



# Dropout Rates in Massachusetts Public Schools: 2000-01

August, 2002



**Massachusetts Department of Education**  
**address** 350 Main Street, Malden, MA 02148  
**telephone** 781-338-3000 **internet** [www.doe.mass.edu](http://www.doe.mass.edu)



# Table of Contents

<u>Section</u>	<u>Page</u>
Introduction	1
Analysis of Dropout Rates	1
Results for Selected Student Populations	4
Returned Dropouts	7
Data Collection and Dropout Rate Calculations	8
Appendix A – Annual Dropout Rates by District and School	10
Appendix B – Projected Four-Year Dropout Rates by District	32
Appendix C – Annual Dropout Rates by District, Grade, and Gender	40
Appendix D – Annual Dropout Rates by District and Race/Ethnicity	48



The statewide dropout rate masks the wide disparity in individual school rates and the persistently high rates at some schools. Among individual schools the dropout rate ranged from a low of zero percent to a high of 50 percent<sup>1</sup>. Sixteen schools reported no dropouts in 2000-01 and another 67 schools reported dropout rates of one percent or less. Twenty-one schools reported dropout rates greater than ten percent. These 21 schools comprised 4.9 percent of the state's grade nine through twelve enrollment, but accounted for 20.7 percent of the state's dropouts.

	Enrollment	Number of Dropouts	Annual Rate	Projected Four-year Rate*	Returns as % of Dropouts**
Total, Grade 9-12	271,700	9,380	3.5%		14.6%
Grade					
Grade 9	79,570	2,612	3.3%	13%	13.9%
Grade 10	69,447	2,419	3.5%		14.6%
Grade 11	64,689	2,580	4.0%		14.7%
Grade 12	57,994	1,769	3.1%		15.7%
Gender					
Male	133,778	5,479	4.1%	15%	17.7%
Female	137,922	3,901	2.8%	11%	16.7%
Race/Ethnic Group					
African-American	23,346	1,421	6.1%	22%	12.0%
Asian	12,323	482	3.9%	15%	20.1%
Hispanic	26,095	2,079	8.0%	28%	13.2%
Native American	711	23	3.2%	12%	11.5%
White	209,225	5,375	2.6%	10%	15.2%
Vocational-Technical Schools***					
City/Town	8,395	568	6.8%	24%	15.0%
Regional/County/Independent	24,787	513	2.1%	8%	12.6%
* Percentage of ninth graders (class of 2004) projected to drop out over a four-year period					
** Percentage of 2000-01 dropouts who returned to school by October 1, 2001					
*** Figures do not include vocational-technical students enrolled in comprehensive high schools					

<sup>1</sup> Because dropout rates for schools with low enrollments are overly sensitive to small variations in the number of dropouts, the analysis of the distribution of dropout rates excludes schools with a grade 9-12 enrollment of fewer than 75 (21 schools in 2000-01).

	1996-97	1997-98	1998-99	1999-00	2000-01
Total Dropout Rate, Grade 9-12	3.4%	3.4%	3.6%	3.5%	3.5%
Total Number of Dropouts	8,453	8,582	9,188	9,199	9,380
Grade 9-12 Enrollment	246,757	252,633	258,026	265,795	271,700
<b>Grade</b>					
Grade 9	2.8%	2.7%	3.1%	3.1%	3.3%
Grade 10	3.8%	3.6%	3.8%	3.7%	3.5%
Grade 11	4.0%	4.2%	4.3%	3.9%	4.0%
Grade 12	3.2%	3.3%	3.1%	3.1%	3.1%
<b>Gender</b>					
Male	3.9%	3.9%	4.0%	4.0%	4.1%
Female	3.0%	2.9%	3.1%	2.9%	2.8%
<b>Race/Ethnic Group</b>					
African-American	5.6%	6.1%	6.7%	6.1%	6.1%
Asian	2.7%	3.5%	3.6%	4.0%	3.9%
Hispanic	8.2%	8.2%	9.8%	8.2%	8.0%
Native American	6.0%	5.3%	4.0%	4.2%	3.2%
White	2.7%	2.6%	2.5%	2.6%	2.6%
<b>Vocational-Technical Schools*</b>					
City/Town	6.1%	4.9%	4.9%	5.5%	6.8%
Regional/County/Independent	2.6%	2.4%	2.4%	2.6%	2.1%

\* Figures do not include vocational-technical students enrolled in comprehensive high schools

	Class of 2000	Class of 2001	Class of 2002	Class of 2003	Class of 2004
Total	13%	13%	14%	13%	13%
<b>Gender</b>					
Male	15%	15%	15%	15%	15%
Female	11%	11%	12%	11%	11%
<b>Race/Ethnic Group</b>					
African-American	21%	22%	24%	22%	22%
Asian	11%	13%	14%	15%	15%
Hispanic	28%	29%	33%	29%	28%
Native American	23%	21%	17%	16%	12%
White	10%	10%	10%	10%	10%
<b>Vocational-Technical Schools*</b>					
City/Town	22%	19%	19%	21%	24%
Regional/County/Independent	10%	10%	9%	14%	8%

\* Figures do not include vocational-technical students enrolled in comprehensive high schools









## Data Collection and Dropout Rate Calculations

### Data Collection

In accordance with the U.S. Department of Education definition, a school dropout in Massachusetts is defined as a student who leaves school prior to graduation for reasons other than transfer to another school and does not return to school by October 1 of the following reporting year. Individual public schools reported to the Department of Education the number of students who dropped out over a 12-month period beginning July 1, 2000, and ending June 30, 2001. Dropout figures were reported in the *Year-End School Indicator Report for 2000-01*. Schools then reported the number of dropouts who returned to school by October 1, 2001. In both of these reports, dropouts were classified by gender within the five racial/ethnic groups across grades six through twelve. Although the Department collects data on students in grades six through eight, the reported rate represents grades nine through twelve. Data on grades six through eight are available from the Department.

### Dropout Rate Calculations

#### *Annual Dropout Rate*

In Massachusetts, the annual dropout rate is the number of dropouts from grades nine through twelve over a single one-year reporting period, minus the number of those dropouts who returned to school by the following October 1, divided by the October 1 enrollment for that reporting period. Enrollment data for October 1, 2000, collected in the *Individual School Report*, were used to determine the 2000-01 dropout rate. Because students who drop out between July 1 and October 1 are counted as dropouts but are not included in the enrollment figure against which the number of dropouts is compared, the rates may be slightly inflated to the extent to which students drop out prior to October 1.

This is the eighth consecutive year that the Massachusetts Department of Education has reported dropout data using this measure. Prior to 1993, the Department reported a dropout rate that counted all students who dropped out of school regardless of whether they returned to school. This rate, called the *unadjusted dropout rate*, is not included in the analyses of this report. Therefore, data in this report are not comparable to data for the years prior to 1993. Data comparable with earlier years are available from the Department. The unadjusted rate for 2001 is included in the data table of annual dropout rates for schools and districts at the end of this report (Appendix A).

$$\text{Annual Dropout Rate} = \frac{\text{(number of dropouts - returned dropouts)}}{\text{October enrollment}} * 100$$

Example:

$$\text{Statewide annual dropout rate (2000-01)} = \frac{(10,978 - 1,598)}{271,700} * 100 = 3.5\%$$

*Projected Four-Year Dropout Rate*

The projected four-year dropout rate is determined by calculating the cumulative effect of four years of dropping out according to the following formula.

$$\text{Projected Four-Year Dropout Rate} = [1 - (1 - W) (1 - X) (1 - Y) (1 - Z)] * 100$$

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

Example:

$$\begin{aligned} \text{Statewide Adjusted Projected Four-Year Dropout Rate (class of 2004)} = \\ [1 - (1 - .033) (1 - .035) (1 - .040) (1 - .031)] * 100 = 13\% \end{aligned}$$

The methodology assumes that (1) current annual dropout rates for grades ten, eleven and twelve will remain constant over the next three years, and (2) students who drop out will not return to school *after* October 1 of the following year. Grade-specific dropout rates for individual schools, as well as projected four-year dropout rates for individual schools, are available from the Massachusetts Department of Education.

## Appendix A

### Annual Dropout Rates by District and School, 2000-01

District	School	Trend Data - Adjusted Rates (%)				Adjusted Rate%	Unadjusted Rate%	2001	Total Enrollment
		1997	1998	1999	2000			Adjusted Dropouts (#)	
Abington	Abington High	3.2	4.1	3.5	1.5	1.6	1.8	9	563
Agawam	Agawam High	2.4	1.9	1.9	0.8	0.0	2.3	0	1255
Amesbury	Amesbury High	2.2	2.3	1.1	1.5	4.3	4.8	34	796
Andover	Andover High	0.6	0.4	0.7	0.7	0.1	0.4	2	1626
Arlington	Arlington High	1.7	1.7	1.2	1.2	1.1	1.1	12	1069
Ashland	Ashland High	0.0	0.4	0.4	0.5	0.3	0.3	2	587
Attleboro	Attleboro High	5.1	4.4	5.4	3.9	7.0	7.9	108	1549
	Attleboro Voc Tech High	4.6	5.6	0.0	8.3	10.8	11.6	39	362
	<b>District Totals</b>	5.0	4.6	4.3	4.9	7.7	8.6	147	1911
Auburn	Auburn Senior High	0.5	0.8	3.1	1.0	2.4	2.9	15	626
Avon	Avon Middle High School			1.4	2.6	2.2	2.2	5	226
Ayer	Ayer High	0.3	1.6	2.4	3.7	2.6	3.1	9	351
Barnstable	Barnstable High	5.3	1.1	2.7	3.7	2.1	2.5	42	1974
Bedford	Bedford High	0.3	0.0	0.3	1.1	0.6	0.7	4	671
Belchertown	Belchertown High	2.4	3.4	3.4	2.4	3.6	4.0	20	556

Notes: This report includes dropout and enrollment data for grades 9-12. The adjusted dropout rate accounts for dropouts who returned to school by the following October 1; data prior to 1993 did not have this adjustment made and are not comparable to these figures. Some rates are greater than 100 percent because the October 1 enrollment number was lower than the total number of students that dropped out during the course of the year.



District	School	Trend Data - Adjusted Rates (%)				2001			Total Enrollment
		1997	1998	1999	2000	Adjusted Rate%	Unadjusted Rate%	Adjusted Dropouts (#)	
Boston	Horace Mann	0.0	0.0	0.0	4.5	0.0	0.0	0	23
	<b>District Totals</b>	8.4	8.7	9.8	9.4	8.5	9.3	1518	17891
Bourne	Bourne High	0.9	1.9	1.7	2.2	3.9	4.4	24	612
Braintree	Braintree High	1.5	2.1	1.3	0.7	1.0	1.3	13	1338
Brockton	B B Russell	0.0	0.0	0.0	0.0	23.0	23.0	14	61
	Ithaka/Lincoln	30.0	25.7	23.5	12.2	12.1	12.1	4	33
	Brockton High	5.4	3.4	4.0	5.7	5.3	6.8	211	3945
	<b>District Totals</b>	5.7	3.6	4.2	5.8	5.7	7.1	229	4039
Brookline	Brookline High	0.1	0.1	0.4	0.3	0.3	0.5	6	1860
Burlington	Burlington High	1.5	1.6	1.0	0.3	0.4	0.7	4	891
Cambridge	Camb Rindge & Latin	2.0	2.5	2.4	2.7	3.1	3.3	61	1951
Canton	Canton High	0.9	2.2	2.1	1.1	0.8	1.2	6	730
Carver	Carver High School	3.9	4.0	5.3	3.4	3.6	4.9	21	586
Chatham	Chatham High	2.7	1.6	2.5	1.9	0.4	0.4	1	227
Chelmsford	Chelmsford High	0.9	1.4	1.3	2.4	1.2	1.3	20	1680
Chelsea	Chelsea High	4.0	12.8	10.4	9.2	9.1	10.1	101	1109
	The Alternative School			262.5	8.6	64.3	71.4	18	28
	<b>District Totals</b>	4.0	12.8	12.2	9.1	10.5	11.6	119	1137
Chicopee	Horizon Academy	0.0	3.6	5.4	4.4	0.0	6.1	0	98
	Chicopee High	8.4	6.7	5.9	10.4	5.5	6.4	58	1061

Notes: This report includes dropout and enrollment data for grades 9-12. The adjusted dropout rate accounts for dropouts who returned to school by the following October 1; data prior to 1993 did not have this adjustment made and are not comparable to these figures. Some rates are greater than 100 percent because the October 1 enrollment number was lower than the total number of students that dropped out during the course of the year.

District	School	Trend Data - Adjusted Rates (%)				2001			Total Enrollment
		1997	1998	1999	2000	Adjusted Rate%	Unadjusted Rate%	Adjusted Dropouts (#)	
Chicopee	Chicopee Comprehensive HS	4.9	5.2	2.2	9.2	6.7	7.8	84	1250
	<b>District Totals</b>	6.4	5.8	3.8	9.6	5.9	7.1	142	2409
Clinton	Clinton Senior High	6.0	4.9	3.2	1.6	2.2	2.2	11	511
Cohasset	Cohasset Jr Sr High	0.0	0.0	0.0	0.0	0.0	0.3	0	320
Danvers	Danvers High	1.4	2.6	1.1	1.5	1.2	1.3	13	1042
Dartmouth	Dartmouth High	1.8	2.6	3.0	3.1	2.8	3.4	34	1207
Dedham	Dedham High	3.8	3.3	1.3	1.1	0.7	1.6	5	755
Douglas	Douglas Middle High	1.9	0.4	0.4	1.4	2.0	2.0	6	300
Dracut	Dracut Senior High	3.0	0.8	1.6	1.5	2.3	2.5	23	997
Duxbury	Duxbury High	0.1	0.5	0.1	0.3	0.3	0.3	3	891
East Bridgewater	East Bridgewater High	3.2	3.8	2.5	2.5	2.5	3.6	17	674
Easthampton	Easthampton High	5.3	4.6	5.5	5.7	3.1	3.1	14	448
East Longmeadow	East Longmeadow High	0.4	0.5	0.6	0.8	1.2	1.2	10	815
Easton	Easton Junior High	0.0	0.0	0.0	0.0	0.0	0.0	0	266
	Oliver Ames High	1.1	0.6	0.7	0.1	0.4	0.7	3	732
	<b>District Totals</b>	0.8	0.4	0.5	0.1	0.3	0.5	3	998
Everett	Everett High	3.9	4.6	5.2	2.7	3.5	4.1	54	1542

Notes: This report includes dropout and enrollment data for grades 9-12. The adjusted dropout rate accounts for dropouts who returned to school by the following October 1; data prior to 1993 did not have this adjustment made and are not comparable to these figures. Some rates are greater than 100 percent because the October 1 enrollment number was lower than the total number of students that dropped out during the course of the year.



































































































