

High School Dropouts 2004-05 Massachusetts Public Schools

In the 2004-05 school year, a total of 3.8 percent (11,145 dropouts) of students in grades nine through twelve dropped out. This rate was one-tenth of a percentage point higher than the rate for the 2003-04 school year.

Table 1: State Dropout Trends: 1998-99 to 2004-05

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Total HS Enrollment	258,026	265,795	271,700	273,912	281,939	288,329	293,399
Number of Dropouts	9,188	9,199	9,380	8,422 ¹	9,389	10,633	11,145
Dropout Rate	3.6%	3.5%	3.5%	3.1%	3.3%	3.7%	3.8%

The projected four-year rate is an estimation of the cumulative effect of four years of students dropping out of school. The projected four-year rate for the class of 2008 was 14.7 percent, a slight increase over the projected four-year rate for the previous class.

Table 2: State Projected Dropout Rates: Class of 2002 to Class of 2008

	Class of 2002	Class of 2003	Class of 2004	Class of 2005	Class of 2006	Class of 2007	Class of 2008
Projected Dropout Rates	13.3%	13.1%	13.4%	11.7%	12.8%	14.3%	14.7%

Table 3: Annual Dropout Rates by School Type 1998-99 to 2004-05

	2001-02	2002-03	2003-04	2004-05
Regular/Comprehensive Academic Schools (295)²	4.9%	3.4%	3.7%	3.7%
Vocational-Technical Total (41)	2.6%	3.1%	3.2%	3.0%
City/Town (12)	5.4%	6.8%	7.2%	6.0%
Regional/County/Independent (29)	1.7%	2.0%	2.1%	2.3%
Charter Schools (27)	3.1%	4.3%	5.6%	6.1%
Schools Located in Cities³ (151)	4.8%	5.2%	5.7%	6.1%
Schools Located in Towns³ (211)	1.7%	1.9%	2.0%	2.0%

¹ Due to changes in the Student Information Management System (SIMS) summer dropouts were not included in the dropout count, therefore resulting in an underreported rate.

² Represents the number of schools in the category in the 2004-05 school year.

³ As defined by the incorporation status within the Commonwealth of Massachusetts.

Table 4: Annual Dropout Data for Selected Demographics: 2004-05

		Total HS Enrollment	Number of Dropouts	Annual Dropout Rates	Percent of all Dropouts
Grade	9th	84,628	2,541	3.0%	22.8%
	10th	75,478	2,798	3.7%	25.1%
	11th	69,441	2,813	4.1%	25.2%
	12th	63,852	2,993	4.7%	26.9%
Race/Ethnicity	Asian	13,612	358	2.6%	3.2%
	Black	26,881	1,701	6.3%	15.3%
	Hispanic	31,486	2,872	9.1%	25.8%
	Native American	886	48	5.4%	0.4%
	White	220,534	6,166	2.8%	55.3%
Gender	Female	144,908	4,622	3.2%	41.5%
	Male	148,491	6,523	4.4%	58.5%

Table 5: Annual Dropout Data for Special Populations: 2004-05

		Total HS Enrollment	Number of Dropouts	Annual Dropout Rates	Percent of all Dropouts
Special Education	Special Education	42,647	2,369	5.6%	21.3%
	General Education	250,752	8,776	3.5%	78.7%
Limited English Proficient (LEP)	LEP	10,706	996	9.3%	8.9%
	Non LEP	282,693	10,149	3.6%	91.1%
Low-Income	Low-Income	69,952	4,461	6.4%	40.0%
	Non Low-Income	223,447	6,684	3.0%	60.0%

**Table 6: Annual Dropout Rates for Selected Demographics:
1998-99 to 2004-05**

		1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
Grade	9th	3.1%	3.1%	3.3%	2.9%	2.6%	2.6% ⁴	3.0%
	10th	3.8%	3.7%	3.5%	3.1%	3.6%	3.7%	3.7%
	11th	4.3%	3.9%	4.0%	3.3%	3.7%	4.0%	4.1%
	12th	3.1%	3.1%	3.1%	2.9%	3.5%	4.8%	4.7%
Race/Ethnicity	Asian	3.6%	4.0%	3.9%	2.3%	2.5%	2.7%	2.6%
	Black	6.7%	6.1%	6.1%	4.9%	5.7%	6.3%	6.3%
	Hispanic	9.8%	8.2%	8.0%	7.3%	7.4%	8.2%	9.1%
	Native American	4.0%	4.2%	3.2%	3.7%	4.8%	6.4%	5.4%
	White	2.5%	2.6%	2.6%	2.4%	2.6%	2.8%	2.8%
Gender	Female	3.1%	2.9%	2.8%	2.6%	2.8%	3.1%	3.2%
	Male	4.0%	4.0%	4.1%	3.5%	3.9%	4.3%	4.4%

**Table 7: Annual Dropout Rates for Special Populations:
2002-03 to 2004-05**

		2002-03	2003-04	2004-05
Special Education	Special Education	4.6%	5.4%	5.6%
	General Education	3.1%	3.4%	3.5%
LEP	LEP	6.1%	7.6%	9.3%
	Non LEP	3.2%	3.5%	3.6%
Low-Income	Low-Income	5.1%	5.7%	6.4%
	Non Low-Income	2.8%	3.1%	3.0%

⁴ In the 2003-04 school year, the Department removed the data for students expected to enroll in grade nine due to an incomplete data collection. The Department presumes that if the grade eight missing students were included in the Summer Dropout count, the grade nine dropout rate in 2003-04 might be slightly higher.

Table 8: Dropout Rates and Percent of Dropouts Among Competency Determination (CD) Earners and Students without a CD

Grade	CD Status	Number of Enrolled Students	Number of Dropouts	Dropout Rate	Percent of Dropouts
11	With CD	64,286	1,351	2.1%	48.0%
	Without CD	5,155	1,462	28.4%	52.0%
12	With CD	61,138	2,065	3.4%	69.0%
	Without CD	2,714	928	34.2%	31.0%

Table 9: 2004-05 Annual Dropout Rates Among Schools

The state dropout rate masks the wide disparity in individual school annual dropout rates, specifically the number of schools that have dropout rates below the state rate. Therefore, including a chart within the report was important to illustrate the distribution of school dropout rates. Please note this chart only includes schools with enrollment of 75 students or more as dropout rates for schools with low enrollments are overly sensitive to small variations.

	1999-00		2000-01		2001-02		2002-03		2003-04		2004-05	
<i>Number of Schools Included</i>	317		319		324		321		330		336	
<i>Annual Rate</i>	#	%	#	%	#	%	#	%	#	%	#	%
0	18	6	16	5	29	9	38	12	17	5	11	3
0.1 – 1.0	67	21	67	21	73	23	65	20	70	21	74	22
1.1 – 2.5	103	32	92	29	93	29	82	26	81	25	90	27
2.6 – 5.0	72	23	93	29	85	26	80	25	85	26	94	28
5.1 – 7.5	30	10	21	7	23	7	23	7	37	11	23	7
7.6 – 10.0	9	3	9	3	9	3	15	5	17	5	15	4
10.1 and above	18	6	21	7	12	4	18	6	23	7	29	9

Methodology

Population

The dropout calculations were derived from the population of students enrolled in grades nine through twelve in Massachusetts public schools. High school enrollment was based on the October 1, 2004 SIMS submission, while the dropout count was collected via the end-of-year SIMS submission and the Missing Student Collection. The Missing Student Collection was used to collect information from school districts on those students who failed to enroll in any Massachusetts public school in the 2004-05 school year, but were reported as enrolled within their district at the end of the 2003-04 school year. All students coded as a dropout were included in the state dropout count as a Summer Dropout.

Definitions and Calculations

The Department applied a dropout measure that was developed by the U.S. Department of Education. A dropout is defined as a student in grades nine through twelve who leaves school prior to graduation for reasons other than transfer to another school, and does not re-enroll before the following October 1.

The dropout count was based on two groups of students:

1. **Summer Dropouts.** For the 2004-05 school year, the Summer Dropouts were reported as enrolled in grades nine through twelve at the end of the 2003-04 school year, but were not included in the October 2004 SIMS in any district in Massachusetts. All districts with missing students were provided with the opportunity to explain the situations of each of the students (i.e. transferred, graduated, dropped out) via the Missing Student Collection.
2. **End-of-Year Dropouts.** End-of-Year Dropouts were reported in the end-of-year SIMS submission for the 2004-05 school year. These students were then checked against data submitted by all other districts. If a student was reported as a dropout by one district and enrolled by another district, the student was not considered a dropout.

Beginning in the 2003-04 school year, in compliance with the National Center for Education Statistics (NCES) reporting guidelines, Summer Dropouts were applied to the grade in which they failed to enroll. For example, a student who was reported as enrolled in grade ten at the end of the 2003-04 school year, but fails to enroll in the 2004-05 school year, was counted as a grade eleven dropout because the student completed grade ten. Although the revised 2002-03 dropout by grade figures were used in this report, previous school years' dropout by grade figures have not been modified in accordance with the guidelines.

According to the U.S. Department of Education dropout measure, students who drop out during a particular reporting year, but return to school or graduate by October 1 of the following year were not counted as dropouts. For the 2004-05 school year, the Returned Dropouts had to be reported as enrolled in a Massachusetts public school in the October 1, 2005 SIMS submission.

The final dropout count equals the Summer Dropouts plus the End-of-Year Dropouts minus all Returned Dropouts.

Figure 1: Final Dropout Count Calculation

<p>Final dropout count = (Summer Dropouts + End-of-Year Dropouts) – Returned Dropouts</p> <p><i>Example for the 2004-05 school year:</i> State final dropout count for 2004-05 = (2,613 + 10,180) – 1,648 = 11,145</p>

A dropout rate is the frequency that a dropout occurs within a defined population. The Department calculates the annual dropout rate as the number of students who drop out of school over a one-year period, minus the number of returned dropouts, divided by the October 1 grade 9-12 enrollment, and multiplied by 100. For the 2004-05 school year, the one-year period was from July 1, 2004 to June 30, 2005.

Figure 2: Annual Dropout Rate Calculation

<p>Annual dropout rate = $\frac{\text{Final dropout count}}{\text{October 2004 Grade 9-12 enrollment}} * 100$</p> <p><i>Example:</i> State annual dropout rate for 2004-05 = $\frac{11,145}{293,399} * 100 = 3.8 \%$</p>

The projected four-year rate, is an estimation of the cumulative effect of four years of students dropping out of school for the class of 2008. In other words, it is a projection of the four-year dropout rate for students who were in grade nine in the 2004-05 school year based on the dropout rates for each grade in that year.

Figure 3: Projected Four-Year Rate Calculation

<p>Projected four-year dropout rate = $[1 - (1 - W) (1 - X) (1 - Y) (1 - Z)] * 100$</p> <p>W = Annual dropout rate in grade 9 X = Annual dropout rate in grade 10 Y = Annual dropout rate in grade 11 Z = Annual dropout rate in grade 12</p> <p><i>Example:</i> Projected four-year dropout rate for class of 2008 = $[1 - (1 - .030) (1 - .037) (1 - .041) (1 - .047)] = 14.7\%$</p>
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