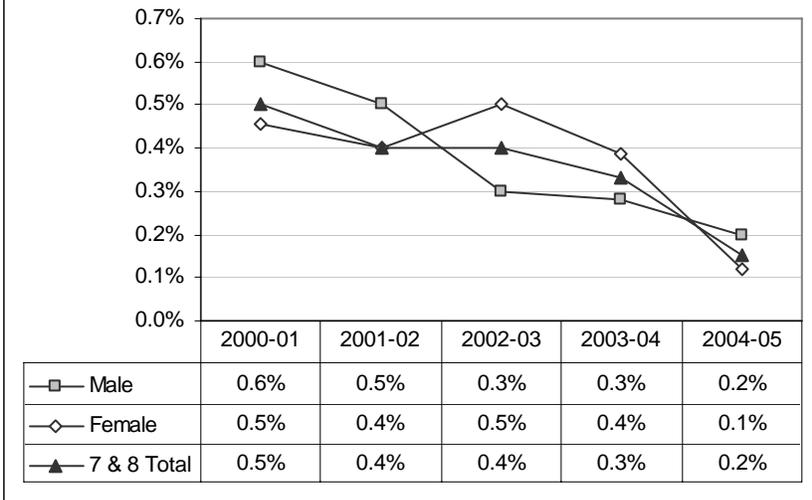
Grade	Dropout Rates			Dropout Count			Enrollment		
	Male	Female	Statewide	Male	Female	Statewide	Male	Female	Statewide
HS Total	3.6%	3.1%	3.3%	919	734	1,653	25,505	23,985	49,490
Grade 12	4.4%	3.5%	4.0%	257	198	455	5,864	5,634	11,498
Grade 11	4.1%	3.5%	3.8%	250	196	446	6,134	5,641	11,775
Grade 10	3.3%	3.3%	3.3%	212	198	410	6,344	5,996	12,340
Grade 9	2.9%	2.2%	2.5%	200	142	342	7,013	6,555	13,568
Ungraded* HS	0.0%	0.0%	0.0%	0	0	0	150	159	309
7 & 8 Total	0.2%	0.1%	0.2%	21	16	37	12,335	11,699	24,034
Grade 8	0.1%	0.2%	0.1%	8	9	17	6,136	5,875	12,011
Grade 7	0.2%	0.1%	0.2%	13	7	20	6,178	5,799	11,977
Ungraded* 7-8	0.0%	0.0%	0.0%	0	0	0	21	25	46
Overall Total	2.5%	2.1%	2.3%	940	750	1,690	37,840	35,684	73,524

- ✓ Both male and female high school dropout rates have been on the decline for the past four years, with the decline being more pronounced with male dropout rates. It is unclear at this time, however, whether this decline is due to improved dropout rates or improved dropout data collection procedures and increased emphasis placed on dropout data with regards to new federal accountability requirements for public high schools (see Table 3 and Figures 4 and 5 on following page).

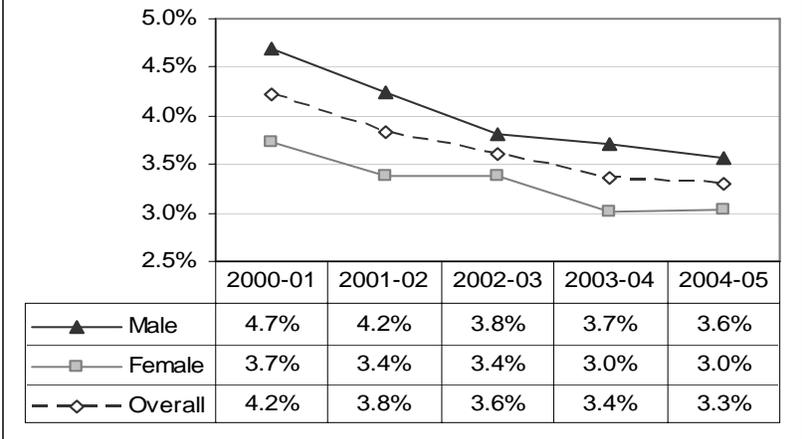
**Table 3**  
**Montana Dropout Rates by Grade Level and Gender for Five Years**

	Dropout Rates						Dropout Count					
	2000-01	2001-02	2002-03	2003-04	2004-05	5-yr Avg	2000-01	2001-02	2002-03	2003-04	2004-05	5-yr Total
7 & 8 Total	0.5%	0.4%	0.4%	0.3%	0.2%	0.4%	129	110	90	81	37	447
Male	0.6%	0.5%	0.3%	0.3%	0.2%	0.4%	72	67	35	35	21	230
Female	0.5%	0.4%	0.5%	0.4%	0.1%	0.4%	57	43	55	46	16	217
HS Total	4.2%	3.8%	3.6%	3.4%	3.3%	3.7%	2,166	1,937	1,811	1,672	1,653	9,239
Male	4.7%	4.2%	3.8%	3.7%	3.6%	4.0%	1,236	1,104	991	952	919	5,202
Female	3.7%	3.4%	3.4%	3.0%	3.0%	3.3%	930	833	820	720	734	4,037
Overall Total	3.0%	2.7%	2.5%	2.4%	2.3%	2.6%	2,295	2,047	1,901	1,753	1,690	9,686
Male	3.3%	3.0%	2.7%	2.6%	2.5%	2.8%	1,308	1,171	1,026	987	940	5,432
Female	2.7%	2.4%	2.4%	2.1%	2.1%	2.3%	987	876	875	766	750	4,254

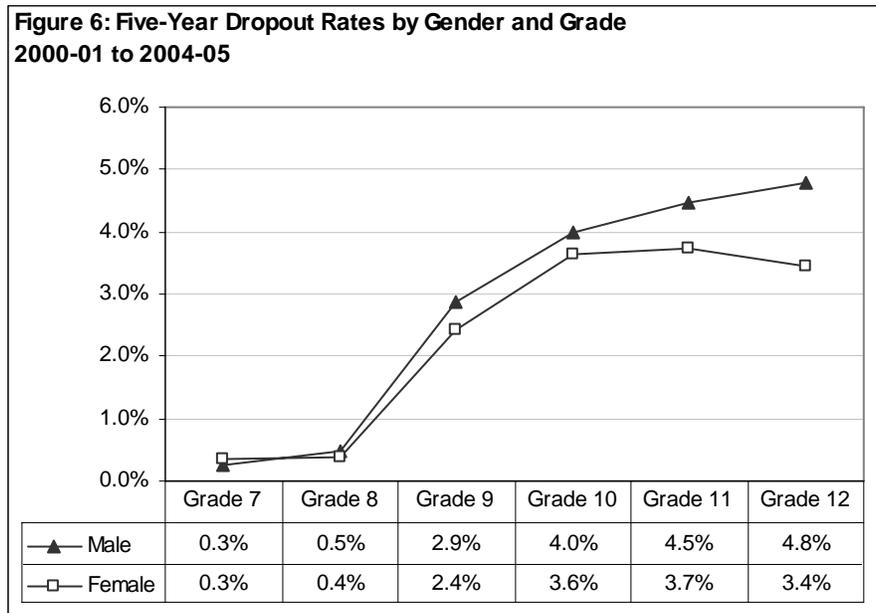
**Figure 4: Dropout Rates by Gender for Grades 7-8  
2000-01 to 2004-05**



**Figure 5: Dropout Rates by Gender for Grades 9-12  
2000-01 to 2004-05**



- ✓ As illustrated below in Figure 6, females drop out at a lower rate at every grade level than males except for in the 7<sup>th</sup> grade.
- ✓ Peak dropout rates for females are observed around the 10<sup>th</sup> and 11<sup>th</sup> grades and then decrease for 12<sup>th</sup> grade. Dropout rates for males, however, increase steadily through grade 12.



### ***Dropout Rates by Race/Ethnicity Categories***

Dropout rates vary by race/ethnicity categories and for some minority groups are higher than the dropout rates for white students. For the 2004-05 school year, Montana school enrollment for grades 7 through 12 included 85.6 percent white students, 10.7 percent American Indians, 1.0 percent Asians, 2.0 percent Hispanics, 0.6 percent blacks, and 0.1 percent Hawaiian/Pacific Islanders. Because the enrollment of some minority groups is low, annual dropout rates for these groups may vary widely from year to year. Averages of a period of years are more realistic indicators of the dropout rates.

### Analysis of Dropout Rates by Race/Ethnicity Categories

- ✓ Consistent with previous years, the 2004-05 dropout rate for the “American Indian” race/ethnicity category was considerably greater than the statewide average and that of the “White” category (see Table 4).

**Table 4  
2004-05 Montana Dropout Rates by Race/Ethnicity Categories**

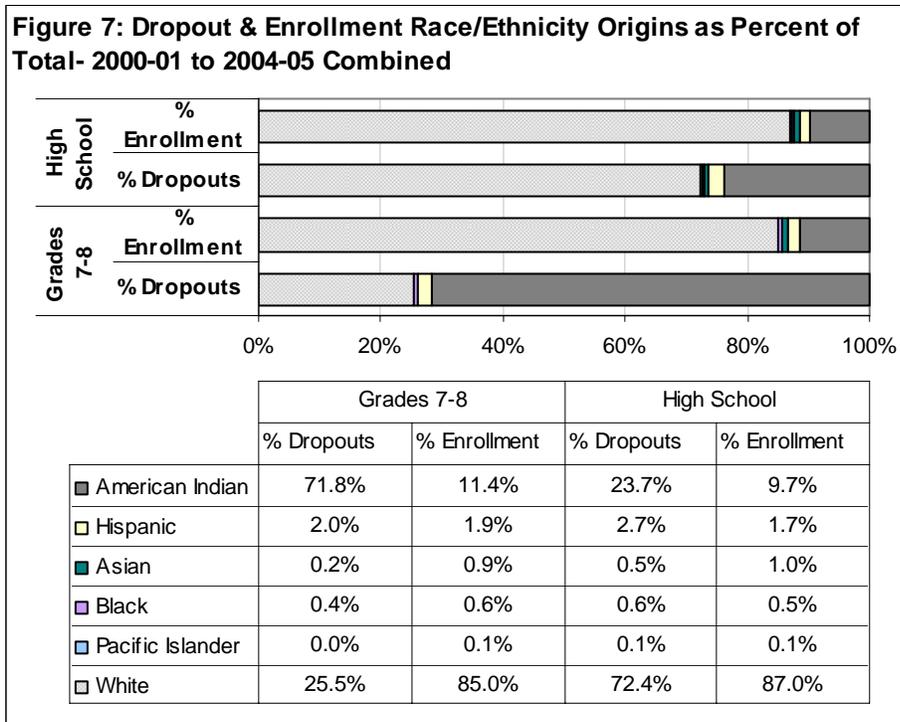
	Dropout Rates			Dropout Count			Enrollment		
	Grades 7-8	Grades 9-12	Total	Grades 7-8	Grades 9-12	Total	Grades 7-8	Grades 9-12	Total
American Indian	0.9%	8.4%	5.8%	26	425	451	2,784	5,057	7,841
Asian	0.0%	1.7%	1.3%	0	9	9	196	520	716
Hispanic	0.2%	4.3%	3.0%	1	44	45	480	1,014	1,494
Black	0.0%	2.2%	1.3%	0	6	6	173	276	449
Pacific Islander	0.0%	4.9%	3.0%	0	3	3	39	61	100
White	0.0%	2.7%	1.9%	10	1,166	1,176	20,362	42,562	62,924
Overall	0.2%	3.3%	2.3%	37	1,653	1,690	24,034	49,490	73,524

- ✓ For the 2004-05 school year, the race/ethnicity categories of Asian, Hispanic, Black, and Pacific Islander combined only accounted 63 dropouts from grades 7 through 12. The corresponding October enrollment was 2,759, yielding a dropout rate of 2.3 percent. Because the number of students enrolled for these race/ethnicity categories is low, annual dropout rates often vary widely from year to year, even when totaled at the state level. An average dropout rate utilizing dropout and enrollment data from multiple years is a more accurate indicator for these small groups (see Table 5).
- ✓ On average American Indian students drop out of grades 7 and 8 at a rate more than 12 times that of white students and out of high school at a rate of three times that of white students.

**Table 5**  
**Montana Dropouts by Race/Ethnicity Categories for Five Years**

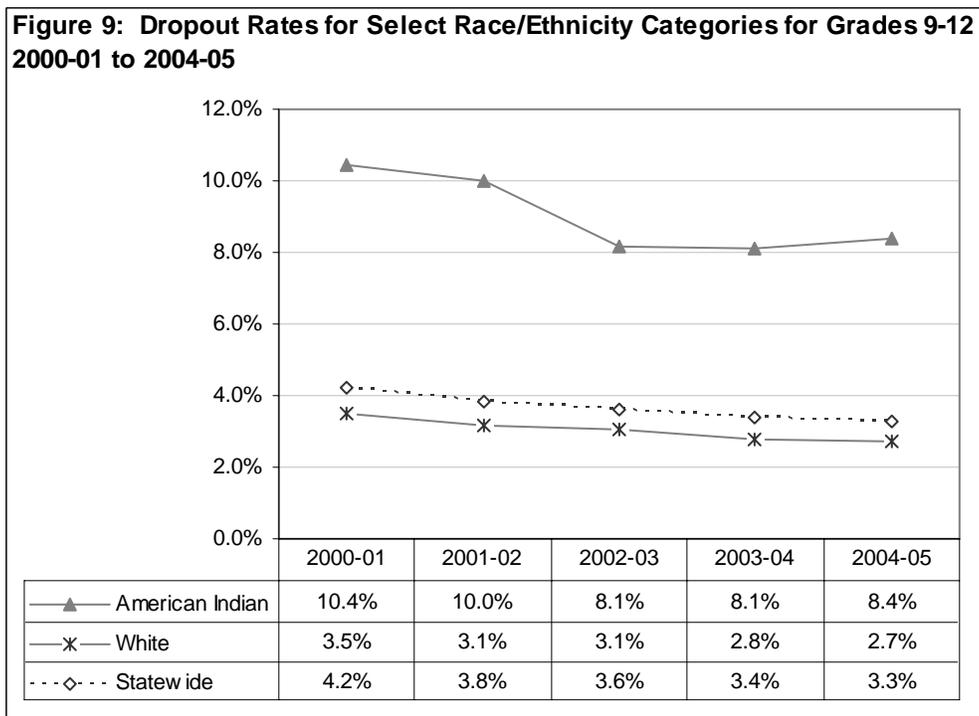
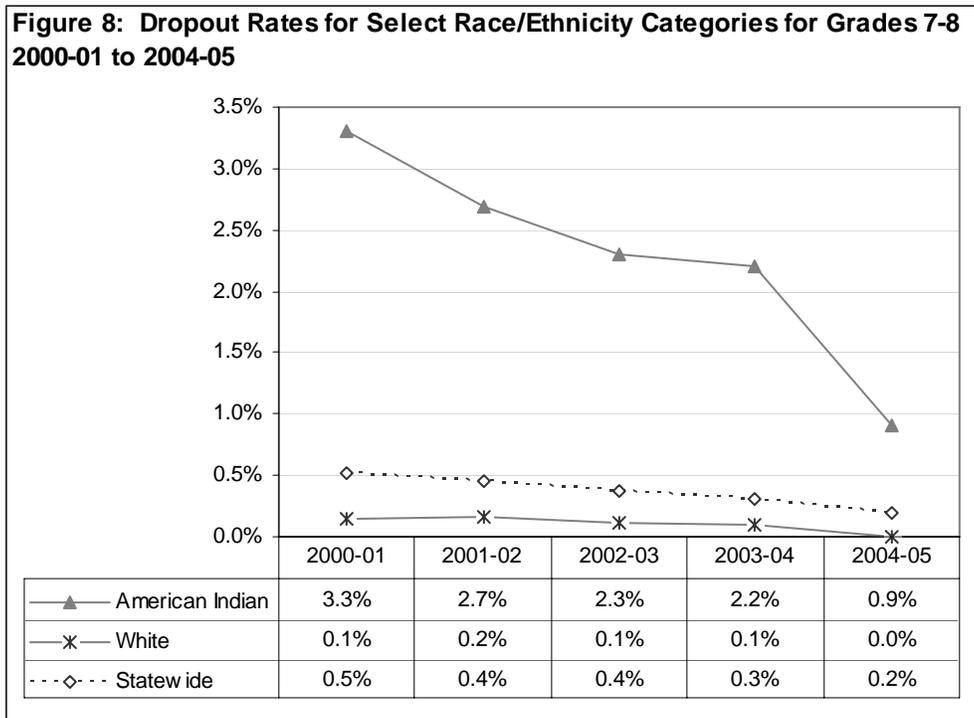
Category	7 <sup>th</sup> & 8 <sup>th</sup> Grade Dropout Rates						High School Dropout Rates					
	2000-01	2001-02	2002-03	2003-04	2004-05	5-yr Avg	2000-01	2001-02	2002-03	2003-04	2004-05	5-yr Avg
American Indian	3.3%	2.7%	2.3%	2.2%	0.9%	2.3%	10.4%	10.0%	8.1%	8.1%	8.4%	9.0%
Asian	0.4%	0.0%	0.0%	0.0%	0.0%	0.1%	3.5%	2.1%	1.2%	1.8%	1.7%	2.0%
Hispanic	0.7%	0.5%	0.4%	0.2%	0.2%	0.4%	8.3%	5.1%	6.0%	5.1%	4.3%	5.6%
Black	0.8%	0.0%	0.0%	0.6%	0.0%	0.3%	4.9%	6.5%	3.8%	5.9%	2.2%	4.5%
Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	1.3%	3.0%	3.6%	3.0%	3.0%
All Minority	2.7%	2.1%	1.8%	1.7%	0.7%	1.8%	9.5%	8.6%	7.1%	7.1%	6.8%	7.8%
White	0.1%	0.2%	0.1%	0.1%	0.0%	0.1%	3.5%	3.1%	3.1%	2.8%	2.7%	3.1%
Statewide	0.5%	0.4%	0.4%	0.3%	0.2%	0.4%	4.2%	3.8%	3.6%	3.4%	3.3%	3.7%

- ✓ In the past five years, American Indians represented only 11.4 percent of the total school enrollment for grades 7 through 8, but accounted for 71.8 percent of the dropouts. For grades 9 through 12, American Indians represented 9.7 percent of the total school enrollment and 23.7 percent of the dropouts (see figure 7).

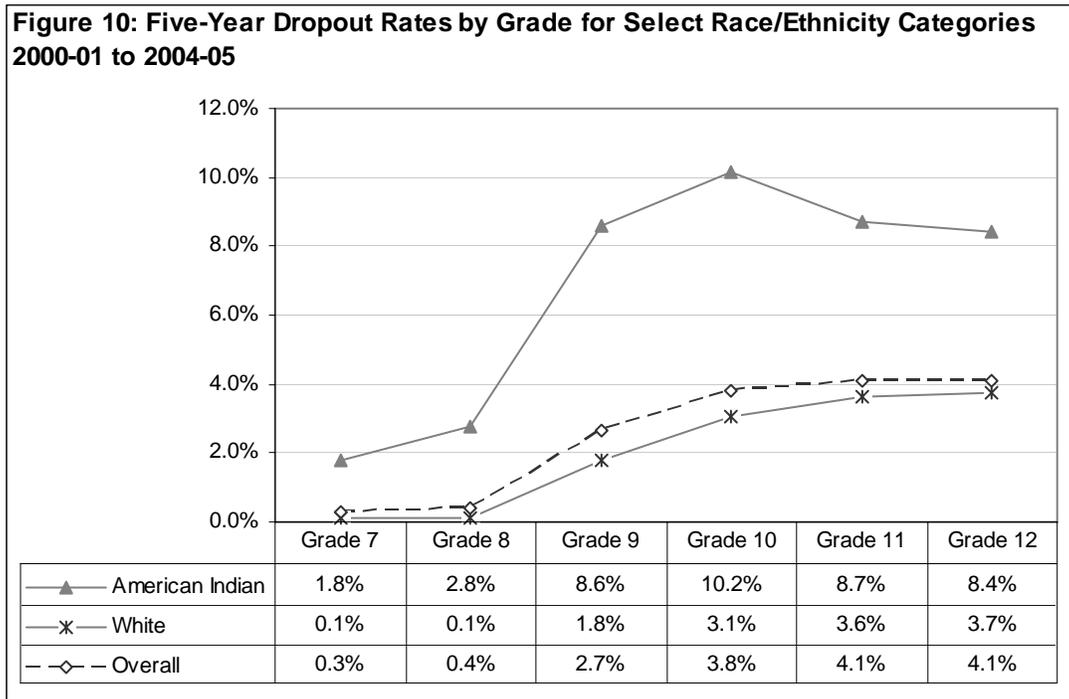


## A Closer Look at American Indian Dropout Rates

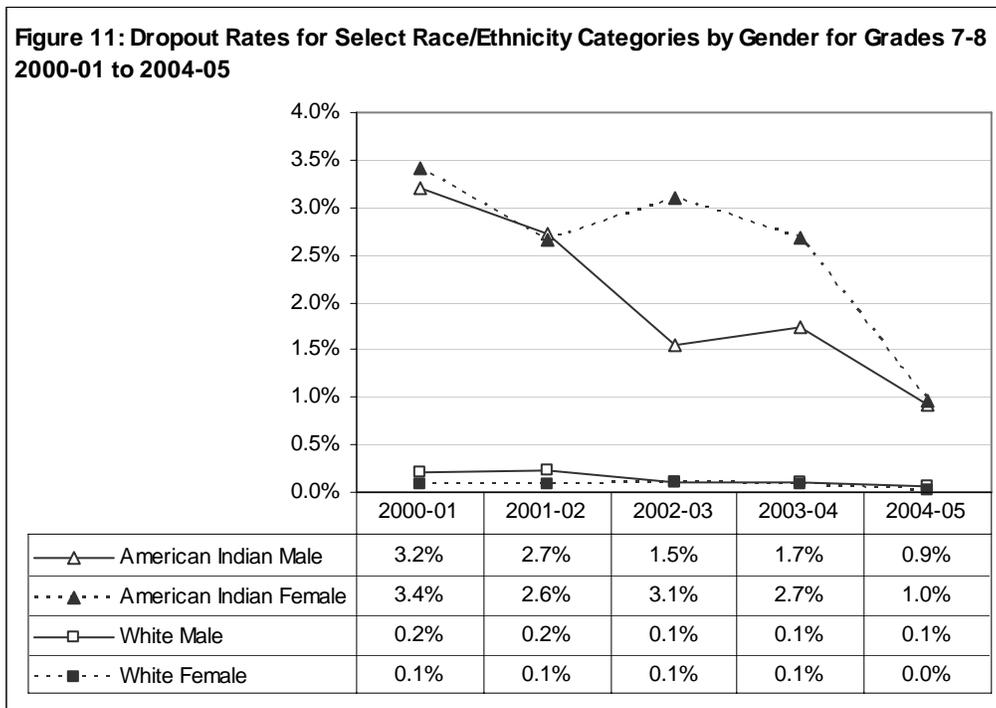
- ✓ Montana has seven Indian reservations and one landless tribe, therefore the “American Indian” race/ethnicity category represents the largest minority group in the state.
- ✓ For the past few years, Montana high school dropout rates, including those for American Indians, have been on the decline. For the 2004-05 school year American Indian dropout rates declined sharply at the 7-8 level but started inching upwards at the high school level after declining for the previous four years.



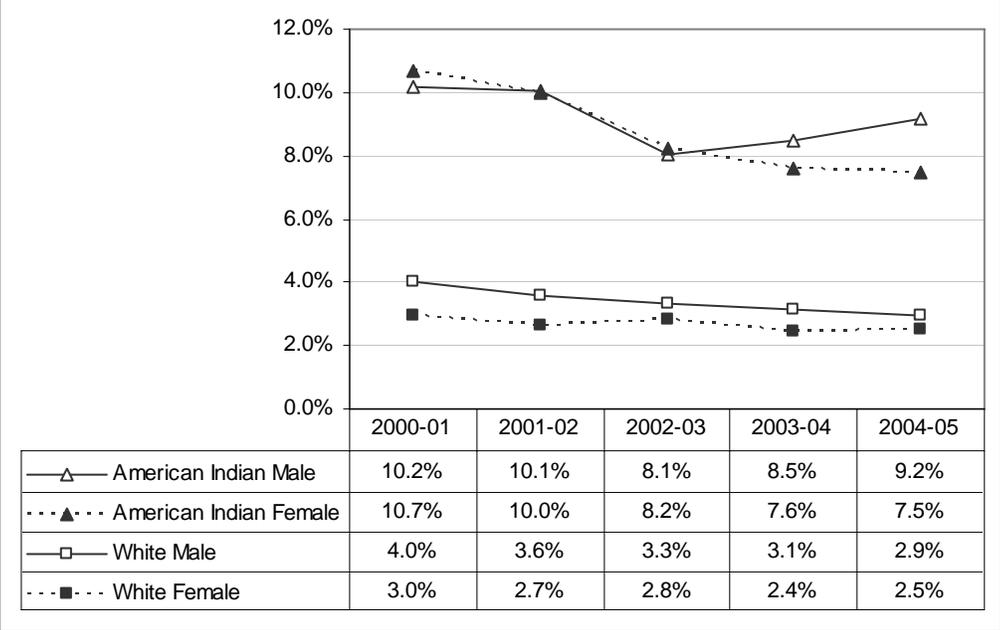
- ✓ As illustrated below in Figure 10, white students drop out at a much lower rate at every grade level than American Indian students. Peak dropout rates for whites are observed around the 11th and 12th grades, whereas, dropout rates for American Indians peak a year earlier in grade 10.



- ✓ Although in general males drop out of school at a higher rate than do females, this gender difference is not observed for the American Indian population at the Grade 7-8 level. As illustrated in Figures 11, for the past five years, American Indian females have dropped out at a higher rate than males. Figure 12 shows that the American Indian Female dropout rate as been declining over the last five years while the rate for American Indian Males has increased over the last two years after declining over the previous three years at the Grade 9-12 level.

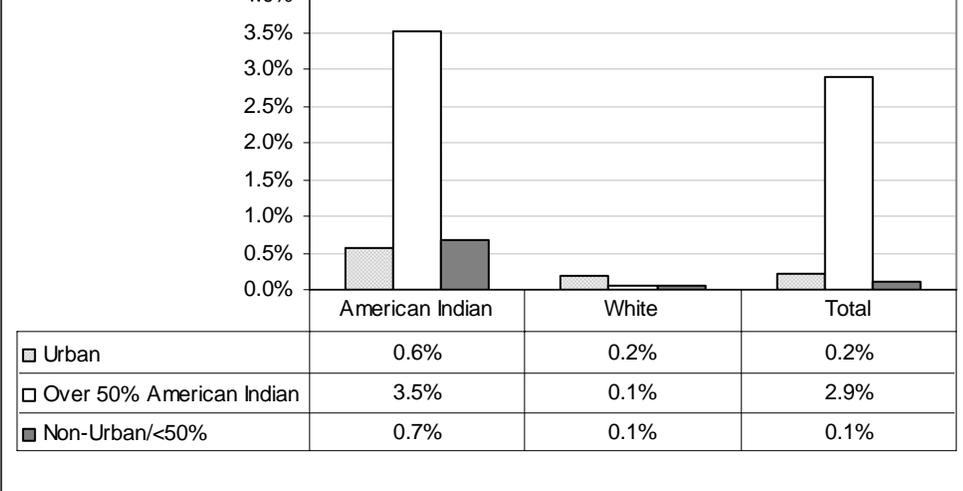


**Figure 12: Dropout Rates for Select Race/Ethnicity Categories by Gender for Grades 9-12 2000-01 to 2004-05**

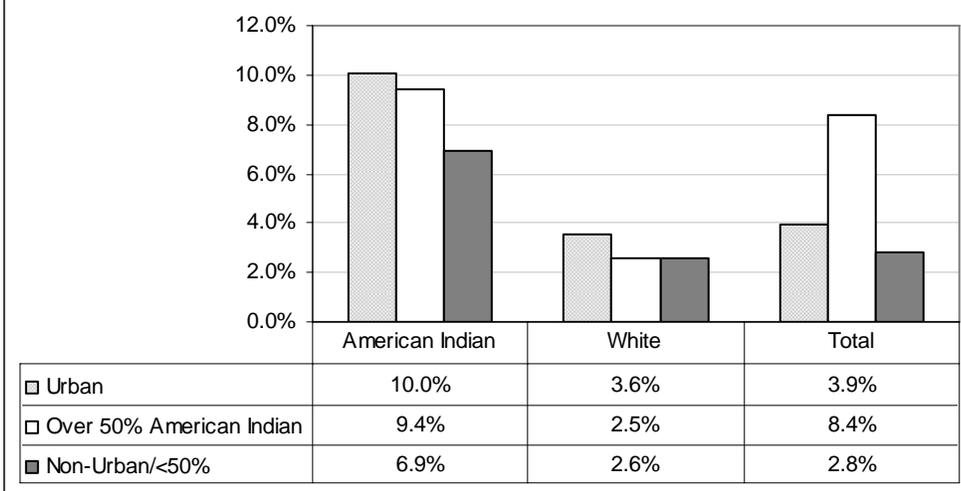


- ✓ During the 2000-01 through 2004-05 school years for grades 7 through 12, 57.8 percent of Montana’s American Indian students were enrolled in a district with an enrollment made up of 50% or more American Indian students; 19.1 percent were enrolled in an “urban” school, defined as a school belonging to one of the state’s seven largest school systems (Billings, Bozeman, Butte, Great Falls, Helena, Kalispell, and Missoula); and the remaining 23.1 percent were enrolled in non-urban/less than 50% American Indian enrollment districts.
- ✓ As illustrated below in Figure 13, the five year dropout rate for grades 7 through 8 was considerably higher (3.5 percent) for schools in a district made up of more than 50% American Indian Students than for urban (0.6 percent) and non-urban/less than 50% American Indian enrollment districts (0.7 percent).
- ✓ As illustrated on the following page in Figure 14, the five year dropout rate for grades 9 through 12 was higher for urban schools (10.0); than in a district with an enrollment of more than 50% American Indian students (9.4 percent) and non-urban/less than 50% American Indian enrollment districts (6.9 percent).

**Figure 13: Five-Year Dropout Rates for Select Race/Ethnicity Categories by School Location for Grades 7-8 2000-01 to 2004-05**



**Figure 14: Five-Year Dropout Rates for Select Race/Ethnicity Categories by School Location for Grades 9-12  
2000-01 to 2004-05**



### ***Dropout Rate by Size of District***

For the purposes of comparing similarly sized school districts, Montana districts have been identified by size categories based on enrollment numbers.

#### Category- Elementary Enrollment

- 1E= more than 2,500 students
- 2E= 851 to 2,500 students
- 3E= 401 to 850 students
- 4E= 151 to 400 students
- 5E= 41 to 150 students
- 6E= 40 or fewer students

#### Category- High School Enrollment

- 1H= more than 1,250 students
- 2H= 401 to 1,250 students
- 3H= 201 to 400 students
- 4H= 76 to 200 students
- 5H= 75 or fewer students

#### Category- K-12 Districts

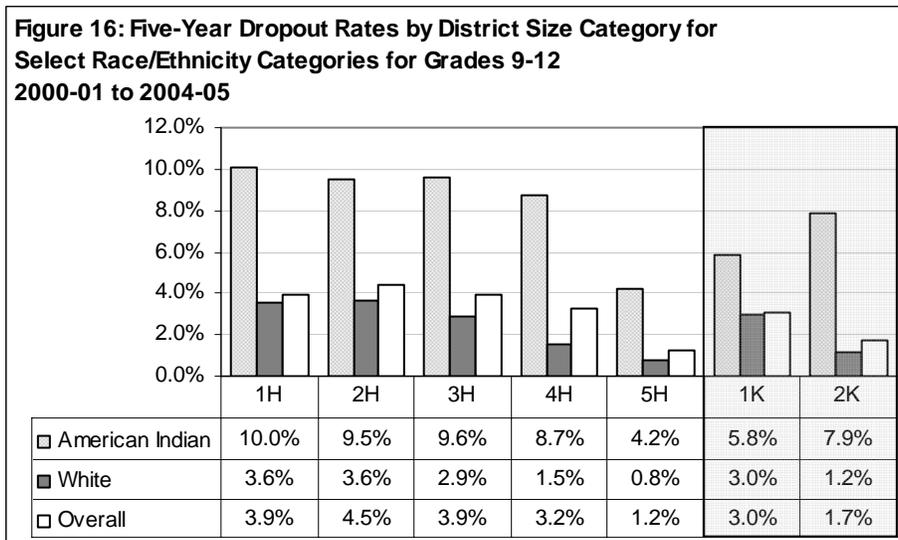
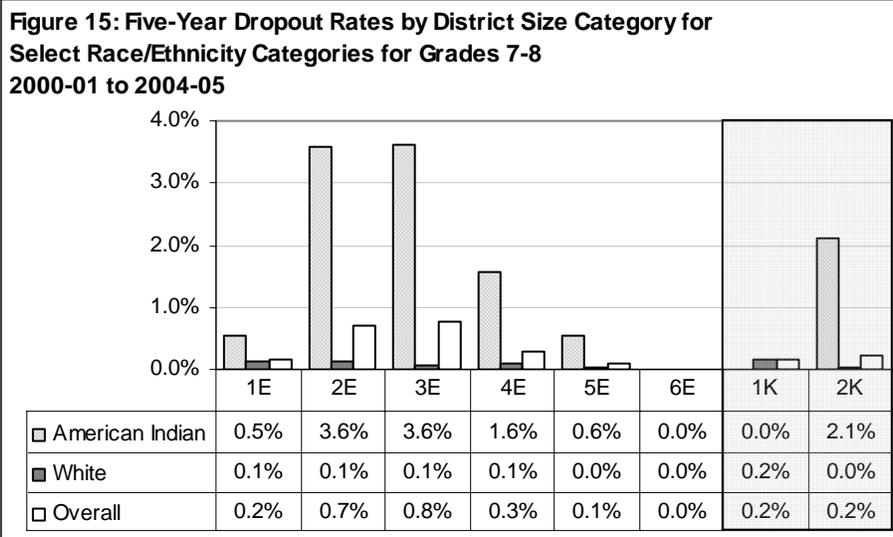
- 1K= 400 or more students
- 2K= 399 or fewer students

### Analysis of Dropout Rates by School District Size

- ✓ The highest dropout rates for grades 7 through 8 are observed for 3E districts with enrollments between 401 to 850 students. Interestingly, 3E districts have the highest percent American Indian enrollment at 20.0 percent (see Table 6 and Figure 15 on following page).
- ✓ As illustrated in Table 6, on average at the high school level, smaller school districts have lower dropout rates than do larger districts, with the highest dropout rates being observed for 2H districts with enrollments between 401 to 1,250 students.
- ✓ The above trend is not observed when data are disaggregated by race/ethnicity. Unlike the “White” race/ethnicity category, American Indian dropout rates at the high school level remain consistently high amongst the various district size categories (see Figure 16 on following page). American Indian drop out rate for the smallest high schools, 5H, is noticeable smaller than other size categories but still higher than the dropout rate for the "White" race in the same size category.

**Table 6**  
**Montana Dropout Rate by School District Size**

Level	1E,1H	2E,2H	3E,3H	4E,4H	5E,5H	6E	1K	2K	All Schools
<u>7/8 dropouts</u>									
2004-05 rate	0.1%	0.1%	0.5%	0.1%	0.1%	0.0%	0.0%	0.2%	0.2%
2003-04 rate	0.2%	0.7%	0.7%	0.1%	0.0%	0.0%	0.1%	0.4%	0.3%
2002-03 rate	0.1%	0.9%	0.7%	0.1%	0.1%	0.0%	0.3%	0.4%	0.4%
2001-02 rate	0.2%	0.9%	0.8%	0.4%	0.1%	0.0%	0.3%	0.2%	0.4%
2000-01 rate	0.2%	0.9%	1.2%	0.6%	0.2%	0.0%	0.2%	0.0%	0.5%
5-yr average rate	0.2%	0.7%	0.8%	0.3%	0.1%	0.0%	0.2%	0.2%	0.4%
<u>HS dropouts</u>									
2004-05 rate	3.4%	4.6%	3.5%	2.7%	0.7%	NA	3.1%	1.7%	3.3%
2003-04 rate	3.6%	3.5%	3.7%	3.0%	2.4%	NA	3.5%	1.5%	3.4%
2002-03 rate	3.9%	4.2%	4.2%	2.9%	0.6%	NA	2.7%	1.9%	3.6%
2001-02 rate	4.2%	4.5%	4.0%	3.9%	1.0%	NA	2.5%	1.5%	3.8%
2000-01 rate	4.5%	5.4%	4.2%	3.5%	1.4%	NA	3.3%	1.8%	4.2%
5-yr average rate	3.9%	4.5%	3.9%	3.2%	1.2%	NA	3.0%	1.7%	3.7%



## Other Types of Dropout Indicators— The Completion and Graduation Rate

The dropout rates identified thus far in this report are annual snapshots of grade-by-grade dropouts. The dropout data used to calculate those annual rates can be used in conjunction with graduate data to build a “synthetic” high school completion rate or “on-time” graduation rate for a specific class of students, even though each student is not followed through high school.

### The Completion Rate

The National Center for Education Statistics (NCES) developed a formula as a practical way to calculate a completion rate after studying a variety of calculation methods. This estimated cohort method utilizes both dropout and graduate data and can be calculated for all accredited schools, but does require data from four consecutive years. \*Northern Cheyenne Tribal 7-8 and High School Graduate Data are not included.

### Completion Rate Formula

$$\text{Completion Rate} = \frac{c_t}{c_t + d_{t-12} + d_{t-11} + d_{t-10} + d_{t-9}}$$

Where:

c= number of graduates receiving a standard high school diploma + nonstandard graduates + GED recipients through a school district administered program

t= year of graduation

d= dropouts

12, 11, 10, 9 = class level

Example:

The 2004-05 Completion Rate for Montana High Schools = 10,713 Graduates for Class of 2005 divided by (1,719 students dropped out over four years plus 10,713 Graduates for the Class of 2005) multiplied by 100 = 86.2 %

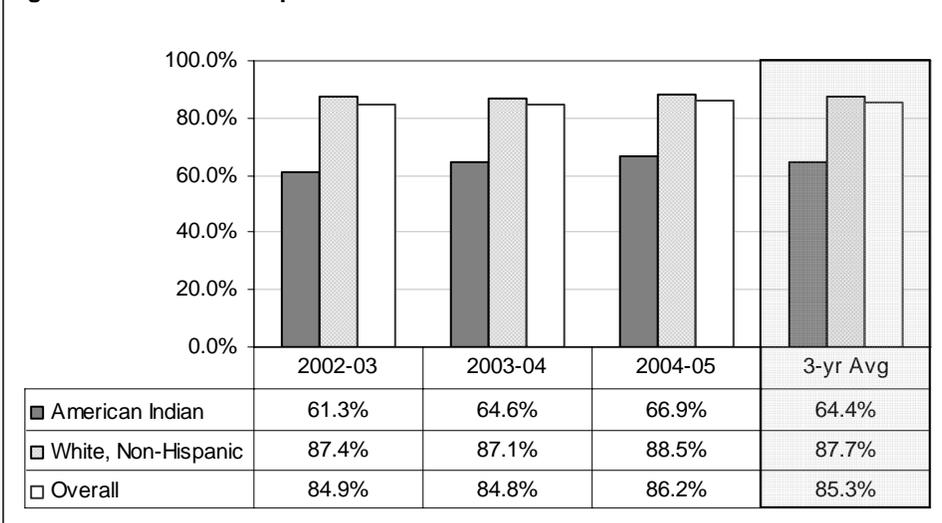
### Analysis of Completion Rates

- ✓ The overall completion rate for the Class of 2005 was 86.2 percent (see Table 7 below).
- ✓ For the Class of 2005, females had a higher completion rate (87.1 percent) than males (85.3 percent).
- ✓ The race/ethnicity categories of Asian, Hispanic, Black, and Pacific Islander only accounted for 3.5 percent of the 2004-05 graduates and 3.9 percent of the dropouts over four years. Therefore, as with dropout rates, the completion rates for these race/ethnicity categories tend to vary widely from year to year.
- ✓ The Class of 2005 completion rate for the “American Indian” race/ethnicity category was considerably lower than the statewide completion rate and that of the “White” category.
- ✓ As illustrated on the following page in Figure 17, American Indian students had a 3-year average completion rate of 64.4 percent, noticeably lower than the “White” average of 87.7 percent.
- ✓ Completion rates for whites have increased slightly for the past three years. Increased completion rates have also been observed for American Indians students.

**2004-05 Montana Completion Rate Summary**

	Dropouts					4-yr Dropout Total	Graduates 2004-05	Completion Rate
	Grade 9 2001-02	Grade 10 2002-03	Grade 11 2003-04	Grade 12 2004-05				
<b>Overall Total</b>	366	435	463	455	1,719	10,713	86.2%	
<b>Gender</b>								
Male	205	222	249	257	933	5,416	85.3%	
Female	161	213	214	198	786	5,297	87.1%	
<b>Race/Ethnicity</b>								
American Indian	141	113	78	87	419	846	66.9%	
Asian	1	1	4	4	10	118	92.2%	
Hispanic	13	15	9	7	44	200	82.0%	
Black	4	4	3	1	12	42	77.8%	
Pacific Islander	0	0	1	0	1	12	92.3%	
White	207	302	368	356	1,233	9,495	88.5%	

**Figure 17: Montana Completion Rates- 2002-03 to 2004-05**



**The Adequate Yearly Progress Graduation Rate**

Graduation rate, defined as “the percentage of students who graduate from secondary school with a regular diploma in the standard number of years” (i.e., “on-time”), is the required additional indicator for public high schools in AYP determinations. Montana’s U.S. Department of Education-approved high school graduation rate is an estimated cohort group rate based on the method recommended by the NCES. Public high schools must have a graduation rate for the “All Students Combined” subgroup of at least 80 percent or make improvement towards this goal to meet this indicator. Montana’s graduation rate is calculated using the formula in the box to the right.

**AYP Graduation Rate Formula**

$$\text{Graduation Rate} = \frac{g_t}{c_t + g_t + d_{12}^t + d_{11}^{(t-1)} + d_{10}^{(t-2)} + d_9^{(t-3)}}$$

Where:

g= number of graduates receiving a standard high school diploma in four years or less (from the time enrolled in the 9<sup>th</sup> grade) or had an IEP allowing for more than four years to graduate.

c= completers of high school by other means

t= year of graduation

d= dropouts

12, 11, 10, 9 = class level

Example:

The 2004-05 Graduation Rate for Montana Public High Schools = 10,272 “On-time” Graduates for Class of 2005 divided by (1,699 students dropped out over four years plus 147 Not “On-time” Graduates for the Class of 2005 plus 10,272 “On-time” Graduates for the Class of 2005) multiplied by 100 = 84.8 %

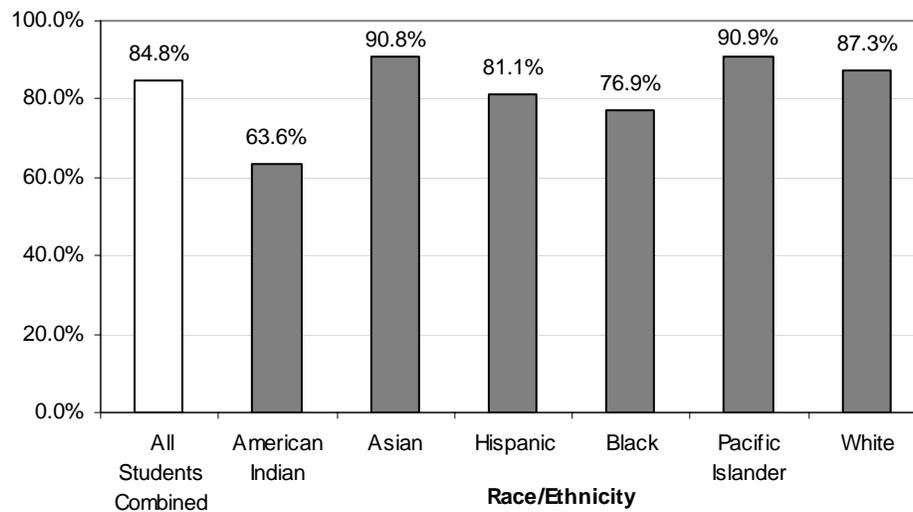
Analysis of AYP Graduation Rates

- ✓ The Class of 2005 AYP Graduation Rate for “All Students Combined” for was 84.8 percent (see Table 8 and Figure 18 on following page).
- ✓ Disaggregated graduation rates are not used for determinations on this indicator. However, for the Class of 2005 the American Indian graduation rate was considerably lower than any of the subgroups. Therefore, schools with predominantly American Indian enrollment may find it more difficult to meet the 80 percent goal.
- ✓ Graduate and dropout data for the “Economically Disadvantaged”, “Limited English Proficient”, and “Students with Disabilities” subgroups was collected for the first time by the OPI for the 2002-03 school year. Since the AYP graduation rate formula requires four consecutive years of data, the OPI will not be able to calculate graduation rates for these subgroups until data for the 2005-06 school year is collected.
- ✓ Although graduate and dropout data for the 2004-05 school year has been collected by the OPI, individual school and district AYP determinations for the 2005-06 school year which use these data will not be made until the Summer of 2006. However, for the 2004-05 school year AYP results, 96 percent of the public high schools made the graduation rate indicator for the Class of 2004 (see Figure 19 on the following page).

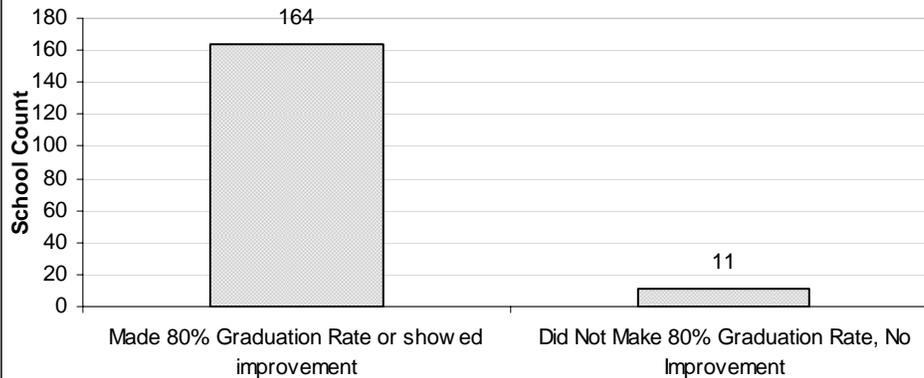
**Table 8**  
**Montana Public High School AYP Graduation Rate for the Class of 2005**

Subgroups	Dropouts					Graduates 2004-05		AYP Graduation Rate
	Grade 9 2001-02	Grade 10 2002-03	Grade 11 2003-04	Grade 12 2004-05	4-yr Dropout Total	Not On-time or GED	On-time	
<b>All Students Combined</b>	<b>360</b>	<b>430</b>	<b>460</b>	<b>449</b>	<b>1,699</b>	<b>145</b>	<b>10,272</b>	<b>84.8%</b>
American Indian	137	108	75	83	403	34	765	63.6%
Asian	1	1	4	4	10	1	109	90.8%
Hispanic	13	15	9	7	44	2	197	81.1%
Black	4	4	3	1	12	0	40	76.9%
Pacific Islander	0	0	1	0	1	0	10	90.9%
White	205	302	368	354	1,229	108	9,151	87.3%
Economically Disadvantaged	NA	NA	NA	NA	NA	NA	NA	NA
Limited English Proficient	NA	NA	NA	NA	NA	NA	NA	NA
Students with Disabilities	NA	NA	NA	NA	NA	NA	NA	NA

**Figure 18: Montana Public High School AYP Graduation Rates for All Students Combined and Race/Ethnicity (School Year 2004-05)**



**Figure 19: 2004-05 School Year AYP Results, Class of 2004**



## What Helps Prevent Students from Dropping Out?

Several studies have identified effective strategies to prevent students from leaving high school before receiving a diploma (NEGP, 2000). Some of those strategies include:

- Providing intensive intervention through smaller alternative middle and high schools.
- Focusing on changing the classroom experience through professional development to improve curriculum and instruction rather than focusing on dropout prevention services.
- Mentoring and tutoring by supportive adults and peers.
- Evaluating the impact of policies, practices, and structures on all students.
- Providing collective support to school and student needs through community and family collaboration.

## **Final Note**

Policy implications that were identified by research studies as critical to the effectiveness of dropout intervention strategies included:

- The choice of teachers is more important than the choice of curriculum.
- The high school level may be too late to begin implementing intervention strategies.
- Data is needed to design appropriate strategies to prevent students from dropping out (NEGP, 2000).

The goal of gathering dropout information is to identify where and when students drop out of school and to use this knowledge to help keep students in school. Each community needs to learn the unique reasons why students drop out of their schools and, as a community, participate in supporting interventions to keep them in school and perhaps break the cycle of at-risk factors.

## References

- Lewis, Anne C. (2000). Dropouts from the K-12 public school system. *The NEGP Monthly*, Vol. 2, No. 19 (p. 1-2). August, 2000. Retrieved February 5, 2004, <http://www.negp.gov/issues/issu/monthly/0800.pdf>
- Lewis, Anne C. (2001). Graduation rates up, down, and all around the issues. *The NEGP Monthly*, Vol. 2, No. 25 (pp. 1). February, 2001. Retrieved February 5, 2004, <http://www.negp.gov/issues/issu/monthly/0201.pdf>
- Montana Office of Public Instruction. *Montana Graduate and Dropout Data Collection Handbook*, (p.i), September 2005, <http://www.opi.state.mt.us/pdf/adcdohandbook.pdf>
- U.S. Department of Education, National Center for Education Statistics (1998). *The Condition of Education 1998*, (NCES Publication No. 98-013), by John Wirt, Tom Snyder, Jennifer Sable, Susan Choy, Yupin Bae, Janis Stennett, Allison Gruner, and Marianne Perie. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. National Center for Education Statistics. (2001). *Digest of Education Statistics, 2000*, (NCES Publication No. 2001-034), by Thomas D. Snyder and Charlene M. Hoffman. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Justice, Office of Justice Statistics. (2003, January). *Education and Correctional Populations*, (NCJ Publication No. 195670). Retrieved February 5, 2004, <http://www.ojp.usdoj.gov/bjs/pub/pdf/ecp.pdf>
- U.S. Department of Labor, Bureau of Labor Statistics. (2002). *Current Population Survey. Annual Average Data. Employment Status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic origin*. Retrieved December 15, 2005, <http://www.bls.gov/cps/cpsaat7.pdf>

## Additional Dropout Resources on the Web

National Center for Education Statistics- <http://www.nces.ed.gov/>

National Dropout Prevention Center/Network- <http://www.dropoutprevention.org/>

United States Census Bureau- <http://www.census.gov/index.html>