

**The Deterioration in the Labor Market Fortunes of
Massachusetts High School Students and Young
Dropouts, 2000-2004: Implications for the Connecting
Activities and Other Workforce Development
Programs to Boost Teen Employment Prospects**

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Introduction

The labor market fortunes of the nation's teenagers have deteriorated considerably since the end of the labor market boom in 2000. During the 2001 recession and the largely jobless recovery of 2002-2003, the employment rate of the nation's teenagers declined steadily and steeply, falling from 45% in 2000 to under 37% in 2003 and dropping further to 36.4% in 2004.¹ During 2005, the E/P ratio of the nation's teens remained statistically unchanged at 36.8%, matching 2004 as the lowest employment rate for teens since the end of World War II. The steep decline in teen employment rates considerably exceeded that of any other age group. In fact, older workers (55+) were the only age group to be employed at higher rates in 2005 than they were in 2000.² Among teens, drops in employment were quite severe among all major demographic groups (men and women; Whites, Blacks, and Hispanics), nearly all geographic regions and most states, and among those enrolled in school as well as those out-of-school.³

How have Massachusetts teens, especially high school students, fared in obtaining employment since 2000? Which groups of teens appear to have been more adversely affected by the depressed labor market conditions in the state since the end of the state labor market boom in the first quarter of 2001?⁴ How have Massachusetts high school students fared relative to their peers in the other 50 states and the District of Columbia? How have young high school dropouts fared in terms of their ability to obtain employment in the early years upon leaving school? What implications do these findings have for youth workforce development policy in the state, including state funding of connecting activities to link high school youth with paid internships in the private sector during both the school year and the summer? This paper is designed to provide answers to these questions and also will highlight the severe deterioration in the labor market position of young high school dropouts in the state.

¹ See: Andrew Sum, Joseph McLaughlin, and Ishwar Khatiwada, Still Young, Idle, and Jobless: The Continued Inability of the Nation's Teens to Benefit From Renewed Job Growth, Prepared for Jobs for America's Graduates, Alexandria, 2006.

² See: Andrew Sum, Ishwar Khatiwada, and Sheila Palma, "The Age Twist in Employment Rates, 2000-2004," Challenge Magazine, July-August 2005, pp. 51-68.

³ Male teens were more adversely affected than females due to sharper drops in manufacturing employment and increased competition from young, new immigrant workers, the bulk of whom were male.

⁴ Between the first quarter of 2001 and the first quarter of 2004, total payroll employment in the state declined by nearly 200,000 or more than 6 percent, the second highest rate of job loss in the nation. Since the first quarter of 2004, wage and salary employment has been rising modestly, with total jobs up by approximately 33,000 by the fourth quarter of 2005.

Trends in High School Students' Employment Rates, 2000-2004

Teens who work in high school frequently benefit economically from their early work experience, acquiring a variety of skills that increase their employability and earnings in their young adult years, especially among students who do not enroll in four year colleges upon graduation. There is a strong path dependence in work experience among teens, i.e., the more one works in year t , the more likely he/she is to work in year $t + 1$.⁵ Work experience in high school does not seem to negatively affect academic performance or behavior as long as weekly work hours during the school year are held below 20. Among economically disadvantaged high school students, especially Blacks and Hispanics, those teens with no in-school paid work experience are significantly more likely to drop out of high school than their peers who do work a modest number of hours (10-20).⁶

The ability of Massachusetts' teenaged high school students to gain some employment experience during the past four years has declined quite sharply, especially among men. In Chart 1, we compare the employment rates of 16-19 year old high school students in 2000 with their rates in calendar year 2004. The 2000 findings are based on the long form questionnaires used in conducting the 2000 Census while the 2004 results are based on the 12 months of interviews undertaken by the U.S. Census Bureau as part of the 2004 American Community Surveys.⁷ At the time of the 2000 Census (the March-April period of that year), slightly under 40 percent of all 16-19 year old students across the state were employed. By 2004, however, the employment rate among these students had declined to 32%, a drop of between nine and ten percentage points, considerably greater than that for any other age group in the state over the same four year period (Chart 1). The drop in the employment rate of male high school students across the state was considerably greater than that for female students over this four year period. The male teen employment rate fell by more than ten percentage points from 38 to 28 percent while that of females fell by only a little more than four percentage points over the same time period. In 2004, female high school students in our state were considerably more likely to be working than their

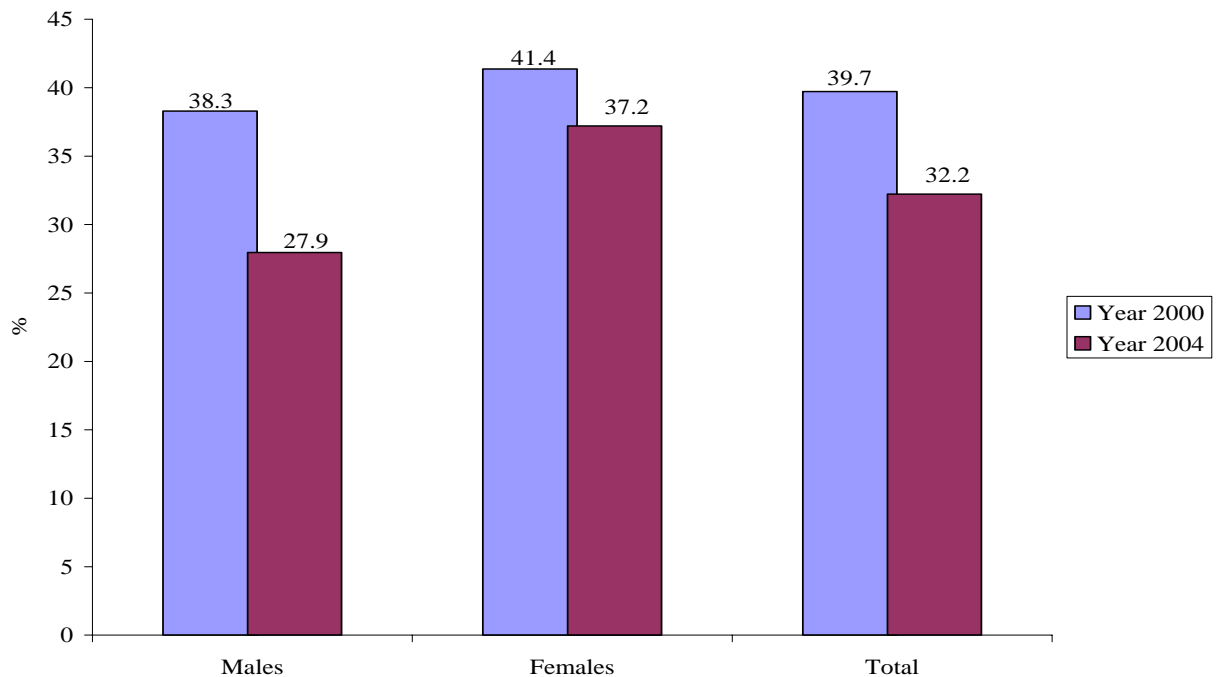
⁵ For a review of the empirical evidence on the advantages of high school employment, see: Andrew Sum, Neeta Fogg, and Garth Mangum, Confronting the Youth Demographic Challenge: The Labor Market Prospects of At Risk Youth, Sar Levitan Center for Social Policy Studies, Johns Hopkins University, Baltimore, 2000.

⁶ See: Marta Tienda and Avner Ahituv, "Ethnic Differences in School Departure," in Of Heart and Mind: Social Policy Essays in Honor of Sar A. Levitan, Edited by Stephen and Garth Mangum, W.E. Upjohn Institute for Employment Research, Kalamazoo, 1996.

⁷ The ACS surveys use a questionnaire quite similar to that of the long-form questionnaire used in the 2000 Census. The U.S. Census Bureau completed interviews with approximately 14,000 households in the state during the 2004 ACS survey. Interviews were carried out during all 12 months of the year.

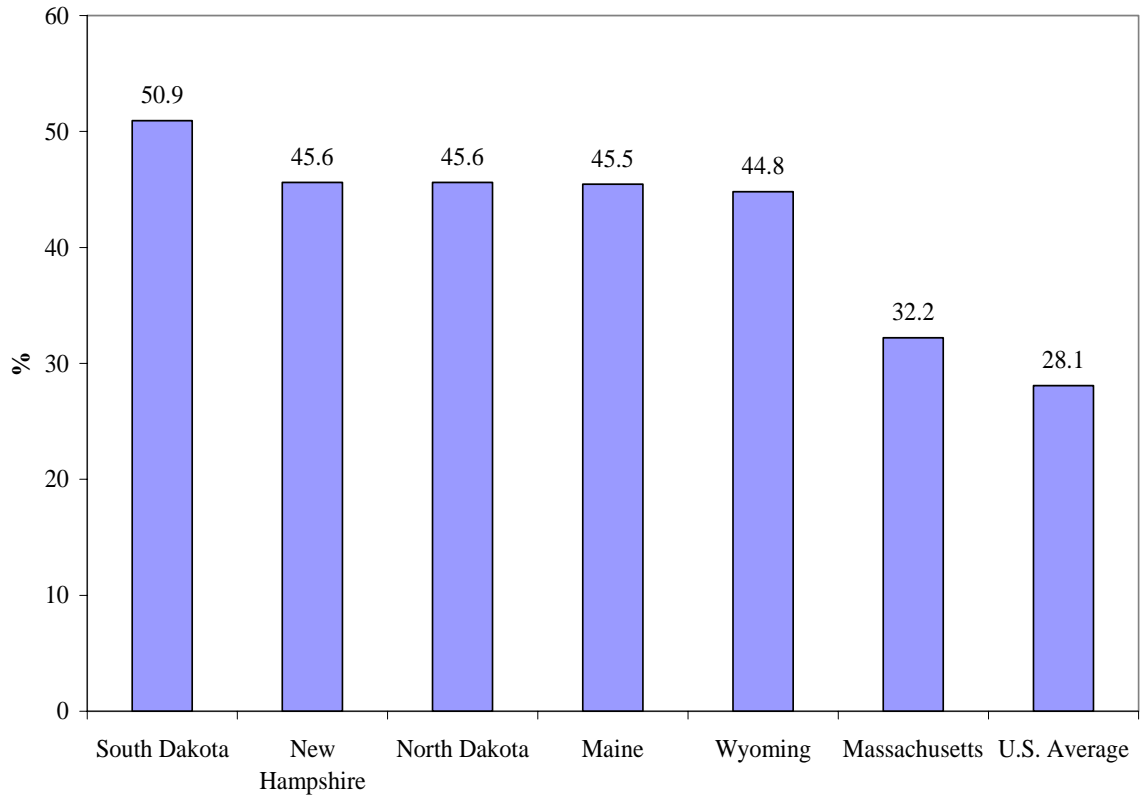
male counterparts (37% vs. 28%). During 2003, female high school students enjoyed a six percentage point employment rate advantage over their male high school peers. Nationally, in 2004, the gender gap in employment rates between female and male high school students was only two percentage points.

Chart 1:
Employment/Population Ratios of 16-19 Year-Old High School Students In
Massachusetts, All and by Gender in 2000 and 2004 (in %)



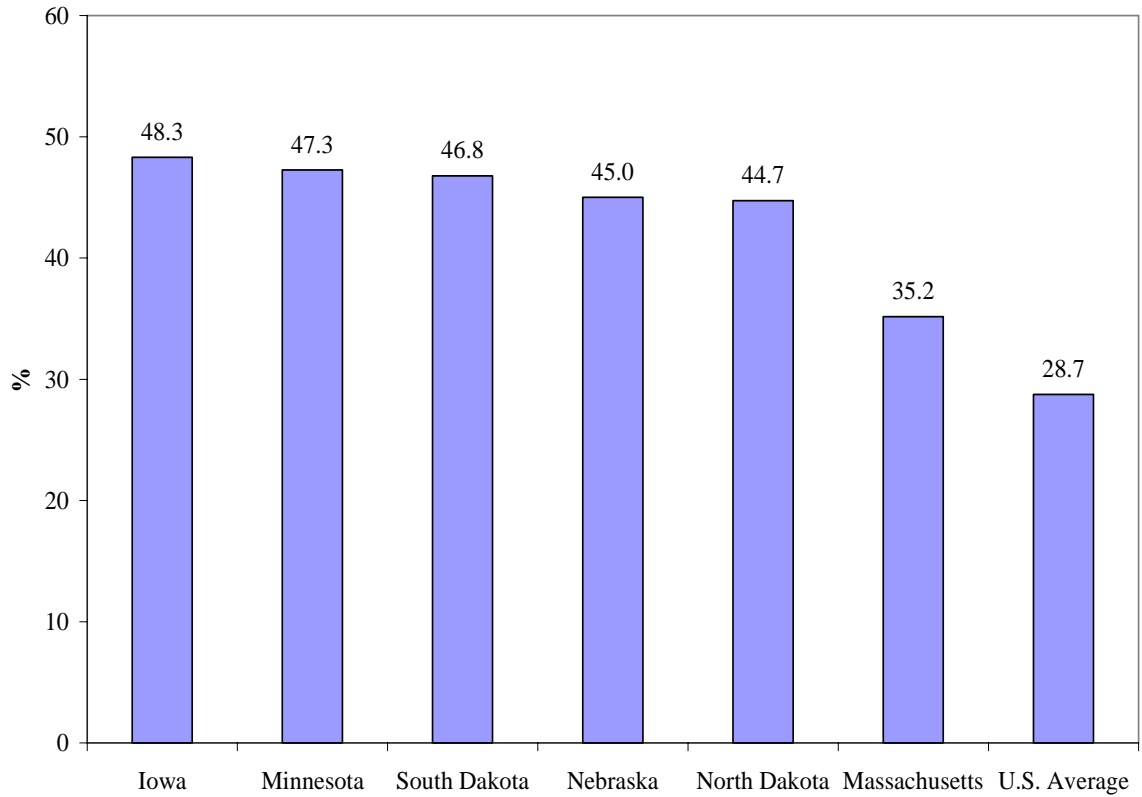
In 2004, the employment rate of Massachusetts high school students (16-19 years old) was approximately four percentage points higher than that of the U.S. (Chart 2). Our state ranked only 23rd highest among the 50 states on this teen employment measure during 2004 tied with the state of Arkansas. The state’s teen employment rate was considerably lower than that of the five leading states on this measure, trailing South Dakota, the national leader, by nearly 19 percentage points and both New Hampshire and Maine by 13 percentage points. Massachusetts’ performance during 2004 could best be described as mediocre, and our comparative ranking among the 50 states has deteriorated over the years. The state ranked 16th highest in 2000 and in 1989.

Chart 2:
Employment/Population Ratios of 16-19 Year-Old High School Students in the U.S.,
Massachusetts, and Five High Teen Employment States in 2004 (in %)



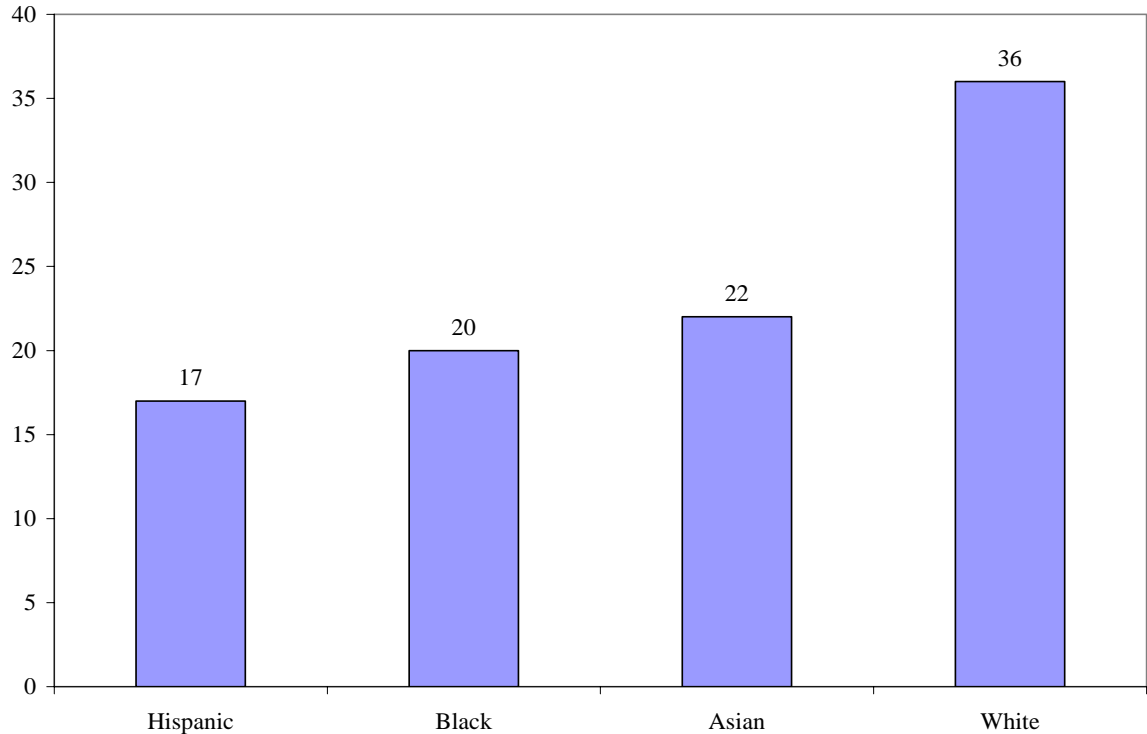
Findings of our analysis of high school students' employment rates during calendar year 2003 are displayed in Chart 3. The 35% employment rate of Massachusetts' teens during that year was more than 6 percentage points above the U.S. average and the state ranked 19th highest on this measure. The five states with the highest employment rates for high school students (all located in the Midwest farm belt) had employment rates 10 to 13 percentage points higher than that of Massachusetts during 2003. Our state ranked last among the six New England states on this teen employment measure.

Chart 3:
Employment/Population Ratios of 16-19 Year-Old High School Students in the U.S.,
Massachusetts, and Five High Teen Employment States in 2003



The work rates of Massachusetts high school students during 2004 varied quite widely across race-ethnic groups. These employment rates ranged from lows of 17 percent among Hispanics and 20 percent among Blacks to a high of 36 percent among White, non-Hispanics (Chart 4). Similar race-ethnic patterns prevailed among high school students across the country, with White teens being twice as likely to be employed as their Black and Hispanic counterparts.

Chart 4:
2004 Employment Rates of 16-19 Year Old High School Students in Massachusetts by
Race-Ethnic Group (in %)



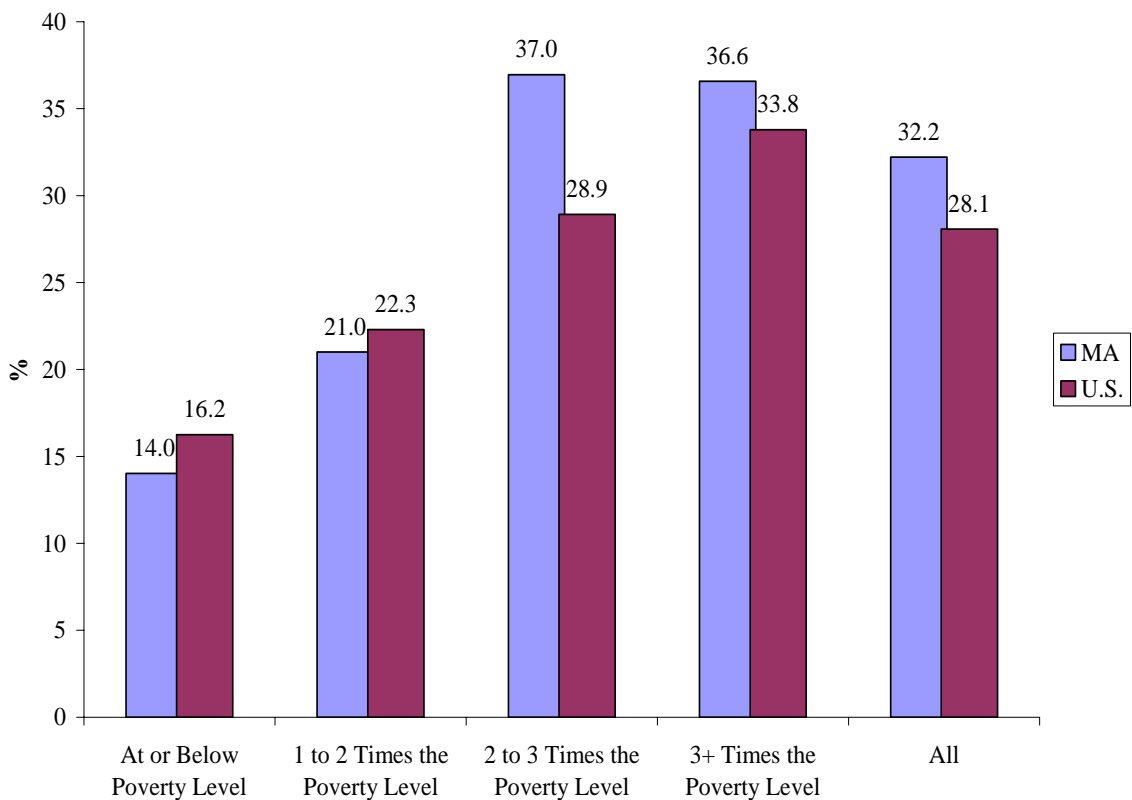
Nationally, the employment rates of high school students have tended to vary quite considerably across family income groups with youth from low income families tending to fare the worst. To identify how high school students from different socioeconomic backgrounds fared in obtaining employment in Massachusetts and the U.S. during 2004, we assigned the students into one of the four following income categories:

- Family had an income below the federal government’s poverty line for a family of their given size and age composition. The weighted average poverty line for a family of four in 2003 was approximately \$18,000. (Poor).
- Family had an income between one and two times the poverty line. (Low income).
- Family had an income between two and three times the poverty line. (Low middle to middle income).

- Family had an income more than three times the poverty line (Middle to upper middle income).

The 2004 employment rates of Massachusetts' high school students by family income category are displayed in Chart 5. The work rates of these high school students varied considerably across family income groups, ranging from a low of 14% among youth in poor families to highs of 36-37 percent among students from middle to higher income families. Youth living in these middle and higher income families were 2.5 times as likely to be employed as teens from families with poverty level incomes. Massachusetts' youth in middle and higher income families also were more likely to work than their U.S. peers while high school students from poor and low income families in our state were modestly less likely to work than their national peers in 2004.

Chart 5:
Employment/Population Ratios of 16-19 Year-Old High School Students in
Massachusetts and the U.S. by the Size of their Family Income Relative to
the Poverty Line in 2004



To place the findings on the 2004 employment rates of Massachusetts high school students in comparative perspective, we estimated the employment rate for key gender and socioeconomic subgroups of high school students in all 50 states and the District of Columbia. The state’s ranking among the states for all 16-19 year old high school students and for key demographic subgroups are displayed in Table 1. For all high school students, the state ranked only 23rd highest, very close to the middle of the distribution. The state’s highest ranking was for female high school students, whose employment rate ranked 14th highest. Males in the state as well as students from poor and low income families fared the worst. The employment rate for male high school students ranked only 29th highest, and the rates for poor and low income students ranked even lower at 36th and 39th, respectively (Table 1). For students from middle to upper middle income families, the employment rate was considerably higher than that of poor and low income students in the Commonwealth, but the state only ranked 26th highest, right in the middle of the distribution. Those students in greatest need of work experience during the high school years were the least likely to obtain it in the past few years.

Table 1:
Massachusetts Ranking Among the 50 States on the Employment/Population Ratios of
Its 16-19 Year Old High School Students, All and by Gender and Selected Family
Income Group (2004)

Group of High School Students	Massachusetts Ranking
All	23 rd (tied with Arkansas)
Men	29 th
Women	14 th
Below poverty income	36 th (tied with 5 other states)
Low income (1-2* poverty)	39 th (tied with SC and TX)
Middle to upper middle income (3* poverty)	26 th (tied with Indiana and Alaska)

The Employment Status of Young High School Dropouts in Massachusetts, 2004

The labor market for Massachusetts’ high school students has been a substantially less hospitable one over the past few years. In this new environment, how have young high school

dropouts fared in terms of their ability to obtain some type of employment?⁸ During 2004, the E/P ratio for 16-19 year old dropouts in our state was only 31.4%, eight percentage points below the U.S. average (Chart 6). Massachusetts ranked sixth lowest among the 50 states on this core employment measure.⁹ The states with the five highest E/P ratios for dropouts, including New Hampshire, are also displayed in Chart 6. The employment rates for young dropouts in these five states ranged from 55.6 to 65.4 percent, exceeding the Massachusetts employment rate by 24 to 34 percentage points. The findings for 2004 were not a statistical aberration. Similar analysis for calendar year 2003 revealed an E/P ratio for young high school dropouts in Massachusetts of only 28%, twelve points below the national average. The state again ranked sixth lowest among the 50 states on this measure.

Employment rates of young high school dropouts in Massachusetts during 2003 also were calculated for selected family income subgroups and were compared to those for the U.S. (Chart 7). Only one of every five or six dropouts living in families with incomes below three times the poverty line were employed in 2004. The employment rate of dropouts in middle income families was three times higher at 61% (Chart 7). Poor, low income, and lower middle income youth in Massachusetts were employed at rates well below those of their national peers in 2004. For example, only 16% of high school dropouts from low income families were employed in Massachusetts in 2004 versus 42% of their U.S. peers. In 2003 and 2004, poor young dropouts in our state were employed at rates well below their U.S. peers. In 2003, only 15% reported any type of job versus 22% in 2004. The labor market fortunes of young high school dropouts in Massachusetts are quite bleak, and their long term economic prospects also are not very bright. Lifetime earnings of male dropouts are down considerably over their values in prior decades due to a combination of less employment and lower real wages. Improving the educational training, and work experience traits of these young dropouts should be given a major priority by the state's workforce development system.

⁸ A high school dropout is defined as a 16-19 year old who was not enrolled in school at the time of the ACS survey and did not possess either a high school diploma or a GED certificate. High school students on summer vacation would be classified as an active high school student.

⁹ Even at the peak of the labor market boom in 2000, young dropouts in the city of Boston found it much more difficult to find employment than their peers in the nation's 50 largest cities, see: Tracy Jan, "Job Market for Dropouts Tougher in Hub," The Boston Globe, April 6, 2006, p. B-1, 3.

Where Do We Go From Here? Policy Options for the Workforce Development System

The labor market for Massachusetts' teens (16-19) in general and high school students and high school dropouts in particular has been considerably weaker in the past few years (2003-2004) than it was at the end of the labor market boom of the late 1990's and 2000. The employment rates of Massachusetts' teens have declined considerably, and our state's ranking among the 50 states has deteriorated especially for males, dropouts, and low income teens.¹⁰ The poor job generating performance of the state's economy has been a contributing factor to the employment difficulties of teens. By the end of calendar year 2005, payroll employment (seasonally adjusted) in the state was still 168,000 or more than 5 percent below its peak level in the first quarter of 2001. Teens also have faced increased supply competition for available jobs in retail trade, leisure and hospitality, and service industries from new immigrants and older workers (60+) wishing to supplement their retirement incomes.

Massachusetts' teens in 2003-2004 were considerably less likely to be working than they were at the end of the 1990's. Job opportunities have declined for teens during the school year and during the summer. Nationally, teens also have faced a more difficult time finding any type of work. What types of workforce development policy actions could help boost teen employment prospects? First, there is a need for more comprehensive programs to connect high school youth to jobs during the school year and summer through intensive job development, job placement, and paid internship activities. Economically disadvantaged and minority youth are in particular need of such job brokering services. The legislature can assist by boosting the current budget for connecting activities that link workforce development agencies with a wide array of firms to offer youth paid internships. Second, the One Stop Career Centers can play a much more active role in providing job placement services on behalf of teens including placement of staff within high schools to facilitate registration with the job placement system. Third, more state and local political leaders should follow the leadership of Boston's Mayor Menino in aggressively promoting summer job opportunities for teens in the private sector. Summer jobs should be tied to efforts to boost youths' literacy, numeracy, and soft skills. Fourth, the state government should support a small scale job creation effort for low income youth across the

¹⁰ At the time of the 2000 Census the employment rate for male high school students in Massachusetts was 15th highest in the nation. By 2004, it had declined to 29th. Poor and low income youth fare very poorly in state labor markets.

state, starting with summer jobs and continuing with a year-round effort to put more teens back to work. Fifth, a whole new workforce development campaign aimed at young high school dropouts needs to be implemented. School dropout problems remain intense in many of the state's central city school systems with 25 to 40 percent of the incoming freshmen classes not graduating with a high school regular diploma. The vast majority of young teen dropouts have been jobless in recent years and their employment and earnings prospects remain depressed as they reach their early to mid-20's. They face a very bleak economic outlook and will become a major fiscal burden for the state in the years ahead.