

Youth Development Indicators for Educational  
and Workforce Development Programs in  
Massachusetts At the State, Regional, and  
Local WIB Service Delivery Areas

---

Prepared By  
Center for Labor Market Studies  
Northeastern University  
Boston, Massachusetts

Prepared for:  
Commonwealth Corporation

March 23, 2009



## The Components of the Massachusetts Youth Development Indicators Project

---

- The Youth Development Indicators Packages. They were produced for the entire state, five regions across the state, and the sixteen local WIB service delivery areas
- A Users Guide for the Youth Development Indicators Packages
- A Power Point Presentation Providing Key Findings and Data on Youth Educational Labor Market, and Social Outcomes
- A Policy Research Monograph on the State of Youth In the Commonwealth and Key Educational/Workforce Development Challenges



## Key Elements of the Youth Development Indicator Packages

---

- The size and demographic characteristics of the resident 16-24 year old population; recent changes in its size and the projected population outlook to 2015
- The school enrollment status/educational attainment of the 16-19 and 20-24 year old population
- The labor force behavior, unemployment rates, and unemployment rates of teens and young adults
- The employment and earnings experiences of teens and young adults over the year
- The industries and occupations of the jobs held by employed teens and young adults



## Key Elements of the Youth Development Indicator Packages (Cont.)

---

- The percent of teens and young adults with no paid work experience during the year
- The percent of teens and young adults that were disconnected from both school and work
- The percent of teens and young adults that were disconnected from both school and work
- The incidence of high school dropout problems among teens and young adults and their income problem
- The incidence of motherhood and single motherhood among 16-24 year old women and their income inadequacy problems



## Key Elements of the Youth Development Indicator Packages (Cont.)

---

- The disabled young adult population (16-24) and their labor market behavior
- Institutionalization rates among the 16-24 year old population
- Four and Five Year On-Time High School Graduation Rates of Massachusetts High School Freshmen, Classes of 2006 and 2007
- College Attendance Plans of High School Graduates 2007
- Mal-Employment Problems of Recent Four Year College Graduates



## Sources of Data for the Youth Workforce Development Indicators

---

- 2000 Census of Population and Housing
- 2005-2006-2007 American Community Surveys; 36,000-37,000 households per year; 4,000 residents of group quarters including inmates of institutions
- Current Population Surveys, selected years 1978-79 to 2007-2008
- Massachusetts Vital Statistics, birth data for women 15-24
- Massachusetts Department of Education, 4 and 5 year high school graduation rates, Classes of 2006 and 2007
- Massachusetts Department of Education, annual exit surveys of college / work / military service plans of new high school graduates



## Recent and Projected Changes in the Size and Demographic Composition of the State's Teen (16-19) and 20-24 Year Old Populations

---

- Population developments in the state from 2000-2008; the double-digit growth of the teen and young adult populations
- The changing race-ethnic composition of the 16-24 year old population
- The projected population outlook for teens and young adults between 2008 and 2015

Trends in the Number of Persons Under 16,  
16-19 Year Olds, and 20-24 Year Olds in  
Massachusetts, 2000 to 2007 (in Thousands)

---

**Massachusetts**

	(A)	(B)	(C)	(D)
Age Group	2000	2007	Absolute Change	Percent Change
Under 16	1,341	1,253	-88	-6.6
16 – 19	334	368	34	+10.2
20 – 24	404	453	49	+12.0
All, 16 – 24	738	821	83	+11.2

Trends in the Number of Persons Under 16,  
16-19 Year Olds, and 20-24 Year Olds in the U.S.,  
2000 to 2007 (in Thousands)

---

**United States**

	(A)	(B)	(C)	(D)
Age Group	2000	2007	Absolute Change	Percent Change
Under 16	64,273	65,153	880	1.4
16 – 19	16,200	17,209	1,009	6.2
20 – 24	18,964	21,032	2,068	10.9
All, 16 – 24	35,164	38,241	3,077	8.8

Estimated Changes in the 16-24 Year Old  
Resident Population of Massachusetts by  
Race-Ethnic Group, 2000 to 2006-2007

Group	(A)	(B)	(C)	(D)
	2000 April	2006-2007 Average	Absolute Change	Percent Change
All	735,072	818,126	83,054	11.3%
Asian	40,053	45,160	5,107	12.7%
Black, not Hispanic	44,319	58,667	14,348	32.3%
Hispanic	76,168	92,166	15,998	21.0%
Other Races, not Hispanic <sup>(1)</sup>	30,265	24,072	-6,193	-20.4%
White, not Hispanic	544,267	598,086	53,819	9.9%

Percent Change in the Population of 16-24 Year Olds in  
Massachusetts and the Combined Metro North, Metro  
South/West, South Coastal WIB Regions By Age and Race-  
Ethnic Group, 2000-2007

---

Group	(A) MA	(B) Combined Metro North, Metro South/West, South Coastal
16-19	11.7	15.8
20-21	15.5	21.1
22-24	7.7	6.0
Black	32.4	45.2
Hispanic	21.0	13.1
White	9.9	13.0



## Projected Changes in the Resident Population of Persons Under 16, 16-19, and 20-24 in Massachusetts, 2008-2015

---

	(A)	(B)	(C)	(D)
Age Group	2008	2015	Absolute Change	Percent Change
Under 16	1,310,674	1,303,765	-6,909	-.5%
16 – 19	387,958	348,634	-39,324	-10.1%
20 – 24	449,147	477,596	28,449	6.8%
16 – 24	837,105	826,230	-10,875	-1.3%



## Developments in the Nation's Teen and Young Adult Labor Markets 2000-2007 and During the Current Economic Recession

---

- The civilian labor force participation and employment rates of the nation's teens and young native born adults (20-24) fell sharply and steeply from 2001 through 2003; their E/P ratios fell more steeply than any other age group by far
- Teen employment was only marginally affected by national job growth from 2003 to 2006 and then began to decline in the fall of 2006 well before the onset of the national recession. The teen E/P ratio fell considerably from the fall of 2007 to the end of 2008; by the end of 2008, only 30% of the nation's teens were employed, lowest rate in post-World War II history
- Between 2000 and 2008, teen employment rate declines were overwhelming; their E/P rate fell by 15 percentage points from November-December 2000 to November-December 2008



## Continued

---

- Teen employment declines were severe in every major demographic and socioeconomic group; young college students affected the least, high school students and high school dropouts the most
- Employment rates of teens in 2008 were lowest among the young (16-17), males, Blacks and Asians, and low income youth
- Among 20-24 year olds, employment rates in 2008 were nearly 5 percentage points below 2000 among all youth, by January 2009, young males were employed at rates 10 to 12 percentage points below those of early 2001; record low employment rates for young 20-24 year old males; high school dropouts and graduates with no college have fared the worst in the labor market

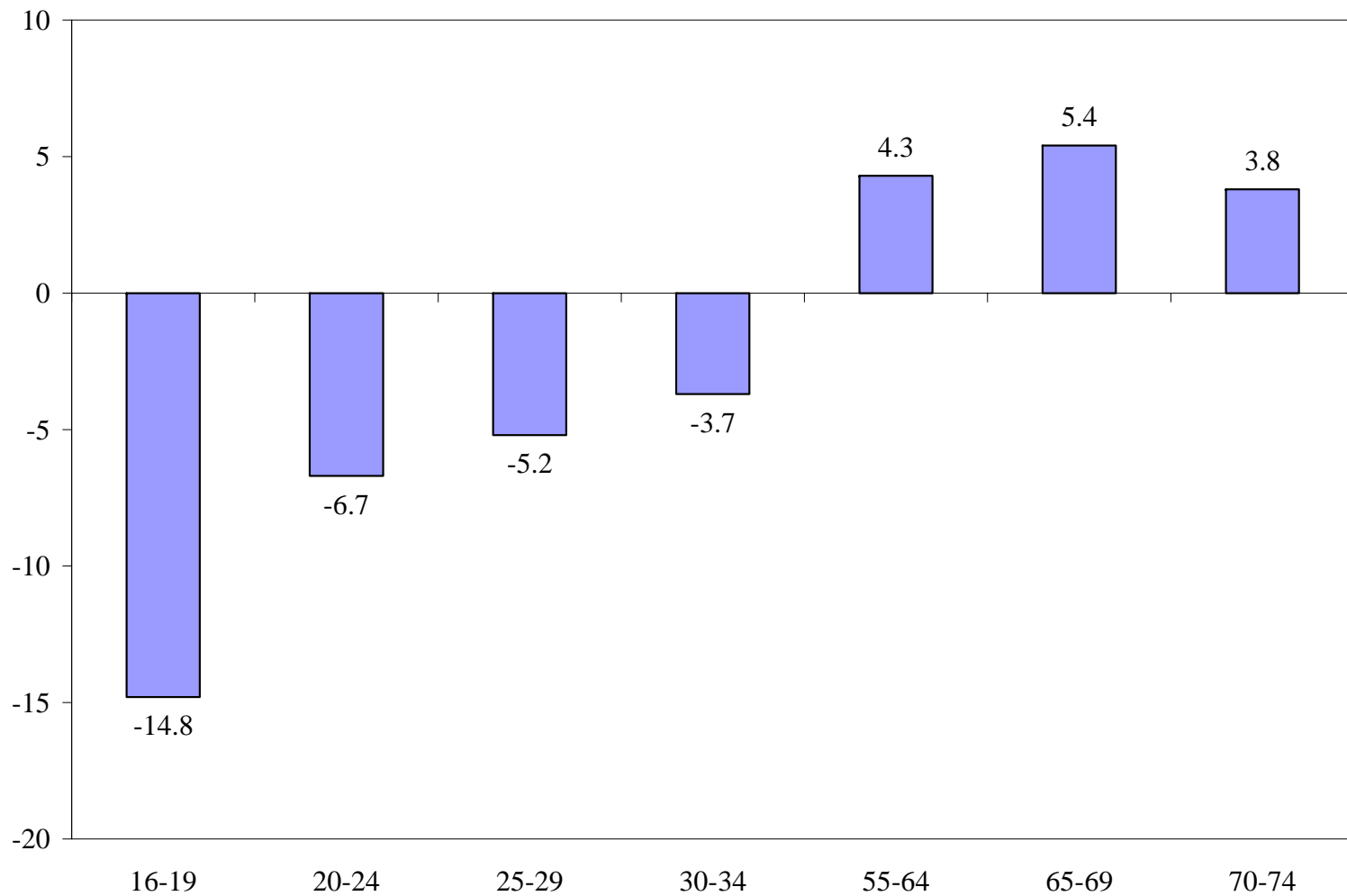



## Continued

---

- E/P ratios of young college graduates have remained quite high (the smallest declines) but a very high fraction of them are mal-employed, working at jobs that do not require a college degree

Comparisons of Changes in the Employment Rates of Selected Younger and Older Age Groups of U.S. Adults Between November – December 2000 and November – December 2008





Changes in Civilian Employment in the U.S. from  
December 2007 – January 2009 by Major Age Group  
(Seasonally Adjusted\*)

---

	(A)	(B)	(C)
Age Group	November 2007	January 2009	Change in Employed Persons
16+	146,665	142,099	-4,566
16-24	19,864	18,238	-1,626
25-29 <sup>(1)</sup>	16,224	15,653	-571
55+	26,201	27,218	+1,017

Note: The seasonally adjusted numbers for 25-29 year olds were generated by the authors by estimating seasonal adjustment factors for November and January.



## Declines in 16-19 Year Old Teen Employment Rates Between 2000 and 2008 by Gender and Race-Ethnic

(Annual Averages, in %)

	(A)	(B)	(C)
Demographic Group	2000	2008	Percentage Point Change
All	45.5	33.2	-12.3
Men	45.5	32.2	-13.3
Women	45.5	34.1	-11.4
Asian	30.8	21.2	-9.6
Black	30.0	21.5	-8.5
Hispanic	38.7	28.8	-9.9
White	52.0	38.3	-13.7

Declines in 16-19 Year Old Teen Employment Rates  
Between 2000 and 2008 by Educational Attainment, and  
Household Income Groups (Annual Averages, in %)

	(A)	(B)	(C)
Demographic Group	2000	2008	Percentage Point Change
High school dropout	50.4	36.7	-13.7
High school students	34.4	22.1	-13.3
College students	48.9	42.1	-6.8
High school graduates	72.9	61.7	-11.2
<b>Household Income</b>			
<20,000	37.8	25.1	-12.7
20-40,000	43.8	30.9	-12.9
40-60,000	50.6	34.8	-15.8
60-75,000	53.9	34.8	-19.1
75,000+	49.4	37.9	-11.5

Trends in the Employment Rates of the Nation's 20-24 Year Olds Between January-February 2000 and January-February 2009, All, Males and Race-Ethnic Group (in %)

	(A)	(B)	(C)	(D)	(E)
Time Period	Both Genders	All Males	Black	Hispanic	White
January-February 2000	72.4	76.8	59.4	82.2	78.2
January-February 2007	69.3	72.4	60.2	74.1	73.2
January-February 2009	64.2	66.0**	51.2	67.3	66.5
Change from 2000 to 2009	-8.2	-10.8	-8.2	-14.9	-11.7

\*\*A record post-World War II low for young men; prior low was 1983 when their E/P ratio in January-February was 69.8%

Trends in the Employment Rates of the Nation's 20-24 Year Olds Between January-February 2000 and January-February 2009, All, Females and Race-Ethnic Group (in %)

	(A)	(B)	(C)	(D)	(E)
Time Period	Both Genders	All Females	Black	Hispanic	White
January-February 2000	72.4	68.0	59.2	60.5	69.3
January-February 2007	69.3	66.0	57.9	58.8	67.3
January-February 2009	64.2	62.4	53.5	52.5	63.8
Change from 2000 to 2009	-8.2	-5.6	-5.7	-7.7	-5.5



## Teen Employment Developments in the State of Massachusetts Over the Long Run, 2000-2008, and Recent Years, 2005-2007

---

- Long-term secular changes in teen employment rates in Massachusetts and the U.S.: the state's relative decline from more of a national leader in the late 1980s to the middle of the pack (2007-2008)
- Employment rates of Massachusetts teens in 2007-2008 by family income
- Changes in the employment rates of teenaged high school students 1999-2000 to 2007-2008 by gender, race, and family income
- The predicted probabilities of employment among selected subgroups of 16-19 year old high school students in Massachusetts, 2005-2007

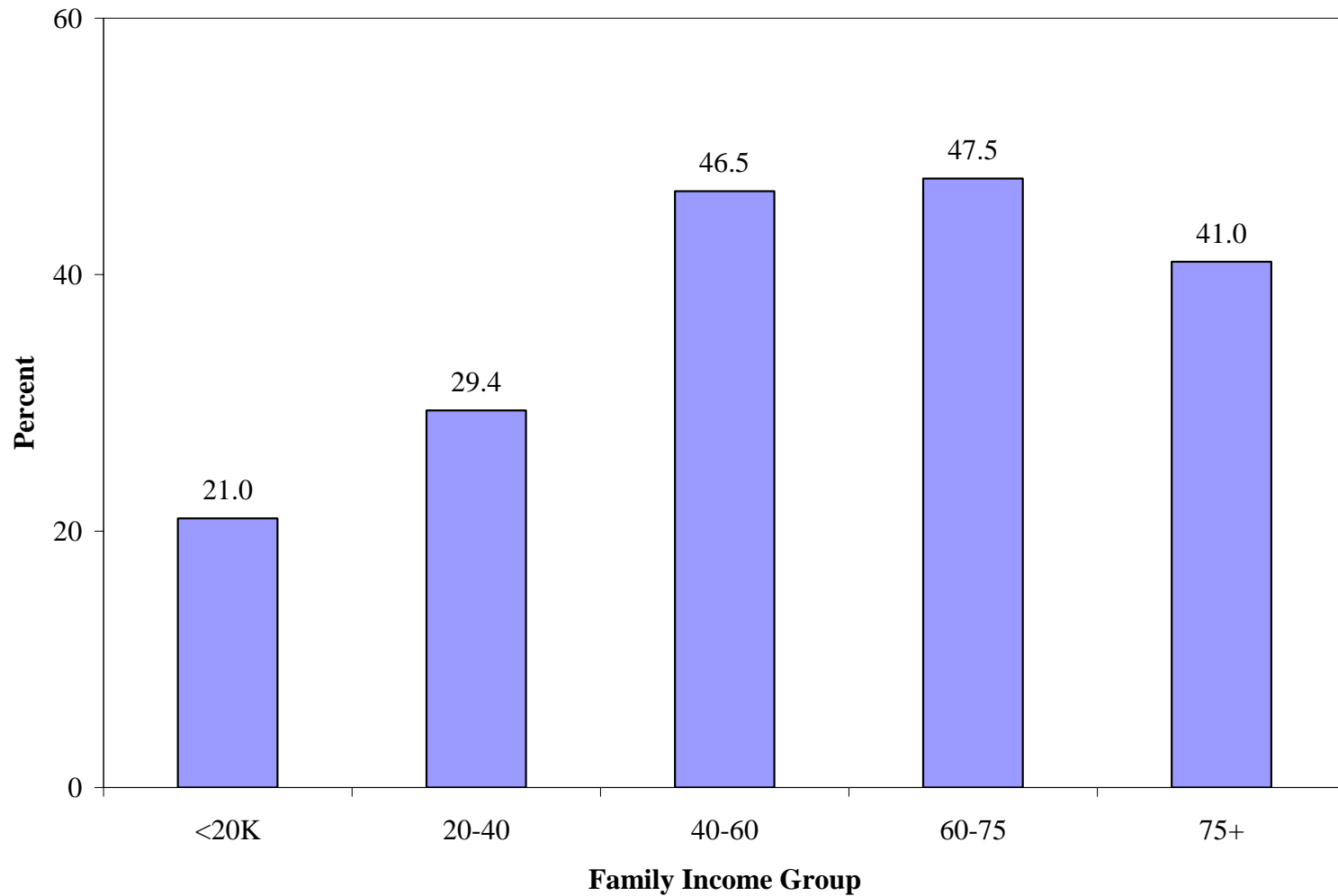
Employment/Population Ratios of Teens 16-19 Years Old) in Massachusetts and the U.S., Selected Years 1978-79 to 2007-2008 (Annual Averages, in Percent)

	(A)	(B)	(C)	(D)
Time Period	Mass.	U.S.	Mass. – U.S. (Percentage Points)	Mass. Rank Among States
1978-79	55.2	49.0	+6.2	15 <sup>th</sup>
1988-89	54.2	47.2	+7.0	11 <sup>th</sup>
1999-2000	50.9	45.4	+5.5	17 <sup>th</sup>
2007-2008	38.1	34.4	+2.7	23 <sup>rd</sup>

Comparisons of the Employment Rates of Teens in  
Massachusetts and the U.S. by Family Income Group in  
2007-2008 and Massachusetts' Rank Among the 50 States

Family Income Group	(A) Mass.	(B) U.S.	(C) Mass. – U.S.	(D) Mass. Rank Among States
<20,000	21.0	27.1	-6.1	43 <sup>rd</sup>
20-40,000	29.4	32.5	-3.1	42 <sup>nd</sup>
40-60,000	46.5	36.4	+10.1	14 <sup>th</sup>
60-75,000	47.5	40.4	+7.1	15 <sup>th</sup>
75,000+	41.0	38.5	+4.5	24 <sup>th</sup>

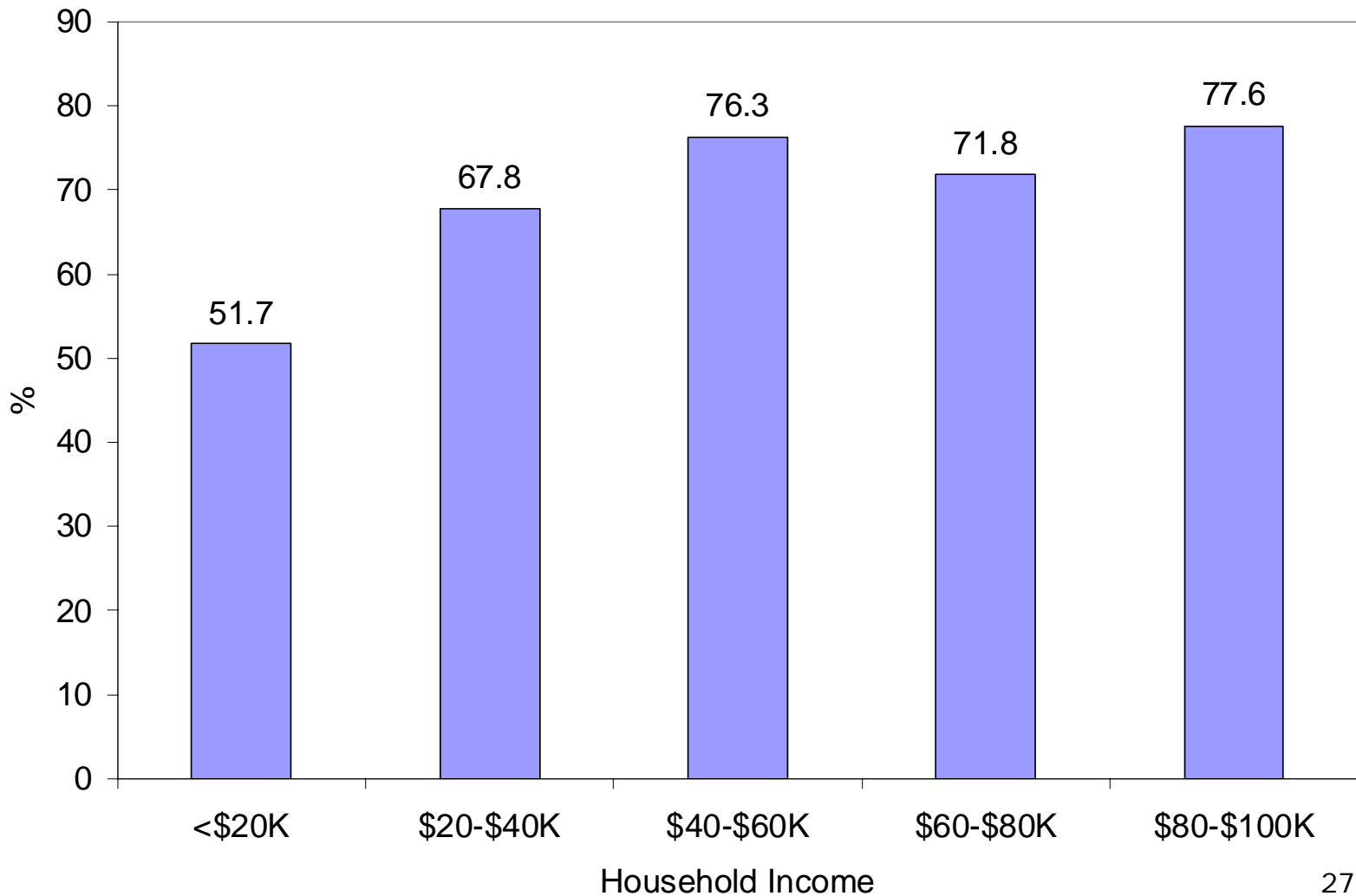
# E/P Ratios of 16-19 Year Olds in Massachusetts by Family Income Groups, 2007-2008 Averages (in %)



Employment Rates of 16-24 Year Olds in Massachusetts and  
the Combined Metro North, Metro South/West, and South  
Coastal WIB Regions By Age Group and Educational  
Attainment, 2006-2007

Group	MA	Combined Region
All	54.2	53.5
16-19	38.0	36.0
20-21	58.2	56.4
20-24	73.9	75.5
H.S. Students	30.3	30.9
H.S. Dropouts	48.6	48.8
H.S. Graduates	60.8	57.0
Bachelor's Deg.	79.4	79.8

Employment Rates of 20-24 Year Olds in the Combined Metro North, Metro South/West and South Coastal WIB Regions By Household Income Group, 2006-2007




Percent Distribution of Employed 16-19 Year Olds and Adults 25+ by Major Industry of Their Employers in the Metro North, Metro South/West, and South Coastal WIB Regions, 2006-2007

Industry	(A) 16-19 Year Olds Share of Employment	(B) 25+ Share of Employment	(C) Ratio of Teens to Adults (25+)
Agri., Forestry, Fishing, Hunting, and Mining	0.3	0.3	1.00
Construction	3.7	6.0	0.62
Manufacturing	2.8	8.9	0.31
Wholesale Trade	1.2	3.2	0.38
Retail Trade	35.5	8.5	4.18
Transportation, Warehousing	3.1	9.9	0.31
Finance, Insurance, Real Estate and Leasing	1.0	7.5	0.13
Prof., Scientific, Mgmt., Adm. and Waste Mgmt.	5.5	16.1	0.34
Education, Healthcare, and Social Service	14.4	25.8	0.56
Arts, Entertainment, Accom., and Food Service	26.8	5.7	4.70
Other Service, Excl. Public Adm.	4.2	4.1	1.02
Public Administration	1.3	4.0	0.33 <sub>28</sub>

E/P Ratios of 16-19 Year Old High School Students in  
Massachusetts 1999-2000 to 2007-2008, All and by Gender,  
Race-Ethnic Group, and Family Income Group (in %)

Group of High School Students	(A)	(B)	(C)
	1999-2000	2007-2008	Percentage Point Change
All	44.8	30.6	-14.2
Men	42.6	29.5	-13.1
Women	47.3	31.9	-15.4
Black	24.5	16.1	-8.4
Hispanic	32.0	13.8	-18.2
White, not Hispanic	49.0	33.6	-15.4
<20,000	23.4	12.7	-10.7
20-40,000	41.0	25.4	-15.6
40-60,000	63.5	28.7	-34.8
60-75,000	63.2	41.8	-21.4
75,000+			



## Predicted Probability of Employment Among Four Hypothetical Groups of Massachusetts High School Students (16-19) in 2005-2007

Demographic/Family Background Traits of Hypothetical Students	Predicted Probability Of Working
Black, male, 17 years old, lives with mother only, mother does not work, family income under \$20,000	8.4%
Black, male, 17 years old, lives with both parents, mom and dad work, family income \$40-60,000	24.6%
White, male, 17 years old lives with both parents, both work, family income \$60-80,000	40.7%
White, female, 18 years old, lives with both parents, both work, family income \$80-100,000	55.3%
Relative difference in probability of working between the last and first groups	7 – 1



## Employment Rates of Non-College Enrolled 20-24 Year Olds and 16-21 Year Olds, 2005-2007

---

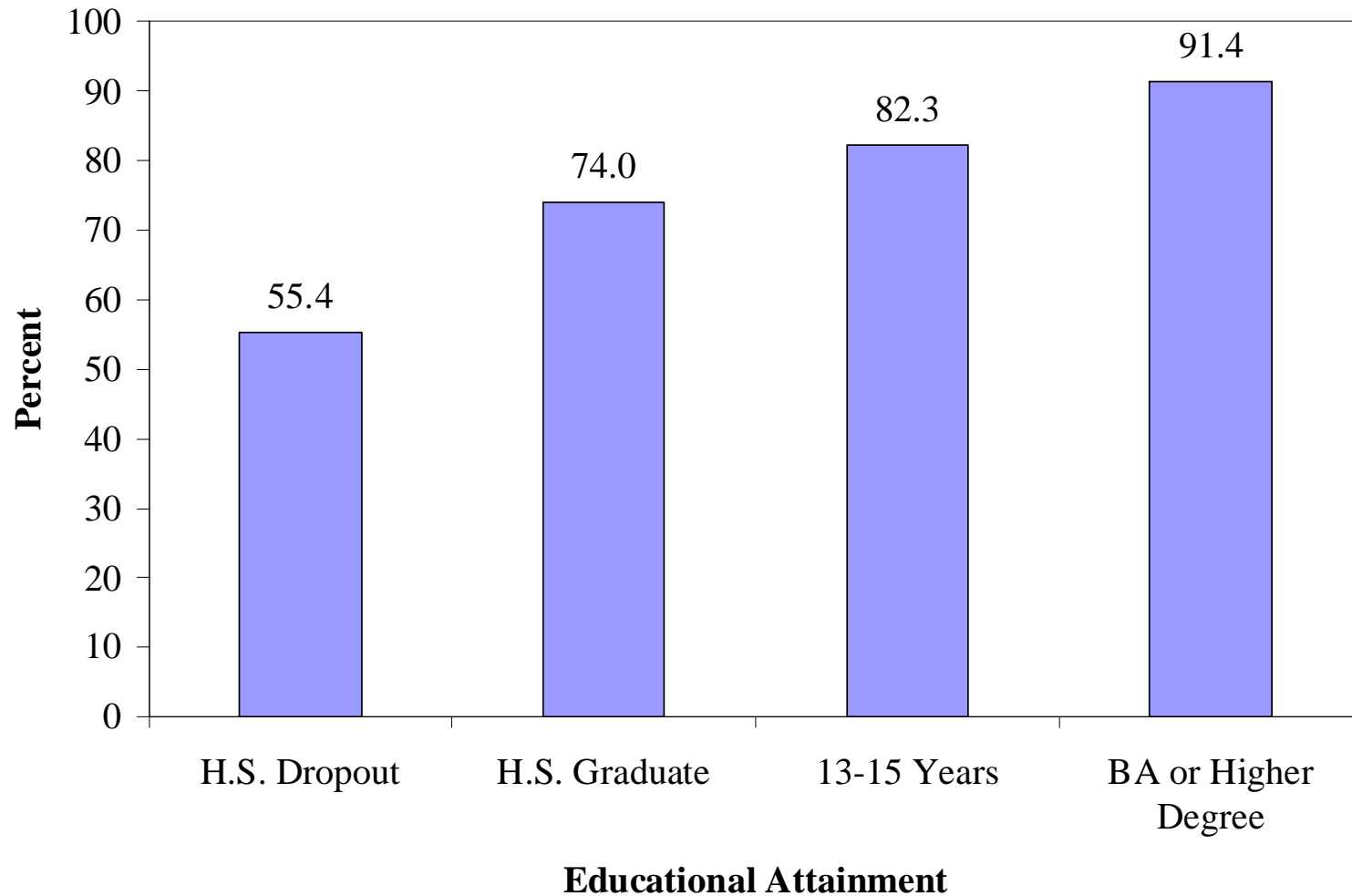
- Employment Rates of Massachusetts and U.S. Non-College Enrolled 20-24 Year Olds, All and by Gender
- Employment Rates of Massachusetts, Non-Enrolled 20-24 Year Olds by Educational Attainment
- Employment Rates of Massachusetts, Non-Enrolled 20-24 Year Olds by Race-Ethnic Group

Employment/Population Ratios of Non-Enrolled 20-24 Year Olds in Massachusetts and the United States, Total and by Gender, Race-Ethnic Group and Educational Attainment

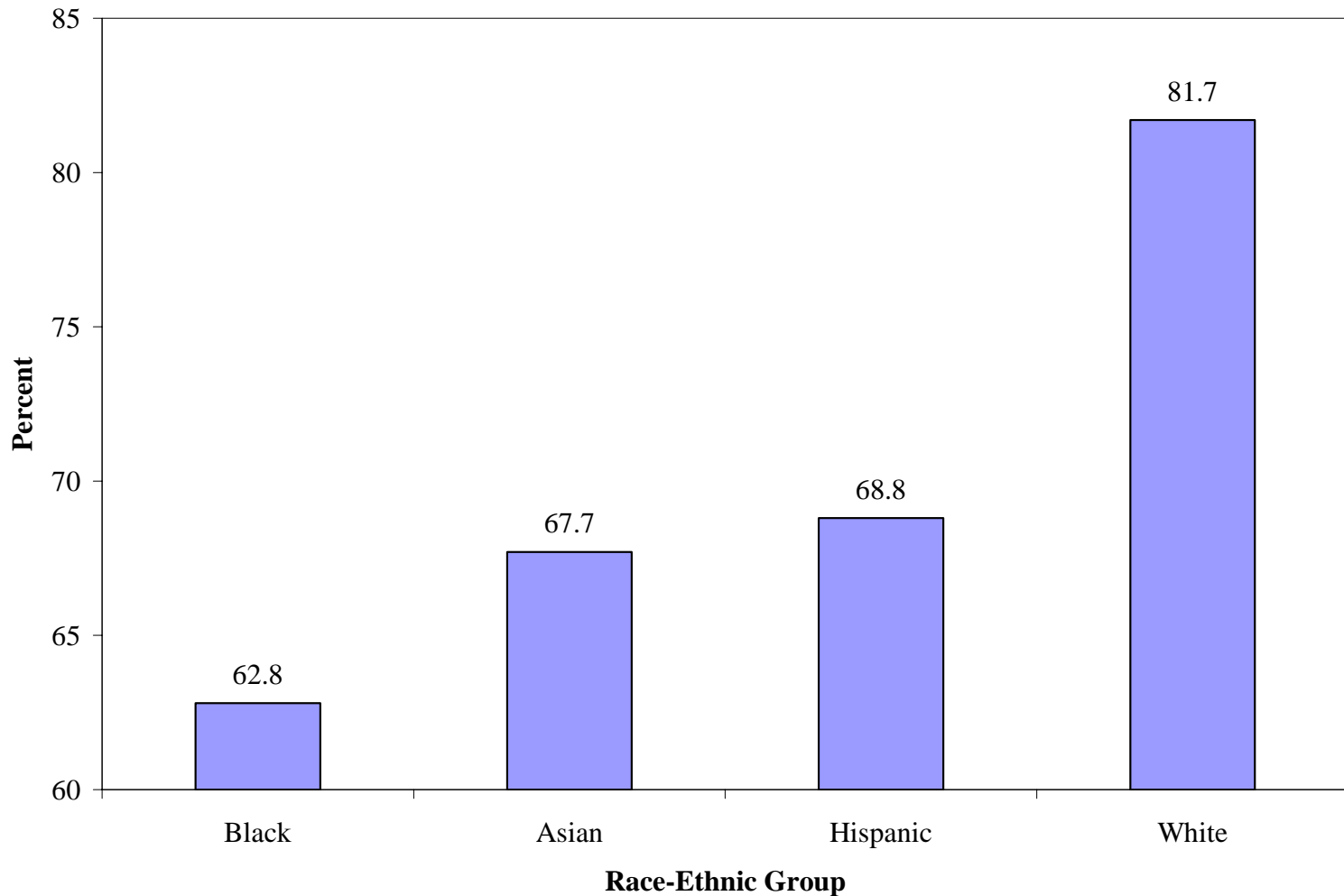
<b>Demographic Group</b>	<b>(A) Mass.</b>	<b>(B) U.S.</b>	<b>(C) Mass. – U.S.</b>	<b>(D) Massachusetts Rank Among 50 States and D.C.</b>
<b>All</b>	<b>77.5</b>	<b>72.7</b>	<b>+4.8</b>	<b>12<sup>th</sup></b>
<b>Men</b>	<b>78.5</b>	<b>77.8</b>	<b>+0.7</b>	<b>27<sup>th</sup></b>
<b>Women</b>	<b>76.3</b>	<b>67.0</b>	<b>+9.3</b>	<b>5<sup>th</sup></b>
<b>Asian</b>	<b>67.7</b>	<b>70.6</b>	<b>-2.9</b>	<b>33<sup>rd</sup></b>
<b>Black</b>	<b>62.8</b>	<b>59.6</b>	<b>+3.2</b>	<b>19<sup>th</sup></b>
<b>Hispanic</b>	<b>68.8</b>	<b>70.3</b>	<b>-1.5</b>	<b>42<sup>nd</sup></b>
<b>White</b>	<b>81.7</b>	<b>77.3</b>	<b>+4.4</b>	<b>10<sup>th</sup></b>
<b>&lt;12 or 12, no diploma</b>	<b>55.4</b>	<b>57.2</b>	<b>-1.8</b>	<b>34<sup>th</sup></b>
<b>High school diploma/GED</b>	<b>74.0</b>	<b>71.0</b>	<b>+3.0</b>	<b>17<sup>th</sup></b>
<b>13-15 years</b>	<b>82.3</b>	<b>80.0</b>	<b>+2.3</b>	<b>15<sup>th</sup></b>
<b>Bachelor's or higher degree</b>	<b>91.4</b>	<b>88.8</b>	<b>+2.6</b>	<b>17<sup>th</sup></b>



## Employment Rates of Non-Enrolled 20-24 Year Olds in Massachusetts by Educational Attainment, 2005-2007 Average (in%)



Employment Rates of Non-Enrolled 20-24 Year Olds  
in Massachusetts by Major Race-Ethnic Group, 2005-  
2007 Averages (in %)





## The Incidence of Disconnection Problems Among 22-24 Year Olds in Massachusetts, 2005-2007

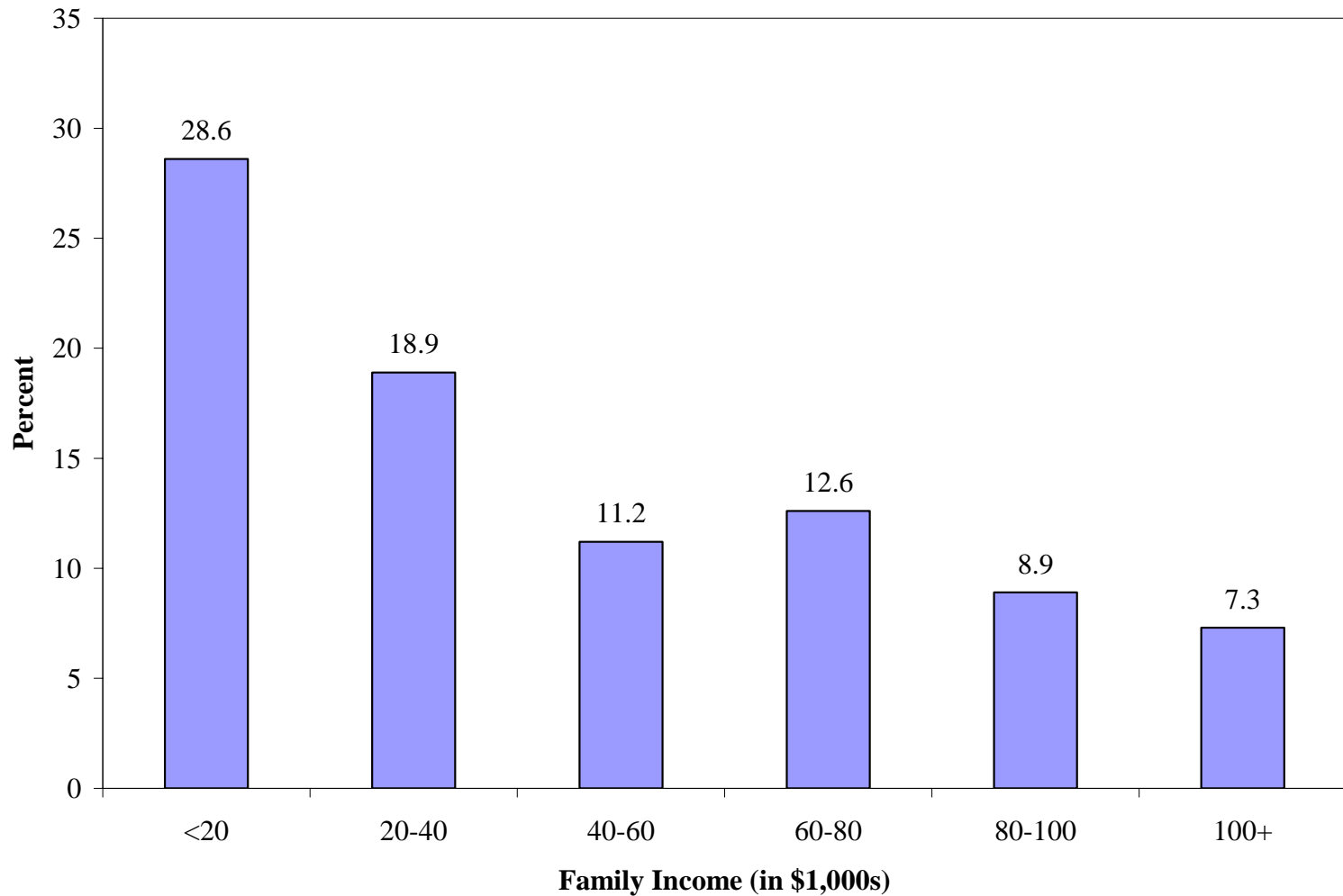
---


- Identifying the number of disconnected young adults; i.e., those neither working nor enrolled in school
- The incidence of disconnection problems among 22-24 year olds in Massachusetts; variations across race and family income groups
- Predicting the employment status of 16-21 year old out-of-school youth in Massachusetts in 2005-2007; the influence of formal schooling, race-ethnic backgrounds, parents' work behavior, and family income on employment probabilities of these out-of-school youth
- The economic costs of lost work experience in terms of lower future wages and earnings, a lower likelihood of receiving formal training from future employers and apprenticeship training (national evidence from the NLS 97 longitudinal survey through 2006)

Percent of the State's and Nation's 22-24 Year Olds Who  
Were Out-of-School and Out-of-Work in 2005-2007,  
All and by Gender, Race/Ethnic Group, and Family Income

	(A)	(B)	(C)	(D)
Group	Mass.	U.S.	Mass. – U.S.	Mass. Rank Among 50 States
All	12.9	17.1	-4.2	10 <sup>th</sup> lowest
Men	12.1	13.7	-1.6	17 <sup>th</sup>
Women	13.6	20.4	-6.8	4 <sup>th</sup> lowest
Asian	14.0	12.7	+1.3	31 <sup>st</sup>
Black	22.7	25.9	-3.2	17 <sup>th</sup>
Hispanic	22.8	22.1	+0.7	26 <sup>th</sup>
White, not Hispanic	10.1	13.7	-3.6	6 <sup>th</sup>
<20,000	28.6	27.3	+1.3	33 <sup>rd</sup>
20-40,000	18.9	20.3	-1.4	26 <sup>th</sup>
40-60,000	11.2	15.5	-4.3	6 <sup>th</sup>
60-80,000	12.6	13.8	-1.2	21 <sup>st</sup>
80-100,000	8.9	12.0	-3.1	6 <sup>th</sup>
100,000+	7.3	10.0	-2.7	5 <sup>th</sup>

## Percent of Massachusetts 22-24 Year Olds Who Were Both Out-of-School and Out-of-Work at the Time of the ACS Surveys by Family Income, 2005-2007 Averages






Impacts of Previous Work Experience in  
Teen Years and Early 20's on Their Predicted  
Hourly Wages of 21-25 Year Olds in 2005, U.S.

---


Group	(A)	(B)
	Teen Work Experience	20+ Work Experience
All	4.3%	5.3%
Men	2.9%	5.1%
Women	5.3%	5.3%
Low Educated (12 or fewer years of schooling)	4.9%	4.5%



Predicted Probabilities of Working Among Four  
Hypothetical Non-Enrolled 16-21 Year Old White Males in  
the Commonwealth of Massachusetts, 2005-2007

---

Demographic and Family Traits of Individual	Predicted Probability
Native Born, 19 Year Old, White Male, High School Dropout, Lives with Mother Only, Mom Does Not Work, Family Income under \$20,000	27.8%
Native Born, 19 Year Old, White Male, High School Graduate, Lives with Both Parents, Dad Works, Family Income \$20-40,000	60.7%
Native Born, 19 Year Old, White Male, High School Graduate, Lives with Both Parents, Both Work, Family Income \$40-60,000	76.7%
Native Born, 19 Year Old, White Male, Some College, Lives with Both Parents, Both Work, Family Income \$80-100,000	87.0%



Impacts of Teen Work Experience, 20+ Work Experience, Apprenticeship Training Spells, and Formal Company Training Spells on Annual Earnings in 2005  
( $L_n$  earnings was dependent variable)

---

	(A)	(B)	(C)
	All	Men	Women
Teen Work Experience	16%	16%	14%
20+ Work Experience	19%	14%	24%
Apprentice Training	7%	13%	0
Formal Company Training	9%	14%	6%
Other Training	10%	10%	7%

Percent of the Nation's Young Adults 23-26 Years Old in 2006  
Who Reported Ever Receiving Apprenticeship Training Between  
1997-2005 (Had to be interviewed at least 6 times)

<b>Group</b>	<b>Any Apprenticeship Training</b>
All	1.9%
Men	2.6%
Women	1.1%
Black	1.7%
Hispanic	1.4%
White	2.1%
<b>Men Only</b>	
<12 Years	1.4%
GED	2.9%
H.S. Diploma	2.8%
Some College	3.4%
2-Year Degree	2.1%
4-Year Degree	.4%

(Continued)

<b>Group</b>	<b>Any Apprenticeship Training</b>
<b>ASVAB Quintile</b>	
Lowest	1.1%
Second	1.9%
Third	3.1%
Fourth	4.3%
Fifth	2.3%
<b>Subgroups</b>	
White, Bottom 5 <sup>th</sup>	.5%
Black Dropout	1.1%
Black in Bottom 5 <sup>th</sup>	1.8%
Hispanic Dropout	1.2%
Hispanic Bottom 5 <sup>th</sup>	.6%



## The Economic and Social Consequences of High School Dropouts in the Commonwealth

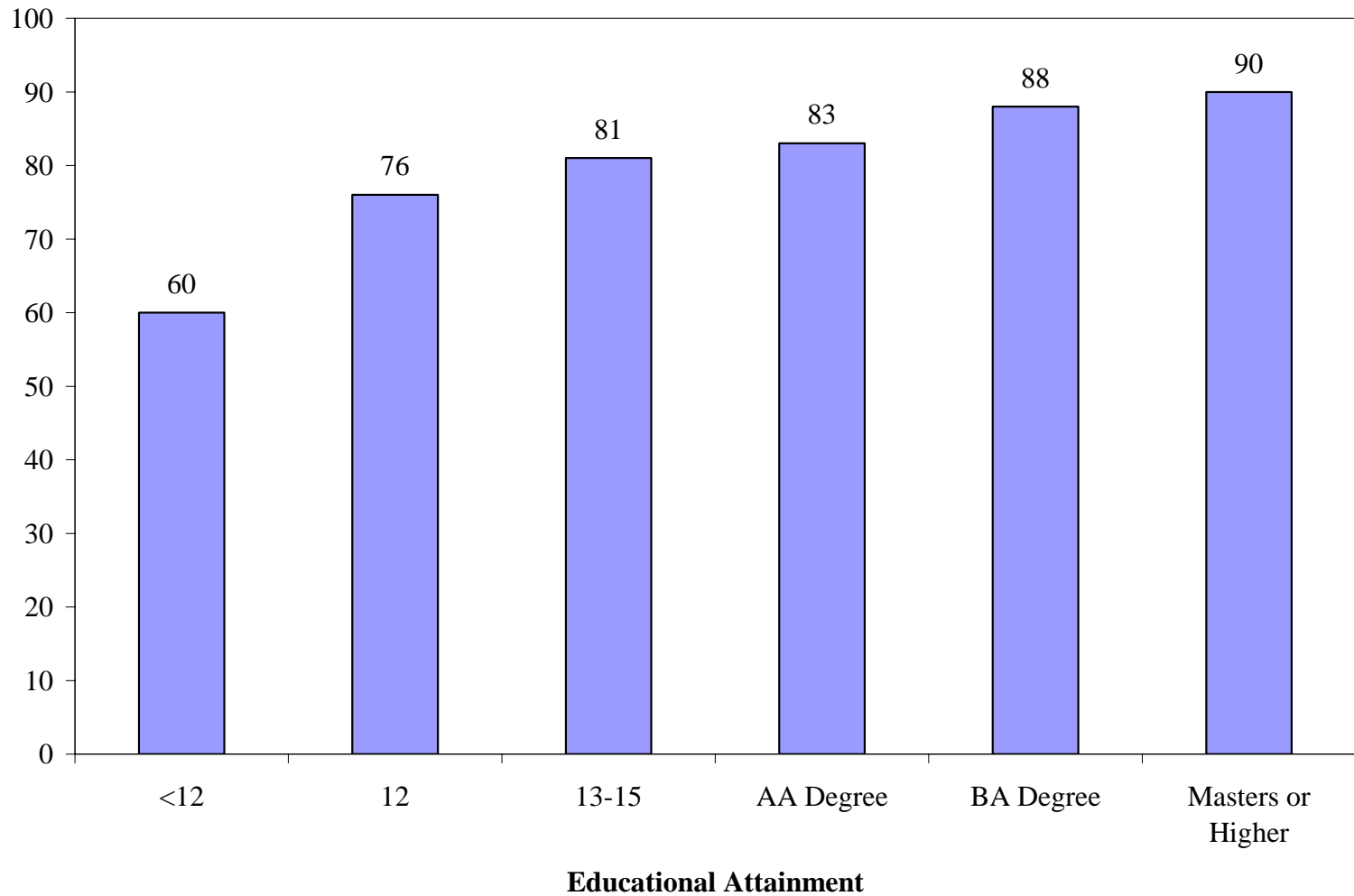
---


- Lower rates of employment in all stages of the work life from late teens to mid 60s; reduces cumulative work experience
- Lower annual earnings from ages 22-34 than high school graduates and all other educational groups
- Increased incidence of income inadequacy problems; greater dependence on government cash and in-kind transfers
- Reduced marriage rates over the lifetime
- Higher rates of out-of-wedlock childbearing
- Increased incarceration rates in jails / prisons especially among males and race-ethnic minorities
- Impose large net fiscal burdens on the rest of society

Percent of 22-34 Year Olds in Massachusetts Who Were Employed at the Time of the ACS Surveys by Educational Attainment,<sup>(1)</sup> All and by Gender (2005-2007, Averages)

	(A)	(B)	(C)
Educational Attainment	All	Men	Women
<12 or 12, no diploma or GED	60.2	68.9	47.9
H.S. diploma/GED	75.8	81.3	68.4
13-15 years, no degree	80.6	85.1	75.7
Associate's degree	82.6	89.9	77.3
Bachelor's degree	88.6	92.8	85.0
Master's or higher degree	90.4	95.0	87.3
All	80.6	85.0	76.0

## Percent of 22-34 Year Olds Who Were Employed in Massachusetts by Educational Attainment, Both Sexes Combined, 2005-2007 Averages

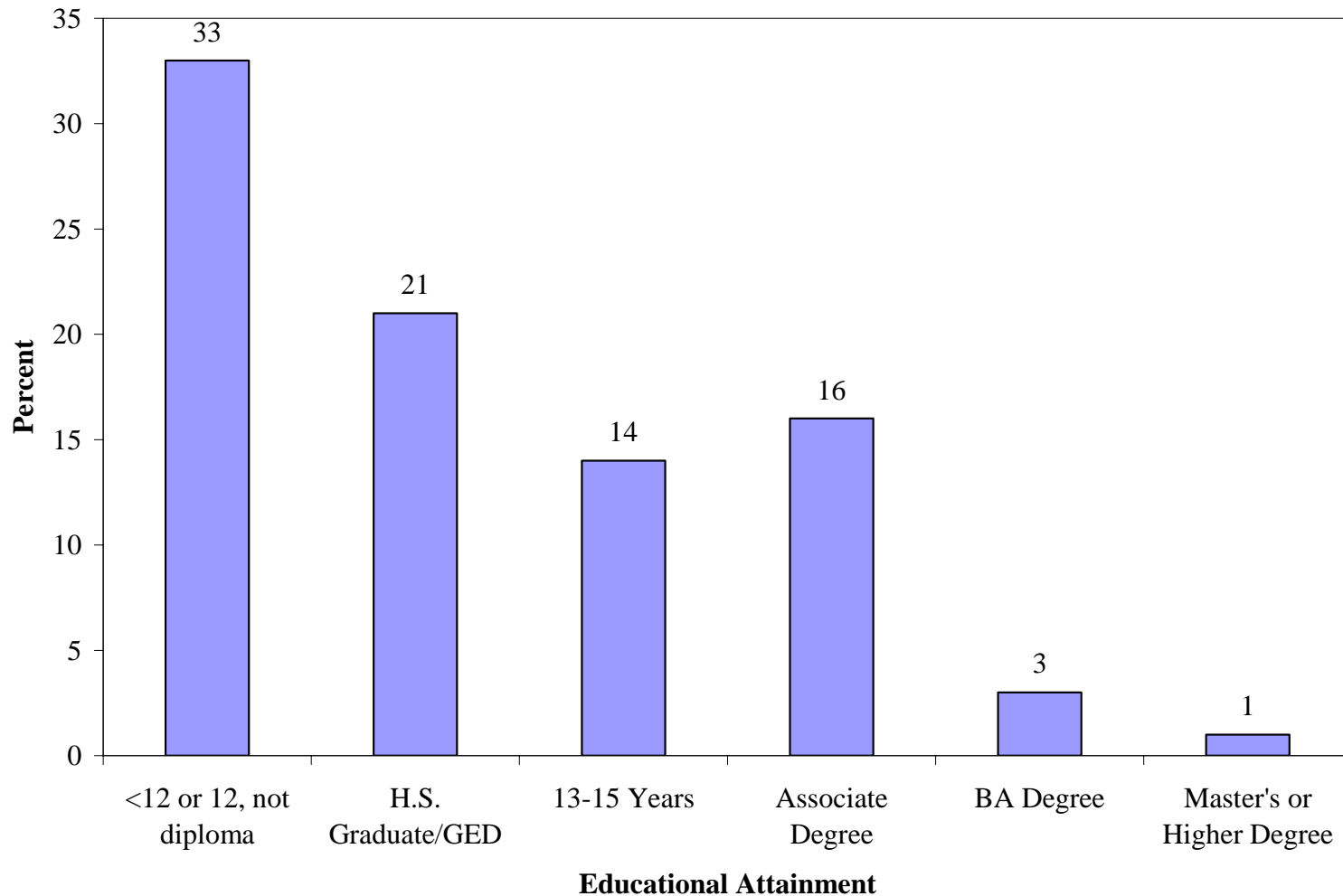




Mean Annual Earnings from Employment of 22-34  
Year Olds<sup>(1)</sup> in Massachusetts by Educational  
Attainment, All and by Gender 2005-2007 Averages

	(A)	(B)	(C)
Educational Attainment	All	Men	Women
<12 or 12, no diploma or GED	15,252	19,022	9,931
H.S. diploma/GED	23,653	29,101	16,208
11-15 years, not degree	27,561	33,458	21,305
Associate's degree	31,437	38,429	26,301
Bachelor's degree	44,331	54,336	35,642
Master's or higher degree	59,602	75,172	49,109
All	33,678	39,539	27,533

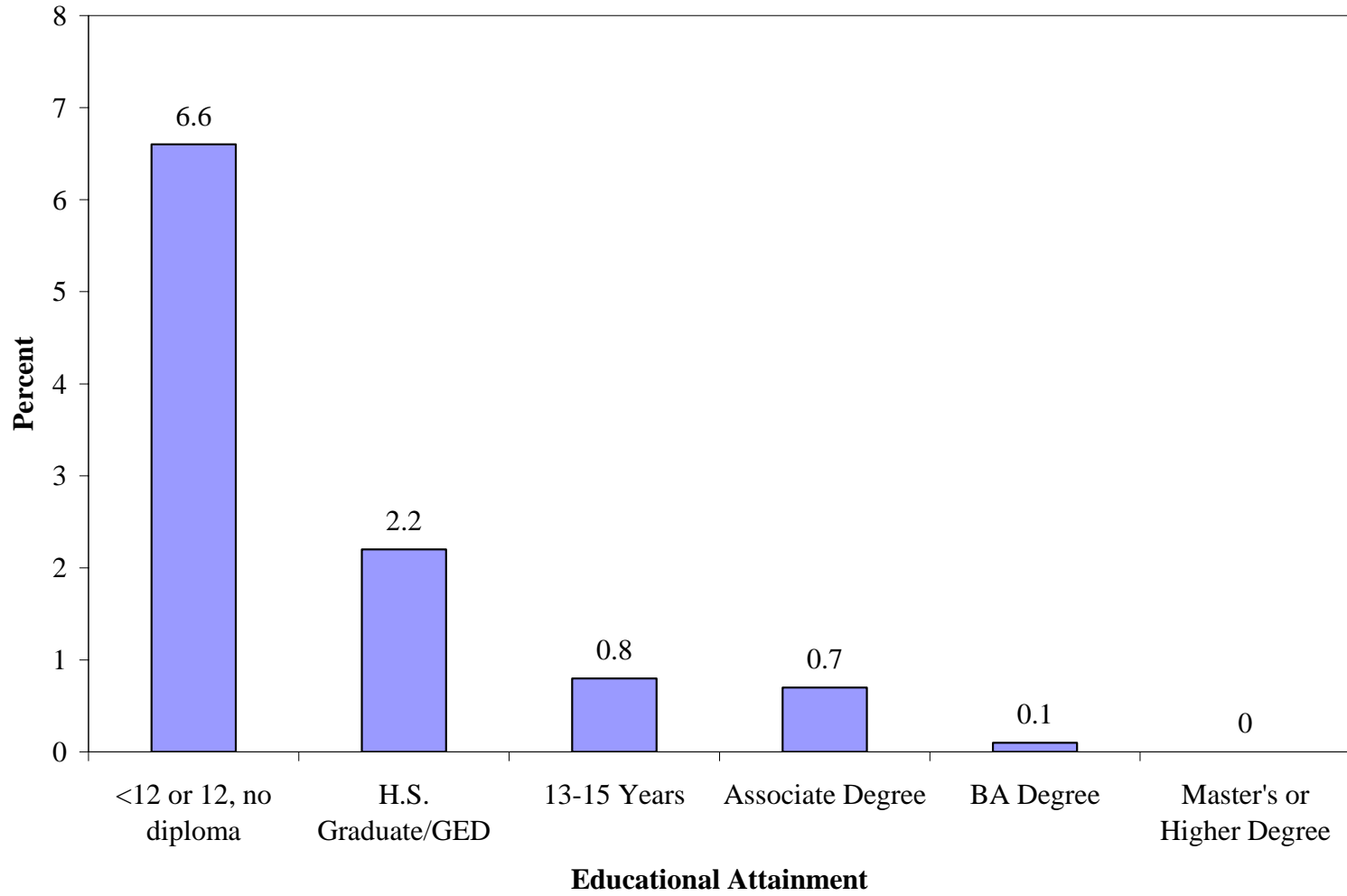
# Percent of 22-34 Year Old Women in Massachusetts Who Were Single Mothers by Educational Attainment, 2005-2007 Averages



Percent of 22-34 Year Olds in Massachusetts Who Were Poor or Near Poor or Low Income by Educational Attainment, Both Genders Combined, 2005-2007 Averages

Educational Attainment	(A)	(B)
	Poor or Near Poor	Low Income
<12 or 12, no diploma or GED	30.1	51.4
H.S. diploma or GED	16.5	29.3
13-15 years	12.4	23.6
Associate's degree	8.0	17.0
Bachelor's degree	4.8	9.7
Master's or higher degree	3.2	5.8
All	12.0	21.8

# Percent of 22-34 Year Old Massachusetts Males Who Were Institutionalized in 2006-2007 by Educational Attainment





## Identifying Other Key Target Groups for Youth Educational and Workforce Development Programs

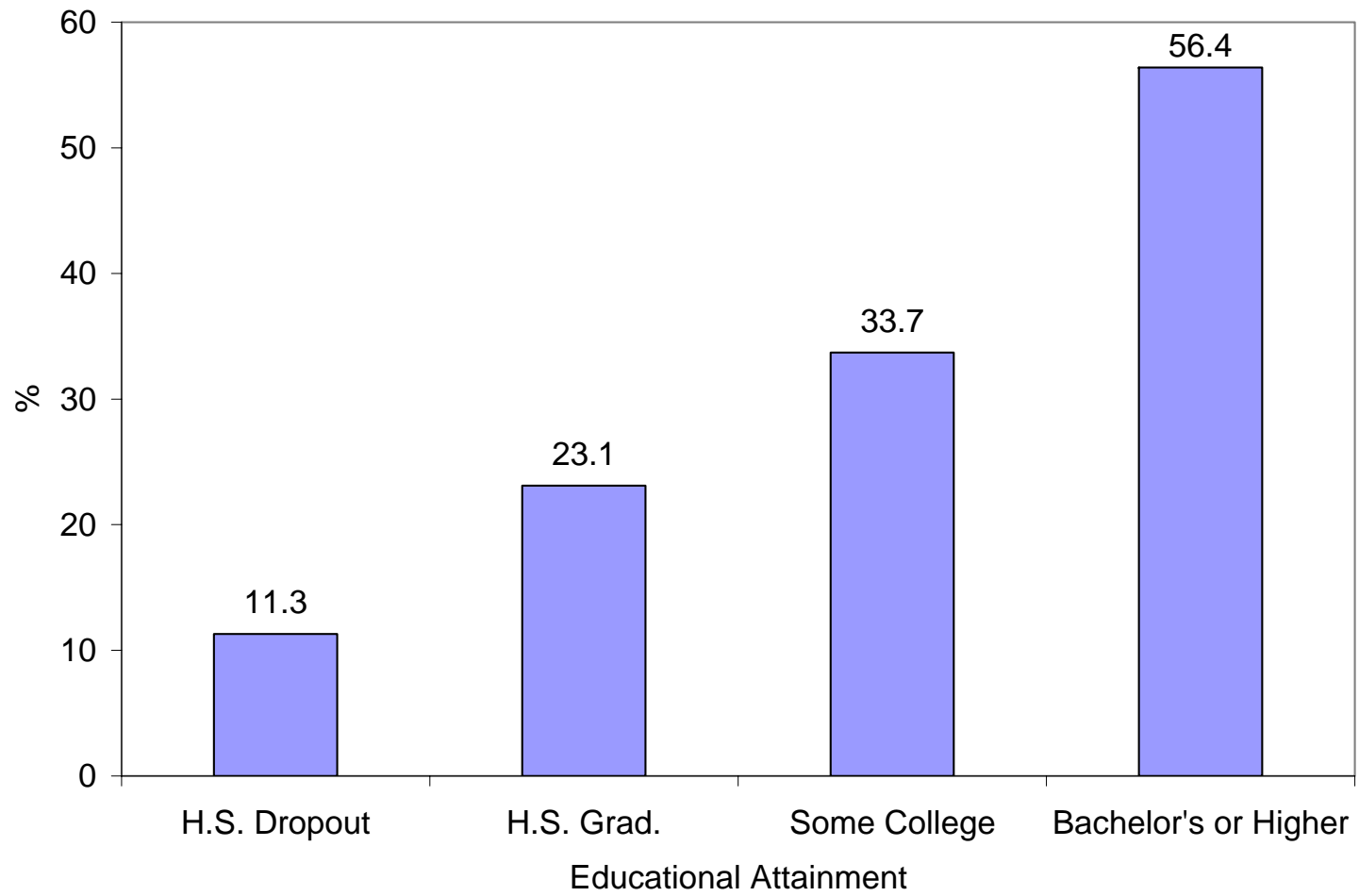
---

- The young ex-offender population; human capital deficits of ex-offenders (limited schooling, literacy/numeracy, work experience)
- Young single mothers; their educational barriers and income inadequacy problems; high geographic concentration of teen mothers in the Commonwealth
- The disabled youth population; identifying the pool of disabled youth and their labor market problems at the state and local WIB level; there are substantially below average labor force participation rates and high unemployment of youth with work-related disabilities

## Labor Force Activity Rates of 16-24 Year Old in Massachusetts by Work Disability Status, 2005-2006-2007 Averages

Group	Labor Force Participation Rate		Employment-Population Ratio		Unemployment Rate	
	Work Disabled	Not Disabled	Work Disabled	Not Disabled	Work Disabled	Not Disabled
All (16-24)	32.0%	63.6%	21.6%	55.2%	32.3%	13.2%
Male	35.6%	63.3%	22.6%	53.5%	36.4%	15.4%
Female	27.2%	64.0%	20.3%	57.0%	25.3%	11.0%
White	31.9%	65.2%	22.9%	57.9%	28.3%	11.2%
Black	33.4%	58.7%	19.3%	45.1%	42.3%	23.2%
Asian	27.6%	47.5%	24.3%	40.1%	11.9%	15.7%
Hispanic	30.3%	63.6%	16.1%	51.4%	46.9%	19.2%
Other	36.8%	68.1%	23.9%	56.6%	35.0%	16.9%
16-19	26.0%	48.2%	16.7%	38.6%	35.9%	19.8%
20-21	37.1%	68.3%	19.4%	59.6%	47.6%	12.8%
22-24	35.1%	82.0%	29.5%	75.3%	15.9%	8.1%
HS Students	22.5%	40.8%	16.9%	30.7%	25.0%	24.8%
HS Dropouts	26.6%	70.9%	15.2%	52.4%	42.9%	26.1%
HS Graduates <sup>(1)</sup>	37.3%	71.2%	24.2%	62.3%	35.1%	12.5%
Some College <sup>(1)</sup>	43.2%	66.3%	32.1%	60.4%	25.8%	9.0%
B.A. or Higher <sup>(1)</sup>	46.6%	84.6%	36.0%	79.5%	22.8%	6.1%

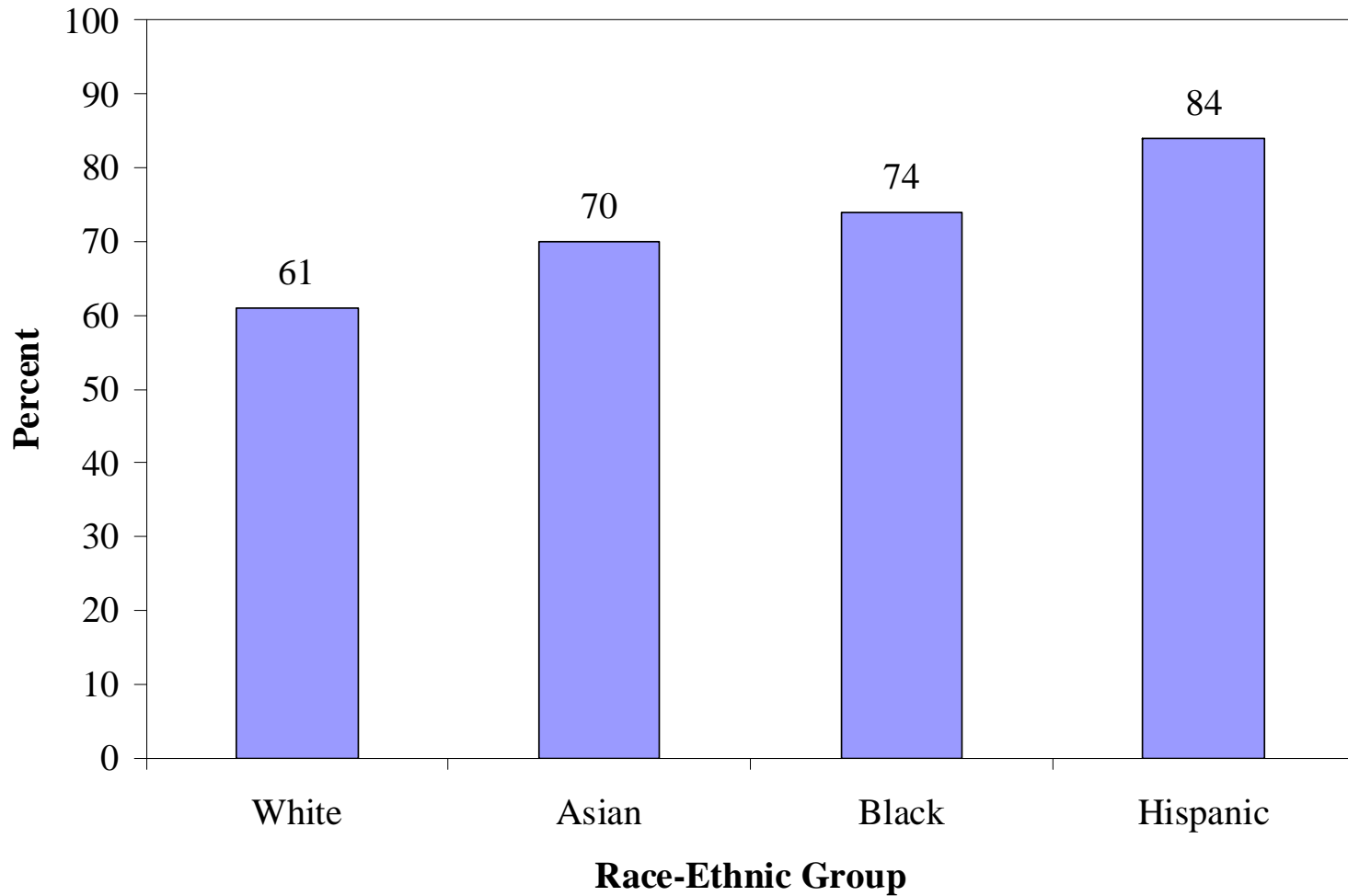
## Employment Rates of 16-24 Year Old Youth With Work-Related Disabilities in the Combined Metro North, Metro South/West, and South Coastal WIB Regions, 2005-07



The Percent of 16-21 Year Old Single Mother Families that  
Were Poor/Near Poor or Low Income in the U.S. and  
Massachusetts 2005-2007

	(A)	(B)	(C)
Income Inadequacy Measure	Massachusetts	U.S.	Massachusetts – U.S.
Poor/Near Poor	50.7	51.2	-.5
Low Income	69.5	68.1	+1.4

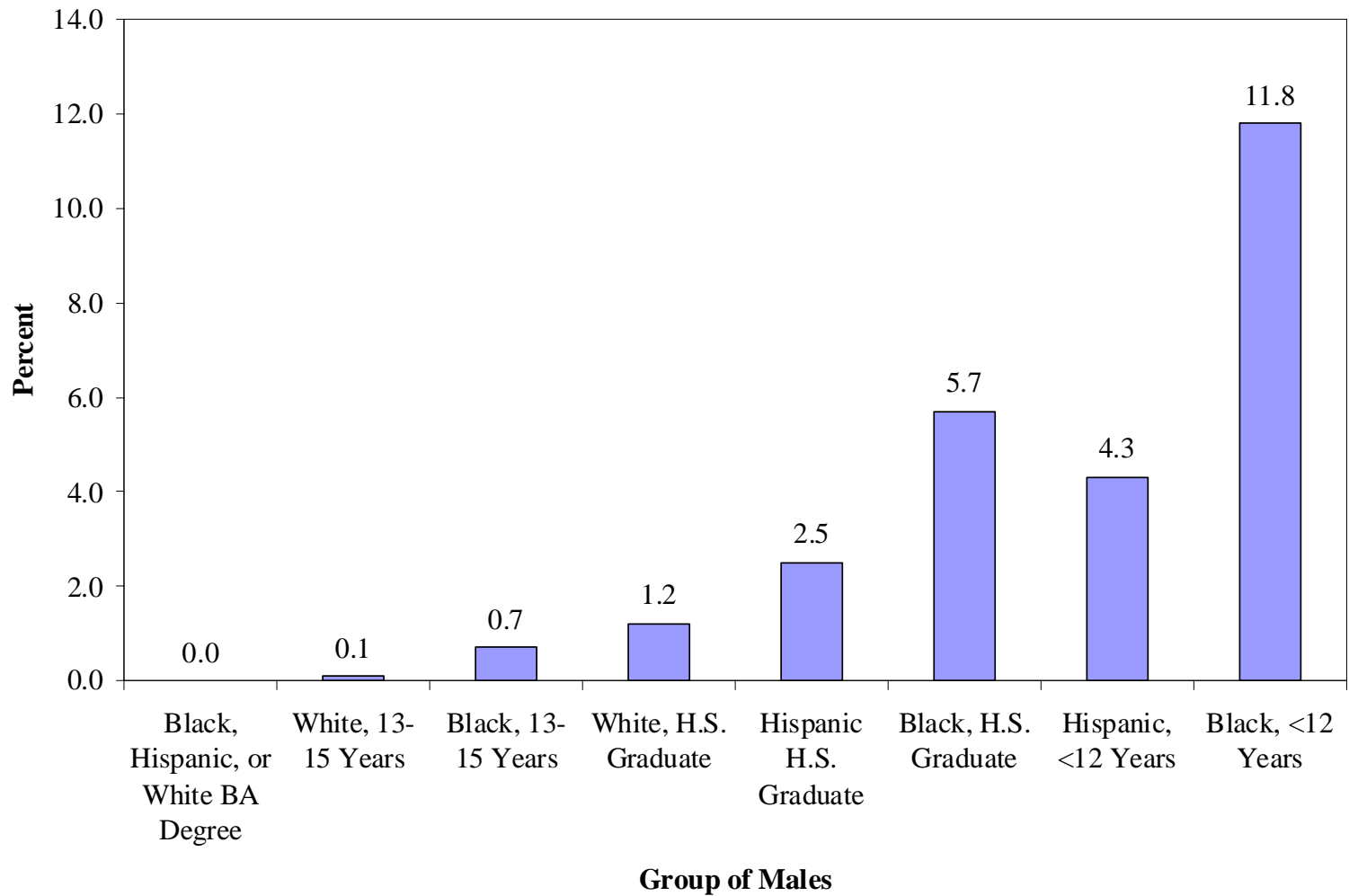
Percent of 16-21 Year Old Single Mother Families in Massachusetts that Were Low Income in 2005-2007 by Race-Ethnic Group of Mother



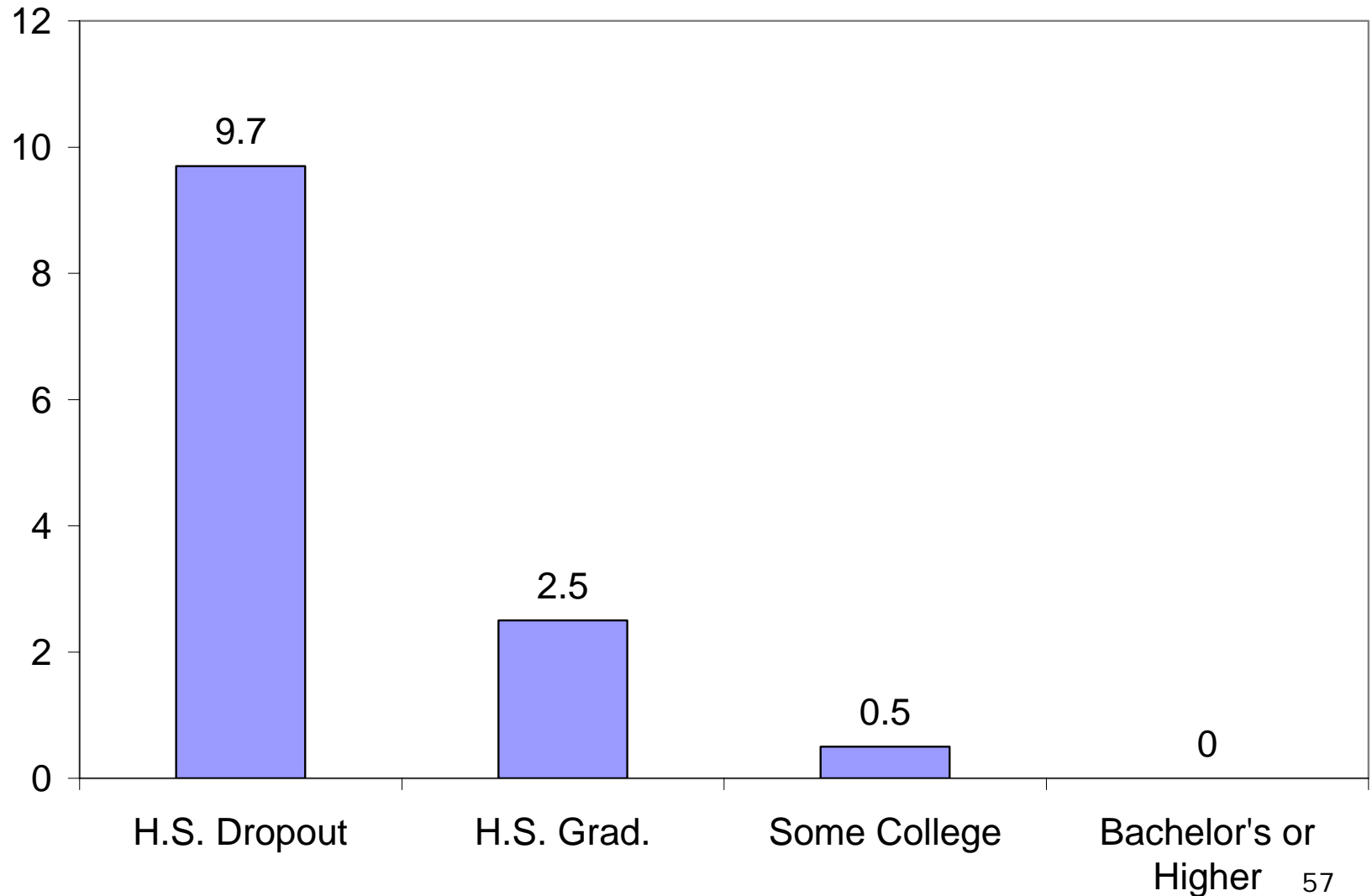
Percent of Young Mothers That Were Single Mothers in  
Massachusetts and the Combined Metro North, Metro  
South/West, and South Coastal WIB Regions By Age Group,  
2006-2007

Age Group	(A) MA	(B) Combined Metro North, Metro South/West, South Coastal WIB Regions
16-24, All	72.1	79.5
16-19	74.5	80.0
20-21	71.0	71.6
22-24	72.0	81.8

# Institutionalization Rates of 16-24 Year Old Males in Massachusetts in Selected Race-Ethnic/Educational Attainment Groups, 2006-2007 Averages (in %)



Institutionalization Rates of 16-24 Year Old Males By Educational Attainment in the Combined Metro North, Metro South/West, and South Coastal WIB Regions, 2006-2007 Averages





## The 4-Year and 5-Year High School Graduation Rate Performance of Massachusetts Public High, Class of 2007 Cohort

---

1. Massachusetts has been one of the leaders in adopting the proposed high school graduation rate methodology proposed by the U.S. Congress in the NCLB legislation in 2002 and the National Governors Association. Our 4-year, on-time graduation rates for the Classes of 2006, 2007, 2008 were at or near the top of the state distribution. For the class of 2007, our graduation rate was just under 81%. We ranked 2<sup>nd</sup> highest (tied with Delaware) among 12 states.
2. Our 5-year graduation rate for the Class of 2007 was 3.1 percentage points above the 4-year rate: 84.0% vs. 80.9%. Black and Hispanic youth improved the most but still remain well below the 5-year graduation rates of Asian and White youth.




## (Continued)

---

3. Statewide, women graduate at a higher rate than men (84% vs. 78%) for the class of 2007, and Whites (86%) and Asians (84%) graduate at rates well above those of Blacks (65%) and Hispanics (58%).
4. Gender gaps in 4-year, on-time graduation rates exist for all major race-ethnic groups, but are largest among Black (14 percentage points) and Hispanic (11 percentage points) youth. These gender gaps are far larger in our central city school districts and lower income suburbs (Lawrence, Lynn) than they are in the more affluent school districts of the state.
5. Four year graduation rates vary quite substantially across the state's major urban and affluent suburban school districts.

4-Year and 5-Year Graduation Rates for All  
Students and Student Subgroups in Massachusetts,  
Class of 2007 Cohort

	(A)	(B)
	4-Year Rate	5-Year Rate
All Students	80.9	84.0
Female	84.1	86.5
Male	77.8	81.5
Asian	83.7	87.7
Black	65.2	71.2
Hispanic	58.5	64.4
White	86.4	88.5
Limited English Proficiency	53.3	60.8
Special Education	62.8	65.5
Low Income	65.2	70.7



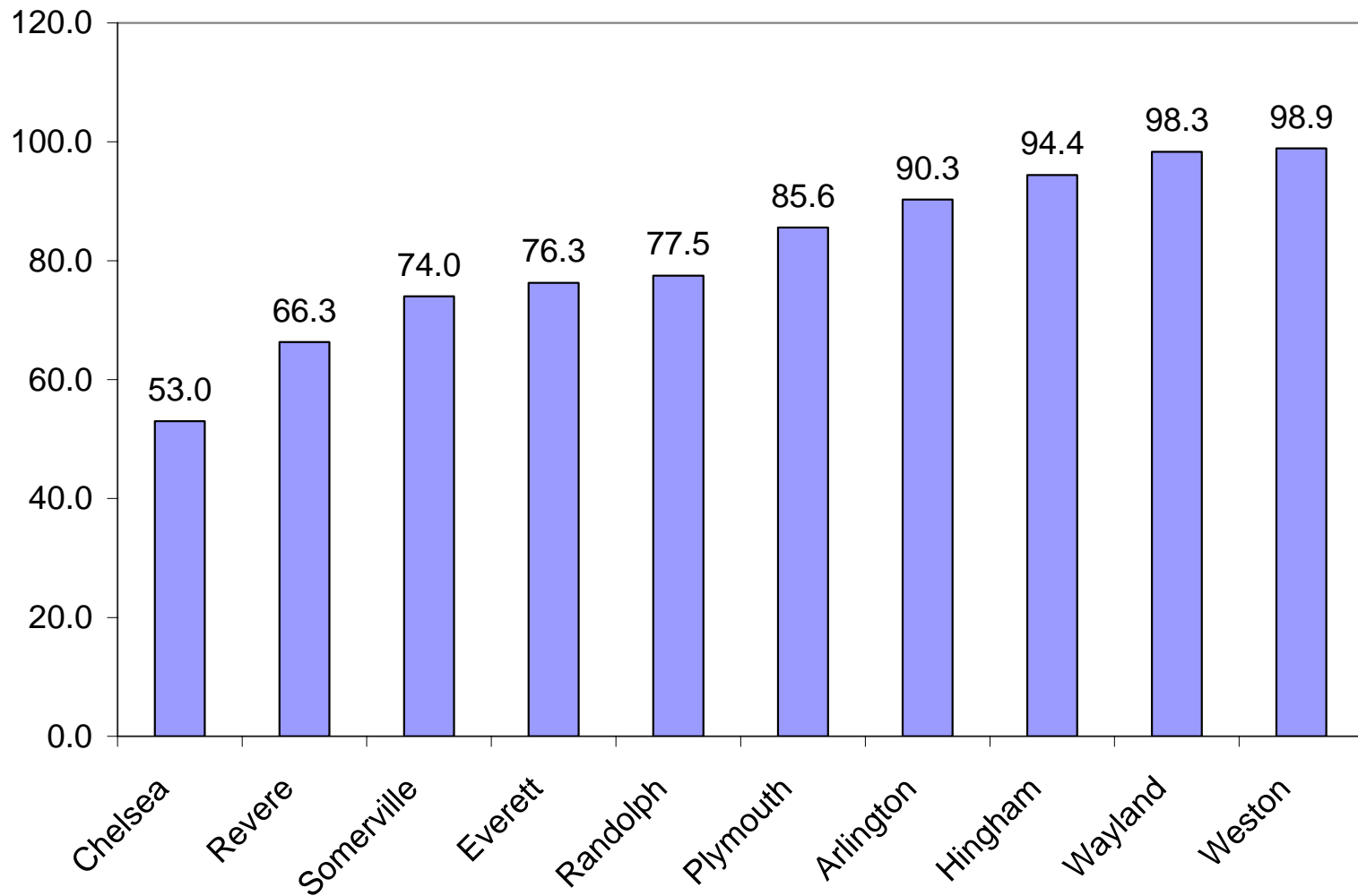
## Gender Gaps in 5-Year Graduation Rates By Race-Ethnicity and Selected Student Subgroups, Class of 2007 Cohort

---

Group	(A) Male	(B) Female	(C) Female - Male
African American	66.1	76.4	10.3
Asian	86.3	89.2	2.9
Hispanic	60.0	68.9	8.9
White	86.6	90.5	3.9
Special Education	67.6	70.0	2.4
Limited English Prof.	56.1	65.9	9.8



## Four-Year Cohort Graduation Rates in Selected School Districts in Massachusetts, 2007





## The Early Transition to College; College Retention and Graduation Rates in Massachusetts

---

There is some good news and some bad news on each of these educational fronts

- Overall, Massachusetts appears to perform quite well in transitioning high school graduates into college in the fall immediately following graduation from high school.
- Statewide, 79 percent of public school graduates from the Class of 2007 planned to attend a 2 or 4 year college in the fall following graduation versus 67% of their peers across the country.
- Planned attendance in college in Massachusetts varied across gender, race-ethnic groups, and especially geographic areas; Massachusetts graduates outperformed their counterparts in each gender group and among Blacks and Whites



## (Continued)

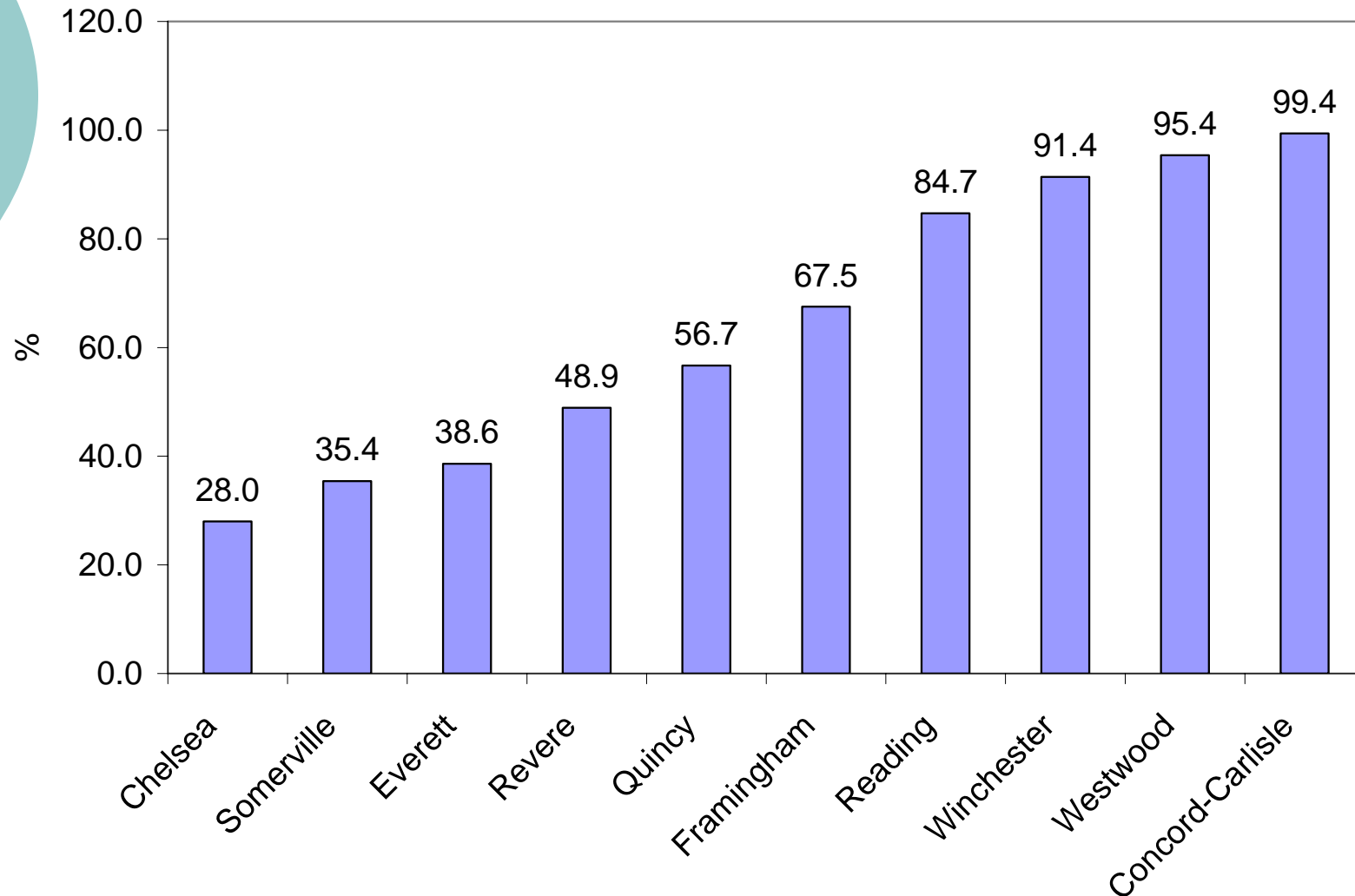
---

- Planned 2 and 4 year college enrollment rates of 2007 graduates varied widely across affluent and large urban school districts of the state, ranging from lows of 59% and 64% in Everett and Somerville to highs of 95 percent or higher in several affluent suburban school districts in the Combined Metro North, Metro South/West, and South Coastal WIB regions.
- We need to do a better job tracking the persistence of all Massachusetts high school graduates after they enroll in college and improve their graduation rates.

## College, Work, and Military Service Plans of Massachusetts High School Graduates By Gender and Race-Ethnic Group

	(A)	(B)	(C)	(D)	(E)	(F)	(H)
Group	2 or 4 Year	2- Year	4- Year	Other Post- Secondary	Military	Work	Unknown
All	79.3	21.6	57.7	2.8	1.4	9.6	6.0
Male	73.6	21.0	52.6	3.4	2.4	12.9	6.8
Female	84.9	22.2	62.7	2.2	0.4	6.4	5.2
African- American	73.3	28.3	45.0	2.8	0.6	7.3	15.2
Asian	88.3	15.7	72.6	1.5	0.4	3.3	5.9
Hispanic	64.9	35.1	29.8	3.8	1.7	13.0	13.7
White	81.3	19.7	61.6	2.8	1.5	9.7	4.1

# Percent of H.S. Graduates in the Class of 2007 Planning To Attend a 4-Year College or University, Selected School Districts in MA



Comparisons of the Graduation Rates At Massachusetts 4-Year Private, 4-Year Public and 2-Year Public Colleges and Universities With the National Average (Classes of 2006)

	(A)	(B)	(C)
Type of Institution / Cohort	MA	U.S.	MA - U.S.
<b>4-Year Private Colleges and Universities, 2000 Cohort</b>	<b>70.6</b>	<b>63.8</b>	<b>+6.8</b>
<b>4-Year Public Colleges and Universities, 2000 Cohort</b>	<b>54.0</b>	<b>53.3</b>	<b>0.7</b>
<b>2-Year Public Colleges and Universities, 2003 Cohort</b>	<b>18.0</b>	<b>23.2</b>	<b>-5.2</b>



## Growing Mal-Employment Among Young College Graduates in Massachusetts

---

- Defining mal-employment problems and college labor market jobs
- The declining shares of young college graduates (BA degrees under 30) in Massachusetts and the U.S. that are employed in college labor market jobs
- The mal-employment problems are high among both men and women in our state; much lower among those with a Master's or higher degree
- Personal economic costs (sharply lower earnings) associated with mal-employment among college graduates; social costs of mal-employment
- The causes of mal-employment; alternative public policy responses

Percent of Employed 20-34 Year Olds with a Bachelor's Degree in Massachusetts and the U.S. Who Were Holding a College Labor Market Job by Age Group, 2006

	(A)	(B)	(C)
Age Group	Massachusetts	U.S.	Massachusetts – U.S.
20-24	67.7	64.4	+3.3
25-29	72.6	71.2	+ 1.4
30-34	73.2	74.6	-1.4
All, 20-34	71.8	71.5	+.3

Mean Annual Earnings of Employed Bachelor Degree Holders 20-34 Years Old in Massachusetts and the U.S. by College Labor Market Job Status and Age Group, 2006

	(A)	(B)	(C)
Geographic Area/Age Group	College Labor Market Job	Not a College Labor Market Job	Col. B as % of Col. A
<b>Massachusetts</b>			
20-24	31,496	23,125	73.4
25-29	49,549	33,664	67.9
30-34	65,848	38,324	58.2
All	52,375	32,804	62.6
<b>U.S.</b>			
20-24	29,621	20,339	68.6
25-29	45,095	32,115	71.3
30-34	59,887	38,994	65.5
All	49,078	32,225	65.6