

## 5. CHANGES IN THE EMPLOYMENT STATUS AND JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES

By Renée Cameto and Phyllis Levine

Employment is the pathway to financial independence and self-reliance for the vast majority of adults. This also is true for the majority of youth with disabilities as they move toward adulthood. One of the intentions of their education is to prepare them for employment and independent living. In fact, achieving employment is a primary transition goal of the majority of high school students with disabilities (Cameto, Levine, & Wagner, 2004). However, for many youth entering young adulthood, it is not enough simply to have a job; they need a job that offers benefits, pays a livable wage, and presents opportunities for advancement.

Historically, employment options for people with disabilities tended toward service, unskilled labor, and blue-collar industries. However, the growing emphasis on technology in the workplace has shifted labor force demands toward workers with technical knowledge and skills and the ability to work independently. These types of competencies present significant challenges for many youth with disabilities, while creating the potential for securing jobs with benefits and opportunity of advancement.

This chapter considers how youth with disabilities have adapted to evolving labor market conditions by examining changes between 1987 and 2003 in the employment status of youth with disabilities who had been out of high school up to 2 years, as measured in the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study-2 (NLTS2).<sup>1</sup> Specifically, it addresses:

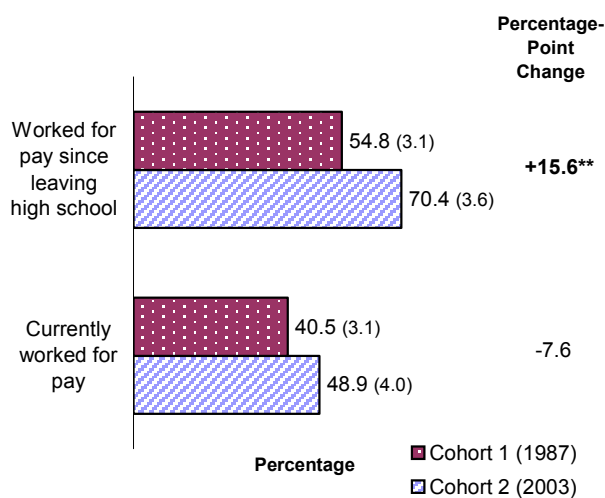
- **Employment status:** having been employed at any time since leaving high school and being employed at the time of the interview.
- **Characteristics of youth's current or most recent job:** hours worked per week, hourly wage, and the general type or category of job.

These factors are described for youth with disabilities as a whole and for those who differed in disability category, high-school-exit status (i.e., those who completed high school and those who did not), age, gender, household income, and race/ethnicity, when significant.

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<sup>1</sup> Youth for whom data are available for 1987 and 2003 are referred to as cohort 1 and cohort 2, respectively. For both groups of youth, 20% were 15 through 17 years old, 31% were 18, and 50% were 19.

**Exhibit 5-1  
EMPLOYMENT STATUS OF OUT-OF-SCHOOL  
YOUTH WITH DISABILITIES**



Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistical significance: \*\*p.<01.

Standard errors are in parentheses.

**Employment during the Transition Years after High School**

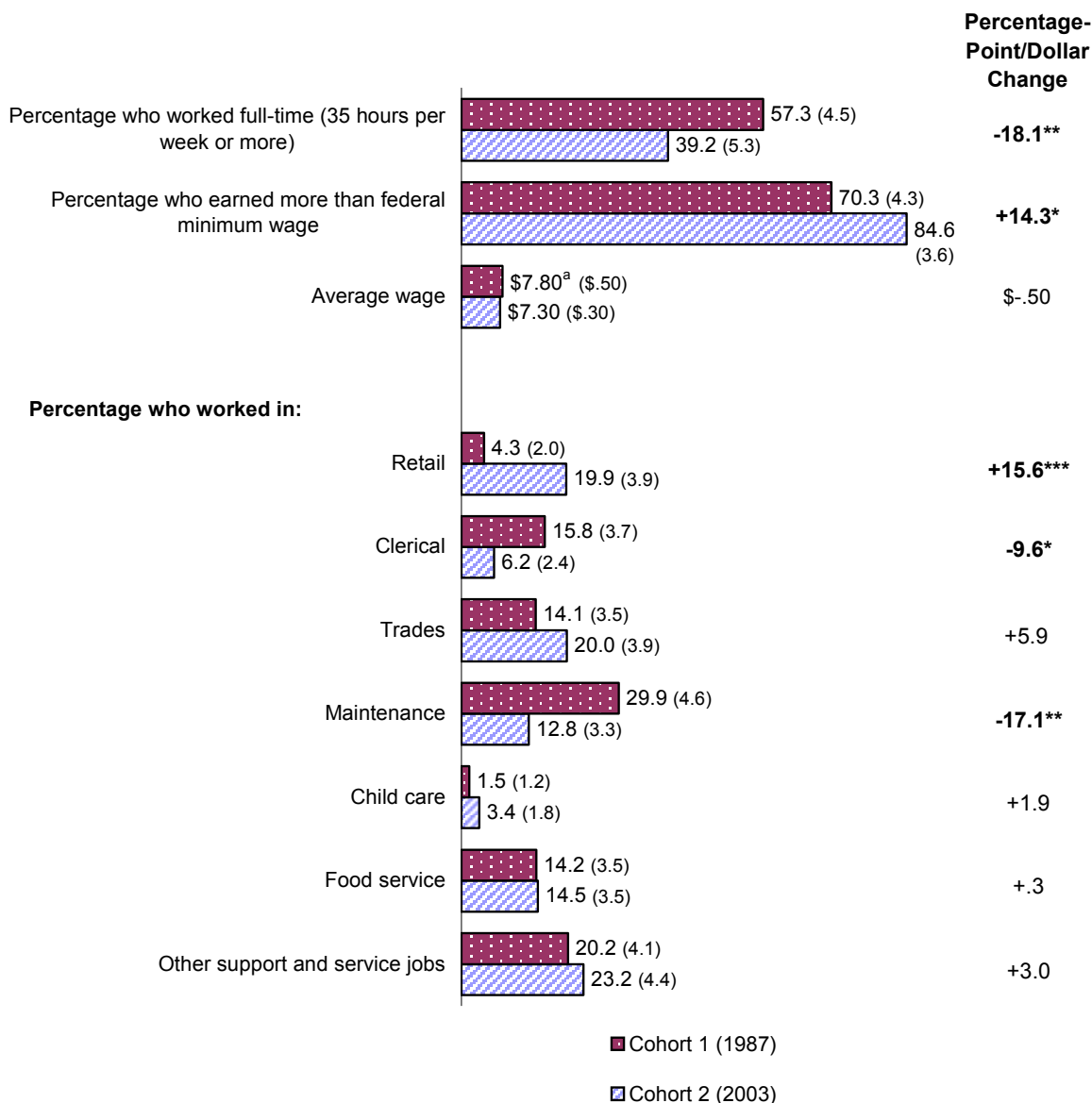
Out-of-school youth in cohort 2 were more likely to have worked for pay during the first few years after high school than their peers in cohort 1 (70% vs. 55%,  $p<.01$ ; Exhibit 5-1). In contrast, there was no difference over time in the likelihood of out-of-school youth being competitively employed at the time of the interview (48% and 41% in cohorts 1 and 2, respectively). The difference between these two findings is not surprising because they reflect very different time frames (i.e., up to 2 years and a single point in time) during a period when many young adults experience fluctuations in employment and/or postsecondary education and training. The findings are similar to those reported for youth with disabilities while they were in

secondary school (Wagner, Cameto, et al., 2003). Paid employment in the previous year for secondary school students with disabilities in 2001 had increased since 1987 by 9 percentage points, whereas employment at the time of the interview was down by 7 percentage points. The rate of current employment for out-of-school youth with disabilities (41%) lagged significantly behind that of their same-age out-of-school peers in the general population, among whom 63% were currently working in 2000 ( $p<.001$ ).<sup>2</sup> In fact, the 22-percentage-point difference between youth with disabilities and the general population widened since the mid-1980s, when 48% of cohort 1 youth were currently employed, as were 61% of youth in the general population (D’Amico, 1991).

As for other teens, the first foray into the labor market by youth with disabilities generally involves entry-level jobs primarily in maintenance, food service, retail, and other service and support fields. With time, the types of jobs youth perform may more closely reflect their interests and experiences and have greater potential for full-time work and increased wages, responsibility, or advancement. In fact, from 1987 to 2003, there were several notable changes in the characteristics of the jobs youth with disabilities held (Exhibit 5-2). Employed youth in cohort 2 were less likely to work full-time than their peers in cohort 1, a finding mirrored in analyses of secondary school students with disabilities (Wagner, Cameto, et al., 2003). There was a decrease of 18 points in the percentage of out-of-school youth working 35 hours per week or more at their current or most recent job (57% of cohort 1 vs. 39% of cohort 2,  $p<.01$ ) and an increase of 12 points in the percentage working 10 to 19 hours per week (5% vs. 17%,  $p<.01$ ).

<sup>2</sup> Calculated for 15- through 19-year-old out-of-school youth using data from the National Longitudinal Survey of Youth, 2000 (U.S. Department of Labor, 2003).

**Exhibit 5-2  
CHANGES IN JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES**



Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> Adjusted for inflation, expressed in 2003 dollars.

Statistical significance: \*p<.05, \*\*p<.01, \*\*\* p<.001.

Standard errors are in parentheses.

Although they tended to work fewer hours, at first glance, youth in cohort 2 were better paid on average, as were secondary school students with disabilities (Wagner, Cameto, et al., 2003); 85% of out-of-school youth earned more than the federal minimum wage, a 14-percentage-point increase from cohort 1 (p<.05). However, despite this apparent improvement in youth with disabilities being employed at rates above minimum wage, the average wage (about \$7.30 for cohort 2) did not increase significantly over time when 1987 wages were adjusted for inflation.

The percentages of youth with disabilities whose current or most recent job involved work in child care, food service, or other support and service jobs (assembly, sorting, delivery) changed little between cohorts 1 and 2. In contrast, the likelihood of being employed in maintenance or laborer jobs, including gardening, grounds keeping, cleaning, animal care, or farm labor, decreased from 30% to 13% ( $p < .01$ ). A decrease of 10 percentage points in the likelihood of youth holding clerical jobs, including computer support, bank telling, stock work, and general clerical positions, also occurred (16% to 6%, respectively,  $p < .05$ ). On the other hand, there was a 16-percentage-point increase, from 4% of cohort 1 youth to 20% of cohort 2 youth, in employment in retail jobs, including sales, marketing, and cashiering ( $p < .001$ ).

### Differential Changes Related to Disability Category

Although employment status changed over time for out-of-school youth with disabilities as a whole, few notable changes appeared between cohorts for youth in different disability categories (Exhibit 5-3), with the exceptions that significant increases in working for pay since leaving high school occurred for youth with learning disabilities (16 percentage points,  $p < .05$ ) and visual impairments (26 percentage points,  $p < .05$ ). In contrast, a 26-percentage-point increase in working for pay since leaving high school among youth with multiple disabilities did not reach statistical significance for this small group of youth.

**Exhibit 5-3**  
**CHANGES IN EMPLOYMENT STATUS OF OUT-OF-SCHOOL YOUTH,**  
**BY DISABILITY CATEGORY**

	Learning Disability	Speech/ Language Impair- ment	Mental Retar- dation	Emo- tional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Multiple Disabilities/ Deaf- Blindness
<b>Percentage:</b>									
<b>Who worked for pay since leaving high school</b>									
Cohort 1 (1987)	62.2 (4.6)	61.3 (7.0)	37.9 (5.5)	52.6 (5.2)	54.7 (5.7)	36.6 (7.8)	30.3 (8.6)	50.8 (8.9)	9.6 (7.6)
Cohort 2 (2003)	78.5 (4.7)	69.3 (10.0)	41.5 (8.0)	63.8 (5.4)	62.0 (8.5)	62.4 (9.7)	44.9 (8.1)	50.2 (13.0)	36.1 (12.7)
Percentage-point change	<b>+16.3*</b>	+8.0	+3.6	+11.2	+7.3	<b>+25.8*</b>	+14.6	-.6	+26.5
<b>Currently worked for pay</b>									
Cohort 1 (1987)	53.8 (4.8)	55.4 (7.3)	35.2 (5.6)	46.8 (5.3)	51.2 (5.8)	29.9 (7.6)	26.9 (8.3)	39.1 (8.8)	14.1 (11.1)
Cohort 2 (2003)	44.6 (5.7)	51.3 (11.1)	25.2 (7.1)	36.9 (5.6)	45.0 (7.2)	27.6 (9.0)	16.5 (6.1)	32.8 (12.4)	25.7 (12.0)
Percentage-point change	-9.2	-4.1	-10.0	-9.9	-6.2	-2.3	-10.4	-6.3	+11.6

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following level: \* $p < .05$ .

Standard errors are in parentheses.

At both points in time, youth with learning disabilities or speech impairments were the most likely to have worked since leaving high school and, along with youth with hearing impairments, to be working at the time of the interview. In fact, significantly more out-of-school youth with learning disabilities were reported to have worked for pay since leaving high school than peers

with mental retardation, orthopedic impairments, or multiple disabilities ( $p < .01$  or  $p < .001$ ). Although the proportion of cohort 1 youth with learning disabilities who worked since leaving high school also was considerably higher than that for youth with visual impairments (62% vs. 37%,  $p < .01$ ), this was not the case at the second point in time. The 26-percentage-point increase for cohort 2 youth with visual impairments resulted in 62% of these youth being employed since leaving high school, a rate that was similar to that of their peers with learning disabilities. Cohort 1 and 2 youth with learning disabilities or hearing or speech impairments also were considerably more likely to be working for pay at the time of the interview than their peers with mental retardation or orthopedic impairments ( $p < .05$  or greater).

There were few notable changes in the characteristics of the jobs held by working youth in different disability categories (Exhibit 5-4). Only youth with learning disabilities were significantly less likely to be working full-time in cohort 2 (23 percentage points,  $p < .05$ ). Although these youth were the most likely to be employed full-time in cohort 1, this decrease resulted in youth with emotional disturbances having the highest proportion of full-time workers in cohort 2 (53%,  $p < .05$  compared with youth with mental retardation). The increase in the proportion of youth who earned more than the federal minimum wage that was seen for youth with disabilities as a whole occurred only among youth with emotional disturbances (26 percentage points,  $p < .01$ ).

Youth with learning disabilities experienced the greatest change in the types of jobs held; they held fewer clerical and maintenance jobs (11 and 19 percentage points, respectively;  $p < .05$  for both changes) in 2003 than in 1987 but were more likely to be working in retail positions (18 percentage points,  $p < .01$ ). Youth with emotional disturbances or hearing impairments also were more likely to be employed in retail jobs in cohort 2 than cohort 1 (11 and 19 percentage points, respectively;  $p < .05$ ).

**Exhibit 5-4**  
**CHANGES IN JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH,**  
**BY DISABILITY CATEGORY**

	Learning Disability	Speech/ Language Impair- ment	Mental Retar- dation	Emo- tional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Multiple Disabilities/ Deaf- Blindness
<b>Percentage of working youth who:</b>									
<b>Worked full-time (35 hours per week or more)</b>									
Cohort 1 (1987)	61.7 (6.2)	46.3 (8.9)	48.7 (10.2)	48.9 (7.8)	57.6 (9.2)	44.0 (13.4)	--	--	--
Cohort 2 (2003)	38.3 (7.3)	33.2 (10.1)	24.2 (11.3)	52.7 (7.5)	47.0 (9.6)	28.7 (12.5)	20.2 (12.0)	37.1 (6.6)	27.1 (20.2)
Percentage-point change	<b>-23.4*</b>	-13.1	-24.5	+3.8	-10.6	-15.3			
<b>Earned more than the federal minimum wage</b>									
Cohort 1 (1987)	78.1 (5.4)	61.7 (9.2)	49.5 (10.7)	55.0 (8.1)	72.6 (8.6)	--	--	--	--
Cohort 2 (2003)	87.3 (4.8)	84.4 (7.4)	68.1 (10.7)	81.4 (5.6)	89.3 (5.7)	67.6 (13.7)	86.0 (9.3)	85.9 (4.5)	65.5 (19.5)
Percentage-point change	+9.2	+22.7	+18.6	<b>+26.4**</b>	+16.7				
<b>Were employed in:<sup>a</sup></b>									
<b>Retail</b>									
Cohort 1 (1987)	3.9 (2.7)	4.9 (4.3)	--	3.2 (3.0)	3.2 (3.6)	--	--	--	--
Cohort 2 (2003)	22.2 (5.6)	17.8 (7.5)	5.7 (5.4)	14.6 (4.8)	22.1 (7.6)	11.9 (8.4)	24.6 (11.2)	19.4 (4.9)	10.9 (12.4)
Percentage-point change	<b>+18.3**</b>	+12.9		<b>+11.4*</b>	<b>+18.9*</b>				
<b>Clerical</b>									
Cohort 1 (1987)	15.1 (4.9)	24.3 (8.6)	--	14.5 (6.0)	22.3 (8.5)	--	--	--	--
Cohort 2 (2003)	4.0 (2.6)	16.5 (7.3)	14.7 (8.2)	9.7 (4.0)	15.6 (6.6)	13.1 (8.8)	4.6 (5.4)	11.7 (4.0)	6.0 (9.4)
Percentage-point change	<b>-11.1*</b>	-7.8		-4.8	-6.7				
<b>Maintenance</b>									
Cohort 1 (1987)	31.4 (6.4)	27.0 (8.9)	--	27.4 (7.6)	9.2 (5.9)	--	--	--	--
Cohort 2 (2003)	12.2 (4.4)	10.1 (5.9)	15.1 (8.3)	15.2 (4.9)	6.4 (4.5)	7.4 (6.8)	11.7 (8.4)	7.7 (3.3)	4.6 (8.3)
Percentage-point change	<b>-19.2*</b>	-16.9		-12.2	-2.8				

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of trades, child care, food service, and other support and service jobs are omitted from the exhibit because there were no significant changes over time for any category.

-- Too few to report separately.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

**Exhibit 5-5  
CHANGES IN EMPLOYMENT STATUS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY SCHOOL-EXIT STATUS**

	<u>Completers</u>	<u>Dropouts</u>
<b>Percentage who:</b>		
<b>Worked for pay since leaving high school</b>		
Cohort 1 (1987)	63.8 (4.0)	50.8 (4.9)
Cohort 2 (2003)	73.0 (4.3)	67.5 (6.7)
Percentage-point change	+9.2	<b>+16.7*</b>
<b>Currently worked for pay</b>		
Cohort 1 (1987)	57.3 (4.1)	40.9 (4.9)
Cohort 2 (2003)	43.9 (4.9)	34.7 (7.1)
Percentage-point change	<b>-13.4*</b>	-6.2

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following level: \*p<.05.

Standard errors are in parentheses.

**Differential Changes Related to School-Exit Status**

The percentages of out-of-school youth with disabilities who were reported to have worked for pay since leaving high school increased only among dropouts (17 percentage points, p<.05; Exhibit 5-5). Conversely, there was a decrease in the percentage of out-of-school youth who were working at the time of the interview only among high school completers (13 percentage points, p<.05). These changes resulted in a leveling of the differences between completers and dropouts that were apparent in cohort 1. Cohort 1 completers were more likely than dropouts to be employed both since high school (64% vs. 51%, p<.05) and at the time of the interview (57% vs. 41%, p<.05), but in cohort 2, these differences moderated and were not statistically significant.

Changes over time in the job characteristics of employed youth with disabilities were notable only for school completers (Exhibit 5-6). Among cohort 2 youth who completed high school, significantly fewer worked full-time at their current or most recent job (21 percentage points, p<.05), and a significantly larger proportion earned more than the federal minimum wage (16 percentage points, p<.05). Furthermore, mirroring employed youth with disabilities as a whole, over time, high school completers were less likely to be working in maintenance jobs

**Exhibit 5-6  
CHANGES IN JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY SCHOOL-EXIT STATUS**

	<u>Completers</u>	<u>Dropouts</u>
<b>Percentage of working youth who:</b>		
<b>Worked full-time (35 hours per week or more)</b>		
Cohort 1 (1987)	54.9 (5.5)	62.1 (7.8)
Cohort 2 (2003)	33.6 (6.2)	55.8 (9.7)
Percentage-point change	<b>-21.3*</b>	-6.3
<b>Earned more than federal minimum wage</b>		
Cohort 1 (1987)	68.2 (5.3)	73.8 (7.5)
Cohort 2 (2003)	84.7 (4.3)	83.8 (7.0)
Percentage-point change	<b>+16.5*</b>	+10.0
<b>Were employed in:<sup>a</sup></b>		
Retail		
Cohort 1 (1987)	6.0 (2.9)	1.4 (2.2)
Cohort 2 (2003)	23.3 (5.0)	10.2 (5.4)
Percentage-point change	<b>+17.3**</b>	+8.8
Maintenance		
Cohort 1 (1987)	26.4 (5.3)	36.6 (8.9)
Cohort 2 (2003)	11.7 (3.8)	16.3 (6.6)
Percentage-point change	<b>-14.7*</b>	-20.3

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of clerical, trades, child care, food service, and other support and service jobs are omitted from the exhibit because there were no significant changes over time for any category.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

(15 percentage points,  $p < .05$ ) and more likely to be working in retail jobs (17 percentage points,  $p < .01$ ). In neither cohort were there significant differences in job characteristics between high school completers and dropouts.

### Differential Changes Related to Demographic Characteristics

Several demographic characteristics of youth with disabilities were associated with different changes over time in their employment status or job characteristics; however, among the types of job held, only for maintenance and retail jobs were any significant changes noted for any demographic characteristic.

**Age.** Notable change over time in the percentages of youth with disabilities who worked for pay since leaving high school occurred for youth in the two older age groups (Exhibit 5-7).

About three-fourths of cohort 2 youth ages 18 and 19 were reported to have worked since high school, reflecting increases of 19 and 15 percentage points, respectively ( $p < .05$  for both changes). As for youth as a whole, there were no significant changes in the percentage of youth employed at the time of the interview in the three age groups.

	15 through 17	18	19
<b>Percentage who:</b>			
<b>Worked for pay since leaving high school</b>			
Cohort 1 (1987)	37.4 (7.7)	54.4 (5.3)	61.7 (4.1)
Cohort 2 (2003)	50.5 (10.0)	73.0 (5.3)	76.3 (5.1)
Percentage-point change	+13.1	<b>+18.6*</b>	<b>+14.6*</b>
<b>Currently worked for pay</b>			
Cohort 1 (1987)	36.2 (8.1)	48.1 (5.4)	53.1 (4.3)
Cohort 2 (2003)	21.5 (8.5)	46.6 (6.0)	44.6 (6.0)
Percentage-point change	-14.7	-1.5	-8.5

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.  
Statistically significant difference in a two-tailed test at the following level: \* $p < .05$ .  
Standard errors are in parentheses.

The employment status differences between the youngest out-of-school youth and their older peers were accentuated over time, both with regard to employment since high school and employment at the time of the interview. The youngest cohort 1 youth were significantly less likely to be employed than 19-year-olds (37% vs. 62%  $p < .01$ ). At cohort 2, increases for both 18- and 19-year-olds resulted in there being significant differences between the youngest group and both of the older groups (50% vs. 73% and 76%,  $p < .05$ ). Considering

employment at the time of the interview, no differences existed between the age groups at cohort 1, but by cohort 2, there were significant differences between the youngest youth and both groups of their older peers (22% vs. 47% and 45%, respectively;  $p < .05$ ).

There were no significant changes over time in the percentages of youth in the three age groups who were working full-time. Earning more than the federal minimum wage at their current or most recent job significantly increased only for the oldest youth (Exhibit 5-8). Among 19-year-olds in cohort 2, 90% were earning more than minimum wage, a 16-percentage-point increase from cohort 1 ( $p < .05$ ).



**Exhibit 5-8  
CHANGES IN JOB CHARACTERISTICS OF  
OUT-OF-SCHOOL YOUTH WITH DISABILITIES,  
BY AGE**

	15 through 17	18	19
<b>Percentage of working youth who:</b>			
<b>Earned more than federal minimum wage</b>			
Cohort 1 (1987)	62.5 (14.9)	68.3 (7.6)	73.3 (5.5)
Cohort 2 (2003)	66.5 (13.4)	84.1 (5.6)	89.7 (4.4)
Percentage-point change	+4.0	+15.8	<b>+16.4*</b>
<b>Were employed in:<sup>a</sup></b>			
<b>Retail</b>			
Cohort 1 (1987)	--	2.1 (2.4)	5.7 (3.0)
Cohort 2 (2003)	11.0 (8.1)	14.3 (5.0)	26.3 (6.6)
Percentage-point change		<b>+12.2*</b>	<b>+20.6**</b>
<b>Maintenance</b>			
Cohort 1 (1987)	--	38.4 (8.3)	29.1 (5.9)
Cohort 2 (2003)	25.6 (11.4)	21.2 (5.8)	3.3 (2.7)
Percentage-point change		-17.2	<b>-25.8***</b>

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of clerical, trades, child care, food service, and other support and service jobs are omitted from the exhibit because there were no significant changes over time for any category.

-- Too few to report separately.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01; \*\*\*p<.001.

Standard errors are in parentheses.

The types of jobs youth held changed significantly in only two job categories for the oldest youth. Among 19-year-olds, there was a decrease over time of 26 percentage points in the likelihood of working in maintenance jobs ( $p<.001$ ), with a corresponding increase in retail jobs for 19-year-olds (21 percentage points,  $p<.01$ ). The sizable decrease in maintenance jobs for the oldest youth resulted in a significantly lower rate of such jobs relative to 18-year-olds in cohort 2 (3% vs. 21%,  $p<.01$ ) that had not existed in cohort 1. Eighteen-year-olds shared the increase in employment in retail jobs with their older peers, although the increase was smaller (12 percentage points,  $p<.05$ ).

**Gender.** Changes in employment status over time were dramatic for girls with disabilities but not for their male counterparts (Exhibit 5-9). The percentage of out-of-school girls who had worked for pay since leaving high school almost doubled between cohorts 1 and 2 (35% to 67%), a 32-percentage-point increase ( $p<.001$ ). This sizable increase for girls eliminated the large gap in employment rates in cohort 1 that

favored boys (64% vs. 35%,  $p<.001$ ). Regarding current employment, in cohort 1, boys were almost twice as likely as girls to be employed at the time of the interview (57% vs. 30%,  $p<.001$ ), but there was no significant difference between the two groups in cohort 2.

Unlike all youth with disabilities, the percentage working full-time did not decrease significantly for either boys nor girls, nor were there significant differences between them in the rates of full-time work for either cohort. The increase in earning more than the federal minimum wage was significant only for the larger group of boys (14 percentage points,  $p<.05$ ; Exhibit 5-10). Boys were less likely to be employed in maintenance work in cohort 2 than cohort 1. There was an 18-percentage-point decrease, with 14% being employed in these jobs in cohort 2 ( $p<.01$ ). A corresponding increase in employment in retail jobs for boys of

**Exhibit 5-9  
CHANGES IN EMPLOYMENT STATUS OF  
OUT-OF-SCHOOL YOUTH WITH  
DISABILITIES, BY GENDER**

	Boys	Girls
<b>Percentage who:</b>		
<b>Worked for pay since leaving high school</b>		
Cohort 1 (1987)	63.8 (3.5)	34.8 (5.3)
Cohort 2 (2003)	72.1 (4.4)	67.1 (6.5)
Percentage-point change	+8.3	<b>+32.3***</b>
<b>Currently worked for pay</b>		
Cohort 1 (1987)	56.7 (3.7)	30.2 (5.2)
Cohort 2 (2003)	46.0 (4.9)	31.1 (6.4)
Percentage-point change	-10.7	+9

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following level: \*\*\*p<.001.

Standard errors are in parentheses.

13 percentage points also was significant (p<.01) (the small number of employed girls limits the ability of findings for that group to reach statistical significance on some variables, despite having larger changes relative to boys).

**Household income.** Although youth from households in both the middle and highest income groups in cohort 1 were more likely to be employed since leaving high school than youth from the lowest-income households (66% and 64% vs. 42%, p<.01; Exhibit 5-11), this pattern had changed by cohort 2. A 20-percentage-point increase in employment among youth from the highest-income households resulted in their employment rate surpassing those of youth from both the lowest and middle income groups (84% vs. 59% and 65%, p<.01 and p<.05, respectively). A similar pattern was evident regarding current employment. Youth from the middle- and highest-income households in cohort 1 were more likely to be employed at the time of the interview than youth from households in the lowest income group (57% and 60% vs. 31%, p<.01 and p<.001, respectively). A 23-percentage-point decrease in current employment among cohort 2 youth in the middle income group resulted in youth from the wealthiest households being more likely than those from other two groups to be employed (53% vs. 31% and 34%, respectively; p<.05).

There were no significant changes in youth in any household income group working full-time. Similarly there were no differences between the groups in either cohort. The significantly

**Exhibit 5-10  
CHANGES IN JOB CHARACTERISTICS OF  
OUT-OF-SCHOOL YOUTH WITH DISABILITIES,  
BY GENDER**

	Boys	Girls
<b>Percentage of working youth who:</b>		
<b>Earned more than federal minimum wage</b>		
Cohort 1 (1987)	73.2 (4.7)	57.5 (10.6)
Cohort 2 (2003)	87.3 (4.0)	79.5 (7.2)
Percentage-point change	<b>+14.1*</b>	+22.0
<b>Were employed in:<sup>a</sup></b>		
<b>Retail</b>		
Cohort 1 (1987)	3.1 (1.9)	9.9 (7.2)
Cohort 2 (2003)	16.5 (4.5)	26.9 (7.5)
Percentage-point change	<b>+13.4**</b>	+17.0
<b>Maintenance</b>		
Cohort 1 (1987)	32.2 (5.2)	18.5 (9.4)
Cohort 2 (2003)	13.7 (4.2)	10.8 (5.2)
Percentage-point change	<b>-18.5**</b>	-7.7

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of clerical, trades, child care, food service, and other support and service jobs are omitted from the exhibit because there were no significant changes over time for any category.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

<b>Exhibit 5-11 CHANGES IN EMPLOYMENT STATUS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY HOUSEHOLD INCOME</b>			
	Income		
	Lowest	Middle	Highest
<b>Percentage who:</b>			
<b>Worked for pay since leaving high school</b>			
Cohort 1 (1987)	42.1 (6.0)	66.5 (5.8)	64.0 (4.9)
Cohort 2 (2003)	59.1 (6.8)	65.0 (7.4)	84.3 (5.3)
Percentage-point change	+17.0	-1.5	<b>+20.3**</b>
<b>Currently working for pay</b>			
Cohort 1 (1987)	31.0 (5.7)	57.3 (6.1)	59.9 (5.0)
Cohort 2 (2003)	31.3 (6.5)	34.3 (7.4)	53.0 (7.3)
Percentage-point change	+.3	<b>-23.0*</b>	-6.9

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

increased likelihood of earning more than minimum wage that was apparent for youth with disabilities as a whole occurred only among youth from households in the lowest income group (27 percentage points, p<.05; Exhibit 5-12;). Significant changes over time in the types of jobs held by youth from different household income groups occurred only with maintenance and retail jobs held by youth from households in the highest income group. Working in maintenance jobs decreased by 18 percentage points (p<.05), whereas holding retail jobs increased by 16 percentage points (p<.05).

**Race/ethnicity.** There were increases over time in employment since high school among white and African-American youth with disabilities (13 and 26 percentage points, p<.05 and p<.01, respectively; Exhibit 5-13). The substantial gain for African-American youth eliminated the wide disparity that existed at cohort 1 between them and white youth in having been employed since leaving high school (36% vs. 62%, p<.001). The disparity between white and African-American youth in current employment in cohort 1 (56% vs. 27%, p<.001) was no longer significantly different in cohort 2.

There were no significant decreases across time in the percentage of youth of different racial/ethnic backgrounds working full-time, nor were there differences in rates between groups

<b>Exhibit 5-12 CHANGES IN JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY HOUSEHOLD INCOME</b>			
	Income		
	Lowest	Middle	Highest
<b>Percentage of working youth who:</b>			
<b>Earned more than federal minimum wage</b>			
Cohort 1 (1987)	53.3 (11.5)	75.7 (7.6)	78.1 (5.6)
Cohort 2 (2003)	80.0 (7.0)	89.9 (5.9)	84.6 (6.1)
Percentage-point change	<b>+26.7*</b>	+14.2	+6.5
<b>Employed in:<sup>a</sup></b>			
<b>Retail</b>			
Cohort 1 (1987)	1.7 (3.4)	4.6 (4.0)	6.4 (3.4)
Cohort 2 (2003)	15.7 (6.3)	15.8 (7.2)	22.6 (6.9)
Percentage-point change	+14.0	+11.2	<b>+16.2*</b>
<b>Maintenance</b>			
Cohort 1 (1987)	40.3 (13.0)	26.5 (8.5)	32.2 (6.5)
Cohort 2 (2003)	13.5 (6.0)	16.5 (7.4)	13.8 (5.7)
Percentage-point change	-26.8	-10.0	<b>-18.4*</b>

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of clerical, trades, child care, food service, and support and other service jobs are omitted from the exhibit because there were no significant changes over time for any category.

Statistically significant difference in a two-tailed test at the following level: \*p<.05.

Standard errors are in parentheses.

**Exhibit 5-13  
CHANGES IN EMPLOYMENT STATUS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY RACE/ETHNICITY**

	Race/Ethnicity		
	White	African-American	Hispanic
<b>Percentage who:</b>			
<b>Worked for pay since leaving high school</b>			
Cohort 1 (1987)	61.6 (3.6)	35.5 (6.1)	60.4 (12.8)
Cohort 2 (2003)	74.3 (4.3)	61.7 (8.1)	65.4 (11.4)
Percentage-point change	<b>+12.7*</b>	<b>+26.2**</b>	+5.0
<b>Currently worked for pay</b>			
Cohort 1 (1987)	56.4 (3.7)	27.4 (5.9)	49.6 (13.3)
Cohort 2 (2003)	45.4 (5.0)	32.3 (7.8)	32.2 (11.3)
Percentage-point change	-11.0	+4.9	-17.4

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

in either cohort. The increases over time in the percentage earning more than minimum wage were substantial only for white youth (Exhibit 5-14). With a 20-percentage-point increase, 90% of white youth in cohort 2 were earning more than the federal minimum wage (p<.01).

Among the three racial/ethnic groups, only white youth experienced significant changes in their level of employment in maintenance and retail positions, with a 20-percentage-point decrease in maintenance jobs and a 12-percentage-point increase in retail jobs (p<.01 and p<.05, respectively).

## Summary

The employment picture for youth with disabilities in their initial years out of school changed in several ways between 1987 and 2003. About 7 in 10 youth with disabilities who had been out of school up to 2 years in 2003 had worked for pay outside the home at some time since leaving high school; somewhat more than half had done so in 1987. However, cohort 2 youth with disabilities were no more likely than cohort 1 peers to be working at the time of the

**Exhibit 5-14  
CHANGES IN JOB CHARACTERISTICS OF OUT-OF-SCHOOL YOUTH WITH DISABILITIES, BY RACE/ETHNICITY**

	Race/Ethnicity		
	White	African-American	Hispanic
<b>Percentage of working youth who:</b>			
<b>Earned more than federal minimum wage</b>			
Cohort 1 (1987)	70.7 (4.9)	73.5 (11.1)	54.6 (20.4)
Cohort 2 (2003)	90.2 (3.6)	77.4 (9.7)	68.6 (15.4)
Percentage-point change	<b>+19.5**</b>	+3.9	+14.0
<b>Were employed in:<sup>a</sup></b>			
<b>Retail</b>			
Cohort 1 (1987)	4.4 (2.3)	6.1 (6.6)	--
Cohort 2 (2003)	16.5 (4.4)	18.6 (8.2)	39.8 (15.3)
Percentage-point change	<b>+12.1*</b>	+12.5	
<b>Maintenance</b>			
Cohort 1 (1987)	30.8 (5.2)	26.5 (12.2)	--
Cohort 2 (2003)	10.3 (3.6)	18.4 (8.2)	17.9 (12.0)
Percentage-point change	<b>-20.5**</b>	-8.1	

Sources: NLTS Wave 1 parent interviews and NLTS2 Wave 2 parent/youth interviews.

<sup>a</sup> The categories of clerical, trades, child care, food service, and other support and service jobs are omitted from the exhibit because there were no significant changes over time for any category.

-- Too few to report separately.

Statistically significant difference in a two-tailed test at the following levels: \*p<.05; \*\*p<.01.

Standard errors are in parentheses.

interview, and they were less likely to work full-time at their current or most recent job. Over time, considerably more out-of-school youth with disabilities earned above the federal minimum wage, yet the average hourly wage did not increase when adjusted for inflation. There also were some shifts in the types of jobs worked by employed out-of-school youth with disabilities—fewer youth held maintenance or clerical jobs and more worked in retail in their current or most recent job.

The decrease in current and in full-time employment is consistent with findings reported in Chapter 6 of a significant increase in youth with disabilities combining work with the pursuit of postsecondary education. This potential explanation for findings reported in this chapter is reinforced by the fact that the decrease in current and full-time employment occurred only among high school completers—those most likely to have been enrolled in postsecondary education. Improvements in earnings relative to the federal minimum wage and shifts in the types of jobs held also occurred only among high school completers.

The changes in employment that were identified for youth with disabilities as a whole were not widely distributed across disability categories. They were best reflected among youth with learning disabilities, the largest disability group. These youth were more likely to have worked since high school and less likely to have worked full-time, and they demonstrated the shift in the kinds of jobs held that were apparent for youth with disabilities as a whole. However, they did not experience an increase in the likelihood of earning more than the minimum wage; only youth with emotional disturbances did so. Youth with visual impairments shared in the increase in the rate of employment since high school, and, with youth with emotional disturbances, they experienced the increase in retail sales jobs noted generally for all youth with disabilities.

The youngest out-of-school youth with disabilities did not share in any of the employment changes noted for older youth, perhaps in part because the large majority of them had not finished high school, as noted in Chapter 2. Although girls with disabilities closed the gap relative to boys in the proportion who had worked since leaving high school, a significant increase in earnings relative to the minimum wage and shifts in the kinds of jobs held were apparent only among boys. Similar-size changes in earnings and job types for girls did not reach statistical significance due to the smaller size of that group relative to boys.

Changes in employment rates and characteristics were not consistent across income groups. Youth with disabilities in the highest income group experienced the only significant increase in the rate of employment since high school and were the only group to have significant shifts in the kinds of jobs held. However, the middle income group showed a significant decline in the current employment rate (a decline not exhibited by youth with disabilities as a whole or any other subgroup), and the lowest income group showed the only significant gain in earnings relative to the federal minimum wage. Increases in the likelihood of working for pay since high school benefited white and African-American youth with disabilities, but only white youth showed an increase in the likelihood of earning more than the minimum wage or shifts in the kinds of jobs held; no changes in the employment profile of Hispanic youth with disabilities were noted.

Subsequent reports comparing NLTS and NLTS2 findings will explore the extent to which the pattern of changes in employment among youth with disabilities are sustained or evolve as youth pursue careers in young adulthood.