

# The Post-High School Outcomes of Young Adults With Disabilities up to 8 Years After High School

A Report From the National Longitudinal Transition Study-2 (NLTS2)



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September 2011 Lynn Newman Mary Wagner Anne-Marie Knokey Camille Marder Katherine Nagle Debra Shaver Xin Wei with Renée Cameto Elidia Contreras Kate Ferguson Sarah Greene Meredith Schwarting **SRI International** 

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#### **Executive Summary**

Increasingly, researchers are contending that changes in the latter part of the 20th century and the early 21st century have prompted a reconsideration of the notion of adolescence (e.g., Fussell and Furstenberg 2005)—a developmental stage encompassing the years between 11 and 18 (Hall 1904)—being immediately followed by adulthood—a stage marked by "completion of schooling, movement from the parental household, entrance into the labor force, formation of partnerships, and the onset of childbearing and parenting" (Furstenberg, Rumbaut, and Settersten 2005, p. 7). They suggest that, among other social shifts, an increasing emphasis on postsecondary education and the growing struggles postadolescents face in becoming economically self-sufficient elongate or postpone the transitions usually associated with adulthood. Recognizing this reality, a growing body of research is focusing on the period of "early adulthood," ages 18 through 34 (Furstenberg, Rumbaut, and Settersten 2005), as distinct from adolescence and full adulthood (e.g., Arnett 2001; Arnett 2002). The John T. and Catherine D. MacArthur Foundation Research Network on Transitions to Adulthood and Public Policy recently assembled an extensive collection of analyses of the social forces shaping the early adult period and the experiences that characterize it (Settersten, Furstenberg, and Rumbaut 2005). After reviewing the available data, however, the authors concluded that a need remains to "pioneer research efforts aimed at understanding the new frontiers of early adult life" (Settersten, Furstenberg, and Rumbaut 2005, p. 7).

The National Longitudinal Transition Study-2 (NLTS2) funded by the National Center for Special Education Research at the Institute of Education Sciences, U.S. Department of Education, provides a unique source of information to help in developing an understanding of the experiences of secondary school students with disabilities nationally as they go through their early adult years. NLTS2 addresses questions about youth with disabilities in transition by providing information over a 10-year period about a nationally representative sample of secondary school students with disabilities who were 13 to 16 years old and receiving special education services in grade 7 or above, under the Individuals With Disabilities Education Act (IDEA) in the 2000–01 school year. NLTS2 findings generalize to youth with disabilities nationally and to youth in each of the 12 federal special education disability categories in use for students in the NLTS2 age range. The study was designed to collect data on sample members from multiple sources in five waves, beginning in 2001 and ending in 2009.

This document uses information about these former secondary school students to describe the experiences of young adults with disabilities in the postsecondary education, employment, independence, and social domains in their first 8 years out of high school.

Much of the information reported in this document comes from young adults with disabilities themselves in the form of responses to either a telephone interview or a self-administered mail survey with a subset of key items from the telephone interview<sup>1</sup> conducted in 2009, as part of NLTS2's fifth and final wave of data collection, referred to as Wave 5. Data for young adults who were reported by parents to be unable to respond to an interview or complete a questionnaire or who did not respond to interview or survey attempts were provided by parents. Data from the three sources were combined for the analyses reported here and subsetted to include only data for

<sup>&</sup>lt;sup>1</sup> Only a subset of items was included in the mail survey because the full set of items was considered too lengthy to be feasible for a mail questionnaire format.

those who were known to be out of high school at the time of the Wave 5 data collection in 2009. In constructing variables that describe young adult's experiences since leaving high school, data from the Wave 2 through Wave 4 parent and youth telephone interviews and mail surveys (conducted in 2003, 2005, and 2007, respectively) also were used for young adults who were out of high school at the time of each data collection. When similar data items were available, comparisons were made between young adults with disabilities and the same-age young adults in the general population. The analyses approach used for the general population data bases mirrors the approach used for NLTS2 data. General population comparison data were taken from The National Longitudinal Survey of Youth, 1997 (NLSY97), 2005 data collection, from The National Longitudinal Study of Adolescent Health (Add Health), Wave 3 collected in 2001-2002, and from the Current Population Survey (CPS) 2009.<sup>2</sup> Comparison analyses of these weighted data included a subset of respondents who were out of high school at the time and were 21 to 25 years old.<sup>3</sup>

This report focuses on the subset of young adults with disabilities who were out of secondary school and 21 to 25 years old when telephone interviews were conducted with their parents and, whenever possible, with the young adults themselves in 2009. Young adults included in this report varied in the length of time they were out of high school, ranging from less than 1 month to 8 years post-high school. NLTS2 findings reported in this document use information collected from these young adults or parents to describe the experiences of young adults with disabilities in the postsecondary education, employment, independence, and social domains in their first 4 years out of high school. Findings are presented for young adults with disabilities as a whole and for those who differ in disability category, length of time out of high school, highest level of educational attainment, gender, parent's household income, and race/ethnicity.

This report is organized to provide information on young adults with disabilities in several key domains, including the following:

- Postsecondary education enrollment, educational experiences, and completion.
- Employment status and characteristics of young adults' current or most recent job.
- Productive engagement in school, work, or preparation for work.
- Residential independence; the prevalence of marriage and parenting; and aspects of their financial independence.
- Social and community involvement, including friendship activities and community participation in both positive and negative ways.

This executive summary presents all findings related to these key domains that are included in the full report for young adults with disabilities as a group as well as all differences between young adults who differ in their length of time since leaving high school, highest level of educational attainment, and demographic characteristics that are significantly different at at least the p < .01 level. Patterns of significant differences between disability categories are noted and illustrated by specific examples of significant findings.

<sup>&</sup>lt;sup>2</sup> The time period for Add Health Wave 4, collected in 2007-08 would have been a more appropriate comparison for the 2009 Wave 5 NLTS2 data; however, the items related to financial independence were not collected in Add Health Wave 4.

<sup>&</sup>lt;sup>3</sup> Youth with disabilities are included in the general population comparison sample because excluding them would require using self-reported disability data, which frequently are not an accurate indicator of disability, resulting in both over- and underestimations of disability.

#### **Postsecondary Education**

Over the course of a lifetime, an individual with a college degree will earn \$1 million more on average than a worker with a high school diploma (U.S. Department of Commerce U.S. Census Bureau 2002). As the U.S. economy becomes progressively more knowledge based, attaining a postsecondary education becomes more critical (Carnevale and Desrochers 2003). For example, only 20 percent of workers needed at least some college for their jobs in 1959; by 2000, that number had increased to 56 percent (Carnevale and Fry 2000).

Along with their peers in the general population, young adults with disabilities are increasingly focusing on postsecondary education. Postsecondary education is a primary post-high school goal for more than four out of five secondary school students with disabilities who have transition plans (Cameto, Levine, and Wagner 2004). NLTS2 provides the opportunity to examine the postsecondary education experiences of young adults with disabilities who have been out of secondary school up to 8 years.

- Sixty percent of young adults with disabilities were reported to have continued on to postsecondary education within 8 years of leaving high school.
- Young adults with disabilities were more likely to have enrolled in 2-year or community colleges (44 percent) than in vocational, business, or technical schools (32 percent) or 4-year colleges or universities (19 percent).
- The mean time between leaving high school and enrolling in a postsecondary school was 7 months; however, the median was 3 months.
- Most students with disabilities were enrolled in postsecondary education programs on a consistent (77 percent), full-time (71 percent) basis.
- Postsecondary students who attended 2-year colleges were more likely to have been enrolled in an academic than vocational course of study (51 percent vs. 30 percent). Students at all types of colleges focused on a broad range of majors.
- To receive accommodations or supports from a postsecondary school because of a disability, students first must disclose a disability to their school. Sixty-three percent of postsecondary students who were identified by their secondary schools as having a disability did not consider themselves to have a disability by the time they transitioned to postsecondary school. Twenty-eight percent of postsecondary students with disabilities identified themselves as having a disability and informed their postsecondary schools of their disability.
- Nineteen percent of postsecondary students who were identified as having a disability by their secondary schools were reported to receive accommodations or supports from their postsecondary schools because of their disability. In contrast, when these postsecondary students were in high school, 87 percent received some type of accommodation or support because of a disability.
- Postsecondary students who were given assistance because of their disability received a range of accommodations and supports from their schools. Additional time to complete tests was the most frequently received type of assistance, with 79 percent receiving this type of accommodation.

- Postsecondary students received help with their schoolwork beyond the support provided by schools because of their disability. Forty-four percent reported receiving some type of help, whether or not the assistance was related to their disability.
- Most students who received any type of help with their schoolwork reported that these supports were "very" or "somewhat" useful (88 percent) and that they "probably" or "definitely" (85 percent) were getting enough assistance.
- Forty-three percent of postsecondary students who had not received any type of help with their school work reported that it would have been helpful to have received assistance with school work.
- On average, students with disabilities who had been out of high school up to 8 years and had attended a 2-year or 4-year college had earned 59 semester credits. Those who had attended 2-year or community colleges had earned on average 23 semester credits, and those who ever had attended a 4-year college had earned 71 semester credits.
- Ninety percent of students with disabilities who were currently enrolled in postsecondary school reported that they were working toward a diploma or certificate.
- At the time of the Wave 5 interview, 41 percent of postsecondary students had graduated from their most recent postsecondary program; 31 percent had left their most recent postsecondary school prior to completing, and the remaining students still were currently enrolled in their postsecondary program at the time of the interview. Forty-one percent had completed their 2-year college programs, 57 percent had completed their vocational, business, or technical school programs, and 34 percent had completed their 4-year college programs.

#### Employment

Many adults consider employment a central component of their lives, providing not only economic benefits, but also a social network and a sense of worth as a productive member of society (Levinson and Palmer 2005; Rogan, Grossi, and Gajewski 2002). Indeed, employment has been linked to a range of positive outcomes, including financial independence and enhanced self-esteem (Fabian 1992; Lehman et al. 2002; Polak and Warner 1996). Given the importance of post-high school employment, preparation for employment is a primary focus of many transition services for secondary-school-age youth with disabilities, and achieving employment is the primary transition goal of the majority of secondary students with disabilities served under IDEA (Cameto, Levine, and Wagner 2004).

- Working for pay outside the home was an aspect of the post-high school experiences of a majority of young adults with disabilities. Ninety-one percent of young adults with disabilities out of high school up to 8 years reported having been employed at some time since leaving high school, holding an average of four jobs during that time.
- Among young adults with disabilities who had been out of high school 8 years, 67 percent worked full time at their current or most recent job.
- Wages of working young adults averaged \$10.40 per hour, and 61 percent received at least one of the benefits investigated in NLTS2 (paid vacation or sick leave, health insurance, or retirement benefits).

- The average hourly wage of young adults with disabilities who were employed full time was significantly higher than that of young adults working part time (\$11.00 vs. \$9.00).
- Young adults working full time were more likely to receive employment benefits (paid vacation or sick leave, health insurance, and retirement benefits) than those working part time (77 percent vs. 31 percent).
- About 26 percent of working young adults reportedly had employers who were aware of their disability, and 7 percent reported receiving some kind of accommodation on the job, most often adaptations to assignments or supervisory arrangements.
- Approximately 88 percent of working young adults reported that they liked their job at least fairly well and 90 percent reported being treated pretty well by others at their job. Approximately 62 percent to 75 percent agreed that their job paid pretty well, offered opportunities for advancement, put their education and training to good use, and, among those employed 6 months or more, had thus far involved a raise or promotion.
- Despite positive feelings about their jobs, young adults with disabilities were more likely to have quit their last job (53 percent) than to have left for other reasons.

### **Productive Engagement in the Community**

NLTS2 considered young adults with disabilities as being productively engaged in the community if they had participated in employment, education, and/or job training activities since leaving secondary school. Addressing this broader concept of engagement, rather than considering individual outcomes (employment or postsecondary education) separately, was encouraged by the advisory panel during the design of the initial NLTS; as a result, NLTS was one of the first studies to present a broader perspective on how young adults and young adults with disabilities could be productively engaged in their communities. The advisory panel for the current study continued to endorse that view of engagement. The importance of this broader view of what constitutes a successful transition is now incorporated in the current federal policy that requires states to collect data on "Indicator 14"-i.e., "the percent of young adults who had IEPs, are no longer in secondary school, and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school" (20 U.S.C. 1416(a)(3)(B)). The NLTS2 operationalization of this concept, as endorsed by the NLTS2 design advisory panel, is somewhat broader than Indicator 14, in that NLTS2 includes all forms of employment, not just competitive employment, and includes job training as a productive form of preparation for work, in addition to enrollment in postsecondary education.

- Ninety-four percent of young adults with disabilities who had been out of secondary school up to 8 years were reported to have been engaged in employment, postsecondary education, and/or job training during this post-high school period.
- Thirty percent had paid employment as their only mode of engagement since high school.
- Forty-two percent had been employed since leaving high school and also had been enrolled in postsecondary education.
- Nineteen percent had been employed and also involved in other activities, including job training.
- Postsecondary education was the only mode of engagement since high school for 3 percent of those with disabilities.

#### Household Circumstances of Out-of-High School Young adults With Disabilities

Markers on the path to adult responsibility typically have included financial and residential independence and self-sufficiency, marriage, and parenting (Arnett 2000; Chambers, Rabren, and Dunn 2009, Rindfuss 1991; Settersten 2006).

- Within 8 years of leaving high school, 59 percent of young adults with disabilities had lived independently (on their own or with a spouse, partner, or roommate), and 4 percent had lived semi-independently (primarily in a college dormitory or military housing).
- When young adults were asked about their satisfaction with their current living arrangement, 69 percent reported being satisfied with their residential arrangement.
- Twenty-nine percent of young adults with disabilities reported having had or fathered a child by the time they had been out of high school for up to 8 years. Twenty-two percent of males reported having fathered a child and 42 percent of females reported having had a child.
- Thirteen percent of young adults with disabilities were married.
- Fifty-nine percent of young adults with disabilities had a savings account, 59 percent had a checking account, and 41 percent had a credit card in their own name. Seventy-four percent had annual individual incomes (or for those living with a spouse, household incomes) of \$25,000 or less.

# Social and Community Involvement of Out-of-High School Young adults With Disabilities

Social inclusion "rests on the principle that democratic societies are enriched by the full inclusion of their citizens in the ebb and flow of community affairs" (Osgood et al. 2005, p. 12). Consistent with this notion, the domains encompassed in an understanding of a successful transition to young adulthood for individuals with disabilities have long included living successfully in one's community (Halpern 1985; National Center on Educational Outcomes 1993). An important aspect of whether a young adult is living successfully in the community is the "adequacy of his or her social and interpersonal network [which] is possibly the most important of all" aspects of adjustment for young adults with disabilities (Halpern 1985, p. 480).

- NLTS2 findings suggest that young adults with disabilities had active friendships— 77 percent reported seeing friends outside of organized activities at least weekly.
- Fifty-four percent were reported to communicate by computer at least once a week, with 32 percent doing so once a day or more often.
- The participation rate in any one of three types of extracurricular activities—lessons or classes outside of school, volunteer or community service activities, and organized school or community groups—was 52 percent, ranging from 20 percent to 39 percent of young adults across the three types of activities.
- Eleven percent of young adults were reported never to see friends outside of organized activities, and 48 percent did not take part in any of the three types of extracurricular activities mentioned above.
- More than three-fourths (78 percent) of young adults with disabilities had driving privileges and 71 percent exercised civic participation through registering to vote.

- Several negative forms of community participation or involvement also characterized the out-of-high school experiences of some young adults with disabilities. For example, 11 percent reported having been in a physical fight in the past year and 17 percent reported carrying a weapon in the past 30 days.
- Fifty percent of young adults with disabilities reported at some time having been stopped and questioned by police for reasons other than a traffic violation, and 32 percent had been arrested. Seventeen percent had spent a night in jail and 18 percent were reported to have been on probation or parole.

### **Disability Category Differences**

Disability category differences are apparent in many of the post-high school outcomes examined in this report. For example, youth with sensory impairments, emotional disturbances, mental retardation, or multiple disabilities were quite different from each other in their patterns of post-high school outcomes.

#### Youth With Sensory Impairments

- Young adults with visual or hearing impairments were more likely to attend postsecondary school (71 percent and 75 percent) than those with emotional disturbances, multiple disabilities, or mental retardation (53 percent, 33 percent, and 29 percent, respectively). In addition, young adults with visual or hearing impairments were more likely to have enrolled in a 4-year college or university (40 percent and 34 percent) than those with emotional disturbances, autism, other health impairments, multiple disabilities, or mental retardation (7 percent to 20 percent), and those with visual impairments also were more likely to have attended a 4-year college than those with learning disabilities, orthopedic impairments, or traumatic brain injuries (21 percent, 26 percent, and 19 percent, respectively).
- Young adults with visual or hearing impairments were more likely to have received accommodations and supports from their schools because of a disability (59 percent and 53 percent, respectively) than were young adults speech/language impairments, other health impairments, learning disabilities, emotional disturbances, or mental retardation (12 percent to 24 percent).
- Young adults with visual impairments were less likely to have been employed at the time of the interview than young adults with other health impairments, speech/language impairments, or learning disabilities (44 percent to 67 percent).
- Young adults with visual impairments were more likely to have disclosed a disability to their employers (75 percent) compared with young adults with learning disabilities, speech/language impairments, other health impairments, emotional disturbances, or traumatic brain injuries (19 percent to 30 percent).
- Young adults with hearing impairments were reported to be more likely communicate by computer at least daily (e.g., e-mail, instant message, or participate in chat rooms), than those with emotional disturbances, autism, or multiple disabilities to (21 percent to 51 percent).
- Young adults with visual impairments were more likely to have taken lessons or classes outside of formal school enrollment (38 percent) than were young adults with learning

disabilities, mental retardation, other health impairments, or traumatic brain injuries (12 percent to 20 percent). They also had a significantly higher rate of participation in volunteer or community service activities (44 percent) than did young adults with speech impairments or mental retardation (26 percent and 19 percent, respectively). Young adults with visual impairments also were more likely to have belonged to an organized community or extracurricular group than young adults with emotional disturbances (51 percent vs. 32 percent).

### Young Adults With Emotional Disturbances

- Young adults in several categories were more likely than those with emotional disturbances to have enrolled in 4-year colleges or universities, including those with speech/language impairments, hearing impairments, visual impairments, or orthopedic impairments (11 percent vs. 26 percent to 40 percent).
- Young adults with emotional disturbances who were enrolled in postsecondary programs were less likely than young adults in several other disability categories to have informed their schools of a disability, including those with orthopedic impairments, visual impairments, multiple disabilities, deaf-blindness, autism, or hearing impairments (27 percent vs. 59 percent to 76 percent).
- Involvement with the criminal justice system also was more common for young adults with emotional disturbances than those in many other categories. Overall, 75 percent of young adults with emotional disturbances had been involved with the criminal justice system at some point in their lives. Their rate of ever having been involved in the criminal justice system at all was significantly higher than the rates for those in all other disability categories (26 percent to 55 percent).
- Young adults with emotional disturbances were more likely to have been stopped by the police, other than for a traffic violation, in the past 2 years (43 percent) than young adults in all other categories except traumatic brain injury (4 percent to 21 percent).
- Young adults with emotional disturbances also had significantly higher rates of being arrested in the past 2 years (27 percent) than those in all other categories except traumatic brain injury (less than 1 percent to 12 percent). They were more likely to have spent a night in jail in the past 2 years (19 percent) than young adults with in all other categories except traumatic brain injury and other health impairment (less than 1 percent to 8 percent).
- Young adults with emotional disturbances also were more likely to have been on probation or parole in the past 2 years (15 percent) than young adults in all other categories except traumatic brain injury and other health impairment (less than 1 percent to 8 percent).

## Young Adults With Mental Retardation or Multiple Disabilities

• Young adults with mental retardation or multiple disabilities were exceeded by young adults in several categories in their rate of enrollment in postsecondary education. Those with learning disabilities; speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, other health impairments, or traumatic brain injuries were more likely to be enrolled in postsecondary education than those with multiple disabilities or mental retardation (61 percent to 75 percent vs. 33 percent and

29 percent, respectively). Young adults with emotional disturbances, autism or deafblindness (53 percent, 44 percent, and 57 percent, respectively) also significantly exceeded young adults with mental retardation in their rates of postsecondary enrollment.

- Students with multiple disabilities were more likely to receive accommodations or supports from their postsecondary schools because of a disability than were those with speech/language impairments, learning disabilities, or other health impairments (46 percent vs. 12 percent, 17 percent, and 15 percent, respectively).
- In the employment domain, young adults with mental retardation or multiple disabilities were less likely to have been employed at the time of the interview than young adults with other health impairments, speech/language impairments, learning disabilities, or hearing impairments (39 percent and 39 percent vs. 57 percent to 67 percent).
- Young adults with mental retardation or multiple disabilities worked fewer hours per week on average (28 hours and 25 hours, respectively) than those with learning disabilities, emotional disturbances, speech/language impairments, or other health impairments (34 to 38 hours). Young adults with learning disabilities, speech/language impairments, hearing impairments, visual impairments, other health impairment, or emotional disturbances earned more per hour on average than their peers with mental retardation (\$10.50 to \$11.10 vs. \$7.90).
- Young adults with mental retardation or multiple disabilities were more likely to report that their employers were aware of their disability than young adults with learning disabilities, speech/language impairment, or other health impairments, emotional disturbances, or traumatic brain injuries (60 percent and 72 percent vs. 19 percent to 30 percent).
- In terms of residential independence, young adults with multiple disabilities were less likely to have lived independently than those with learning disabilities, emotional disturbances, or speech/language impairments (16 percent vs. 65 percent, 63 percent, and 51 percent, respectively). In addition, they were less likely to be married than those with learning disabilities, emotional disturbances, speech/language impairments, or mental retardation (1 percent vs. 11 percent to 15 percent).
- In the social domain, 53 percent of young adults with multiple disabilities and 58 percent of those with mental retardation reported seeing friends informally at least weekly. This rate was exceeded by young adults with speech/language impairments, learning disabilities, other health impairments, visual impairments, traumatic brain injuries, hearing impairments, or emotional disturbances (75 percent to 84 percent). Youth with visual or orthopedic impairments, deaf-blindness, or multiple disabilities also were more likely than youth with mental retardation to have belonged to an organized community group, taken extracurricular lessons or classes, or taken part in volunteer service activities (47 percent vs. 62 percent to 67 percent).
- In the financial domain, young adults in most disability categories were more likely to have used several types of financial tools than were young adults with mental retardation. For example, compared with young adults with mental retardation, young adults with learning disabilities, speech/language impairments, hearing impairments, visual impairments, orthopedic impairments, or other health impairments were more likely to have savings account (42 percent vs. 63 percent to 67 percent), to have a checking

account (29 percent vs. 63 percent to 74 percent), or a credit card (19 percent vs. 47 percent to 57 percent).

### Differences in Experiences by Length of Time Out of High School

Young adults with disabilities included in this report varied in their length of time out of high school, ranging from 1 month or less to 8 years post-high school. Twelve percent of young adults had been out of high school less than 3 years, 36 percent had been out from 3 up to 5 years, and 52 percent had been out of high school from 5 up to 8 years.

- Those who had been out of high school from 5 up to 8 years were more likely to receive paid vacation or sick leave (57 percent) and health insurance from their employer (53 percent) than those who had been out of high school for less than 3 years (27 percent and 32 percent, respectively).
- Young adults who were out of high school from 5 to 8 years or from 3 to 5 years were more likely to report having been engaged in employment, job training, or postsecondary education since high school than those who had been out of high school for less than 3 years (96 percent and 94 percent, respectively, vs. 85 percent).
- Young adults with disabilities out of high school from 5 to 8 years were more likely to report living independently than those out of high school for less than 3 years or (71 percent vs. 39 percent) and were more likely to live independently than those out of high school 3 to 5 years (48 percent).
- Young adults with disabilities out of high school from 5 to 8 years were more likely to report to have had or fathered a child than those out of high school for less than 3 years (36 percent vs. 18 percent).
- Marriage status differed significantly such that those out of high school from 5 up to 8 years were more likely to be married than those who left school for less than 3 years (17 percent vs. 3 percent).
- Those out of high school from 5 to 8 years were more likely to communicate by computer at least daily than those out of high school the shortest time (38 percent vs. 19 percent).
- Young adults out of high school from 5 to 8 years were more likely to be reported to have driving privileges than those who had been out of high school from 1 to 3 years (83 percent vs. 60 percent).

#### Differences in Experiences by Highest Level of Educational Attainment

Several post-high school outcomes varied by level of educational attainment. Those who had higher levels of educational attainment were more likely to experience several positive post-high school outcomes. In contrast, young adults who had left high school without finishing were significantly more likely to have experienced each of the various forms of criminal justice system involvement.

• High school completers were approximately three times as likely as their peers who did not complete high school to have enrolled in a postsecondary school (65 percent vs. 23 percent).

- Young adults who had received a postsecondary education degree or certificate were more likely to be employed at the time of the interview than those with lower levels of educational attainment (83 percent vs. 38 percent to 58 percent).
- Average hourly wages were significantly higher for young adults with disabilities who had completed a postsecondary education program than for those who had completed high school or who had some postsecondary education (\$12.50 vs. \$9.80 per hour and \$9.80 per hour).
- Young adults whose highest education level was high school completion were more likely than those whose highest education level was some postsecondary education to report that their education was put to good use (84 percent vs. 63 percent).
- Young adults with disabilities who had completed postsecondary education or training were significantly more likely to have lived independently than those for whom high school was their highest level of education (74 percent vs. 50 percent).
- High school noncompleters were more likely to have had or fathered a child than young adults with disabilities who had earned a postsecondary degree or certificate (48 percent vs. 21 percent).
- Young adults with disabilities who had completed postsecondary education or training were more likely to have a savings account (78 percent), checking account (86 percent), or credit card (64 percent) than those who had not completed high school (25 percent, 25 percent, and 19 percent, respectively) and those for whom high school was their highest level of education (49 percent, 47 percent, 32 percent, respectively). In addition, young adults who had completed a postsecondary program were more likely to have had a checking account than those who had attended but not completed their postsecondary education (61 percent).
- High school completers were more likely to have had a savings or checking account than high school noncompleters (49 percent vs. 25 percent, 47 percent vs. 25 percent, respectively).
- High school noncompleters were more likely to report being in the lowest annual income category (\$25,000 or less) than those who had completed a postsecondary program (83 percent vs. 59 percent).
- Young adults with a postsecondary degree or certificate had higher weekly rates of seeing friends than those for whom completing high school was their highest level of educational attainment (90 percent vs. 70 percent).
- Those who had completed a postsecondary education program were more likely than high school completers to have participated in a volunteer or community service activity (39 percent vs. 19 percent) and were more likely than high school noncompleters to have been a member of a community group (48 percent vs. 24 percent) and to have engaged in any of the forms of community participation investigated in NLTS2 (66 percent vs. 29 percent).
- Postsecondary education degree were more likely to have a driver's license (95 percent) and to have registered to vote (89 percent) than high school noncompleters (62 percent and 48 percent, respectively) or completers (66 percent and 60 percent, respectively).

- Young adults who had some postsecondary education and those who had earned a postsecondary degree or license were more likely to have taken part in at least one of the modes of community participation investigated in NLTS2 than those who had not completed high school (55 percent and 66 percent vs. 30 percent).
- Young adults with disabilities who had not completed high school were more likely to have had each of the various forms of criminal justice system involvement than those who had earned a postsecondary degree or had completed their high school education, including being stopped by police for other than a traffic violation (75 percent vs. 42 percent and 48 percent, respectively); having been arrested (59 percent vs. 22 percent and 32 percent), spending a night in jail (40 percent vs. 10 percent and 17 percent), or having been on probation or parole (39 percent vs. 10 percent and 19 percent).

#### **Demographic Differences in Post-High School Experiences**

Differences were apparent across young adults' demographic characteristics, including gender, age, household income, and race/ethnicity for some post-high school outcomes but not for others.

Postsecondary school enrollment or completion rates; engagement in school, work, or training for work; and most aspects of independence, including residential arrangements, marital status, having driving privileges, and using personal financial management tools, were similar for young men and women with disabilities. However, some gender differences were apparent:

- Young men with disabilities worked on average 38 hours per week, whereas young women averaged 32 hours of work per week.
- Forty-two percent of young women with disabilities had had a child since high school, whereas 22 percent of young men with disabilities had fathered a child.
- Young men were more likely than young women to report carrying a weapon in the preceding 30 days (24 percent vs. 7 percent); to have been stopped by police other than for a traffic violation (58 percent vs. 37 percent); to have been arrested (39 percent vs. 21 percent); and to have been jailed overnight (21 percent vs. 9 percent).

Young adults with disabilities who came from households with different income levels were similar in several aspects of their post-high school experiences. For example, postsecondary enrollment and completion rates, social and community involvement, residential independence, and involvement in violence-related activities or with the criminal justice system did not differ significantly by the economic status of the households in which young adults with disabilities grew up. However, young adults from wealthier families<sup>4</sup> were more likely than their peers to experience several positive outcomes:

• Young adults with disabilities from parent households with incomes of more than \$50,000, or \$25,001 to \$50,000 were more likely than those from households with incomes of \$25,000 or less to have been employed at the time of the interview (71 percent and 65 percent vs. 44 percent).

<sup>&</sup>lt;sup>4</sup> Parent/guardian household income was analyzed using three categories: \$25,000 or less, \$25,001 to \$50,000, and more than \$50,000.

- Those from households with incomes of more than \$50,000 were less likely to have been fired from their most recent job than were those from household with incomes of \$25,000 or less (4 percent vs. 20 percent).
- Compared with young adults with disabilities from households in the lowest income category (\$25,000 or less), those in the highest income category (more than \$50,000) were more likely to have a savings account (72 percent vs. 43 percent), checking account (70 percent vs. 40 percent), or a credit card (50 percent vs. 26 percent).
- Young adults who came from households in the highest income category were less likely to be in the lowest individual income category (\$25,000 or less) than those from households in the lowest income category (68 percent vs. 87 percent).
- Young adults with disabilities from the lower and middle income categories were more likely to have had or fathered a child than those from families with household incomes of more than \$50,000 (38 percent and 37 percent, respectively vs. 15 percent).
- Young adults with disabilities in the highest income group were more likely to be reported to have electronic communication at least daily than young adults from households in the lowest income group (37 percent vs. 20 percent), and young adults with disabilities from the upper income groups were more likely to have driving privileges than young adults from households with incomes of \$25,000 or less (87 percent, respectively, vs. 67 percent).

Similarities and differences also were apparent for young adults with different racial/ethnic backgrounds.<sup>5</sup> There were no significant differences across racial/ethnic groups in the likelihood of being engaged in school, work, or preparation for work; in postsecondary school enrollment or completion; in social or community involvement; and in involvement in violence-related activities or with the criminal justice system. For post-high school outcomes that differed by race/ethnicity:

- African American young adults with disabilities were more likely to have had or fathered a child than White young adults with disabilities (26 percent vs. 45 percent).
- White young adults with disabilities were more likely to be married than African American young adults with disabilities (17 percent vs. 4 percent).
- White young adults with disabilities were more likely to have a checking account or credit card than African American young adults with disabilities (66 percent vs. 39 percent for checking account; 44 percent vs. 26 percent for credit card).
- White young adults with disabilities were more likely than their African American peers to have driving privileges (84 percent vs. 63 percent).

<sup>&</sup>lt;sup>5</sup> NLTS2 analyses included three racial/ethnic categories: White, African American, and Hispanic.

### **Comparisons With the General Population**

When similar data items were available, comparisons were made between young adults with disabilities and same-age young adults in the general population. The analyses approach used for the general population data bases mirrored the approach used for NLTS2 data. Comparison data were taken from The National Longitudinal Survey of Youth, 1997 (NLSY97), 2005 data collection, The National Longitudinal Study of Adolescent Health, (ADD Health), Wave 3, collected in 2001-02, and the Current Population Survey (CPS) 2009.

The picture of young adults with disabilities presented in this report differed from that of young adults in the general population on several dimensions; for example:

- Young adults with disabilities were less likely to have enrolled in postsecondary programs than were their peers in the general population (60 percent vs. 67 percent).
- Young adults with disabilities were more likely to have attended a 2-year college (44 percent) or a postsecondary vocational, technical, or business school (32 percent) than their peers in the general population (21 percent and 20 percent, respectively). In contrast, those with disabilities were less likely than their peers in the general population to have attended a 4-year university (19 percent vs. 40 percent).
- Postsecondary completion rates of students with disabilities were lower than those of similar-aged students in the general population (41 percent vs. 52 percent).
- Young adults with disabilities who had attended 2-year colleges were more likely to have completed their 2-year college programs than were those in the general population (41 percent vs. 22 percent); however, they were less likely than their general population peers to have completed their 4-year college programs (34 percent vs. 51 percent).
- Young adults with disabilities earned an average of \$10.40 per hour compared with \$11.40 per hour for young adults in the general population.
- Young adults with disabilities were less likely to live independently than were their peers in the general population (45 percent vs. 59 percent).
- The marriage rate for young adults with disabilities was lower than that of their peers in the general population (13 percent vs. 19 percent).
- Young adults in the general population were more likely than young adults with disabilities to have a checking account (59 percent vs. 74 percent) or a credit card (41 percent vs. 61 percent).

## **Cautions in Interpreting Findings**

Readers should remember the following issues when interpreting the findings in this report:

- The analyses are descriptive; none of the findings should be interpreted as implying causal relationships. Neither should differences between disability categories be interpreted as reflecting disability differences alone, because of the confounding of disability and other demographic factors.
- Data presented are combined young adults' self-reports and parent-reported data. If a Wave 5 youth interview/survey was completed, young adults' responses to the items were used in this report. If a youth interview/survey could not be completed for an eligible young adult, or if a young adult was reported by parents not to be able to participate in an

interview/survey, parents' responses were used. For the subsample of out-of-high school young adults included in this report, the youth interview/survey was the source of data for post-high school outcomes for 65 percent of young adults, and the parent interview was the source for 35 percent of young adults. Combining data across respondents raises the question of whether parent and young adults' responses would concur—that is, would the same findings result if parents' responses were reported instead of young adults' responses. When both parents and young adults were asked whether the young adult attended community college, belonged to an organized community group, currently works for pay, and worked for pay in the past 2 years, their responses agreed from 73 percent to 88 percent of the time.

- It is important to note that descriptive findings are reported for the full sample of out-ofhigh school young adults; those findings are heavily influenced by information provided for young adults with learning disabilities, who constitute 63 percent of the weighted sample. Comparisons also were conducted between groups of young adults who differed with respect to disability category, high school-leaving status and timing, gender, race/ethnicity, and household income. These bivariate analyses should not be interpreted as implying that a factor on which subgroups are differentiated (e.g., disability category) has a causal relationship with the differences reported. Further, readers should be aware that demographic factors (e.g., race/ethnicity and household income) are correlated among young adults with disabilities, as well as being distributed differently across disability categories. These complex interactions and relationships among subgroups relative to the variables included in this report have not been explored.
- Several types of analyses were conducted for this report, including between-group means, between-group percentages, and within-subject percentages. Because of the weighted nature of NLTS2 data, equality between the mean values of the responses to a single survey item in two disjoint subpopulations was based on a test statistic essentially equivalent to a two-sample *t* test for independent samples using weighted data. Sample sizes for each group being compared were never less than 30. For a two-tailed test, the test statistic was the square of the *t* statistic, which then followed an approximate chi-square distribution with one degree of freedom, that is, an *F* (1, infinity) distribution.
- Although discussions in the report emphasize only differences that reach a level of statistical significance of at least p < .01, the large number of comparisons made in this report will result in some significant differences that are "false positives," or differences mistakenly determined to be significant when they are not (i.e., type I errors). Readers also are cautioned that the meaningfulness of differences reported here cannot be derived from their statistical significance.

This report provides the final national picture of the post-high school outcomes and experiences of young adults with disabilities represented in NLTS2 who had been out of high school up to 8 years, how these outcomes and experiences differed across disability categories and demographic groups, by school completion status and years out of high school, and, when data were available, how they compared with those of young adults in the general population.

#### 1. Young Adults With Disabilities: Study Background and Methods

Increasingly, researchers are contending that changes in the latter part of the 20th century and the early 21st century have prompted a reconsideration of the notion of adolescence (e.g., Fussell and Furstenberg 2005)—a developmental stage encompassing the years between 11 and 18 (Hall 1904)—being immediately followed by adulthood—a stage marked by "completion of schooling, movement from the parental household, entrance into the labor force, formation of partnerships, and the onset of childbearing and parenting" (Furstenberg, Rumbaut, and Settersten 2005). They suggest that, among other social shifts, an increasing emphasis on postsecondary education and the growing struggles postadolescents face in becoming economically self-sufficient elongate or postpone the transitions usually associated with adulthood. Recognizing this reality, a growing body of research is focusing on the period of "early adulthood," ages 18 through 34 (Furstenberg, Rumbaut, and Settersten 2005), as distinct from adolescence and full adulthood (e.g., Arnett 2001; Arnett 2002). The John T. and Catherine D. MacArthur Foundation Research Network on Transitions to Adulthood and Public Policy recently assembled an extensive collection of analyses of the social forces shaping the early adult period and the experiences that characterize it (Settersten, Furstenberg, and Rumbaut 2005). After reviewing the available data, however, the authors concluded that a need remains to "pioneer research efforts aimed at understanding the new frontiers of early adult life" (Settersten, Furstenberg, and Rumbaut 2005).

The National Longitudinal Transition Study-2 (NLTS2) provides a unique source of information to help in developing an understanding of the experiences of secondary school students with disabilities nationally as they go through their early adult years. NLTS2 addresses questions about youth with disabilities in transition by providing information over a 10-year period about a nationally representative sample of secondary school students with disabilities who were receiving special education services under the Individuals with Disabilities Education Act (IDEA) in the 2000–01 school year. This document uses information about these former secondary school students to describe the experiences of young adults with disabilities in the postsecondary education, employment, independence, and social domains in their first 8 years out of high school. Specifically, this report addresses questions that reflect critical domains of young adulthood that are central to the purpose of IDEA as expressed in 20 U.S.C. 1400(d)(1)(A) to "prepare them [children with disabilities] for future education, employment, and independent living." These questions are the following:

- What is the pattern of enrollment in various kinds of postsecondary schools for young adults with disabilities? What are the characteristics of postsecondary education for young adults with disabilities (e.g., stability of enrollment, full- vs. part-time enrollment, field of study, receipt of services and supports)? What are the postsecondary school completion rates for young adults with disabilities who have ever enrolled in postsecondary programs?
- What are the employment experiences of young adults with disabilities (e.g., employment status, hours worked, types of jobs, accommodations received)? What reasons did young adults with disabilities report for having left their most recent jobs and what were the job search activities of those who were unemployed?

- How engaged are young adults with disabilities up to 8 years after high school in terms of involvement in postsecondary education, training, or employment?
- What are the household circumstances of young adults with disabilities after high school in terms of living arrangements, marriage and family formation, and economic circumstances?
- To what extent are young adults with disabilities involved in their communities in both positive (e.g., belonging to organized groups, doing volunteer/community service activities) and negative (e.g., criminal justice system involvement) ways? What are the characteristics of the leisure and social lives of young adults with disabilities?
- How do the post-high school experiences of young adults with disabilities compare with those of their peers in the general population?
- How do post-high school experiences differ for young adults with disabilities in different disability categories and for those with different levels of educational attainment, length of time since leaving high school, and demographic characteristics?<sup>6</sup>

To address these questions, this report focuses on the subset of young adults with disabilities who were out of secondary school for up to 8 years and were 21 to 25 years old<sup>7</sup> when telephone interviews were conducted with their parents and, whenever possible, with the young adults themselves in 2009, during the fifth and final wave of data collection for NLTS2.<sup>8</sup>

## **Study Overview**

NLTS2 is a 10-year-long study of the characteristics, experiences, and outcomes of a nationally representative sample of youth with disabilities who were 13 to 16 years old and receiving special education services in grade 7 or above on December 1, 2000. NLTS2 findings generalize to youth with disabilities nationally and to those in each of the 12 federal special

<sup>&</sup>lt;sup>6</sup> Demographic characteristics include gender, parents' household income, and race/ethnicity. Findings are reported for White, African American, and Hispanic young adults with disabilities; other racial/ethnic categories of young adults were too small (less than 3 percent of the population of youth with disabilities) to report findings for them separately. Household income was categorized based on the three categories used in the data collection instrument, (i.e., \$25,000 or less, \$25,001 to \$50,000, and more than \$50,000). NLTS2 household income item categories were based on a review of general population statistics to ensure that the household income response categories fairly evenly divided the population. In NLTS2 Wave 1 the income breakdown was 35 percent for the category of \$25,000 or less, 31 percent for \$25,001 to \$50,000, and 34 percent for more than \$50,000 For consistency across the report, all comparisons are presented for all variables unless otherwise noted in a section (i.e., by length of time out of high school, high school completion status, disability category, age, gender, household income, and race/ethnicity.)

<sup>&</sup>lt;sup>7</sup> The age of young adults with disabilities in 2009 was based on birthdates provided by parents during interviews and the date of the Wave 5 interview.

<sup>&</sup>lt;sup>8</sup> This report is an update of a report on analyses conducted of data from the third wave of NLTS2 data collection, when youth had been out of high school up to 4 years and were ages 17 through 21. The organization and content of this report intentionally mirror the Wave 3 report very closely, including the figures and table shells used and some context-setting text. The report focusing on the fourth wave of NLTS2 data collection, when youth had been out of high school up to 6 years is an abbreviated look at key post-high school outcomes (e.g. postsecondary enrollment and employment status) and does not include the post-high school experiences, such as focus of postsecondary coursework or type of job, that are included in this report.

education disability categories in use for students in the NLTS2 age range.<sup>9</sup> (Details of the NLTS2 design, sample, and analysis procedures are presented in appendix A.)<sup>10</sup> The study was designed to collect data on sample members from multiple sources in five waves, beginning in 2001 and ending in 2009.<sup>11</sup>

The NLTS2 sample was constructed in two stages, beginning in the 2000-2001 school year. The NLTS2 district sample was stratified to increase the precision of estimates, to ensure that low-frequency types of districts (e.g., large urban districts) were adequately represented in the sample, to improve comparisons with the findings of other research, and to make NLTS2 responsive to concerns voiced in policy debate (e.g., differential effects of federal policies in particular regions, districts of different sizes). Three stratifying variables were used: region, size (student enrollment), and community wealth. A stratified random sample of school districts was selected from the universe of approximately 12,000 that served students receiving special education in at least one grade from 7th through 12th grades. These districts. For NLTS2 to be nationally representative of youth with disabilities who attended the most common types of publicly supported schools, the 77 state-supported "special schools"—i.e., those that primarily served students with hearing and vision impairments and multiple disabilities—were invited to participate.

The goal was to select from these districts and special schools a target sample of about 12,000 students. Extensive efforts to obtain consent to participate from eligible districts and the known universe of special schools resulted in 501 school districts and 38 special schools agreeing to participate in NLTS2. Analyses of the NLTS2 district sample revealed that it closely resembled the universe of districts from which it was drawn on the sample's stratifying variables and on selected variables from the U.S. Department of Education's Office of Civil Rights database on the universe of school districts. Participating school districts and special schools provided rosters of students receiving special education services in the designated age range, from which the student sample was selected.

The roster of all students in the NLTS2 age range who were receiving special education services from each district and special school was stratified by primary disability category, as reported by the districts. Students then were selected randomly from each disability category. Sampling fractions were calculated that would produce enough students in each category so that, in the final study year, findings would generalize to most categories individually with an acceptable level of precision, accounting for attrition and for response rates to the parent/youth

<sup>&</sup>lt;sup>9</sup> The definitions of the 12 primary disability categories used here are specified by law and presented in table A-4, appendix A.

<sup>&</sup>lt;sup>10</sup> Additional information about NLTS2 is available at www.nlts2.org.

<sup>&</sup>lt;sup>11</sup> Wave 1 included parent interviews (2001), surveys of school staff (2002), and assessments of the academic abilities of students who were 16 to 18 years old in 2002. Wave 2 involved interviews with both parents and youth (2003), a mail survey of youth whose parents reported they were able to respond to questions but not by phone (2003), school staff surveys for youth still in high school (2004), and assessments of the academic abilities of youth who were 16 to 18 years old in 2004. Wave 3 (2005) repeated the telephone interviews and mail survey of youth, as in Waves 4 and 5 (2007 and 2009). High school transcripts were collected annually for youth leaving high school each year.

Table 1.NLTS2 data sources for post-high school experiences of young adults with disabilities included in this report		
Source	Approximate number	Percent of young adults included in this report
Total number of sample members with responses to Wave 5 survey known to be out of secondary school at the time of the Wave 5 data collection	4,810	100.0
Youth telephone interview	2,360	49.0
Youth mail questionnaire	760	16.0
Parent telephone interview Number in Wave 5 report and out of school in Wave 4, with Wave 4 survey	1,690	35.0
data coming from	3,980	83.0
Youth telephone interview	2,100	44.0
Youth mail questionnaire	330	7.0
Parent telephone interview	1,550	32.0
Number in Wave 5 report and out of school in Wave 3, with Wave 3 survey	,	
data coming from	2,080	43.0
Youth telephone interview	1,320	27.0
Youth mail questionnaire	160	3.0
Parent telephone interview Number in Wave 5 report and out of school in Wave 2, with Wave 2 survey	600	14.0
data coming from	860	18.0
Youth telephone interview	560	12.0
Youth mail questionnaire	50	<1.0
Parent telephone interview	250	5.0
Number in Wave 5 report with Wave 1 survey data		
Parent interview	4,660	97.0
High school transcript	3,630	75.0
School and school district student rosters	4,810	100.0

interview. A total of approximately 11,280 students<sup>12</sup> were selected and eligible to participate in NLTS2.

# Data Sources for Young Adults With Disabilities

This section presents the multiple data sources used in this report to describe the post-high school experiences of young adults with disabilities at the time of the Wave 5 interview, who were known to be out of secondary school at the time of the Wave 5 data collection. Appendix A includes a description of the overall response rates for each wave of data collection.

Primary sources used in this report were the Wave 5 youth telephone interview and mail survey or the Wave 5 parent telephone interview, conducted in 2009.<sup>13</sup> In addition, those variables that describe young adults' experiences since leaving high school were constructed on the basis of data from the Waves 2 through 4 (conducted in 2003, 2005, and 2007, respectively) youth telephone interviews and mail surveys or the Waves 2 through 4 parent telephone interviews for young adults who were out of high school at that time. School district rosters, high school transcripts, and the Wave 1 parent interview or mail survey also provided a small amount of the data used in this report. Each data source for

young adults with disabilities is described briefly below and discussed in greater detail in appendix A.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> All unweighted sample sizes included in the text, figures, and tables of this report are rounded to the nearest 10, per IES Disclosure Review Board requirements.

<sup>&</sup>lt;sup>13</sup> NLTS2 instruments are available at www.nlts2.org.

<sup>&</sup>lt;sup>14</sup> Because the data reported here come primarily from telephone interviews or mailed surveys that were requested by respondents during a telephone contact, no prior consent was required; respondents were free to indicate their consent by continuing with the interview or to decline and hang up. Interviewers provided respondents with the following information:

The data for this report were obtained on approximately 4,810<sup>15</sup> NLTS2 sample members with responses to the Wave 5 survey who were known to be out of high school at the time of the Wave 5 data collection in 2009 (table 1).

#### Young Adult/Parent Data

#### Wave 5 Data

Much of the information reported in this document comes from young adults with disabilities themselves in the form of responses to either a telephone interview or a self-administered mail survey with a subset of key items from the telephone interview.<sup>16</sup> Data for young adults who were reported by parents to be unable to respond to an interview or complete a questionnaire or who did not respond to interview or survey attempts were provided by parents. Data from the three sources were combined for the analyses reported here and subsetted to include only data for out-of-high school young adults.

**Youth telephone interview.** NLTS2 sample members who were eligible for a Wave 5 youth telephone interview were those (1) for whom working telephone numbers or addresses were available so that they could be reached by phone and (2) whose parents or guardians (referred to here as parents) had reported in the Wave 2 parent telephone interview (if interviewed at that time) or in later-wave parent interviews (if interviewed in later waves for the first time) that the young adult could answer questions about his or her experience by phone (a total of approximately 4,180 young adults).<sup>17</sup> At those times, after making the initial telephone contact with the parents of sample members and completing items intended only for parent respondents, parents were asked whether their children with disabilities were able to respond to questions about their experiences by telephone for themselves. Parents who responded affirmatively and whose sample children were younger than age 18 then were asked to grant permission for their children to be interviewed and told the kinds of questions that would be asked.<sup>18</sup> Parents of those 18 or older were informed of the kinds of questions that would be asked of the young adult, but

"This interview is voluntary. Everything you say will be kept completely confidential and you may choose not to answer any question that I ask you. Nothing you say will ever be reported individually about you, [YOUTH if parent was respondent], or your family, and no information you give will be shared with [YOUTH/YOUR] school. If you have any questions or concerns about the study, I can give you a toll-free number to call."

<sup>&</sup>lt;sup>15</sup> All unweighted sample sizes included in the text, figures, and tables of this report are rounded to the nearest 10, per IES requirements.

<sup>&</sup>lt;sup>16</sup> Only a subset of items was included in the mail survey because the full set of items was considered too lengthy to be feasible for a mail questionnaire format.

<sup>&</sup>lt;sup>17</sup> See appendix A for more information on sample eligibility and a discussion of response rates for each wave of data collection.

<sup>&</sup>lt;sup>18</sup> Parents were told that interview questions would pertain to "school or work and social activities, as well as a few questions about things like...." For youth younger than 18, the sentence was completed with "[his/her] attitudes and experiences, like ever having been arrested." For youth age 18 or older, the sentence was completed with "[his/her] attitudes and experiences, including smoking, drinking, and ever having been arrested"; items related to these kinds of risk behaviors were asked only of youth age 18 or older. A total of 164 parents reported that their children could respond to the telephone interview but did not give permission for their children to be interviewed (4 percent of those reportedly able to respond); the interview then continued with the parents and obtained additional information on such subjects as employment and postsecondary education. Analyses of the disability category distribution and demographic factors of youth who were able to respond and given permission to do so and those who were not permitted to be interviewed revealed no significant or sizable differences between the two groups.

permission was not requested because they were no longer minors. Interviewers obtained contact information for these young adults and attempted to complete telephone interviews with them.

Wave 5 telephone interviews were completed with approximately 2,410 young adults, 77 percent of the approximately 4,180 who were eligible.<sup>19</sup> Approximately 2,360 telephone interview respondents to the Wave 5 telephone interview were out-of-high school young adults, the focus of this report.

**Youth mail survey.** If parent respondents to the telephone interview indicated that their children with disabilities were not able to respond to questions about their experiences for themselves by telephone, interviewers asked whether they would be able to complete a mail questionnaire; young adults respondents also could request that they be sent a mail questionnaire, rather than respond to the phone interview. Mailing addresses were obtained for those sample members, and questionnaires were sent to the young adult. In addition, questionnaires were tailored to the circumstances of individual young adults. For example, if a parent indicated in the telephone interview that a young adult was employed, the questionnaire for that young adult contained a section on employment experiences, which was not included in questionnaires for young adults reported not to be employed. Questionnaires were returned by approximately 790 young adults, 40 percent of the approximately 2000 young adults who were mailed a survey. Approximately 760 mail questionnaire respondents were out-of-high school young adults who are part of the sample that generated the findings reported in this document.<sup>20</sup>

**Parent/guardian interview.** In addition to sample members who completed a telephone interview or mail survey, parents completed a telephone interview for sample members who did not respond for themselves either because they were reported not to be able to do so or because young adults who were reported to be able to respond could not be reached or refused to respond. In the latter case, parents were contacted to complete a subset of interview items that experience demonstrated could readily be answered by many parents (e.g., whether a young adults was employed or enrolled in postsecondary education). Approximately 1,690 young adults for whom parents were the sole respondents were out of secondary school and are included in the sample that forms the basis of this report. Out-of-high school young adults whose parents responded for them did not differ significantly in their disability category, age identified as having a disability, age when first special education services were received, health status, or most functional abilities, with one exception. Young adults whose parents responded for them were less likely to have been reported to have high functional abilities than were those who had responded for themselves (56 percent vs. 74 percent; appendix B provides detailed information regarding comparisons between these groups).

<sup>&</sup>lt;sup>19</sup> If a young adult could not be reached by phone or did not return a mailed questionnaire, an attempt was made to recontact the parent and complete the second part of the telephone interview with the parent, if the young adult had not indicated that the parent should not be contacted. Material included in the lead letters mailed to young adults prior to the interviews and introductory language in the phone interview informed young adults that they could refuse to have their parents contacted. The second part of the parent interview included only items readily answerable by many parents about their young adult children with disabilities; 18 percent of parent part 2 interviews were completed by parents after the young adult could not be reached.

Readers should be aware of the potential for differences in reports across modes of data collection (i.e., mail questionnaire vs. telephone interview). Differences between mail and telephone samples (e.g., the mail sample included more youth with hearing impairments) did not support examining these potential differences in data collection mode.

#### Wave 2 Through Wave 4 Data

As mentioned previously, several variables that were created for this report indicate whether a young adult had had a particular experience "since high school" (e.g., postsecondary enrollment, employment and independent living arrangements). Seventeen percent of out-of-high school respondents (approximately 830 young adults) had left high school since the Wave 4 data collection; thus, Wave 5 data are all that are required to generate values for these variables for them. However, the remainder of the out-of-high school respondents (approximately 3,980 young adults) were already out of high school in Wave 2, 3, or 4. Thus, data from prior waves needed to be taken into account to generate values for variables measuring experiences "since high school." Prior-wave data also were used to determine whether young adults had completed high school or left without completing and the year in which they left. Wave 2 through Wave 4 data collection mirrored procedures followed for Wave 5. The Wave 4 youth telephone interview produced data for approximately 2,100 young adults included in the sample that forms the basis of this report, the mail questionnaire generated data for approximately 330 young adults, and parent interviews provided data for approximately 1,550 young adults, for a total of approximately 3,980 sample members. The Wave 3 youth telephone interview produced data for approximately 1,320 young adults included in the sample that forms the basis of this report, the mail questionnaire generated data for approximately 160 young adults, and parent interviews provided data for approximately 600 young adults, for a total of approximately 2,080 sample members. The Wave 2 youth telephone interview produced data for approximately 560 young adults included in the sample that forms the basis of this report, the mail questionnaire generated data for approximately 50 young adults, and parent interviews provided data for approximately 250 young adults, for a total of approximately 860 sample members.

Because of the relatively small percentage of young adults enrolled in postsecondary schools at the time of the Wave 5 interview, Wave 2 through Wave 4 data also were used to augment data for variables related to the postsecondary education experiences of students who had been enrolled in these types of schools in prior waves but not in Wave 5. Variables included those related to timing and intensity of enrollment, course of study, receipt of accommodations and supports, and postsecondary school completion. Including earlier wave data increased the sample size, enabling broader analyses of these variables, particularly analyses by disability category. For these variables, for young adults who did not have Wave 5 postsecondary school data but who were out of high school and enrolled in postsecondary school in an earlier wave, data from the most recent wave in which they had been enrolled in postsecondary education were combined with the responses of postsecondary attendees in Wave 5.

#### Wave 1 Data

The initial wave of NLTS2 data collection involved parent telephone interviews and a mail survey of parents who could not be reached by telephone. Data for two demographic items (gender and race/ethnicity) were drawn from these Wave 1 sources for 4,660 young adults with disabilities included in the sample that forms the basis of this report.

#### High School Transcripts

High school completion status and high school leave date were based on data from high school transcripts. Final high school transcripts were requested for all NLTS2 sample members. Transcript data were collected for approximately 3,630 young adults included in this report. For

those for whom transcript data were not available, school completion status and leave dates were based on information from parent/youth interviews.

## School and School District Student Rosters

Information about the primary disability category of NLTS2 sample members came from rosters of students in the NLTS2 age range receiving special education services in the 2000–01 school year under the auspices of participating school districts and state-supported special schools. Additionally, data on the racial/ethnic background of sample members were taken from this source when they were included on rosters. In the absence of roster data on youth's racial/ethnic background, data were taken from the Wave 1 parent interview or mail survey. The student rosters and the parent interview/mail survey provided similar racial/ethnic classifications.

# Data Sources for Comparisons With Young Adults in the General Population

When similar data items were available, comparisons were made between young adults with disabilities and the same-age young adults in the general population. The analyses approach used for the general population data bases mirrored the approach used for NLTS2 data.<sup>21</sup> Comparison data were taken from:

- The National Longitudinal Survey of Youth, 1997 (NLSY97). This study includes a nationally representative sample of approximately 9,000 youth who were 12 to 16 years old as of December 31, 1996. Round 1 of the survey took place in 1997. In that round, both the eligible youth and one of each youth's parents received hour-long personal interviews. Youth have continued to be interviewed annually. Comparison data were taken from the 2005 data collection for young adults who were 21 to 25 years old and out of high school at the time to match the sample of NLTS2 young adults included in this report. Calculations were made from public-use data available at http://www.nlsinfo.org/web-investigator/webgator.php. NLSY data collected in 2005 were the best match for NLTS2 2009 data because of the age of the young adults in both data sets at those time points, however readers should note the 4 year difference between the two data collection periods. Readers also should be aware that the population of young adults with disabilities in this age range differs from the general population of young adults in ways other than disability status (e.g., the population of young adults with disabilities is 64 percent male; see appendix B for further description of the population represented in NLTS2). In addition, there is a 4 year difference between NLTS2 data collected in 2009 and NLSY data collected in 2005.
- The National Longitudinal Study of Adolescent Health, Wave 3. Comparisons with the general population regarding financial independence, reported in chapter 5, are based on the public-use version of the National Institutes of Health, National Institute of Child Health and Human Development (NICHD), National Longitudinal Study of Adolescent

<sup>&</sup>lt;sup>21</sup> Young adults with disabilities are included in the general population comparison sample because excluding them would require using self-reported disability data, which frequently are not an accurate indicator of disability, resulting in both over- and underestimations of disability. For example, a large proportion of self-identified disabilities in postsecondary school are visual impairments because of confusion by students who wear glasses. In addition, NLTS2 findings indicate that less than one-third (32 percent) of youth who were identified by their secondary school as having a disability consider themselves to have a disability by the time they are age 17 or older.

Health (Add Health), Wave 3, a nationally representative study that explores healthrelated behaviors of adolescents in grades 7 through 12 and their outcomes in young adulthood. Wave 3 data were collected in 2001–02. Comparisons included a subset of respondents who were 21 to 25 years old. The time period for Add Health Wave 4, collected in 2007–08 would have been a more appropriate comparison for the 2009 Wave 5 NLTS2 data; however, the items related to financial independence were not collected in Add Health Wave 4.

• Current Population Survey (CPS) 2009. Several items regarding the employment of young adults in the general population were taken from the Current Population Survey (CPS) 2009. The CPS is a monthly survey of 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The nationally representative sample included in this monthly survey was selected to represent the civilian noninstitutional population in the United States. Comparison data for this report were taken from the May 2009 data collection for young adults who were 21 to 25 years old and out of high school. Calculations were made from public use data available at http://www.census.gov/cps/, using the Data Ferret Web tool.<sup>22</sup>

## Young Adults Included in the Report

The young adults with disabilities who are the focus of this report represent only a subset of young adults with disabilities who received special education services in secondary school in 2000–01, not the entire population. The full population to which the NLTS2 sample generalizes is a cohort of young adults who were 13 to 16 years old and received special education services in grade 7 or above in participating schools and school districts as of December 1, 2000. Weights for analyses reported in this document were calculated so that all young adults with disabilities who were out of secondary school and for whom a telephone interview or mail survey was completed or for whom parents responded to the second part of the parent interview generalize to all young adults with disabilities who were out of high school. Weights were computed adjusting for various youth and school characteristics used as stratifying or poststratifying variables. (See appendix A for additional information related to sample weighting.)

#### **Analysis Approaches**

Analyses reported in this document involve simple descriptive statistics (e.g., percentages, means) and bivariate relationships (i.e., cross-tabulations). All statistics were weighted to be representative of a larger population of young adults (as discussed earlier). These analysis approaches excluded cases with missing values; no imputation of missing values was conducted.<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> CPS variables were combined to make them equivalent to NLTS2 items. For this reason, the CPS survey questions will not be presented in the report chapters.

<sup>&</sup>lt;sup>23</sup> Given that interview/survey respondents were weighted to represent the universe and individuals who failed to respond to the survey as a whole were assigned a weight of zero, imputing missing values for nonrespondents would not affect analysis results. In addition, for those who responded to the interview/survey, item nonresponse was relatively low—item nonresponse ranged from less than 1 percent to less than 3 percent for the key outcome variables.

Statistical tests examining differences between independent subgroups or between responses to different items given by the same group that involve categorical variables with more than two possible response categories were conducted by treating each of the possible response categories to a question regarding satisfaction with the amount of services young adults received from their postsecondary school ("definitely getting enough," "probably getting enough," "probably not getting enough," and "definitely not getting enough") was treated as a separate dichotomous item. The percentages of young adults who gave each response were then compared across disability or demographic groups or across different questionnaire/interview items. This approach, rather than using scale scores (e.g., the average response for a disability group on a 4-point scale created by assigning values of 1 through 4 to the response categories), was adopted for two reasons: The proper scaling for the response categories was not apparent, and it was felt that reporting differences in percentages responding in each of the response categories would be more meaningful and easier for readers to interpret than reporting differences in mean values.

Rather than test for differences between all independent subgroups (e.g., young adults in different disability categories) simultaneously (e.g., using a  $k \times 2$  chi-square test of homogeneity of distribution, where k is the number of disability groups), the statistical significance of differences between selected pairs of independent subgroups was tested. This approach was followed because the intent was to identify significant differences between specific groups (e.g., young adults with learning disabilities are significantly more likely than those with mental retardation to report that they had ever enrolled in a postsecondary school) rather than to identify a more general "disability effect" (e.g., the observed distribution across disability categories differs significantly from what would be expected from the marginal distributions) for the variable of interest.

The test statistic used to compare Bernoulli-distributed responses (i.e., responses that can be allocated into one of two categories and coded as 0 or 1) for two independent subgroups is analogous to a chi-square test for equality of distribution (Conover 1999) and approximately follows a chi-square distribution with one degree of freedom. However, because a chi-square distribution with one degree of freedom is the same as an *F* distribution with one degree of freedom in the numerator and infinite degrees of freedom in the denominator (Johnson and Kotz 1995), this statistic can be considered the same as an *F* value; it also can be considered "chi-squared." <sup>25</sup>

<sup>&</sup>lt;sup>24</sup> All standard errors in this report were calculated using formula-based estimates rather than estimates based on replicate weights. See appendix A for description of estimating standard errors. As a 10-year longitudinal study, NLTS2 has used this formula-based procedure to calculate standard errors throughout the duration of the study, rather than use currently available procedures. This decision to maintain consistency in analytical approaches was based on the need to support comparisons of findings across NLTS2 reports. To examine possible differences between approaches, replicate weights were created for chapter 5 of this report. Findings using the replicate weights were then compared with the findings using formula-based estimates. Of the 904 possible comparisons in the chapter, 29 differences (3 percent) were noted, supporting the decision to maintain the use of formula-based estimates.

<sup>&</sup>lt;sup>25</sup> In the case of unweighted data, two percentages are usually compared by using nonparametric statistics, such as the Fisher exact test. In the case of NLTS2, the data were weighted, and the usual nonparametric tests would yield significance levels that are too small (Heeringa, West, and Berglund 2010) because the NLTS2 effective sample size is less than the nominal sample size. Instead, to test for the equality between the mean values of the responses to a single survey item in two disjoint subpopulations, we began by computing a ratio where the

Tests also were conducted to examine differences in the rates at which young adults with disabilities as a whole provided specific kinds of self-representations (for example, the percentage of young adults who reported the help with schoolwork they received from postsecondary schools as "very useful" compared with the percentage who rated the sufficiency of the help as "definitely getting enough"), using an analogous one-sample statistic based on difference scores.<sup>26</sup> The test statistic follows a chi-square distribution with one degree of freedom for sample sizes of 30 or larger and, for similar reasons to those cited above, is considered roughly equivalent to an F(1, infinity) distribution.

# **Technical Notes**

Readers should remember the following issues when interpreting the findings in this report:

- **Purpose of the report.** The purpose of this report is descriptive; as a nonexperimental study, NLTS2 does not provide data that can be used to address causal questions. The descriptions provided in this document concern the post-high school experiences of young adults with disabilities. No attempt is made to "validate" respondents' reports with information on their understanding of the survey items or with third-party information on their experiences (e.g., from employers or postsecondary education institutions). Further, the report does not attempt to explain why parents or young adults responded as they did or why responses differ for youth in different subgroups (e.g., disability categories).
- **Subgroups reported.** In each chapter, the descriptive findings are reported for the full sample of young adults; those findings are heavily influenced by information provided by young adults with learning disabilities, who constitute 63 percent of the weighted sample (see appendix B). Young adults with mental retardation, emotional disturbances, other health impairments, and speech/language impairments constitute 12 percent, 12 percent,

numerator was the difference of the sample means for those subpopulations. (In the case of Bernoulli variables, each mean was a weighted percentage.) The denominator for the ratio was the estimated standard error of the numerator, where the standard errors were adjusted to take into account clustering, stratification, and unequal weights. The adjustment to the variances was determined in a design effect study that compared traditionally calculated variances with those calculated using 32 balanced repeated replicate weights. Sample sizes (and consequently degrees of freedom) for Student *t* types of ratios were typically reasonably large (i.e., never fewer than 30 in each group), so the ratio follows, by the Central Limit Theorem, an approximately normal distribution. For a two-tailed test, the test statistic is the square of the ratio, which then follows an approximate chi-square distribution with one degree of freedom. Because a chi-square distribution with one degree of freedom is the same as an *F* distribution with one degree of freedom in the numerator and an infinite number of degrees in the denominator, the test statistic approximately follows an *F* (1, infinity) distribution. Since the application of adjustments from the design effect study tended to slightly overestimate the standard errors from balanced repeated replicates, the use of infinite degrees of freedom, rather than 31 degrees of freedom, nevertheless resulted in actual *p* values that were slightly lower than nominal *p* values.

<sup>26</sup> Testing for the significance of differences in responses to two survey items for the same individuals involves identifying for each young adult the pattern of response to the two items. The response to each item (e.g., the young adult reported receiving vacation benefits—yes or no—and reported receiving health benefits—yes or no) is scored as 0 or 1, producing difference values for individual young adults of +1 (responded affirmatively to the first item but not the second), 0 (responded affirmatively to both or neither item), or -1 (responded affirmatively to the second item but not the first). The test statistic is the square of a ratio, where the numerator of the ratio is the weighted mean change score and the denominator is an estimate of the standard error of that mean. Because the ratio approaches a normal distribution by the Central Limit Theorem, this test statistic approximately follows a chi-square distribution with one degree of freedom, that is, an *F* (1, infinity) distribution.

5 percent, and 4 percent of the weighted sample, respectively. The other seven categories together make up less than 6 percent of the weighted sample. Findings then are reported separately for young adults in each federal special education disability category in tables that are ordered by disability prevalence, as determined at the beginning of the study. Comparisons also were made between groups of young adults who differed with respect to years since leaving high school, highest level of educational attainment, gender, race/ethnicity, and parents' household income. These bivariate analyses should not be interpreted as implying that a factor on which subgroups are differentiated (e.g., disability category) has a causal relationship with the differences reported. Further, readers should be aware that demographic factors (e.g., race/ethnicity and parents' household income) are correlated among young adults with disabilities, as well as being distributed differently across disability categories (e.g., young adults in the category of mental retardation are disproportionately likely to be African American, and those in the other health impairment category are disproportionately likely to be White relative to the general population; see appendix B, table B-4, for percentage of youth within each disability category, by demographic characteristics).<sup>27</sup> The complex interactions and relationships among subgroups relative to the other variables included in this report (e.g., postsecondary enrollment status) have not been explored.

- **Findings weighted.** NLTS2 was designed to provide a national picture of the characteristics, experiences, and achievements of youth with disabilities in the NLTS2 age range as they transition to young adulthood. Therefore, all the statistics presented in this report are weighted estimates of the national population of young adults who received special education in the NLTS2 age group and of each disability category individually who were out of high school.
- **Standard errors.** For each mean and percentage in this report, a standard error is presented that indicates the precision of the estimate. For example, a variable with a weighted estimated value of 50 percent and a standard error of 2.00 means that the value for the total population, if it had been measured, would, with 95 percent confidence, lie between 46 percent and 54 percent (i.e., within plus or minus 1.96 x 2, or 3.92 percentage points of 50 percent). Thus, smaller standard errors allow for greater confidence to be placed in the estimate, whereas larger ones require caution.
- **Combined young adult self-report and parent-report data.** If a Wave 5 youth interview/survey was completed, young adults' responses to these items were used in this report. If a youth interview/survey could not be completed for an eligible young adult or if a young adult was reported by parents not to be able to participate in an interview/survey, parent responses were used. For the subsample of out-of-high school young adults included in this report, the youth interview/survey was the source of data for post-high school outcomes for 65 percent of young adults, and the parent interview was the source for 35 percent of young adults who did not have a youth interview. Combining data across respondents raises the question of whether parent and young adult responses were reported instead of the young adult's responses. When both parents and young adults

<sup>&</sup>lt;sup>27</sup> See Wagner et al. (2003) for relationships of demographic factors and disability categories for the full NLTS2 sample.

were asked whether the young adult attended community college, belonged to an organized community group, currently works for pay, and worked for pay in the past 2 years, their responses agreed from 73 percent to 88 percent of the time (analyses presented in appendix A).

- **Small samples.** Although NLTS2 data are weighted to represent the population, the size of standard errors is influenced heavily by the actual number of young adults in a given group (e.g., a disability category). In fact, findings are not reported separately for groups that do not include at least 30 sample members because groups with very small samples have comparatively large standard errors. For example, because there are relatively few young adults with deaf-blindness, estimates for that group have relatively large standard errors. Therefore, readers should be cautious in interpreting results for that group and others with small sample sizes and large standard errors.
- Significant differences. A large number of statistical analyses were conducted and are presented in this report. Because no explicit adjustments were made for multiple comparisons, the likelihood of finding at least one statistically significant difference when no difference exists in the population is substantially larger than the type I error for each individual analysis. To partially compensate for the number of analyses that were conducted, we have used a relatively conservative *p* value of < .01 in identifying significant differences. The text mentions only differences reaching at least that level of significance. If no level of significance is reported, the group differences described do not attain the *p* < .01 level. Readers also are cautioned that the meaningfulness of differences reported here cannot be inferred from their statistical significance.

#### **Organization of the Report**

This report is envisioned as an update of earlier NLTS2 reports based on data collected in Wave 3 (2005) and Wave 4 (2007) of the study, when young adults had been out of high school for up to 4 and 6 years, respectively.<sup>28</sup> The current Wave 5 (2009) report augments prior NLTS2 findings as more youth transitioned to early adulthood, were out high school longer (up to 8 years), and had increasing exposure to opportunities for postsecondary education, employment, and independent living. This report is organized to provide information on young adults with disabilities in several key domains. Chapter 2 describes the extent to which young adults with disabilities enrolled in any postsecondary education and their participation in 2- and 4-year colleges and vocational or trade schools specifically; features of their educational experience, such as their major field of study and support services they accessed, as well as their postsecondary education completion rates, also are presented. Chapter 3 considers the employment status of young adults with disabilities, including current employment and employment since leaving high school. Characteristics of young adults' current or most recent job also are described. Chapter 4 addresses the extent to which young adults with disabilities were productively engaged in school, work, or preparation for work after they left high school.

The household circumstances of young adults with disabilities are considered in chapter 5, including the extent to which young adults were living away from home, the prevalence of marriage and parenting, and aspects of their financial independence. Chapter 6 focuses on the social and community involvement of young adults with disabilities, including their friendship

<sup>&</sup>lt;sup>28</sup> See Newman et al. (2009) and Sanford et al. (in review).

activities and community participation in both positive and negative ways, such as participation in extracurricular lessons or classes and organized group and volunteer activities and involvement in violence-related activities and with the criminal justice system.

Appendix A provides details of the NLTS2 design, sample, measures, and analysis approaches. Appendix B presents data on the characteristics of young adults with disabilities included in the out-of-high school sample.

The following chapters provide the final national picture from NLTS2 of the post-high school experiences of young adults with disabilities.

#### 2. Postsecondary Education

Over the course of a lifetime, an individual with a college degree will earn \$1 million more on average than a worker with only a high school diploma (U.S. Department of Commerce 2002). As the U.S. economy becomes progressively more knowledge based, attaining a postsecondary education becomes more critical (Carnevale and Desrochers 2003). For example, only 20 percent of workers needed at least some college for their jobs in 1959; by 2000, that number had increased to 56 percent (Carnevale and Fry 2000).

Along with their peers in the general population, young adults with disabilities are increasingly focusing on postsecondary education. Postsecondary education is a primary post-high school goal for more than four out of five secondary school students with disabilities who have transition plans (Cameto, Levine, and Wagner 2004). In addition, youth with disabilities increasingly are taking rigorous academic courses in high school, including college-preparatory courses, such as a foreign language and science (Wagner, Newman, and Cameto 2004).

However, even when their high school programs prepare them for postsecondary education, students with disabilities can encounter a variety of challenges in the transition from secondary to postsecondary school. Postsecondary schools are guided by a legal framework of rights and responsibilities that is different from the framework governing secondary schools. When students leave high school, their education no longer is covered under the IDEA umbrella but instead is under the auspices of two civil rights laws—Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) (Stodden, Jones, and Chang 2002; Wolanin and Steele 2004). Unlike high school, there is not a mandatory Individualized Education Program (IEP) process to identify and provide the supports students may need to succeed in the postsecondary school (Office for Civil Rights U.S. Department of Education 2007). In high school, IDEA places "the burden on the school to find and serve the student with an IEP. In higher education the burden is on the student, not the school, to find the appropriate services and navigate through higher education" (Wolanin and Steele 2004, p. 27).

This understanding of the challenges posed by the postsecondary school environment for young adults with disabilities raises the following questions:

- To what extent do young adults with disabilities enroll in postsecondary schools?
- How does their level of enrollment compare with that of their peers in the general population?
- What are the experiences of those enrolled in postsecondary schools, including the intensity of their enrollment and their course of study?
- To what extent do those who enroll receive supports and accommodations as part of their postsecondary education?
- What are the completion rates for students who enroll in postsecondary schools?

This chapter examines the postsecondary education experiences of young adults with disabilities who have been out of secondary school for up to 8 years. It focuses on participation in three types of institutions: 2-year or community colleges; postsecondary vocational, business, or technical schools; and 4-year colleges. The chapter begins with an examination of postsecondary education enrollment rates and continues with findings regarding the experiences of

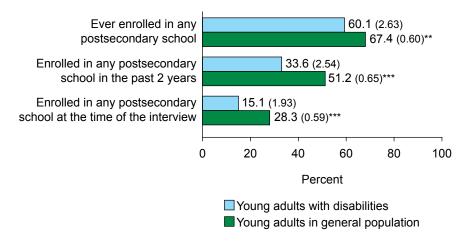
postsecondary students with disabilities, including their courses of study, receipt of accommodations and modifications, and rates of completion. These findings are presented for young adults with disabilities as a whole and for those who differ in length of time out of high school, high school completion status, disability category, gender, parents' household income, and race/ethnicity.

### **Postsecondary School Enrollment**

Ensuring that students with disabilities have "access to and full participation in postsecondary education" has been identified as one of the key challenges in the future of secondary education and transition for such students (National Center on Secondary Education and Transition 2003, p. 1). Postsecondary education has been linked to increased earning potential for youth who continue their education after high school, even for those who have not earned a degree (Marcotte et al. 2005).

For young adults in the general population, "postsecondary enrollments are at an all-time high" (Ewell and Wellman 2007, p. 2). Of young adults with disabilities, 60 percent were reported to have continued on to postsecondary education within 8 years of leaving high school.<sup>29</sup> The percentage of similar-age young adults in the general population who had ever enrolled in postsecondary school was higher than that of young adults<sup>30</sup> with disabilities (67 percent, p < .01; figure 1).

Figure 1. Postsecondary school enrollment of young adults with disabilities and young adults in the general population



\*\* p < .01, \*\*\* p < .001 for the difference between young adults with disabilities and young adults in the general population. NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97) 2005 youth survey, responses for 21- to 25-yearolds.

<sup>&</sup>lt;sup>29</sup> Respondents were asked, "Since leaving high school have you [has YOUTH] taken any classes from a [postsecondary school]?"

<sup>&</sup>lt;sup>30</sup> U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97) 2005 youth survey, responses for 21- to 25-year-olds.

Thirty-four percent of young adults with disabilities who were out of high school up to 8 years were reported to have been enrolled in a postsecondary program in the 2 years prior to the interview, and 15 percent were enrolled at the time they were interviewed. By both measures, young adults in the general population were more likely than young adults with disabilities to be enrolled. Approximately half (51 percent) of young adults in the general population had been enrolled in college in the 2 years prior to the interview, and 28 percent were enrolled at the time they were interviewed<sup>31</sup> (p < .001 for both comparisons).

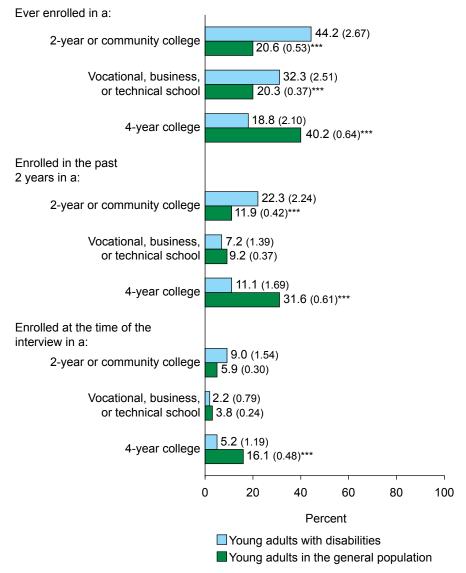
Rates of enrollment varied by type of postsecondary program. Among young adults with disabilities, enrollment in 2-year or community colleges since leaving high school (44 percent) was more common than enrollment in postsecondary vocational, business, or technical schools (32 percent, p < .001), and enrollment in both of these categories of institutions was more common than enrollment in 4-year colleges or universities (19 percent, p < .001 for both comparisons; figure 2).

Young adults with disabilities were more likely than same-age young adults in the general population to have attended a 2-year college or a postsecondary vocational school at some point since leaving high school (44 percent vs. 21 percent and 32 percent vs. 20 percent, p < .001 for both comparisons). In contrast, young adults in the general population were more likely to have attended a 4-year college (40 percent vs. 19 percent, p < .001). These patterns of differences also are found for enrollment in 2-year and 4-year institutions in the 2 years before the interview (22 percent vs. 12 percent at 2-year colleges and 11 percent vs. 32 percent at 4-year colleges, p < .001 for both comparisons) and for enrollment in 4-year institutions at the time of the interview (16 percent vs. 5 percent, p < .001).

Almost one-third (31 percent) of young adults with disabilities had enrolled in more than one type of postsecondary institution since leaving high school (not in the table). In comparison, 29 percent reported having attended only one type of postsecondary school since high school.

<sup>&</sup>lt;sup>31</sup> Respondents were asked, "Are you [is YOUTH] going to a [postsecondary school] now?" Those who had been enrolled in a postsecondary school but were not currently enrolled were asked, "Are you [is YOUTH] not going to a [postsecondary school] now because you are [YOUTH is]: on school vacation, graduated or completed the program, or some other reason?" Respondents who were on school vacation were recoded as being currently enrolled in postsecondary school.

Figure 2. Postsecondary school enrollment of young adults with disabilities and young adults in the general population, by school type



\*\*\* *p* < .001 for the difference between young adults with disabilities and young adults in the general population. NOTE: Young adults who had enrolled in more than one type of postsecondary school were included in each type of school they had attended. Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97) 2005 youth survey, responses for 21- to 25-yearolds.

# Disability Differences in Postsecondary School Enrollment

Enrollment in postsecondary programs varied widely by disability category (table 2), with percentages ranging from 30 percent to 75 percent. Having ever enrolled was significantly more common among young adults in every disability category except one (multiple disabilities) than among young adults with mental retardation (p < .01 for all comparisons). In addition, such enrollment was significantly more common among young adults with learning disabilities

(67 percent); speech/language, hearing, visual, orthopedic, or other health impairments (67 percent, 75 percent, 71 percent, 62 percent, and 66 percent, respectively); or traumatic brain injuries (61 percent) than among those with multiple disabilities (33 percent, p < .01 for all comparisons). Such enrollment also was more common among those with learning disabilities or speech/language, hearing, visual, orthopedic, or other health impairments than among those with autism (44 percent, p < .01 for all comparisons); and more common among those with hearing or visual impairments than among those with emotional disturbance (53 percent, p < .01 for all comparisons).

	Learning disability	impair-	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
Ever enrolled in:						Perce	ent					
Any												
postsecondary school	66.8 (3.89)	66.9 (3.63)	28.7 (3.60)	53.0 (4.53)	74.7 (4.24)	71.0 (5.00)	62.0 (4.42)	65.7 (4.04)	43.9 (4.65)	61.0 (7.37)	32.8 (5.07)	56.8 (7.09)
2-year or community college	49.9 (4.13)	46.0 (3.84)	18.9 (3.12)	37.7 (4.40)	51.5 (4.88)	51.5 (5.52)	50.3 (4.56)	51.6 (4.25)	32.2 (4.38)	42.2 (7.47)	21.7 (4.45)	36.9 (6.91)
Vocational, business, or technical school	35.8 (3.96)	28.5 (3.48)	16.4 (2.94)	33.3 (4.28)	42.9 (4.84)	26.2 (4.84)	26.2 (4.08)	32.2 (3.98)	21.0 (3.82)	36.9 (7.30)	17.5 (4.10)	22.1 (6.21)
4-year college	21.2 (3.38)	32.5 (3.61)	6.7 (1.99)	10.8 (2.82)	33.8 (4.62)	40.1 (5.40)	26.1 (4.00)	19.6 (3.38)	17.4 (3.56)	18.5 (5.88)	7.4 (2.83)	23.7 (6.09)

Table 2.	Postsecondary	school	enrollment	of young	g adults, l	by disabilit	y category

NOTE: Young adults who had enrolled in more than one type of postsecondary school were included in each type of school they had attended. Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,770 to 4,810 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey 2009.

Consistent with the pattern for overall enrollment, percentages of young adults ever having enrolled in 2-year or community colleges were higher among those with learning disabilities (50 percent); speech/language, hearing, visual, orthopedic, or other health impairments (46 percent, 52 percent, 52 percent, 50 percent, 52 percent, respectively); traumatic brain injuries (42 percent); or deaf-blindness (37 percent) than among those with mental retardation (19 percent, p < .01 for all comparisons). Two-year or community college enrollment was also higher among those with learning disabilities or speech/language, hearing, visual, orthopedic, or other health impairments than among those with multiple disabilities (22 percent, p < .01 for all comparisons); and higher among those with learning disabilities or hearing, visual, orthopedic, or other health impairments than among those with autism (32 percent, p < .01 for all comparisons).

Similarly, ever having enrolled in a 4-year college was more common among young adults with learning disabilities (21 percent); speech/language, hearing, visual, orthopedic, or other health impairments (33 percent, 34 percent, 40 percent, 26 percent, and 20 percent respectively); or deaf-blindness (24 percent) than among young adults with mental retardation (7 percent, p < .01 for all comparison). Four-year college enrollment also was more common for young adults in all these categories except other health impairments and traumatic brain injuries than it was for

young adults with multiple disabilities (7 percent, p < .01 for all comparisons). Young adults with speech/language, hearing, visual, or orthopedic impairments also were more likely than young adults with emotional disturbances (11 percent, p < .01 for all comparisons) ever to have attended a 4-year college. In addition, those with speech/language, hearing, or visual impairments were more likely than those with autism (17 percent, p < .01 for all comparisons); those with hearing or visual impairments also were more likely than those with other health impairments (p < .01 for both comparisons); and those with visual impairments also were more likely than those with learning disabilities, orthopedic impairments, or traumatic brain injury (p < .01 for all comparisons) ever to have enrolled in a 4-year college.

Young adults with learning disabilities (36 percent), emotional disturbances (33 percent), hearing or other health impairments (43 percent and 32 percent, respectively), or traumatic brain injury (37 percent) also were more likely than young adults with mental retardation (16 percent) or multiple disabilities (18 percent) to ever have been enrolled in vocational, business, or technical school (p < .01 for all comparisons). In addition, young adults with hearing impairments were more likely than those with autism (21 percent) to have attended these types of schools (p < .01)

# Differences in Postsecondary School Enrollment by High School-Leaving Characteristics

Secondary school completers were more likely to have enrolled in postsecondary school than were noncompleters; 65 percent of completers had attended postsecondary school at some time since leaving high school up to 8 years earlier, compared with 23 percent of noncompleters (p < .001; table 3). Differences between high school completers and noncompleters were apparent for enrollment in both 2-year and 4-year colleges (48 percent vs. 13 percent and 21 percent vs. <1 percent, respectively, p < .001 for both comparisons) but not in vocational, business, or technical school.

Rates of enrollment in postsecondary school overall or in each type of postsecondary school did not differ significantly by length of time out of high school.

		Non-	Less than	3 up to	5 up to
	Completers	completers	3 years	5 years	8 years
			Percent		
Ever enrolled in:					
Any postsecondary school	64.5 (2.74)	22.8 (6.85)	52.3 (6.21)	60.0 (4.62)	61.9 (3.61)
2-year or community college	48.0 (2.86)	12.7 (5.44)	37.5 (6.02)	42.1 (4.66)	47.2 (3.72)
Vocational, business, or technical school	34.7 (2.73)	12.3 (5.37)	24.4 (5.34)	33.2 (4.45)	33.4 (3.51)
4-year college	20.9	0.2	13.1	15.9	22.4
	(2.33)	(0.73)	(4.20)	(3.41)	(3.10)

Table 3.	Postsecondary school enrollment of young adults with disabilities, by high-school-
	leaving status and years since leaving high school

NOTE: Young adults who had enrolled in more than one type of postsecondary school were included in each type of school they had attended. Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,770 to 4,810 young adults with disabilities.

#### Demographic Differences in Postsecondary School Enrollment

As other studies have found for young adults in the general population (e.g., Corak, Lipps, and Zhao 2005), household income is related to the likelihood of enrolling in postsecondary school. Young adults with disabilities from households with incomes of more than \$50,000 were more likely than those with household incomes of \$25,000 or less ever to have been enrolled in postsecondary education (70 percent vs. 50 percent, p < .001; table 4).

Family income differences were apparent in enrollment at 2-year colleges. Young adults from wealthier parent households (those with incomes of more than \$50,000) were more likely than those from lower-income parent households (\$25,000 or less) to have ever enrolled in a 2-year college (53 percent vs. 33 percent, p < .01). In contrast, parents' household income was not significantly related to enrollment in vocational, business, or technical schools or 4-year colleges.

In the general population, females had higher 2-year and 4-year college enrollment rates than males (Peter and Horn 2005). In contrast to their peers in the general population, young adults with disabilities' postsecondary enrollment did not differ significantly by gender (60 percent for males and 60 percent for females).

Rates of enrollment in postsecondary schools also did not differ significantly by race or ethnicity for young adults with disabilities. Sixty-two percent of Hispanic, 60 percent of African American, and 61 percent of White young adults with disabilities had ever enrolled in a postsecondary program.

	\$25,000 or	\$25,001 to	More than		African					
	less	\$50,000	\$50,000	White	American	Hispanic	Male	Female		
		Percent								
Ever enrolled in:										
Any postsecondary school	50.2	58.3	70.3	60.6	59.6	61.7	60.0	60.2		
	(4.66)	(5.42)	(3.74)	(3.14)	(5.92)	(8.12)	(3.26)	(4.46)		
2-year or community college	33.1	45.2	53.1	43.7	44.4	49.5	43.2	46.0		
	(4.39)	(5.47)	(4.08)	(3.18)	(6.00)	(8.36)	(3.30)	(4.54)		
Vocational, business, or	32.6	28.5	36.0	30.7	34.9	37.9	35.1	27.4		
technical school	(4.37)	(4.96)	(3.93)	(2.96)	(5.75)	(8.11)	(3.17)	(4.07)		
4-year college	10.1	18.1	27.1	19.6	19.1	14.6	17.6	20.7		
	(2.81)	(4.23)	(3.63)	(2.55)	(4.72)	(5.90)	(2.53)	(3.69)		

 Table 4.
 Postsecondary school enrollment of young adults with disabilities, by parents' household income, and young adults' race/ethnicity and gender

NOTE: Young adults who had enrolled in more than one type of postsecondary school were included in each type of school they had attended. Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,770 to 4,810 young adults with disabilities.

# **Postsecondary School Experiences**

The findings reported thus far indicate that young adults differed in their rates of enrollment in postsecondary programs; those who were enrolled also differed in aspects of their schooling. This section shifts the focus from young adults' enrollment in postsecondary schools to the experiences of those who had enrolled in these types of programs, examining students' experiences related to timing and intensity of enrollment, postsecondary course taking, accommodations and supports, and completion rates.<sup>32</sup>

# Timing and Intensity of Enrollment

Most students with disabilities who continued on to postsecondary school did so within 6 months of leaving high school.<sup>33</sup> Overall, 41 percent were reported to have enrolled in a postsecondary school within 2 months of leaving high school, 35 percent enrolled within 2.1 to 6 months, 14 percent enrolled within 6.1 to 12 months, and 10 percent waited longer than 1 year before continuing their education (figure 3). The mean time between high school leaving and first postsecondary enrollment was 7.4 months (0.97 SE). However, the median time between leaving high school and enrolling in a postsecondary school was 3 months.

Students waited a mean time of 7.3 months (1.24 SE) to enroll in 2-year colleges; 14.3 months (2.53 SE) for vocational, business, or technical schools; and 12.5 months (2.58 SE) for 4-year institutions. Median values for the months between high school leaving and postsecondary school enrollment were 3 months for both 2- and 4-year colleges and 6 months for vocational, business, or technical schools. Differences in these high school-postsecondary school time gaps are not statistically significant.

Seventy-seven percent of young adults with disabilities who had ever been enrolled in postsecondary school were reported to have been enrolled steadily,<sup>34</sup> whereas 23 percent were reported to have taken classes some semesters or quarters but not others (figure 4).<sup>35</sup> Seventy-five percent of students at 2-year colleges; 79 percent of students at vocational, business, or

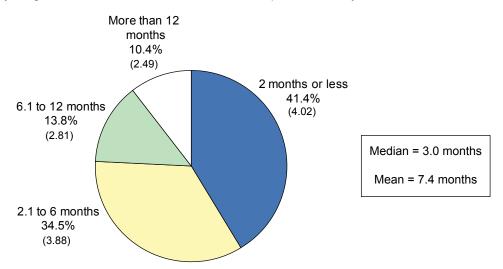
<sup>&</sup>lt;sup>32</sup> Because a relatively small proportion of young adults in the NLTS2 sample (15 percent) were enrolled in postsecondary schools at the time of the Wave 5 interview, data from Waves 2 through 4 were used to augment Wave 5 data for most analyses in this chapter, as follows: If a young adult with disabilities did not attend a postsecondary school in the 2 years preceding the Wave 5 interview, but was reported in a prior wave to have been out of high school and to have attended a postsecondary school. Augmenting the data in this way increased the sample size sufficiently to allow disaggregated analyses (e.g., by disability category) of variables concerning timing and intensity of enrollment, course of study, receipt of accommodations and supports, and postsecondary school completion.

<sup>&</sup>lt;sup>33</sup> Respondents were asked, "About how long after leaving high school was it before you [YOUTH] started going to a [postsecondary school]?"

<sup>&</sup>lt;sup>34</sup> For each type of postsecondary school, respondents were asked, "Have you [has YOUTH] been enrolled continuously since you first began at a [type of postsecondary school], not counting time off for vacations, or have you [has YOUTH] been enrolled off and on, taking classes some semesters or quarters but not others?"

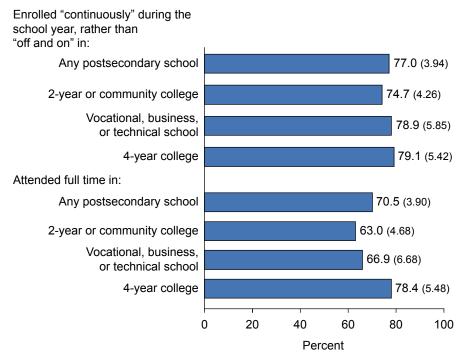
<sup>&</sup>lt;sup>35</sup> Bars in the figure reflect only youth who met the category's criterion (i.e., were enrolled continuously or on a full-time basis); the complements (i.e., were enrolled some semesters or quarters but not others, or enrolled on a part-time basis) are not presented in the figure.

Figure 3. Months elapsed between high school leaving and first postsecondary school enrollment among young adults with disabilities ever enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 1,920 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

Figure 4. Intensity of enrollment in postsecondary schools by young adults with disabilities ever enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,760 to 2,100 young adults with disabilities.

technical schools; and 79 percent of students at 4-year institutions were reported to have been enrolled steadily during the school year.

Whether students attend postsecondary school full or part time may help shape their postsecondary experiences; for example, a report on community college student engagement suggested that full-time students were more likely to interact with faculty, academic advisors, or other students than their part-time peers (Inside Higher Ed 2006). Seventy-one percent of young adults with disabilities who ever had attended postsecondary institutions were reported to have attended full time.<sup>36</sup> These included 63 percent of students at 2-year colleges; 67 percent of students at vocational, business, or technical schools; and 78 percent of students at 4-year institutions.

#### **Disability Differences in Timing and Intensity of Enrollment**

The mean length of time between leaving high school and beginning a postsecondary program ranged from approximately 5 months for students with visual impairments to 11 months for students with multiple disabilities (table 5), with no significant differences between disability

2	,	0,										
		Speech/ language	Mental	Emo- tional	Hearing	Visual	Ortho- pedic	Other health		Trau-	Multiple	Deaf-
	Learning disability	impair- ment	retar- dation	distur- bance	impair- ment	impair- ment	impair- ment	impair- ment	Autism		disabili- ties	blind- ness
Mean number of months between having left high school and began postsecondary school	6.6 (1.22)	6.9 (1.31)	10.0 (2.79)	11.0 (2.16)	5.6 (1.36)	4.8 (1.07)	7.7 (1.50)	9.8 (1.69)	5.8 (1.33)	9.2 (2.68)	10.5 (2.75)	8.4 (3.15)
Median number of months between having left high school and began postsecondary school	3.0	3.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Percentage enrolled "steadily" during the school year rather than "off and on"	81.9 (4.96)	77.5	44.5 (12.89)	58.0 (7.48)	61.9 (8.22)	77.4 (6.07)	74.6 (5.32)	68.7 (5.75)	85.7 (6.50)	66.7 (10.28)	84.9	76.3
Percentage enrolled full time (12 or more credit hours)	73.6 (5.32)	76.6 (4.47)	45.5 (10.81)	58.8 (7.09)	71.1 (6.49)	81.5 (5.64)	74.7 (5.35)	63.3 (5.63)	72.8 (6.77)	72.5 (9.39)	72.4 (8.21)	64.6 (9.89)

Table 5.	Intensity of enrollment of young adults with disabilities ever enrolled in a postsecondary program,
	by disability category

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,760 to 2,100 young adults with disabilities.

<sup>&</sup>lt;sup>36</sup> Respondents were asked, "Are you [is YOUTH] going to a [postsecondary school] full time or part time?" If they asked, respondents were told that "full time" means taking a full course load of 12 credits or more at a time.

categories. Median values were 3 months for all disability categories except mental retardation, for which the median value was 6 months. Continuous enrollment during the school year was significantly more common among postsecondary students with learning disabilities (82 percent), autism (86 percent), or multiple disabilities (85 percent) than among those with mental retardation (45 percent, p < .01 for all comparisons). In addition, full-time enrollment was significantly more common among postsecondary students with speech/language impairments (77 percent) or visual impairments (82 percent) than among those with mental retardation (46 percent, p < .01 for both comparisons).

# Differences in Timing and Intensity of Enrollment by High School-Leaving Characteristics

Timing and intensity of enrollment in postsecondary school did not differ significantly by high school-leaving status or length of time out of secondary school (table 6).

Table 6.Intensity of enrollment of young adults with disabilities ever enrolled in a postsecondary<br/>program, by high school-leaving status and years since leaving high school

	Completers	Non- completers	Less than 3 years	3 up to 5 years	5 years or more
Mean number of months between having left high school and began going to a postsecondary school	7.2 (0.97)	18.4 (5.35)	7.2 (2.79)	7.5 (1.67)	7.4 (1.30)
Median number of months between having left high school and began going to a postsecondary school	3.0	12.0	3.0	3.0	3.0
Percentage enrolled continuously during the school year rather than "off and on"	77.5 (3.98)	43.7 (22.15)	84.9 (9.10)	73.6 (7.33)	77.8 (5.17)
Percentage enrolled full time (at least 12 credit hours)	71.1 (3.95)	30.4 (17.80)	77.0 (9.35)	66.0 (7.35)	72.2 (5.08)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,760 to 2,100 young adults with disabilities.

#### Demographic Differences in Timing and Intensity of Enrollment

The length of time between leaving high school and beginning postsecondary school and the intensity of enrollment in postsecondary programs did not differ significantly by students' demographic characteristics (table 7).

Table 7.	Intensity of enrollment of young adults with disabilities ever enrolled in a postsecondary
	program, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
Mean number of months between having left high school								
and began going to a postsecondary school	8.6 (1.81)	9.0 (2.49)	6.1 (1.21)	7.2 (1.16)	7.7 (2.30)	7.5 (2.66)	8.2 (1.29)	6.1 (1.42)
Median number of months between having left high school and began going to a postsecondary school	3.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0
Percentage enrolled continuously during the school year rather than "off and on"	69.1 (8.56)	62.1 (9.88)	86.5 (4.35)	75.0 (4.74)	85.3 (7.77)	74.0 (13.40)	78.5 (4.81)	74.7 (6.75)
Percentage enrolled full time (greater than or equal to 12 credit hours)	70.7 (7.75)	62.4 (8.70)	73.1 (5.22)	67.1 (4.74)	77.0 (8.42)	80.8 (10.58)	68.8 (4.91)	70.6 (6.55)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,760 to 2,100 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

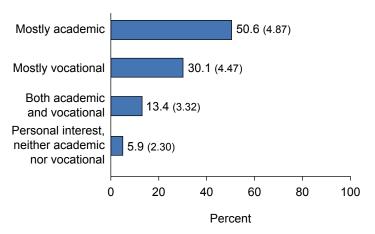
# Postsecondary Course of Study

Postsecondary schools frequently offer a wide range of instructional program options. For example, the National Center for Education Statistics' Classification of Instructional Programs taxonomy describes more than 60 major postsecondary fields of study, not including hundreds of intermediate and specific instructional program subcategories (U.S. Department of Education National Center for Education Statistics 2002). With this range of options, students with disabilities varied in the types of courses they took while in postsecondary school.

Postsecondary students who attended 2-year colleges were more likely to be enrolled in an academic than a vocational course of study, with 51 percent majoring in academic areas and 30 percent in vocational areas (p < .01; figure 5).<sup>37</sup> Thirteen percent reported both an academic and vocational focus, and 6 percent attended classes primarily for recreation and personal interest.

<sup>&</sup>lt;sup>37</sup> Respondents at 2-year colleges were asked, "Have you [has YOUTH] taken mostly vocational courses to train for a job, like computer or business courses, or have you [has YOUTH] taken mostly academic courses, like English or science?"

Figure 5. Primary focus of courses taken at a 2-year or community college by young adults with disabilities who were ever enrolled in postsecondary school

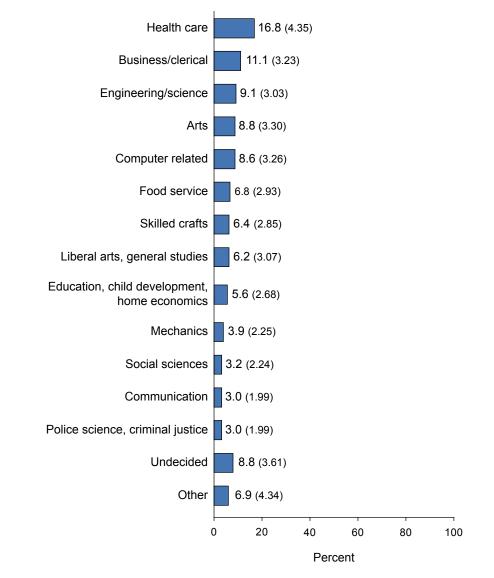


NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 1,410 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

Regardless of type of postsecondary school attended, young adults with disabilities had a range of majors. Among those who had ever been enrolled at 2-year colleges,<sup>38</sup> 17 percent majored in a field related to health care; 11 percent majored in business (including marketing, advertising, management, and finance); 9 percent each majored in engineering/science, arts, (visual and performing arts or design), computer-related fields (computer science, programming, information technologies, computer support), or engineering/science; 6 percent or 7 percent each majored in food service or restaurant management, skilled crafts (e.g., plumbing, electrical, carpentry), liberal arts, or general studies and education, (including childcare, early childhood, or home economics), 3 percent to 4 percent each majored in mechanics, social sciences, communications (journalism, television/radio, entertainment industry), and police science or criminal justice (figure 6). Nine percent were undecided about a major and 7 percent were in other majors.

<sup>&</sup>lt;sup>38</sup> Respondents who had attended 2-year colleges were asked, "What is [was] your [YOUTH's] major or primary course of study in a 2-year or community college?"

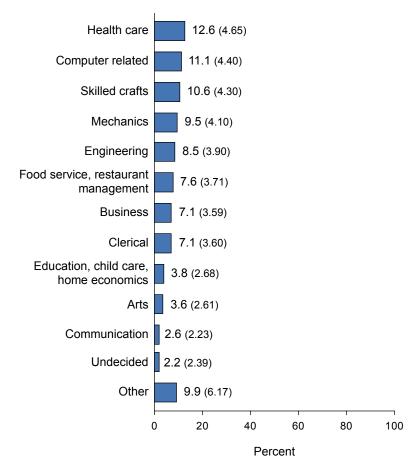
Figure 6. Major or primary course of study of young adults with disabilities ever enrolled at a 2-year or community college



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 1,110 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

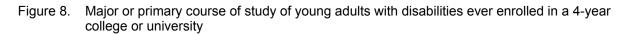
Among young adults with disabilities who had attended vocational, business, or technical schools, the most common majors also were in the health care field (13 percent), followed by computer-related fields and skilled crafts (11 percent each); mechanics (10 percent); engineering (9 percent); food service or restaurant management (8 percent); business or clerical (7 percent each); education, child care, or home economics and arts (4 percent each); and communication (3 percent; figure 7). Approximately 2 percent were undecided, and 10 percent had majors in a range of other fields.

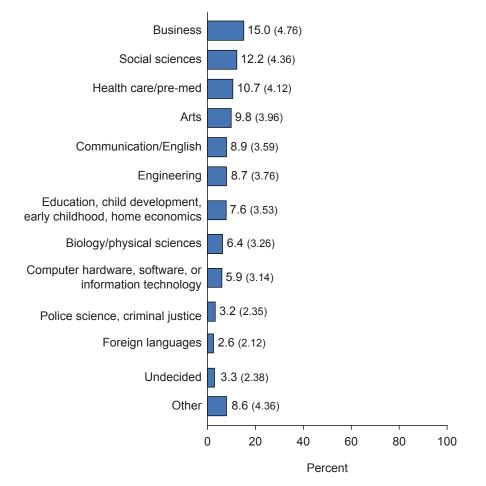
Figure 7. Major or primary course of study of young adults with disabilities ever enrolled in a vocational, business, or technical school



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 540 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

Business-related majors were most common among young adults with disabilities who had attended 4-year colleges (15 percent), followed by social sciences (12 percent); medical and health-related majors (11 percent); arts (10 percent); engineering or communication (9 percent each); education, child development, early childhood, or home economics (8 percent); sciences (biological or physical) or computer-related majors (6 percent each); and police science or criminal justice or foreign languages (3 percent each; figure 8). Nine percent were in other majors or had not yet chosen a major, and 3 percent were undecided in their area of focus.



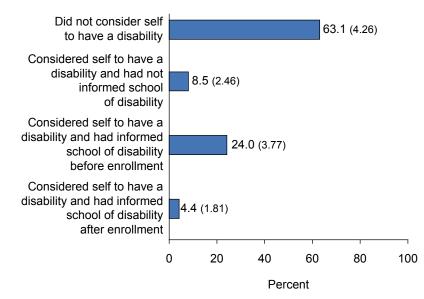


NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 840 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

#### Accommodations and Supports

Receiving appropriate supports and accommodations in postsecondary programs has been shown to be related to school success and retention for students with disabilities (Mull, Sitlington, and Alper 2001; Pierangelo and Crane 1997; Stodden and Dowrick 2000; Stodden, Jones, and Chang 2002). Although a college is required to provide "appropriate academic adjustments as necessary to ensure that it does not discriminate on the basis of disability" (Office for Civil Rights U.S. Department of Education 2007, p. 2), accommodations that are a fundamental alteration of a program or that would impose an undue financial or administrative burden are not mandatory (Wolanin and Steele 2004). Schools interpret these guidelines differently, and the types and extent of supports and accommodations available to students with disabilities vary widely (National Center for Education Statistics 1999; Stodden, Jones, and Chang 2002). As noted earlier, when students leave secondary school and enter postsecondary institutions, the responsibility for arranging for accommodations and supports shifts from the school to the students. At the postsecondary level, students with disabilities are expected to advocate for themselves (Stodden, Jones, and Chang 2002). "To receive accommodations, students with disabilities must disclose their disabilities and take the initiative in requesting accommodations" (Wolanin and Steele 2004, p. ix). However, disclosure of a disability is voluntary. NLTS2 findings show that almost two-thirds (63 percent) of postsecondary students who were identified by their secondary school as having a disability did not consider themselves to have a disability by the time they had transitioned to postsecondary school (figure 9).<sup>39</sup> An additional 9 percent reported considering themselves to have a disability but chose not to disclose it to their postsecondary schools. Approximately one-quarter (24 percent) of postsecondary students with disabilities identified themselves as having a disability and had informed their postsecondary schools of their disability before enrollment, and 4 percent considered themselves to have a disability and had waited to inform the postsecondary schools of their disability until after enrollment.<sup>40</sup>

Figure 9. Extent to which young adults with disabilities ever enrolled in a postsecondary school considered themselves as having a disability and informed postsecondary schools of disability



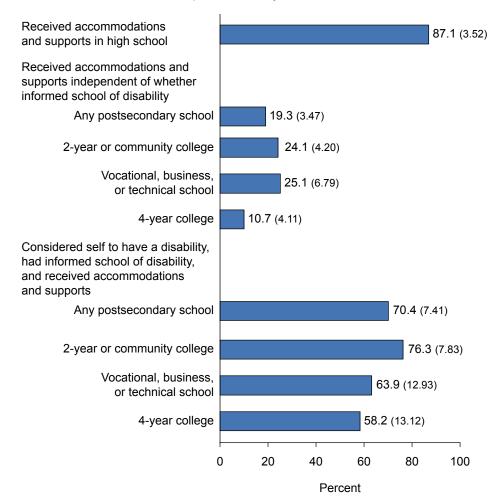
NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 1,960 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

<sup>&</sup>lt;sup>39</sup> Young adult respondents were asked, "Some people have a disability or special need that makes it hard for them to do some things. Do you consider yourself to have any kind of disability or special need?"

<sup>&</sup>lt;sup>40</sup> Young adult respondents who asserted they had a disability were asked, "Was this school aware that you have a disability or special need before you enrolled there, after you enrolled, or is the school not aware of your disability or special need?"

To receive accommodations or supports from a postsecondary school because of a disability, students first must disclose a disability to their school. Approximately 28 percent of postsecondary students who were considered by their secondary schools as having a disability disclosed a disability to their postsecondary schools (sum of third and fourth bars in figure 9). Less than one in five (19 percent) of postsecondary students who were identified as having a disability by their secondary schools were reported to have received any accommodations or supports because of their disability from their postsecondary schools (figure 10).<sup>41</sup>

Figure 10. Receipt of accommodations and supports from school because of disability by young adults with disabilities ever enrolled in postsecondary school



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 300 to 2,010 young adults with disabilities.

<sup>&</sup>lt;sup>41</sup> Respondents were asked, "Have you [YOUTH] received any services, accommodations, or other help from the school to help you do your best there, like a note taker or more time to take tests because of a learning problem, disability, or other special need?"

In contrast, when these postsecondary students were in high school, more than four times as many (87 percent) received some type of accommodation or support because of a disability (p < .001).<sup>42</sup> This pattern of less disability-related assistance at the postsecondary than the secondary level was consistent across the various types of postsecondary schools. Twenty-five percent of 2-year college students; 11 percent of postsecondary vocational, business, or technical school students; and 24 percent of 4-year college students received assistance from their schools because of their disability (p < .001 for all comparisons with rate in high school).

Restricting responses to the 28 percent of students who had disclosed a disability to their postsecondary programs, 70 percent were reported to have received accommodations and supports from their postsecondary programs. Although students with disabilities who had disclosed a disability were more likely than postsecondary students with disabilities as a whole to receive accommodations and supports (p < .001), they remained less likely to receive this type of help from their postsecondary schools than from their high schools (70 percent vs. 92 percent, p < .01).<sup>43</sup>

The rate of receiving accommodations and supports in postsecondary schools for those who had disclosed a disability ranged from 58 percent at 4-year colleges or universities to 64 percent at vocational, business, or technical schools and 76 percent at 2-year or community colleges. Of those who considered themselves to have a disability and had not received accommodations or supports related to their disability from their postsecondary schools, 17 percent had applied for this type of assistance.

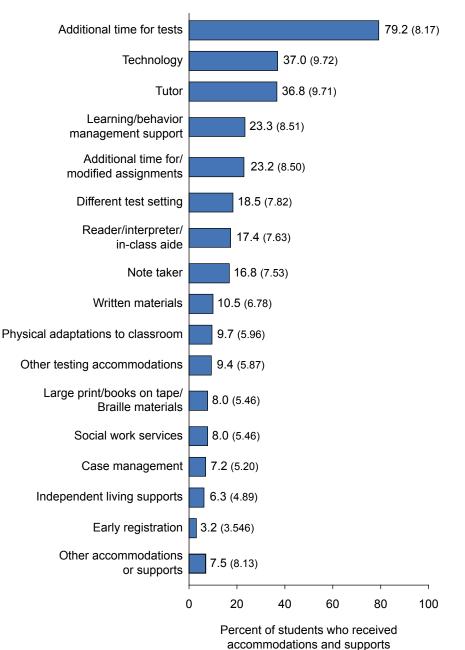
Postsecondary students who were given assistance because of their disability were reported to have received a range of accommodations, supports, and services from their schools.<sup>44</sup> Additional time to complete tests was a frequent type of assistance—received by approximately two-thirds (79 percent) of those who got accommodations, supports, and services (figure 11). Tests were administered in a different-than-usual setting for 19 percent, and 9 percent were provided with other testing accommodations. Thirty-seven percent used technology aids, such as computer software designed for students with disabilities, or had tutors. Seventeen percent received help from note takers or received help from a reader, interpreter, or in-class aide. Approximately one-quarter (23 percent) received learning strategies, study skills, or behavior management support. Assignments were modified or deadlines were extended for 23 percent of postsecondary students who received some type of assistance. Eleven percent received written materials, and less than 10 percent received physical adaptations to their classrooms, large print or Braille materials and books on tape, social work services, case management, independent living supports, or early registration.

<sup>&</sup>lt;sup>42</sup> Source for accommodations and supports received by postsecondary students when they were in high school: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 1 school program survey, 2002; responses restricted to those high school students who had eventually enrolled in postsecondary school.

<sup>&</sup>lt;sup>43</sup> Source for accommodations and supports received in high school by postsecondary students who disclosed a disability to their postsecondary school: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 1 school program survey, 2002; responses restricted to those who eventually enrolled in postsecondary schools and had disclosed a disability to their postsecondary school.

<sup>&</sup>lt;sup>44</sup> Respondents who indicated that they received help from their school because of a disability were asked, "What services, accommodations, or other help have you [YOUTH] received?"

Figure 11. Types of accommodations and supports received from postsecondary schools by young adults with disabilities who had ever enrolled in a postsecondary school and had received these types of assistance



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 710 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009. With the exception of early registration and independent living supports, the types of accommodations received by students in postsecondary schools paralleled those provided during high school. Consistent with experiences in high school general education courses, students with disabilities also frequently received testing modifications in postsecondary school. For example, 75 percent were given more time to complete tests in high school (Newman, Marder, and Wagner 2003), and two-thirds of postsecondary students who received accommodations got additional time for tests. In contrast, students were less likely in postsecondary school than in high school to receive additional time for or modifications to assignments (23 percent vs. 86 percent, p < .001).<sup>45</sup>

Postsecondary students received help beyond the support provided by schools because of their disability. When students were asked whether they had received help with their schoolwork from their postsecondary schools—regardless of whether the assistance was related to their disability—44 percent had received some type of help (figure 12).<sup>46</sup> Of those students who had received help, 70 percent received tutoring assistance and approximately one-quarter sought help from a study or writing center (27 percent and 24 percent, respectively; not presented in figure). Rates of receiving assistance with schoolwork ranged from 32 percent for those at postsecondary vocational, business, or technical schools to 41 percent for those at 4-year colleges or universities.

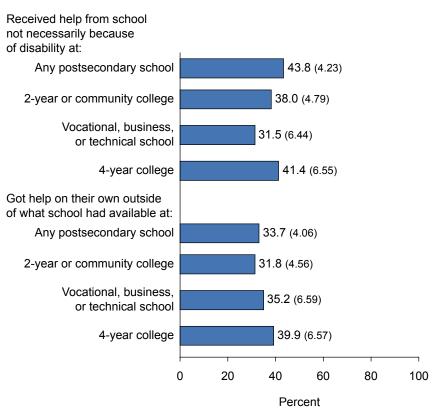
Some students also sought help on their own outside of what their postsecondary schools provided.<sup>47</sup> Approximately one-third (34 percent) had got help on their own. Forty percent of 4-year college students were reported to have received help with their schoolwork beyond that provided by their schools, as were 35 percent of postsecondary vocational, business, or technical school students and 32 percent of community college students.

<sup>&</sup>lt;sup>45</sup> Source for high school accommodations: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 1 general education teacher survey (2002). See Newman, Marder, and Wagner (2003) for discussion of accommodations received in general education classes in high school.

<sup>&</sup>lt;sup>46</sup> Respondents were asked, "Did you [YOUTH] ever get help with school work from this school, like going to a tutor or a study center or writing center?"

<sup>&</sup>lt;sup>47</sup> Respondents were asked, "Besides what the school had available, have you [YOUTH] gotten any services or help on your own to help you do your best at school?"

Figure 12. Receipt of help with schoolwork by young adults with disabilities who had ever enrolled in a postsecondary school



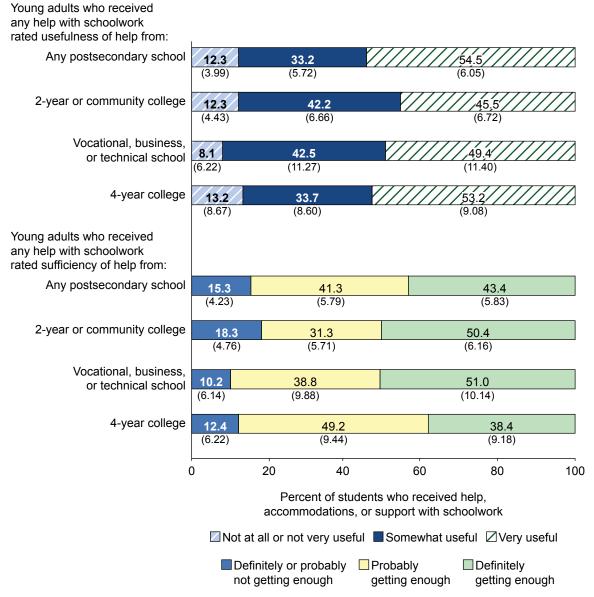
NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,010 to 2,110 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

When postsecondary students who had received any type of help with their schoolwork accommodations or supports from the schools independent of a disability or because of a disability or help outside what the schools provided—were asked to rate how useful those supports were in helping them stay in school and do their best,<sup>48</sup> 33 percent reported that the supports were "somewhat useful," and 55 percent rated them as "very useful" (figure 13). Twelve percent felt they were "not very" or "not at all useful" (p < .001 for comparisons with "somewhat" and "very useful"). Students' ratings of their schoolwork assistance as "very useful" ranged from 46 percent at 2-year or community colleges to 53 percent at 4-year colleges.

<sup>&</sup>lt;sup>48</sup> Young adult respondents were asked, "How useful have the services, accommodations, and help with schoolwork been in helping you stay in school and do your best there?" Response categories were "very useful," "somewhat useful," "not very useful," or "not at all useful."

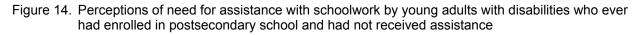
Figure 13. Perceptions of assistance with schoolwork by young adults with disabilities who ever had enrolled in postsecondary school and had received assistance

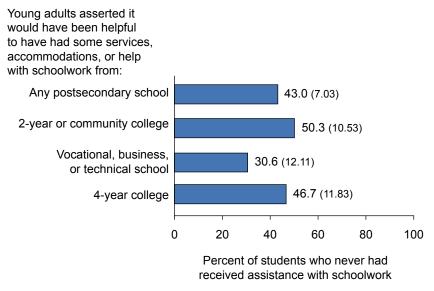


NOTE: Standard errors are in parentheses. Response categories "not at all useful" and "not very useful" and "probably not getting enough" and "definitely not getting enough" have been collapsed for reporting purposes. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 320 to 1,270 young adults with disabilities.

Students who had received assistance also were asked whether they thought they were receiving enough help to do their best at school.<sup>49</sup> Of students who had ever enrolled in postsecondary school, 41 percent reported they "probably" were, and 43 percent reported they "definitely" were getting enough assistance, whereas 15 percent reported they "definitely" or "probably" were not getting enough help (p < .001 for comparisons with "probably" and "definitely" get enough assistance). Thirty-eight percent of students with disabilities at 4-year colleges or universities, 50 percent of those at 2-year colleges, and 51 percent of those at postsecondary vocational, business, or technical schools stated they were "definitely getting enough" services, accommodations, or help with schoolwork.

The 38 percent of postsecondary students who had not received any type of help with their schoolwork—neither accommodations nor supports from the schools independent of a disability or because of a disability nor help outside what the schools provided—were asked whether it would have been helpful to have had some assistance.<sup>50</sup> Forty-three percent reported it would have been helpful to have had additional assistance (figure 14). Almost one-third (31 percent) at vocational, business, or technical schools; 47 percent at 4-year colleges or universities; and 50 percent at 2-year or community colleges reported the need for additional help with schoolwork.





NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 160 to 580 young adults with disabilities.

<sup>&</sup>lt;sup>49</sup> Young adults were asked, "Do you think you are getting enough services, accommodations, or help with schoolwork to do your best there?" Response categories were "definitely getting enough," "probably getting enough," "probably not getting enough," or "definitely not getting enough."

<sup>&</sup>lt;sup>50</sup> Young adult respondents were asked, "Would it have been helpful to you to have had some services, accommodations, or help with schoolwork?"

# Disability Differences in Disclosure of Disability and Receipt of Accommodations

Students with different disabilities varied widely in the extent to which they identified themselves as an individual with a disability; the rate of not considering themselves to have a disability ranged from 19 percent to 74 percent (table 8). Students with speech/language impairments (74 percent), learning disabilities (69 percent), or other health impairments (65 percent) were more likely to have reported not considering themselves as having a disability than were those with orthopedic (19 percent), visual (21 percent), or hearing impairments (32 percent); autism (24 percent); multiple disabilities (26 percent); or deaf-blindness (32 percent) (p < .001 for all comparisons other than with deaf-blindness and p < .01 for all comparisons with deaf-blindness). Students with speech/language impairments or learning disabilities also were more likely to have reported not considering themselves as having a disability than were those with traumatic brain injuries (37 percent, p < .01 for both comparisons) or mental retardation (37 percent, p < .01 for comparison with speech/language impairment only). In addition, students with emotional disturbances (53 percent) were more likely than those with visual or orthopedic impairments (p < .01 for both comparisons) to view themselves as not having a disability.

A similar pattern of disability differences was apparent for those who had informed their postsecondary schools of a disability. Students with orthopedic or visual impairments (76 percent and 73 percent, respectively), multiple disabilities (71 percent), deaf-blindness (68 percent), autism (63 percent), or hearing impairments (59 percent) were more likely to consider themselves as having a disability and to have disclosed that disability to their postsecondary schools than were those with speech/language impairments (17 percent), learning disabilities (24 percent), other health impairments (25 percent), or emotional disturbances (27 percent, p < .001 for all comparisons). Students with mental retardation (58 percent) also were more likely to disclose a disability than were those with learning disabilities (p < .01) or speech/language or other health impairments (p < .001 for both comparisons). In addition, students with traumatic brain injuries (48 percent) were more likely to disclose their disability than those with speech/language impairments (p < .01).

Postsecondary students also differed in their rates of receipt of accommodations and supports from their schools. Rates of receiving accommodations or supports because of a disability ranged from 12 percent to 60 percent (table 9). Students with deaf-blindness (60 percent); visual (59 percent), hearing (53 percent), or orthopedic impairments (55 percent); or multiple disabilities (46 percent) were more likely to receive accommodations or supports because of a disability than were those with speech/language impairments (12 percent), other health impairments (15 percent), or learning disabilities (17 percent, p < .001 for all comparisons). Students with deaf-blindness or visual, hearing, or orthopedic impairments also were more likely to receive disability-related accommodations than were those with emotional disturbances (20 percent, p < .001 for all comparisons). In addition, students with visual or orthopedic impairments were more likely to receive accommodations than were students with mental retardation (24 percent, p < .001 for both comparisons).

The rate of receiving help with schoolwork overall—whether or not specifically due to a disability—did not differ across disability categories, with two exceptions. Students with traumatic brain injuries (70 percent) were more likely to receive help than were those with autism (36 percent) or emotional disturbances (37 percent, p < .01 for both comparisons).

Table 8.	Extent to which young adults ever enrolled in a postsecondary school considered themselves as
	having a disability and informed postsecondary schools of disability, by disability category

		Speech/	Emo-			Ortho-	Other		Trau-		
		language M	lental tional	Hearing	Visual	pedic	health		matic	Multiple	Deaf-
	Learning	impair- r	retar- distur-	impair-	impair-	impair-	impair-		brain	disabili-	blind-
	disability	ment d	lation bance	ment	ment	ment	ment	Autism	injury	ties	ness
					Perce	ent					
Young adult did not											
consider self to have	68.9	74.0 37	7.1 52.5	31.6	20.8	18.5	64.9	23.9	37.4	25.9	32.4
a disability	(5.84)	(4.87) (10	0.95) (7.64)	(6.29)	(5.94)	(4.86)	(5.75)	(6.90)	(10.51)	(8.15)	(10.08)
Young adult considered self to have a disability and											
had informed school	24.2	16.6 57	7.8 26.8	59.4	73.0	76.1	25.4	62.7	47.8	70.7	67.6
of disability	(5.40)	(4.13) (1 <i>1</i>	1.20) (6.78)	(6.64)	(6.50)	(5.34)	(5.24)	(7.83)	(10.85)	(8.47)	(10.08)
Young adult considered self to have a disability and											
had not informed	6.9	9.4 5	5.1 20.7	9.0	6.2	5.4	9.7	13.4	14.8	3.4	#
school of disability	(3.20)	(3.24) (4	4.99) (6.20)	(3.87)	(3.53)	(2.83)	(3.57)	(5.51)	(7.71)	(3.37)	

# Rounds to zero.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. Response categories "student considers self to have a disability and has informed school of disability before enrollment" and "student considers self to have a disability and has informed school of disability after enrollment" have been collapsed for reporting purposes. NLTS2 percentages are weighted population estimates based on a sample of approximately 1,960 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Table 9. Receipt of accommodations, supports, and help with schoolwork by young adults ever enrolled in a postsecondary school, by disability category

	Learning disability	Speech/ language impair- ment	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	•	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	blind-
						Perc	ent					
Accommodations and supports received from school because of disability, independent of informing school of disability	17.0 (4.67)	12.4 (3.62)	24.4 (9.62)	19.8 (6.07)	53.0 (6.48)	59.3 (7.17)	54.5 (6.19)	14.5 (4.21)	34.6 (7.35)	34.2 (10.05)	<b>4</b> 5.9 (9.31)	59.9 (10.41)
Received help with schoolwork from school overall	43.2 (5.94)	44.5 (5.25)	50.0 (10.73)	37.3 (6.95)	51.7 (7.19)	43.4 (7.17)	54.4 (6.12)	49.0 (5.86)	35.6 (7.25)	70.2 (9.62)	56.8 (9.19)	51.7 (10.33)
Student got help on own	33.4 (5.68)	34.5 (5.05)	42.3 (10.54)	28.0 (6.52)	40.0 (7.11)	52.0 (7.35)	37.4 (5.93)	29.2 (5.36)	33.8 (7.23)	30.7 (9.44)	53.8 (9.22)	47.6 (10.33)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,010 to 2,110 young adults with disabilities.

Students' rate of receiving help with schoolwork outside of what was provided by their postsecondary schools did not differ significantly across disability categories.

Students' perceptions of their accommodations, supports, and help with schoolwork did not differ significantly by disability category, except that young adults with hearing impairments were more likely than those with orthopedic impairments to describe the help they received as being "not at all or not very useful" (39 percent vs. 9 percent, p < .01; table 10).

Assertion of the need for help with schoolwork by those who had not received assistance did not differ significantly by disability category.

	Learning disability	•	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
. <u>.</u>						Perce	ent					
Young adults who received any help with schoolwork rated the help as:												
Very useful	54.6 (8.59)	43.3 (7.24)	73.0 (12.66)	51.2 (10.92)	46.8 (9.76)	59.8 (8.14)	62.2 (6.56)	54.8 (7.78)	49.3 (10.78)	54.3 (12.36)	54.3 (11.38)	‡
Somewhat useful	36.9 (8.32)	40.4 (7.17)	8.3 (7.87)	23.6 (9.28)	14.3 (6.84)	25.6 (7.24)	28.8 (6.13)	27.1 (6.94)	27.6 (9.64)	36.2 (11.93)	15.2 (8.20)	‡
Not at all or not very useful	8.5 (4.81)	16.3 (5.39)	18.7 (11.1)	25.2 (9.49)	39.0 (9.54)	14.6 (5.86)	9.0 (3.87)	18.1 (6.02)	23.2 (9.10)	9.5 (7.28)	30.5 (10.51)	‡
Young adults who received any help with schoolwork thought they were:												
Definitely getting enough	42.8 (8.13)	51.8 (7.26)	39.0 (13.69)	36.5 (10.06)	51.5 (9.73)	62.5 (7.99)	53.1 (6.79)	45.4 (7.58)	36.7 (11.33)	45.8 (12.15)	53.6 (11.14)	‡
Probably getting enough	42.4 (8.12)	38.8 (7.08)	34.9 (13.38)	45.1 (10.40)	28.2 (8.76)	21.3 (6.76)	36.8 (6.56)	40.6 (7.47)	53.4 (11.73)	34.6 (11.60)	32.8 (10.49)	‡
Probably or definitely not getting enough	14.8 (5.84)	9.4 (4.24)	26.1 (12.33)	18.4 (8.09)	20.3 (7.83)	16.3 (6.10)	10.1 (4.10)	14.0 (5.28)	9.9 (7.02)	19.6 (9.68)	13.6 (7.66)	ŧ
Young adults who never received any help with schoolwork thought assistance	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	
would have been helpful	43.6 (9.38)	42.2 (8.46)	‡	31.7 (10.50)	41.9 (13.00)	30.6 (12.47)	49.4 (10.30)	32.2 (9.21)	54.1 (12.58)	‡	‡	‡

Table 10.	Perceptions of assistance with schoolwork by young adults with disabilities who had ever
	enrolled in postsecondary school and had received assistance, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. Response categories "not at all useful" and "not very useful" and response categories "probably not getting enough" and "definitely not getting enough" have been collapsed for reporting purposes. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,230 to 1,270 young adults with disabilities.

# Differences in Disclosure of Disability and Receipt of Accommodations by High School-Leaving Characteristics

Self-identification as a student with disabilities, disclosure of a disability to postsecondary schools; receipt of accommodations, supports, and help with schoolwork from school and on their own; and perceptions of accommodations, supports, and help did not differ significantly by students' high school-leaving characteristics (table 11).

Table 11. Disclosure of disability to postsecondary school and receipt of and perceptions of accommodations, supports, and help with schoolwork by young adults with disabilities who had ever enrolled in postsecondary school, by highest level of educational attainment

	Completers	Non- completers	Less than 3 years	3 up to 5 years	5 up to 8 years
			Percent		
Disclosure of disability					
Did not consider self to have a disability	63.5 (4.33)	42.1 (20.76)	47.7 (11.98)	62.0 (7.75)	66.6 (5.49)
Considered self to have a disability and had informed school of disability	28.1 (4.04)	40.3 (20.62)	42.7 (11.87)	31.1 (7.39)	24.0 (4.97)
Considered self to have a disability and had not informed school of disability	8.4 (2.49)	17.6 (16.01)	9.6 (7.07)	6.9 (4.05)	9.4 (3.40)
Receipt of accommodations and supports					
Received from school because of disability, independent of informing school of disability	19.4 (3.53)	12.4 (13.88)	36.9 (11.39)	22.1 (6.64)	14.3 (4.03)
Received help with schoolwork from school overall	13.5 (13.79)	44.4 (4.31)	41.8 (10.97)	44.5 (7.68)	43.8 (5.63)
Got help on own	33.9 (4.14)	27.5 (18.13)	29.3 (10.13)	34.0 (7.31)	34.4 (5.45)
Young adults who received any help with schoolwork rated the help as:					
Very useful	54.2 (6.11)	‡	56.5 (15.67)	54.4 (10.90)	54.2 (7.92)
Somewhat useful	33.5 (5.79)	‡	35.7 (15.15)	36.8 (10.56)	29.8 (7.27)
Not at all or not very useful	12.3 (4.03)	‡	7.8 (8.48)	8.8 (6.20)	16.0 (5.83)
Young adults who received any help with schoolwork thought they were:					
Definitely getting enough	43.0 (5.92)	‡	49.1 (15.79)	36.4 (10.39)	47.1 (7.61)
Probably getting enough	41.7 (5.90)	‡	33.3 (14.89)	52.3 (10.79)	35.3 (7.29)
Probably or definitely not getting enough	15.4 (4.32)	‡	17.5 (12.00)	11.3 (6.84)	17.6 (5.81)
Young adults who never received any help with school work thought assistance would have been	43.5	ŧ	57.0	35.8	46.3
helpful	(7.13)	т	(20.28)	(11.18)	(9.84)

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,230 to 1,270 young adults with disabilities.

# Demographic Differences in Disclosure of Disability and Receipt of Accommodations

Self-identification as a student with disabilities; disclosure of a disability to postsecondary schools; receipt of accommodations, supports, and help with schoolwork from school and on their own; and perceptions of accommodations, supports, and help did not differ significantly by students' demographic characteristics (table 12).

Table 12. Disclosure of disability to postsecondary school and receipt of and perceptions of accommodations, supports, and help with schoolwork by young adults with disabilities who had ever enrolled in postsecondary school, by parents' household income and young adults' race/ethnicity and gender

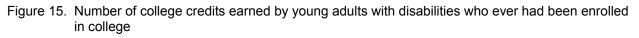
	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
	1033	φ00,000	ψ00,000	Percen		riispariie	Walc	T emaie
Disclosure of disability								
Did not consider self to have a disability	66.4	64.2	59.9	61.1	65.3	70.1	57.8	71.8
	(8.04)	(8.92)	(5.94)	(5.05)	(9.80)	(12.77)	(5.47)	(6.57)
Considered self to have a disability and had informed school of disability	27.6 (7.61)	27.4 (8.30)	30.3 (5.57)	29.5 (4.72)	28.3 (9.27)	23.0 (11.74)	32.1 (5.17)	22.2 (6.07)
Considered self to have a disability and had not informed school of disability Receipt of accommodations and supports	6.1 (4.07)	8.4 (5.16)	9.8 (3.60)	9.4 (3.02)	6.4 (5.04)	6.9 (7.07)	10.1 (3.34)	6.0 (3.47)
Received from school because of disability, independent of informing school of disability	19.5 (6.89)	17.2 (6.95)	21.1 (4.91)	19.6 (4.06)	18.0 (8.05)	19.8 (11.11)	21.9 (4.52)	15.1 (5.27)
Received help with schoolwork	39.2	36.5	50.1	36.9	64.2	47.1	39.6	50.8
from school overall	(8.32)	(8.58)	(5.90)	(4.84)	(9.58)	(13.35)	(5.18)	(7.18)
Got help on own	31.0	35.9	33.6	31.3	44.6	27.6	31.3	37.4
	(7.96)	(8.57)	(5.60)	(4.67)	(10.07)	(12.13)	(4.96)	(6.94)
Young adults who received any help with schoolwork rated the help as:								
Very useful	59.0	67.7	46.4	49.0	59.4	70.6	50.3	59.5
	(11.28)	(12.91)	(8.38)	(7.28)	(12.92)	(16.46)	(8.02)	(9.10)
Somewhat useful	28.5	21.1	40.8	35.1	35.1	19.6	38.8	26.5
	(10.36)	(11.26)	(8.26)	(6.95)	(12.56)	(14.35)	(7.82)	(8.18)
Not at all or not very useful	12.6	11.3	12.8	15.9	5.4	9.8	10.9	14.0
	(7.61)	(8.74)	(5.62)	(5.32)	(5.95)	(10.74)	(5.00)	(6.43)
Young adults who received any help with schoolwork thought they were:								
Definitely getting enough	51.0	33.2	45.8	43.2	37.4	54.8	37.2	51.0
	(10.96)	(12.74)	(8.08)	(7.04)	(12.37)	(16.89)	(7.55)	(8.92)
Probably getting enough	39.0	39.8	41.2	41.3	49.6	26.4	43.7	38.3
	(10.69)	(13.24)	(7.98)	(6.99)	(12.78)	(14.95)	(7.75)	(8.67)
Probably or definitely not getting enough Young adults who never received	10.0 (6.58)	27.0 (12.01)	13.0 (5.45)	15.5 (5.14)	13.1 (8.63)	18.7 (13.23)	19.2 (6.15)	10.6 (5.49)
any help with school work thought	50.9	55.9	36.7	40.2	36.0	83.9	39.3	49.8
assistance would have been helpful	(15.28)	(13.06)	(9.27)	(7.85)	(17.42)	(21.23)	(7.73)	(13.94)

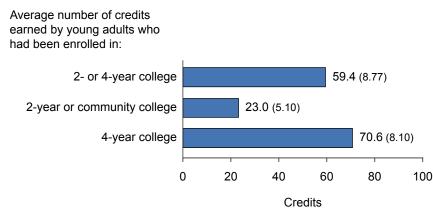
NOTE: Standard errors are in parentheses. Findings are reported for young adults out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,230 to 1,270 young adults. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2,3,4,and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Postsecondary Credits Earned

To complete college and obtain a degree, students must earn a certain number of credits overall—typically approximately 60 credits for an associate's degree and 120 for a bachelor's degree. Chen and Carol (2005) reported that individuals in the general population who had been out of high school for 8 years and had been enrolled in postsecondary education had earned an average of 91 credits and that parents' education was positively associated with college credit accumulation. However, to date, little has been known about the credit accumulation of postsecondary school students with disabilities.

On average, young adults with disabilities who were out of high school up to 8 years and had attended a 2-year or 4-year college at some point in time had earned 59 semester credits (figure 15).<sup>51</sup> Those who had attended 2-year or community colleges had earned on average 23 semester credits, and those who ever had attended a 4-year college had earned 71 semester credits.





NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 610 to 1,330 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 4 and 5 parent interview and youth interview/survey, 2007 and 2009.

# **Disability Differences in Number of Credits Earned**

The average numbers of credits earned in 2-year colleges ranged from approximately 20 credits for students with emotional disturbances to 43 credits for students with visual impairments (table 13). Students with hearing impairments and those with visual impairments earned significantly more postsecondary school credits (42 credits and 43 credits) than did students with emotional disturbances (20 credits; p < .01). At 4-year colleges, the average number

<sup>&</sup>lt;sup>51</sup> Respondents who had attended 2-year colleges were asked, "About how many total credits have you earned [did you earn] at the 2-year or community college or colleges you've attended? Are those semester credits or quarter credits?" and respondents who had attended 4-year colleges were asked, "About how many total credits have you earned [did you earn] at the 4-year college or colleges you've attended? Are those semester credits or quarter credits?" Quarter credits were multiplied by .67 to convert to semester credits for analysis and reporting. Respondents who attended vocational, business, or technical schools were not asked to report the number of earned credits.

of credits earned ranged from 61 for students with other health impairments to 94 for students with hearing impairments or visual impairments. No significant differences were found across disability categories for number of credits earned in 4-year colleges.

	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	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
					Avera	age numb	er of crea	dits				
Young adults who ever had been enrolled in: 2-year or community college	29.8 (5.47)	34.4 (4.17)	‡	19.8 (5.24)	41.7 (6.94)	43.1 (6.77)	32.4 (5.22)	21.9 (4.35)	38.4 (8.34)	38.3 (10.78)	27.46 (8.43)	т
4-year college	72.8 (11.89)	82.7 (9.00)	‡	‡	93.9 (10.28)	93.5 (11.60)	70.8 (8.91)	61.4 (12.30)	76.5 (11.24)	‡	‡	‡

Table 13.	Number of college credits earned by young adults with disabilities who had ever been enrolled
	in college, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 610 and 1,010 young adults with disabilities attending 2- and 4-year colleges.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 4 and 5 parent interview and youth interview/survey, 2007 and 2009.

#### Differences in Number of Credits Earned by High School-Leaving Characteristics

The average numbers of credits earned in 2- year and 4-year colleges did not differ significantly by secondary school-leaving characteristics (table 14).

Table 14. Number of college credits earned by young adults with disabilities who had ever been enrolled in college, by high school-leaving status and years since leaving high school

	Completers	Non- completers	Less than 3 years	3 up to 5 years	5 up to 8 years
		Average	e number of c	redits	
Young adults who ever had been enrolled in:					
2-year or community college	23.1	‡	18.9	29.3	30.0
	(5.14)		(7.92)	(5. 43)	(6.17)
4-year college	70.7	‡	46.1	59.2	84.2
	(8.78)		(12.82)	(13.30)	(11.86)

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 610 to 1,010 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 4 and 5 parent interview and youth interview/survey, 2007 and 2009.

### Differences in Number of Credits Earned by Demographic Characteristics

Number of credits earned did not differ significantly by gender, race/ethnicity, or parents' household income (table 15).

Table 15. Number of college credits earned by young adults with disabilities who had ever been enrolled in college, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
			Aver	age number	r of credits			
Young adults who ever had been enrolled in:								
2-year or community college	24.2 (9.17)	24.7 (6.22)	29.8 (4.93)	29.6 (4.74)	27.8 (10.25)	26.0 (8.22)	28.5 (4.69)	28.7 (6.94)
4-year college	75.2 (17.58)	51.5 (19.26)	73.0 (10.53)	75.4 (9.77)	62.7 (17.19)	89.8 (25.22)	67.1 (10.97)	80.6 (13.28)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 610 to 1,010 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 4 and 5 parent interview and youth interview/survey, 2007 and 2009.

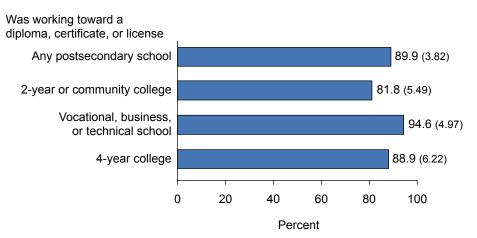
# Postsecondary School Completion

For many students in the general population, postsecondary school enrollment does not result in degree attainment or program completion. Fewer than two-thirds of students in the general population who began as full-time freshmen in 4-year universities in 1995 received a bachelor's degree within a 6-year period (Berkner, He, and Cataldi 2002). Many individuals who begin postsecondary education but fail to graduate do not realize the economic importance of college graduation. For example, whereas the earnings gap between individuals with a bachelor's degree and those with a high school diploma has continuously widened over the past 30 years, those who enroll in college but do not graduate "have made only slight gains" (Carey 2004).

Ninety percent of young adults with disabilities who were currently enrolled in postsecondary school at the time of the interview asserted that they were "working toward a diploma, certificate, or license" (figure 16).<sup>52</sup> The percentages so reporting did not differ significantly for students in different types of postsecondary institutions.

<sup>&</sup>lt;sup>52</sup> Respondents were asked, "Are you [is YOUTH] working toward a diploma, certificate, or license from this work?"

# Figure 16. School completion goal of young adults with disabilities enrolled in postsecondary school at the time of the interview



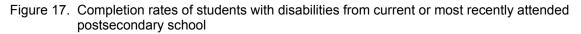
NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 280 to 960 young adults with disabilities.

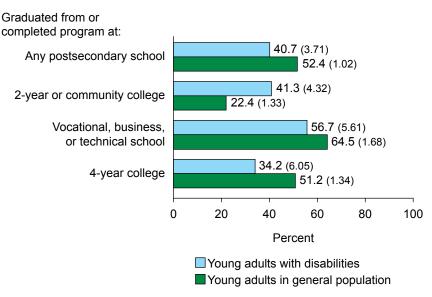
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

Examining completion rates<sup>53</sup> across types of postsecondary schools ("any" postsecondary program), approximately 41 percent of students had graduated from their most recent postsecondary program (figure 17), 31 percent had left their most recent postsecondary school prior to completing (not in figure), and the remaining students still were currently enrolled in their postsecondary program at the time of the interview. Completion rates of postsecondary students with disabilities were lower than those of similar-aged postsecondary students in the general population (41 percent vs. 52 percent, p < .001).

Completion rates varied by type of postsecondary institution. Students with disabilities who attended postsecondary vocational, business, or technical schools were more likely to complete their programs than were those who enrolled in 4-year colleges (57 percent vs. 34 percent, p < .01). Compared with their peers in the general population, completion rates at 4-year colleges were lower for students with disabilities than for their peers (34 percent vs. 51 percent, p < .001). In contrast, their completion rates at 2-year or community college were higher than those of students in the general population (41 percent vs. 22 percent, p < .001).

<sup>&</sup>lt;sup>53</sup> Completion rate in this report is calculated as a percentage of students who enrolled in postsecondary programs; it includes in its base students currently attending postsecondary school. This approach is used more widely than that previously used to calculate NLTS2 completion rates. Completion rates in previous NLTS2 reports were calculated as a percentage of students who had left postsecondary school. For wave 5 the completion rate would have been based on the 72 percent of students who had attended postsecondary school, but were not currently enrolled at the time of the Wave 5 interview. Based on the previous method of calculating completion rates, 47.6 percent of postsecondary students with disabilities and 55 percent of similar-aged peers in the general population had completed their postsecondary programs (not a significant difference).





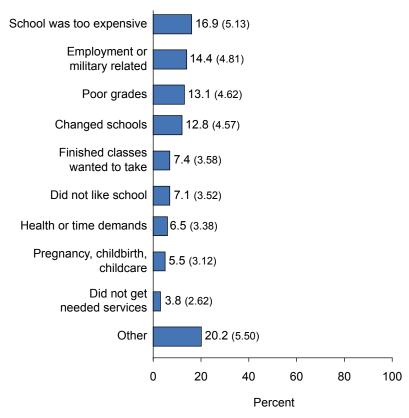
NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 670 to 2,170 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97) 2005 youth survey, responses for 21- to 25-year-olds.

Reasons for leaving postsecondary school varied for the 31 percent of postsecondary school leavers who did not graduate or complete their programs.<sup>54</sup> The most common reason for leaving school concerned its cost: 17 percent of young adults with disabilities reportedly left for this reason (figure 18). Employment or the military, poor grades, and changing schools were the next most common reasons for leaving, with 14 percent, 13 percent, and 13 percent of young adults with disabilities, respectively, leaving for these reasons. Seven percent of young adults with disabilities cited finishing the classes they wanted as their reason for leaving, with similar percentages of young adults with disabilities asserting not liking school or having health or time demands as reasons. Six percent cited pregnancy, childbirth, or childcare; and 4 percent reported not getting the services they needed as reasons. Twenty percent indicated they had left for other reasons, with no single reason within the "other" category accounting for more than 3 percent of exits.

<sup>&</sup>lt;sup>54</sup> Respondents who had been in a postsecondary program earlier but were not currently enrolled and had not graduated were asked, "Why did you [YOUTH] stop going to college?"

Figure 18. Reasons why young adults with disabilities who had not completed postsecondary school and no longer were enrolled had left postsecondary school



NOTE: Figure includes young adults with disabilities who left any given type of postsecondary school even if they were enrolled in another type of postsecondary school at the time of the interview. If a young adult with a disability left postsecondary schools more than once, the last reason for leaving is shown. Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 290 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 3, 4, and 5 parent interview and youth interview/survey, 2005, 2007, and 2009.

#### **Disability Differences in Postsecondary School Completion**

The majority of young adults in all disability categories who were enrolled in postsecondary school at the time of the interview reported that they were working toward a diploma, certificate, or license, with rates ranging from 73 percent of students with multiple disabilities to 97 percent of students with orthopedic or other health impairments (p < .01 for both comparisons with multiple disabilities; table 16).

Within 8 years of leaving high school, completion rates from most recent postsecondary schools ranged from 28 percent for young adults with deaf/blindness to 53 percent of those with hearing impairments (no significant differences).

Table 16.	Completion rates of students from current or most recently attended postsecondary school, by
	disability category

	Learning disability	Speech/ language impair- ment	Mental retar- dation	Emo- tional distur- bance	Hearing impair-	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism		Multiple disabili- ties	
						Perce	nt					
Young adults enrolled at the time of the interview who were working toward a diploma, certificate, or license Completion rate of students in current or most recently	89.1 (5.41)	91.6 (4.26)	‡	96.1 (4.84)	91.8 (4.88)	95.7 (4.63)	96.8 (3.33)	96.6 (3.64)	79.5 (8.56)	90.4 (8.66)	72.5 (11.24)	‡
attended postsecondary school	40.9 (5.23)	43.8 (4.78)	44.2 (8.44)	35.1 (6.05)	52.9 (6.16)	42.8 (6.86)	34.7 (5.39)	40.4 (5.35)	38.8 (7.02)	49.9 (9.97)	(0.00)	27.7 (9.14)

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 960 young adults with disabilities for working toward a degree or diploma and 2,170 young adults with disabilities for graduation rate.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Differences in Postsecondary School Completion by High School-Leaving Characteristics

Among young adults with disabilities who attended postsecondary school, there were no significant differences in the percentages who expected to complete postsecondary school or actual rates of postsecondary school completion by high school-leaving characteristics or time since leaving secondary school (table 17).

 Table 17.
 Completion rates of students with disabilities from current or most recently attended postsecondary school, by high school-leaving status and years since leaving high school

	Completers	Non- completers	Less than 3 years	3 up to 5 years	5 years or more
			Percent		
Young adults enrolled at the time of the interview who were working toward a diploma, certificate, or license	90.0 (3.87)	‡	95.9 (6.03)	85.2 (7.31)	91.7 (5.19)
Completion rate of students in current or most recently attended postsecondary school	42.2 (4.00)	±	35.7 (9.79)	32.6 (6.02)	47.5 (5.16)

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 960 young adults with disabilities for working toward a degree or diploma and 2,170 young adults with disabilities for graduation rate. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2) Wayes 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 20

National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

### Demographic Differences in Postsecondary School Completion

Among young adults with disabilities who attended postsecondary school, there were no significant differences by demographic characteristics in the percentages who expected to complete postsecondary school or actual rates of postsecondary school completion (table 18).

Table 18. Completion rates of students with disabilities from current or most recently attended postsecondary school, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percer	nt			
Young adults enrolled at the time of the interview who were working toward a diploma, certificate, or license	87.5 (8.84)	91.8 (7.90)	89.8 (4.91)	94.3 (3.50)	77.1 (11.53)	98.2 (5.29)	89.0 (5.21)	91.2 (5.53)
Completion rate of students in current or most recently attended postsecondary school	39.5 (7.67)	31.9 (7.14)	45.3 (5.15)	44.4 (4.50)	33.0 (8.19)	37.1 (11.11)	39.0 (4.67)	43.8 (6.10)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 960 young adults with disabilities for working toward a degree or diploma and 2,170 young adults with disabilities for graduation rate.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

This chapter has presented a national picture of the postsecondary experiences and outcomes of young adults with disabilities. Chapter 3 examines employment experiences and outcomes, and chapter 4 focuses on the overlap between postsecondary education and employment.

### 3. Employment

Many adults consider employment a central component of their lives, providing not only economic benefits, but also a social network and a sense of worth as a productive member of society (Levinson and Palmer 2005; Rogan, Grossi, and Gajewski 2002). Indeed, employment has been linked to a range of positive outcomes, including financial independence and enhanced self-esteem (Fabian 1992; Lehman et al. 2002; Polak and Warner 1996). Given the importance of post-high school employment, preparation for employment is a primary focus of many transition services for secondary-school-age youth with disabilities, and achieving employment is the primary transition goal of the majority of secondary students with disabilities served under IDEA (Cameto, Levine, and Wagner 2004).

Although some young adults go on to postsecondary education or training and do not work, and others both work and go to school, for some young adults with disabilities and young adults in the general population, the early years of adult life are a time to begin to engage in employment as a means of support. This chapter examines the employment status and experiences of young adults with disabilities who had been out of high school up to 8 years, including

- employment status;
- number and duration of jobs;
- types of jobs;
- hours worked per week;
- wages and benefits;
- job accommodations;
- perceptions of working conditions;
- job leaving; and
- job search activities.

Findings are reported for young adults with disabilities as a whole and for those who differed in their primary disability classification while in secondary school and by years since leaving high school, highest level of educational attainment, and selected demographic characteristics.

### **Employment Status**

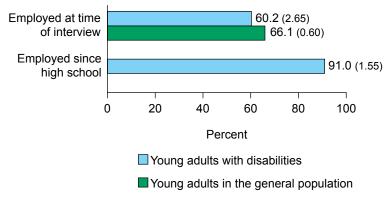
At the time of the 2009 Wave 5 interview, 60 percent of young adults with disabilities who had been out of high school for up to 8 years were employed for pay outside the home (figure 19),<sup>55</sup> compared with 66 percent of similarly aged young adults (21 to 25 years old) in the general population,<sup>56</sup> not a significant difference. About 91 percent of young adults with

<sup>&</sup>lt;sup>55</sup> Respondents were asked, "Do you (does YOUTH) have a paid job now, other than work around the house?"

<sup>&</sup>lt;sup>56</sup> Source for general population data: U.S. Census Bureau, Current Population Survey (CPS), May 2009. Data are for 21- to 25-year-olds.

disabilities had been employed at some point since leaving high school,<sup>57</sup> and 31 percent had been employed after leaving high school but were unemployed at the time of the interview.

Figure 19. Paid employment outside the home of young adults with disabilities and young adults in the general population



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 4,720 to 4,760 young adults with disabilities. General population comparison data not available for employed since high school.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009; U.S. Census Bureau, Current Population Survey (CPS), May 2009. Data are for 21- to 25-year-olds.

# **Disability Differences in Employment Status**

The early post-high school employment experiences of young adults with disabilities varied with their primary disability classification. The percentages of young adults who were employed at the time of the interview ranged from 30 percent to 67 percent (table 19). Young adults with other health impairments, speech/language impairments, or learning disabilities were more likely to be employed at the time of the interview (64 percent to 67 percent) than young adults with deafblindness, orthopedic impairments, autism, multiple disabilities, mental retardation, or visual impairments (30 percent to 44 percent; p < .001 for all comparisons except p < .01 for young adults with speech/language or other health impairments compared with those with visual impairments). In addition, young adults with learning disabilities were more likely to be employed at the time of the interview than those with emotional disturbances (67 percent vs. 50 percent, p < .01), and young adults with hearing impairments were more likely to be employed at the time of the interview than those with deaf-blindness, orthopedic impairments, autism, or mental retardation (30 percent to 39 percent, p < .01 for all comparisons except p < .001 for all comparisons except p < .001 for comparison with young adults with orthopedic impairments.

<sup>&</sup>lt;sup>57</sup> Respondents were asked, "Did you (YOUTH) do any work for pay, other than work around the house, at any time since high school?" Respondents who in any wave had reported working for pay other than work around the house since high school were considered to have been employed since high school.

	Learning disability		retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism		Multiple disabili- ties	Deaf- blind- ness
-						Perce	nt					
Percentage reported to have been:												
Employed at time of interview	67.3 (3.93)	63.9 (3.73)	38.8 (3.90)	49.6 (4.58)	57.2 (4.89)	43.8 (5.54)	35.0 (4.39)	64.4 (4.09)	37.2 (4.59)	51.6 (7.59)	39.2 (5.33)	30.1 (6.69)
Employed since high school	94.9 (1.83)	94.0 (1.84)	76.2 (3.40)	91.2 (2.58)	91.5 (2.74)	78.0 (4.59)	67.7 (4.29)	95.5 (1.77)	63.2 (4.57)	81.4 (5.93)	62.5 (5.24)	70.4 (6.58)

Table 19. Paid employment outside the home of young adults, by disability category

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 4,720 to 4,760 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

The percentage of young adults who had been employed at some time since leaving high school ranged from 63 percent of those with autism or multiple disabilities to about 96 percent of young adults with other health impairments. Young adults with speech/language impairments, learning disabilities, or other health impairments (94 percent to 96 percent) were all more likely to have had a job at some time since high school than young adults with multiple disabilities, autism, orthopedic impairments, deaf-blindness, mental retardation, or visual impairments (63 percent to 78 percent, p < .001 for all comparisons except p < .01 comparing young adults with emotional disturbances or hearing impairments (91 and 92 percent, respectively) were more likely than those with multiple disabilities, autism, orthopedic impairments, deaf-blindness, or mental retardation (63 percent to 76 percent) to have been employed since high school (p < .001 for all comparisons except p < .01 for comparisons except p < .01 for all comparisons with young adults with deaf-blindness).

# Differences in Employment Status by Years Since Leaving High School

Young adults with disabilities who had been out of high school for different amounts of time did not have significantly different rates of employment at the time of the interview or since high school (table 20). Employment at the time of the interview ranged from 50 percent for young adults with disabilities who had been out of high school for less than 3 years to 65 percent for those who had been out of high school for between 3 and 5 years, and employment since high school ranged from 80 percent to 93 percent for young adults with disabilities who had been out of high school for less than 3 years to 65 percent for those who had been out of high school for between 3 and 5 years, and employment since high school ranged from 80 percent to 93 percent for young adults with disabilities who had been out of high school for different lengths of time.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
_		Percent	
Percentage reported to have been:			
Employed at time of	49.5	65.3	59.1
interview	(6.23)	(4.54)	(3.70)
Employed since high	79.9	92.2	92.7
school	(4.99)	(2.55)	(1.95)

Table 20. Paid employment outside the home of young adults with disabilities, by years since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 4,720 to 4,760 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Differences in Employment Status by Highest Level of Educational Attainment

For young adults with disabilities with different levels of educational attainment, employment at the time of the interview ranged from 38 percent to 83 percent, and employment since high school ranged from 78 percent to 99 percent (table 21). At the time of the interview, young adults who had received a postsecondary education degree or certificate were more likely to be employed (83 percent) than young adults whose highest level of educational attainment was some postsecondary education (58 percent), high school completion (54 percent), or less than a high school education (38 percent, p < .001 for all comparisons). Young adults with disabilities who had completed a postsecondary program also were more likely to have been employed since high school (99 percent) than those who had not finished high school (78 percent) or those who had completed high school (89 percent, p < .001 for both comparisons).

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage reported to have been:				
Employed at time of interview	38.1 (7.41)	53.9 (4.16)	57.7 (5.04)	83.2 (4.68)
Employed since high school	78.2 (6.28)	88.7 (2.64)	92.4 (2.69)	98.7 (1.41)

# Table 21. Paid employment outside the home of young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 4,720 to 4,760 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Demographic Differences in Employment Status

Table 22 shows the percentages of young adults with disabilities employed at the time of the interview and since leaving high school by parents' household income and young adults' race/ethnicity and gender. No significant differences in employment status at the time of the interview or employment since high school were noted for young adults with disabilities who differed in their racial/ethnic background (ranging from 48 percent to 65 percent) or gender (65 percent for males and 52 percent for females); however, differences related to parents' household income were significant. Young adults with disabilities from households earning more than \$50,000 and those from households earning \$25,001 to \$50,000 were more likely than those from households earning \$25,000 or less to have been employed at the time of the interview (71 percent and 65 percent vs. 44 percent, p < .001 for comparison between household earnings of more than \$50,000 and less than \$25,000 and p < .01 for comparison between household earnings of \$25,001 to \$50,000 and less than \$25,000).

Table 22.	Paid employment outside the home of young adults with disabilities, by parents' household
	income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percen	t			
Percentage reported to have been:								
Employed at time of interview	44.4 (4.67)	65.2 (5.30)	70.7 (3.76)	64.5 (3.10)	48.0 (6.03)	53.6 (8.46)	64.9 (3.19)	52.1 (4.62)
Employed since high school	85.2 (3.32)	93.6 (2.71)	94.5 (1.87)	93.6 (1.58)	86.4 (4.14)	85.1 (6.00)	91.6 (1.85)	90.1 (2.74)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 4,720 to 4,760 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# **Job Characteristics**

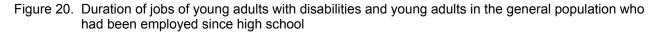
To gain a more complete understanding of the characteristics of young adults with disabilities' post-high school employment, analyses in this section focus on those who were employed at the time of the interview or had been employed after leaving high school.<sup>58</sup>

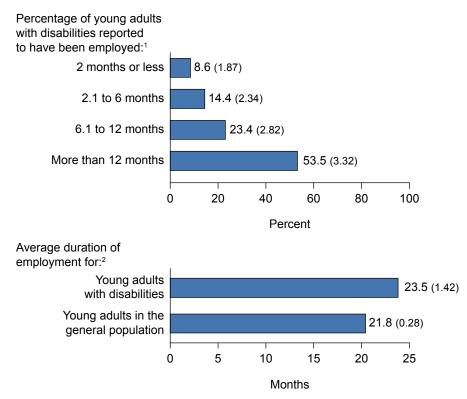
### Number and Duration of Jobs

On average, young adults with disabilities who had been employed had held about four jobs since leaving high school. The majority of young adults with disabilities (54 percent) had held their current or most recent job for 12 months or more. On average, their current or most recent job had lasted 24 months <sup>59</sup> (figure 20), which did not differ significantly from the average job duration of young adults in the general population (22 months).

<sup>&</sup>lt;sup>58</sup> For respondents who were employed at the time of the interview, questions were asked about the current job; for those who were not currently employed, questions were asked about the respondent's most recent job. For reporting purposes, employment items were combined to reflect either the young adult's current (at the time of the interview) or most recent job.

<sup>&</sup>lt;sup>59</sup> Respondents were asked, "How long have you (has YOUTH) had this job?"





<sup>1</sup> For young adults with disabilities who had held at least one job since high school.

<sup>2</sup> For current or most recent job for young adults with disabilities.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), round 9 youth questionnaire, 2005. Data are for 21to 25-year-olds.

#### **Disability Differences in Number and Duration of Jobs**

The average number of jobs young adults in different disability categories had held since high school (among those who had held at least one job) ranged from 2.2 to 4.6 jobs (table 23). Young adults with emotional disturbances, other health impairments, or learning disabilities had held more jobs on average (4.6, 4.5, and 4.2 jobs, respectively) than young adults with mental retardation, orthopedic impairments, or multiple disabilities (2.9, 2.8, and 2.2 jobs, p < .001 for all comparisons with young adults with multiple disabilities and comparisons between young adults with other health impairments and those with mental retardation or orthopedic impairments and p < .01 for all other comparisons). Young adults with other health impairments also had held more jobs (an average of 4.5 jobs) than young adults with hearing impairments (3.3 jobs, p < .01), and young adults with speech/language impairments had held more jobs than those with multiple disabilities on average (3.8 jobs vs. 2.2 jobs, p < .001). Average job duration ranged from 19 months to 30 months, with no significant differences by young adults in different disability categories.

	Learning disability	Speech/ language M impair- ment c	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
Average number of jobs held since high school <sup>1</sup>	4.2	3.8	2.9	4.6	3.3	4.1	2.8	4.5	3.1	3.5	2.2	3.9
	(0.31)	(0.27) (	(0.27)	(0.54)	(0.30)	(0.74)	(0.31)	(0.35)	(0.66)	(0.47)	(0.32)	(1.62)
Average duration of job (months) <sup>2</sup>	24.3	19.7 2	25.9	18.8	22.4	20.5	20.8	21.6	24.7	20.4	30.4	19.1
	(2.09)	(1.77) (2	2.37)	(2.08)	(2.59)	(2.86)	(2.86)	(2.29)	(3.08)	(4.06)	(4.70)	(3.74)

# Table 23. Number of jobs and duration of employment of young adults with disabilities, by disability category

<sup>1</sup> For young adults who had held at least one job since high school.

<sup>2</sup> For current or most recent job for young adults with disabilities.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,720 to 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Differences in Number and Duration of Jobs by Years Since Leaving High School

The number and duration of jobs did not differ significantly between young adults who had been out of high school for different lengths of time (table 24). The average number of jobs held, among those who had held at least one job since high school, ranged from about 3 jobs for young adults who had been out of high school less than 3 years to about 5 jobs for those who had been out of high school for 5 or more years. The duration of their current or most recent job ranged from 20 months for those out of high school for less than 3 years to almost 27 months for those out of high school for 5 or more years.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
Average number of jobs held since high school <sup>1</sup>	3.1	3.9	4.5
	(0.52)	(0.41)	(0.31)
Average duration of job (months) <sup>2</sup>	20.2	20.2	26.6
	(3.30)	(2.08)	(2.14)

#### Table 24. Number of jobs and duration of employment of young adults with disabilities, by years since leaving high school

<sup>1</sup> For young adults with disabilities who had held at least one job since high school.

<sup>&</sup>lt;sup>2</sup> For current or most recent job for young adults with disabilities. NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,720 to 2,740 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Differences in Number and Duration of Jobs by Highest Level of Educational Attainment

The average number and duration of jobs of young adults with disabilities who had achieved different levels of educational attainment did not differ significantly (table 25). Among those who had held a job since high school, the average number of months they had held their current or most recent job ranged from 19 months for those whose highest level of education was less than a high school degree to 25 months for those who had completed a postsecondary education program. The average number of jobs they had held ranged from about 3 jobs for young adults whose highest level of education was high school completion to about 6 jobs for those who had not completed high school.

Table 25. Number of jobs and duration of employment of young adults with disabilities, by highest level of educational attainment

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
Average number of jobs held since high school <sup>1</sup>	5.7	3.3	4.2	4.7
	(0.93)	(0.27)	(0.43)	(0.54)
Average duration of job (months) <sup>2</sup>	(0.93)	(0.27)	(0.43)	(0.34)
	18.5	24.1	22.3	25.1
	(4.15)	(2.21)	(2.80)	(2.85)

<sup>1</sup> For young adults who had held at least one job since high school.

<sup>2</sup> For current or most recent job for young adults with disabilities.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,720 to 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Demographic Differences in Number and Duration of Jobs**

Table 26 shows the number and duration of jobs held since leaving high school by young adults with disabilities by parents' household income and young adults' race/ethnicity and gender. No significant differences in the number of jobs held or the duration of the current or most recent job were noted. The number of jobs held ranged from 3.7 to 4.4. The length of time young adults had held their jobs ranged from 21 months to 25 months by household income categories, 17 months to 26 months by race/ethnicity, and 21 months to 24 months by gender.

Table 26.	Number of jobs and duration of employment of young adults with disabilities, by parents'
	household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000		African American	Hispanic	Male	Female
Average number of jobs held since high school <sup>1</sup>	4.1	3.9	4.1	4.1	3.7	4.4	4.3	3.7
	(0.36)	(0.49)	(0.35)	(0.29)	(0.31)	(0.78)	(0.31)	(0.27)
Average duration of job	20.8	25.3	24.1	24.0	25.7	17.3	24.8	21.0
(months) <sup>2</sup>	(2.79)	(2.92)	(1.95)	(1.66)	(3.97)	(3.57)	(1.78)	(2.30)

<sup>1</sup> For young adults who had held at least one job since high school.

<sup>2</sup> For current or most recent job for young adults with disabilities.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,720 to 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Types of Jobs

Young adults with disabilities held a variety of types of jobs<sup>60</sup> (figure 21). Thirteen percent worked in food preparation and serving-related occupations; 12 percent worked in sales and related occupations; 9 percent worked in office and administrative support occupations; and construction and extraction, personal care and service, and transportation and material moving occupational categories each included 8 percent of young adults with disabilities. Young adults with disabilities were significantly more likely to work in food preparation and serving-related occupations and sales and related occupations (13 percent and 12 percent, respectively) than in education, training, and library occupations (4 percent); computer, mathematical, architecture, engineering, and science occupations (3 percent); military-specific occupations (3 percent); or healthcare support occupations (3 percent, p < .001 for all comparisons). In addition, more young adults with disabilities reported working in food preparation and serving-related occupations than installation, maintenance, and repair occupations (13 percent vs. 6 percent, p < .01). Young adults with disabilities were also more likely to work in office and administrative support occupations (9 percent), construction and extraction occupations (8 percent), or personal care and service occupations (8 percent) than healthcare support occupations (3 percent). About 10 percent of young adults with disabilities held jobs in the "other" category, which includes a large number of job categories held by small numbers of young adults with disabilities.

<sup>&</sup>lt;sup>60</sup> Respondents were asked, "What is your (YOUTH's) job title? Briefly tell me about your (YOUTH's) main job duties at that job."

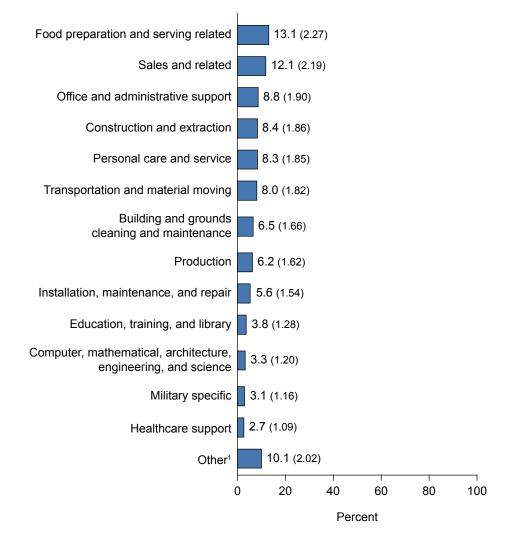


Figure 21. Type of employment of young adults with disabilities

<sup>1</sup>Job categories held by fewer than 2.7 percent of youth with disabilities were combined into the "other" category. A large number of job categories had small numbers of respondents and were collapsed into this category.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,660 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### **Disability Differences in Types of Jobs**

The likelihood of young adults with disabilities holding a particular type of job did not differ significantly across disability categories for most types of jobs investigated. However, differences did exist for young adults with disabilities employed in food preparation and serving-related occupations, production occupations, and occupations included in the "other" category (table 27).

	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	Autism		Multiple disabili- ties	Deaf- blind- ness
						Perce	nt					
Percentage whose current or most recent job was:												
Food preparation and serving related	10.8 (3.06)	10.5 (2.86)	25.1 (4.95)	18.2 (4.32)	16.3 (4.90)	14.7 (5.11)	11.1 (4.38)	13.0 (3.45)	12.8 (4.85)	6.5 (4.95)	9.5 (5.11)	0.0 (0.00)
Sales and related occupations	(3.00) 13.6 (3.37)	(2.80) 12.3 (3.07)	5.3	(4.32) 9.0 (3.20)	(4.90) 16.0 (4.86)	(3.11) 8.9 (4.11)	(4.38) 19.7 (5.55)	(3.43) 10.8 (3.18)	(4.83) 7.5 (3.82)	(4.93) 12.6 (6.66)	(3.11) 5.5 (3.97)	(0.00) 7.3 (5.76)
Office and administrative support	7.4 (2.58)	10.3 (2.84)	11.2 (3.60)	7.7 (2.98)	12.8 (4.43)	23.2 (6.09)	20.9 (5.67)	17.7 (3.91)	19.1 (5.70)	8.0 (5.45)	12.8 (5.82)	20.9 (9.00)
Construction and extraction	9.4 (2.87)	4.3 (1.89)	2.1 (1.64)	11.3 (3.54)	6.6 (3.29)	2.7 (2.34)	1.9 (1.90)	7.4 (2.68)	0.0 (0.00)	4.7 (4.25)	1.5 (2.12)	0.0 (0.00)
Personal care and service	9.6 (2.90)	8.2 (2.56)	2.8 (1.88)	7.9 (3.02)	4.9 (2.86)	6.5 (3.56)	7.3 (3.63)	4.8 (2.19)	2.4 (2.22)	1.4 (2.36)	6.4 (4.26)	9.7 (6.55)
Transportation and material moving	8.4 (2.73)	8.5 (2.60)	9.4 (3.33)	4.3 (2.27)	4.6 (2.78)	4.1 (2.86)	2.4 (2.13)	9.5 (3.01)	14.6 (5.08)	13.1 (6.73)	7.4 (4.56)	8.9 (5.31)
Building and grounds cleaning and maintenance	4.9 (2.12)	3.7 (1.76)	14.3 (3.99)	9.3 (3.25)	3.5 (2.43)	5.8 (3.37)	4.3 (2.83)	7.3 (2.67)	10.8 (4.50)	14.2 (7.01)	23.7 (7.40)	0.0 (0.00)
Production	4.3 (2.00)	4.7 (1.98)	19.0 (4.47)	7.1 (2.87)	6.1 (3.17)	6.2 (3.48)	7.8 (3.74)	3.4 (1.86)	11.5 (4.63)	5.4 (4.54)	23.8 (7.42)	25.8 (9.69)
Installation, maintenance, and repair	6.0 (2.34)	6.3 (2.27)	1.1 (1.19)	7.6 (2.97)	3.4 (2.40)	0.7 (1.20)	0.8 (1.24)	6.5 (2.53)	4.3 (2.94)	2.5 (3.14)	0.8 (1.55)	4.0 (4.34)
Education, training, and library	4.2 (1.97)	5.5 (2.13)	2.5 (1.78)	3.2 (1.97)	5.0 (2.89)	5.3 (3.23)	4.2 (2.80)	1.5 (1.25)	1.9 (1.98)	8.5 (5.60)	1.4 (2.05)	6.4 (5.42)
Computer, mathematical, architecture,												
engineering, and science	4.5 (2.04)	2.3 (1.40)	#	0.5 (0.79)	5.8 (3.10)	3.0 (2.46)	3.0 (2.38)	1.0 (1.02)	3.8 (2.77)	1.8 (2.67)	#	2.4 (3.39)
Military specific	3.5 (1.81)	1.3 (1.06)	0.0 (0.00)	4.1 (2.22)	0.0 (0.00)	0.0 (0.00)	5.1 (3.07)	3.5 (1.88)	4.5 (3.01)	13.4 (6.84)	0.3 (0.95)	‡
Healthcare support Other <sup>1</sup>	2.7 (1.60) 10.7 (3.04)	6.2 (2.25) 16.0 (3.42)	1.3 (1.29) 5.9 (2.69)	2.2 (1.64) 7.4 (2.93)	3.6 (2.47) 11.4 (4.21)	1.9 (1.97) 17.1 (5.43)	0.7 (1.16) 10.9 (4.35)	3.1 (1.78) 10.6 (3.16)	0.0 (0.00) 6.4 (3.55)	5.1 (4.42) 2.6 (3.20)	0.1 (0.55) 6.8 (4.38)	0.0 (0.00) 14.5 (7.80)

Table 27. Type of employment of young adults, by disability category

# Rounds to zero.

**‡** Fewer than three respondents in the cell.

<sup>1</sup>Job categories held by fewer than 2.7 percent of all youth with disabilities were combined into the "other" category. A large number of job categories had small numbers of respondents and were collapsed into this category.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,660 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

The percentage of young adults with different disabilities who were employed in food preparation and serving-related jobs ranged from none to 25 percent, with young adults with mental retardation being more likely to be employed in these types of occupations than those with traumatic brain injuries (7 percent) or deaf-blindness (zero, p < .01 for comparison with young adults with traumatic brain injuries and p < .001 for comparison with young adults with deaf-blindness). Young adults with traumatic brain injury were more likely to hold production jobs than those with other health impairments (24 percent vs. 3 percent, p < .01). Young adults with visual or speech/language impairments were more likely than those with traumatic brain injuries to have a job in the "other" category (17 percent and 16 percent vs. 3 percent, p < .01 for both comparisons).

### Differences in Types of Jobs by Years Since Leaving High School

The types of jobs held by young adults with disabilities did not differ significantly by length of time out of high school (table 28). For example, the percentage of young adults employed in food preparation and serving occupations ranged from 11 percent to 22 percent for young adults out of high school for 3 to 5 years and less than 3 years, respectively, not a significant difference.

# Differences in Types of Jobs by Highest Level of Educational Attainment

There were no significant differences in the types of jobs held by young adults with disabilities who differed in their highest level of educational attainment (table 29). For example, the percentage of young adults whose current or most recent job was in sales and related occupations ranged from 9 percent of those with a postsecondary diploma or certificate to 16 percent of those with some postsecondary education.

	Less than	3 up to	5 up to
-	3 years	5 years Percent	8 years
Percentage whose current or most recent job was:			
Food preparation and	21.8	10.6	12.8
serving related	(6.92)	(3.57)	(3.11)
Sales and related	13.9	11.4	12.2
occupations	(5.80)	(3.69)	(3.05)
Office and administrative	12.5	11.0	6.3
support	(5.54)	(3.63)	(2.26)
Construction and	8.3	6.1	10.1
extraction	(4.62)	(2.78)	(2.80)
Personal care and service	10.4	12.5	4.7
	(5.11)	(3.84)	(1.97)
Transportation and	4.1	9.3	7.9
material moving	(3.32)	(3.37)	(2.51)
Building and grounds	5.2	7.7	5.9
cleaning and maintenance	(3.72)	(3.10)	(2.19)
Production	12.4	4.6	6.0
	(5.52)	(2.43)	(2.21)
Installation, maintenance, and repair	3.1	4.2	7.3
	(2.90)	(2.33)	(2.42)
Education, training, and library	0.6	2.7	5.4
	(1.29)	(1.88)	(2.10)
Computer, mathematical, architecture, engineering,	0.5	2.5	4.6
and science	(1.18)	(1.81)	(1.95)
Military specific	0.7	2.9	3.9
	(1.40)	(1.95)	(1.80)
Healthcare support	1.9	2.7	2.9
	(2.29)	(1.88)	(1.56)
Other <sup>1</sup>	4.7 (3.55)	(1.66) 11.8 (3.75)	10.1 (2.80)

 Table 28.
 Type of employment of young adults with disabilities, by years since leaving high school

<sup>1</sup>Job categories held by fewer than 2.7 percent of all youth with disabilities were combined into the "other" category. A large number of job categories had small numbers of respondents and consequently were collapsed into this category.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,660 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage whose current or most recent job was:				
Food preparation and serving related	10.4	13.5	12.4	13.9
	(6.78)	(3.64)	4.09)	(4.80)
Sales and related occupations	13.6	10.5	15.7	9.4
	(7.61)	(3.27)	(4.52)	(4.05)
Office and administrative support	7.8	8.8	8.7	9.1
	(5.95)	(3.02)	(3.50)	(3.99)
Construction and extraction	10.9	11.4	9.7	2.3
	(6.92)	(3.39)	(3.67)	(2.08)
Personal care and service	4.5	5.9	15.9	3.8
	(4.60)	(2.51)	(4.54)	(2.66)
Transportation and material moving	13.7	10.3	7.6	4.0
	(7.64)	(3.24)	(3.29)	(2.72)
Building and grounds cleaning and maintenance	23.2	6.5	7.1	2.1
	(9.37)	(2.63)	(3.19)	(1.99)
Production	(0.07) 1.7 (2.87)	10.9 (3.32)	5.8 (2.90)	1.5 (1.69)
Installation, maintenance, and repair	7.6	7.5	2.2	6.7
	(5.88)	(2.81)	(1.82)	(3.47)
Education, training, and library	1.5	0.6	1.4	11.4
	(2.70)	(0.82)	(1.46)	(4.41)
Computer, mathematical, architecture,	#	0.1	3.0	8.7
engineering, and science		(0.34)	(2.12)	(3.91)
Military specific	0.0	4.0	0.7	5.5
	(0.00)	(2.09)	(1.03)	(3.17)
Healthcare support	0.6	2.0	0.8	6.2
	(1.71)	(1.49)	(1.11)	(3.35)
Other <sup>1</sup>	4.7	8.0	8.9	15.5
	(4.70)	(2.89)	(3.53)	(5.03)

# Table 29. Type of employment of young adults with disabilities, by highest level of educational attainment

# Rounds to zero.

<sup>1</sup>Job categories held by fewer than 2.7 percent of all youth with disabilities were combined into the "other" category. A large number of job categories had small numbers of respondents and consequently were collapsed into this category. NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,660 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Demographic Differences in Types of Jobs**

There were no significant differences among young adults with disabilities who differed in parents' household income or young adults' race/ethnicity regarding the types of jobs held (table 30); however, some gender differences were apparent. Personal care and services occupations were more likely to be held by young women with disabilities than young men (20 percent vs. 2 percent, p < .001). Young men with disabilities were more likely to be employed in installation, maintenance and repair occupations (8 percent) than young women (less than 1 percent p < .01).

	. ,	\$25,001 to	More than		African			
	less	\$50,000	\$50,000	White Percen	American	Hispanic	Male	Female
Percentage whose current or most recent job was:								
Food preparation and serving related	13.5	11.5	13.1	12.7	10.5	15.0	13.1	13.0
	(4.30)	(4.34)	(3.27)	(2.67)	(4.91)	(7.41)	(2.73)	(4.03)
Sales and related occupations	9.2	18.0	11.0	12.4	10.1	15.3	8.8	18.1
	(3.64)	(5.22)	(3.03)	(2.64)	(4.82)	(7.47)	(2.29)	(4.61)
Office and administrative	9.5	7.3	9.6	7.4	11.4	14.1	5.5	14.8
support	(3.69)	(3.54)	(2.85)	(2.10)	(5.09)	(7.22)	(1.84)	(4.25)
Construction and extraction	11.4 (4.00)	10.3 (4.13)	4.2 (1.94)	8.8 (2.27)	5.6 (3.68)	11.1 (6.52)	12.9 (2.71)	‡
Personal care and service	6.1	14.3	6.5	6.6	16.1	6.6	1.9	20.1
	(3.01)	(4.76)	(2.39)	(1.99)	(5.88)	(5.15)	(1.10)	(4.80)
Transportation and material moving	9.4	8.9	6.9	9.1	5.3	5.8	10.7	2.9
	(3.67)	(3.87)	(2.45)	(2.31)	(3.59)	(4.85)	(2.50)	(2.01)
Building and grounds cleaning and maintenance Production	9.0 (3.60) 7.5 (3.31)	3.8 (2.60) 5.1 (2.99)	6.8 (2.44) 6.3 (2.35)	4.1 (1.59) 7.6 (2.13)	11.5 (5.11) 4.5 (3.32)	8.8 (5.88) 1.6 (2.60)	8.3 (2.23) 7.0 (2.06)	3.2 (2.11) 4.8 (2.56)
Installation, maintenance, and repair	6.7 (3.15)	5.1 (2.99)	5.5 (2.21)	7.6 (2.13)	1.6 (2.01)	1.4 (2.44)	8.4	0.6 (0.92)
Education, training, and library	2.5	0.9	6.8	2.8	9.6	2.0	0.7	9.5
	(1.96)	(1.28)	(2.44)	(1.32)	(4.71)	(2.91)	(0.67)	(3.51)
Computer, mathematical, architecture, engineering, and science	0.8	5.4	4.0	3.2	2.7	5.6	4.8	0.5
	(1.12)	(3.07)	(1.90)	(1.41)	(2.59)	(4.77)	(1.73)	(0.84)
Military specific	3.6 (2.34)	1.6 (1.71)	3.9 (1.87)	2.9 (1.35)	2.3 (2.40)	4.0 (4.07)	4.8 (1.73)	‡
Healthcare support	2.3	1.9	1.4	2.8	2.3	2.9	0.5	6.7
	(1.88)	(1.86)	(1.14)	(1.32)	(2.40)	(3.48)	(0.57)	(2.99)
Other <sup>1</sup>	8.6	5.9	14.1	12.0	6.6	5.7	12.5	5.6
	(3.53)	(3.20)	(3.37)	(2.61)	(3.97)	(4.81)	(2.67)	(2.75)

Table 30.	Type of employment of young adults with disabilities, by parents' household income and
	young adults' race/ethnicity and gender

‡ Fewer than three respondents in the cell.

<sup>1</sup>Job categories held by fewer than 2.7 percent of all youth with disabilities were combined into the "other" category. A large number of job categories had small numbers of respondents and consequently were collapsed into this category.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,660 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

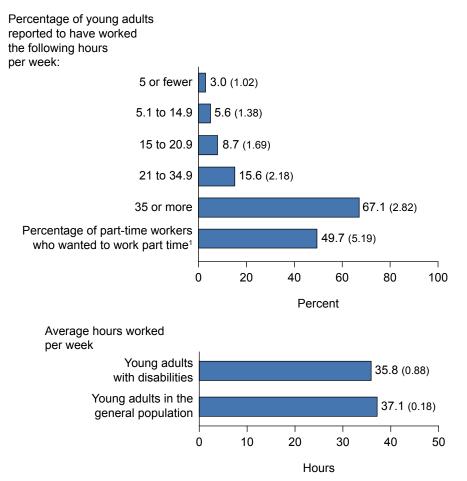
# Hours Worked per Week

About two-thirds of young adults with disabilities (67 percent) worked full time (35 or more hours per week) at the job they held at the time of the interview or at their most recent job<sup>61</sup> (figure 22).

<sup>&</sup>lt;sup>61</sup> Respondents were asked, "About how many hours a week do you (YOUTH) usually work at this job?"

The percentage of young adults with disabilities who worked part time ranged from 16 percent who worked 21 to 34 hours per week to 3 percent who worked 5 or fewer hours per week. On average, young adults with disabilities worked 36 hours per week, which did not differ significantly from similarly aged young adults in the general population, who worked an average of 37 hours per week. Half of young adults with disabilities who worked part time reportedly wanted to do so, whereas the other half who worked part time reported that they would prefer to work full time.<sup>62</sup>

Figure 22. Hours worked by young adults with disabilities and young adults in the general population



<sup>1</sup>For young adults with disabilities working part time (less than 35 hours per week) at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,470 young adults with disabilities for hours worked per week and 1,300 young adults with disabilities for wanting to work part time.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), round 9 youth questionnaire, 2005. Data are for 21-to 25-year-olds.

<sup>&</sup>lt;sup>62</sup> Respondents who worked less than 35 hours per week were asked, "Are you working part time because you want to, or would you rather work full time?"

### **Disability Differences in Hours Worked**

Young adults in several disability categories, including learning disabilities, emotional disturbances, speech/language or other health impairments, or traumatic brain injuries worked more hours per week on average (34 to 38 hours per week) than did those with autism, deafblindness, multiple disabilities, orthopedic impairments, or mental retardation (24 to 28 hours per week, all comparisons p < .001 except p < .01 comparing young adults with speech/language impairments and those with deaf-blindness; table 31). Young adults with learning disabilities also worked more hours (38 hours on average) than young adults with hearing impairments or visual impairments (31 hours, p < .001 compared with young adults with hearing impairments and p < .01 compared with visual impairments). In addition, young adults with hearing impairments (24 hours) or multiple disabilities (25 hours, p < .01 for both comparisons), and those with traumatic brain injury worked more hours (35 hours) than those with autism, deaf-blindness, or multiple disabilities (24 to 25 hours, p < .01 for all comparisons).

Table 31.	Hours worked by young adults, by disability category
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	Learning disability			Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
Average hours worked per week Percentage of part-	37.7 (1.23)	34.2 (1.12)	27.6 (1.34)	35.6 (1.58)	31.3 (1.47)	31.5 (2.06)	26.8 (1.76)	35.0 (1.26)	24.1 (2.07)	35.5 (3.18)	24.8 (2.02)	24.7 (2.77)
time workers who wanted to work part time <sup>1</sup>	48.7 (8.92)	46.3 (7.64)	49.2 (7.24)	49.7 (10.32)	64.1 (7.81)	53.1 (9.52)	52.5 (8.13)	56.5 (8.07)	47.7 (8.27)	29.3 (13.03)	57.6 (8.67)	ŧ

‡ Responses for items with fewer than 30 respondents are not reported.

<sup>1</sup>For young adults with disabilities working part time (less than 35 hours per week) at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,470 young adults with disabilities for hours worked per week and 1,300 young adults with disabilities for wanting to work part time.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Differences in Hours Worked by Years Since Leaving High School

There were no significant differences in hours worked by young adults with disabilities based on the number of years since leaving high school. The average number of hours worked per week ranged from 31 hours for those out of high school for less than 3 years to 38 hours for those out of high school 3 to 5 years (table 32). In addition, the percentage of young adults with disabilities working part time who wanted to work part time did not significantly differ by the number of years since leaving high school.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
Average hours worked per week	30.7	37.6	35.6
	(2.19)	(1.68)	(1.08)
Percentage of part-time workers who wanted to work part time <sup>1</sup>	46.7 (11.29)	48.1 (9.19)	51.9 (7.52)

 Table 32.
 Hours worked by young adults with disabilities, by years since leaving high school

<sup>1</sup>For young adults with disabilities working part time (less than 35 hours per week) at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,470 young adults with disabilities for hours worked per week and 1,300 young adults with disabilities for wanting to work part time. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Differences in Hours Worked by Highest Level of Educational Attainment

The number of hours worked by young adults with disabilities did not significantly differ by their highest level of educational attainment (table 33). The average number of hours worked per week ranged from 34 hours for those with less than a high school education to 37 hours for those who completed a postsecondary education program. In addition, the percentage of young adults with disabilities working part time who wanted to work part time did not significantly differ by the highest level of educational attainment.

Table 33.	Hours worked by young adults with disabilitie	s, by highest level of educational attainment
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	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
Average hours worked per week	33.6	36.8	34.2	37.0
	(2.74)	(1.44)	(1.48)	(1.95)
Percentage of part-time workers who wanted to work part time <sup>1</sup>	60.4	42.6	49.0	57.2
	(19.55)	(6.47)	(10.20)	(10.64)

<sup>1</sup>For young adults with disabilities working part time (less than 35 hours per week) at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,470 young adults with disabilities for hours worked per week and 1,300 young adults with disabilities for wanting to work part time.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Demographic Differences in Hours Worked**

Although no significant differences related to parents' household income or young adults' race/ethnicity were noted for the hours worked by young adults with disabilities, there were significant gender differences (table 34). Young men with disabilities worked on average 38 hours per week, whereas young women worked 32 hours per week (p < .001).

Table 34. Hours worked by young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
Average hours worked per week	34.3	37.8	35.6	37.0	32.0	34.3	38.1	31.5
	(1.70)	(1.81)	(1.22)	(1.01)	(1.84)	(3.38)	(1.04)	(1.51)
Percentage of part-time workers who wanted to work part time <sup>1</sup>	44.7	39.4	58.8	49.9	48.2	51.6	47.4	52.3
	(8.61)	(11.59)	(7.34)	(6.31)	(11.51)	(15.57)	(6.82)	(7.90)

<sup>1</sup>For young adults with disabilities working part time (less than 35 hours per week) at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,470 young adults with disabilities for hours worked per week and 1,300 young adults with disabilities for wanting to work part time.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Wages and Benefits

Employed young adults with disabilities who had been out of high school for up to 8 years earned an average of \$10.40 per hour<sup>63</sup> at the time of the interview (figure 23), a significant difference from the average hourly wage of young adults in the general population (\$11.40, p < .01). Although 13 percent of young adults with disabilities were paid less than the federal minimum wage (\$6.55 in 2008), the majority (72 percent) earned more than \$8.00 per hour, and 50 percent earned more than \$9.00 per hour.

<sup>&</sup>lt;sup>63</sup> Respondents were asked, "About how much are you (is YOUTH) paid at this job? Is that per hour?" Weekly, yearly, and monthly wages were converted to hourly wages by dividing the wage by the number of hours worked per week, and then multiplying by 4.3 for monthly-reported wages or by 52 for yearly-reported wages.

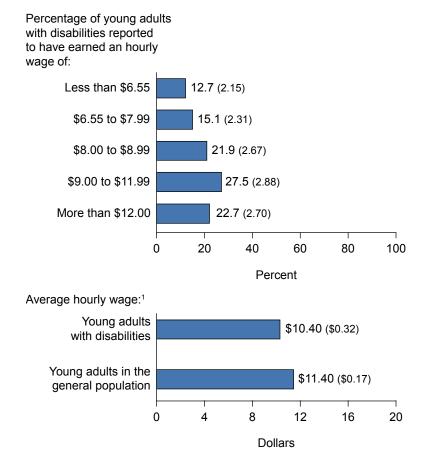


Figure 23. Wages of young adults with disabilities and young adults in the general population

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for young adults with disabilities out of high school up to 8 years for young adult's current or most recent job. NLTS2 percentages are weighted population estimates based on a sample of approximately 3,050 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009. U.S. Census Bureau, Current Population Survey (CPS), May 2009. Data are for 21- to 25-year-olds.

The average hourly wage of young adults with disabilities who were employed full time was significantly higher than that of those working part time (\$11.10 vs. \$9.00, p < .01; figure 24). Young adults with disabilities who worked full time were significantly more likely than young adults with disabilities who worked part time to earn wages ranging from \$10.01 to \$15.00 per hour (28 percent vs. 13 percent, p < .01). In addition, those who worked part time were significantly more likely than full-time workers to earn less than \$6.55 per hour (21 percent vs. 8 percent, p < .01).

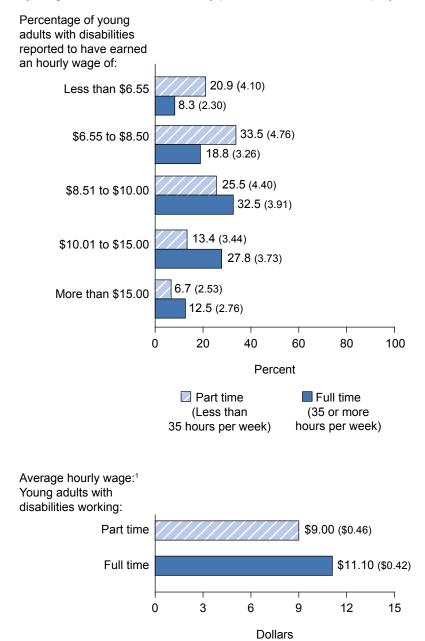


Figure 24. Wages of young adults with disabilities, by part-time and full-time employment

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 3,030 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Paid vacation or sick leave, health insurance, and a retirement plan are benefits that may be provided by employers. Figure 25 presents the percentage of young adults with disabilities who received each of these types of benefits at their current or most recent job<sup>64</sup> and compares them with peers in the general population; no significant differences are noted.<sup>65</sup> For example, 55 percent of young adults with disabilities and 57 percent of young adults in the general population received paid vacation or sick leave. Forty-eight percent of young adults with disabilities received health insurance from their employer, and 56 percent of young adults in the general population did so. The same percentage of young adults in the two groups received retirement benefits (39 percent).

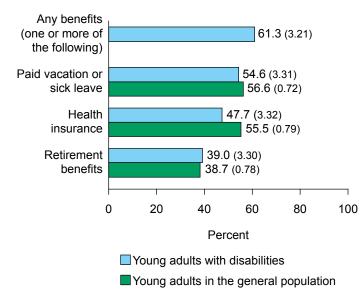


Figure 25. Benefits received by young adults with disabilities and young adults in the general population

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,670 young adults with disabilities. General population comparison data were not available for whether young adults received any benefits.

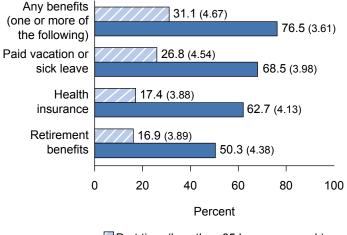
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009. U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), round 9 youth questionnaire, 2005. Data are for 21-to 25-year-olds.

<sup>&</sup>lt;sup>64</sup> Respondents were asked about each benefit type separately, "As part of this job, do you (does YOUTH) get paid vacation or sick leave; health insurance; retirement benefits, like a 401K?"

<sup>&</sup>lt;sup>65</sup> Note that benefits information for NLTS2 and the general population were collected at two time points.

Young adults with disabilities who worked full time were significantly more likely than those who worked part time to receive any employment benefits (77 percent vs. 31 percent, p < .001; figure 26). More specifically, young adults with disabilities who worked full time were significantly more likely than part-time workers to receive paid vacation or sick leave (69 percent vs. 27 percent, p < .001), health insurance (63 percent vs. 17 percent, p < .001), or retirement benefits (50 percent vs. 17 percent, p < .001).

Figure 26. Benefits received by young adults with disabilities, by part-time and full-time employment



Part time (less than 35 hours per week)
 Full time (35 or more hours per week)

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,670 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Disability Differences in Wages and Benefits**

The hourly wage rate for young adults with disabilities ranged from \$7.90 to \$11.10 across disability categories (table 35). Young adults with learning disabilities; speech/language, hearing, visual, or other health impairments; or emotional disturbances (\$10.50 to \$11.10) earned more per hour than their peers with mental retardation (\$7.90, p < .001 for all comparisons except p < .01 comparing young adults in the other health impairment vs. mental retardation categories). The only significant difference in the percentage of young adults receiving any benefits was between young adults with learning disabilities and those with orthopedic impairments (66 percent vs. 42 percent, p < .01).

### Differences in Wages and Benefits by Years Since Leaving High School

Young adults with disabilities who had been out of high school for different amounts of time had significantly different wages and benefits (table 36). Those who had been out of high school for more than 5 years were more likely to receive paid vacation or sick leave (57 percent vs. 32 percent, p < .01) and health insurance (51 percent vs. 27 percent, p < .01) than those who had been out of high school for less than 3 years.

Table 35.	Wages and benefits o	f voung adults, k	by disability category

		Speech/ language	Mental	Emo- tional		Visual	Ortho- pedic	Other health		Trau- matic	Multiple	Deaf-
	Learning disability	impair- ment	retar-	distur- bance	impair- ment	impair- ment	impair- ment	impair- ment	Autism	brain injury	disabili- ties	
Average hourly wage <sup>1</sup>	\$10.60 (0.42)	\$10.80 (0.47)	\$7.90 (0.49)	\$11.00 (0.57)	\$10.50 (0.58)	\$11.10 (0.89)	\$9.10 (1.25)	\$10.70 (0.78)	\$9.20 (0.81)	\$9.30 (0.73)	\$8.80 (0.78)	\$9.20 (1.64)
Percentage reported having received:												
Any benefits (one or more of the following)	65.5 (4.56)	60.2 (4.44)	48.6 (5.61)	53.3 (5.50)	60.1 (6.28)	60.4 (6.89)	42.4 (6.74)	53.9 (4.99)	52.8 (7.08)	53.9 (9.61)	47.0 (8.51)	43.8 (10.67)
Paid vacation or sick leave	59.3 (4.72)	50.9 (4.59)	42.6 (5.64)	44.9 (5.58)	49.6 (6.46)	52.1 (7.14)	38.9 (6.84)	45.3 (5.02)	47.4 (7.20)	46.8 (9.88)	42.4 (8.52)	43.8 (10.67)
Health insurance	52.0 (4.81)	48.4 (4.56)	30.1 (5.24)	40.7 (5.47)	40.4 (6.31)	43.6 (7.05)	33.6 (6.55)	43.9 (5.00)	30.3 (6.64)	41.1 (9.74)	34.0 (8.26)	29.2 (9.78)
Retirement benefits	42.1 (4.85)	43.5 (4.59)	27.5 (5.19)	29.4 (5.18)	41.5 (6.43)	34.7 (6.75)	32.0 (6.59)	36.9 (4.89)	26.6 (6.02)	38.8 (10.01)	35.0 (8.22)	31.5 (9.99)

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,670 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
Average hourly wage <sup>1</sup>	\$9.40	\$9.60	\$11.10
	(0.82)	(0.50)	(0.47)
Percentage reported having received:			
Any benefits	42.9	64.2	63.2
(one or more of the following)	(8.15)	(5.49)	(4.37)
Paid vacation or sick leave	31.8	58.9	56.5
	(7.76)	(5.69)	(4.54)
Health insurance	27.4	49.1	51.2
	(7.41)	(5.78)	(4.56)
Retirement benefits	29.1	40.0	40.5
	(7.65)	(5.74)	(4.60)

Table 36. Wages and benefits of young adults with disabilities, by years since leaving high school

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,670 to 3,050 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Differences in Wages and Benefits by Highest Level of Educational Attainment

There were significant differences in the wages and benefits received by young adults with disabilities based on their highest level of education attained (table 37). Average hourly wages were significantly higher for young adults with disabilities who had completed postsecondary education than for those who had completed high school or who had some postsecondary education (\$12.50 vs. \$9.50 per hour, \$12.50 per hour v. \$9.80 per hour, p < .01 for both comparisons). There were no significant differences in the percentage of young adults with disabilities of different educational levels in receiving any benefits, paid vacation or sick leave, retirement benefits, or health insurance.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
Average hourly wage <sup>1</sup>	\$9.80	\$9.50	\$9.80	\$12.50
	(1.05)	(0.48)	(0.49)	(0.80)
Percentage reported having received:				
Any benefits	46.4	65.1	56.1	66.7
(one or more of the following)	(10.54)	(4.98)	(6.06)	(6.47)
Paid vacation or sick leave	34.1	58.0	49.3	62.0
	(10.23)	(5.23)	(6.18)	(6.67)
Health insurance	40.9	46.9	43.5	55.8
	(10.52)	(5.27)	(6.11)	(6.83)
Retirement benefits	34.9	37.0	35.9	46.5
	(10.15)	(5.18)	(6.10)	(6.93)

Table 37. Wages and benefits of young adults with disabilities, by highest level of educational attainment

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,670 to 3,050 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Demographic Differences in Wages and Benefits**

No significant differences were noted in wages or benefits between young adults with disabilities who differed in their demographic characteristics (table 38). The lack of a significant difference in average hourly wage by gender also was apparent for general population peers, i.e., \$12.10 vs. \$10.70 for males and females in the general population<sup>66</sup> and \$10.90 per hour and \$9.40 per hour for male and female young adults with disabilities, respectively.

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
Average hourly wage <sup>1</sup>	\$9.00	\$9.90	\$11.60	\$10.70	\$10.10	\$9.50	\$10.90	\$9.40
	(0.48)	(0.61)	(0.51)	(0.40)	(0.72)	(0.72)	(0.42)	(0.48)
Percentage reported having received:								
Any benefits	54.6	62.6	64.8	61.8	55.8	61.1	64.2	56.0
(one or more of the following)	(6.00)	(6.50)	(4.55)	(3.83)	(7.78)	(9.92)	(3.81)	(5.78)
Paid vacation or sick leave	50.7	57.0	56.5	55.7	51.1	52.3	55.5	53.1
	(6.06)	(6.73)	(4.79)	(3.95)	(7.89)	(10.27)	(4.00)	(5.86)
Health insurance	39.8	51.6	51.1	49.3	36.8	48.9	52.0	39.9
	(5.93)	(6.79)	(4.80)	(3.96)	(7.65)	(10.29)	(4.00)	(5.76)
Retirement benefits	30.9	40.1	42.6	38.6	34.4	42.5	43.4	30.9
	(5.71)	(6.75)	(4.83)	(3.92)	(7.69)	(10.48)	(4.07)	(5.48)

Table 38.	Wages and benefits of young adults with disabilities, by parents' household income and
	young adults' race/ethnicity and gender

<sup>1</sup> Rounded to nearest \$0.10.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,670 to 3,050 young adults with disabilities.

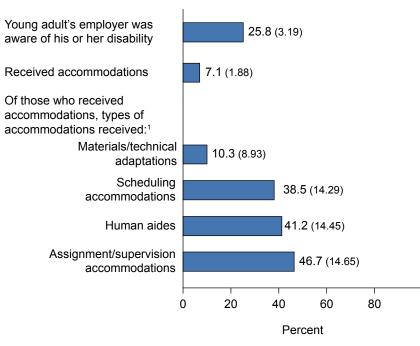
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

<sup>&</sup>lt;sup>66</sup> Wages by gender for the general population were extracted from U.S. Census Bureau, Current Population Survey (CPS), May 2009. Data are for 21- to 25-year-olds.

### Job Accommodations

About 26 percent of young adults with disabilities reported that their employers were aware of their disabilities<sup>67</sup> (figure 27), and 7 percent reported that they received employment accommodations.<sup>68</sup> Job accommodations<sup>69</sup> included a range of individual adaptations involving materials or technology used on the job (e.g., large print or Braille, TTY or TTD, or modified work stations, 10 percent), scheduling accommodations (e.g., flexible work times, more or longer breaks, or more paid time off for medical needs; 39 percent), human aides (e.g., interpreters or job coaches, 41 percent), and adaptations to assignments and/or supervision (e.g., modifications to training or instructions or different expectations for productivity, 47 percent).

Figure 27. Employers' awareness of young adults' disabilities and receipt of employment accommodations



<sup>1</sup> Percentages do not sum to 100 because young adult with disabilities may have received more than one type of accommodation. NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 2,420 young adults with disabilities for employers' awareness of young adult's disability, 2,400 young adults with disabilities for receiving accommodations, and 420 young adults with disabilities for type of accommodation received. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

<sup>&</sup>lt;sup>67</sup> Respondents were asked, "Do you think your (YOUTH's) employer is aware that you have (YOUTH has) a disability or special need?"

<sup>&</sup>lt;sup>68</sup> Respondents were asked, "Have you (Has YOUTH) received any accommodations or other help from your (his/her) employer because you have (he/she has) any kind of learning problem, disability, or other special need?"

<sup>&</sup>lt;sup>69</sup> Respondents were asked, "What accommodations or other help have you (has YOUTH) received?"

#### **Disability Differences in Job Accommodations**

There were variations in the percentage of young adults in different disability categories who reported that their employers were aware of their disability (table 39). Young adults with mental retardation; visual, hearing, or orthopedic impairments; autism; multiple disabilities; or deafblindness (60 percent to 75 percent) were significantly more likely to report that their employers were aware of their disability than young adults with learning disabilities, speech/language or other health impairments, emotional disturbances, or traumatic brain injuries (19 percent to 30 percent, p < .001 for all comparisons except p < .01 for hearing, impairments vs. traumatic brain injury).

	Learning disability	Speech/ language impair- ment	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
						Perce	ent					
Percentage of employed young adults reported to have had:												
Their employers aware of their disability	18.6 (4.13)	22.5 (4.20)	59.8 (6.05)	24.3 (5.36)	63.9 (6.54)	74.9 (6.37)	67.9 (6.62)	29.9 (4.99)	73.1 (6.77)	30.0 (9.36)	72.1 (7.92)	75.2 (9.71)
Received accommodations	4.6 (2.22)	3.4 (1.84)	22.3 (5.24)	3.5 (2.30)	15.4 (4.99)	35.6 (7.10)	27.4 (6.39)	7.9 (2.93)	37.2 (7.53)	5.4 (4.62)	34.5 (8.46)	50.4 (11.24)

 Table 39.
 Employers' awareness of young adults' disabilities and receipt of employment accommodations, by disability category

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,390 to 2,400 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Receipt of employment accommodations also significantly differed by disability category. Young adults with visual or orthopedic impairments, autism, multiple disabilities, or deafblindness (27 percent to 50 percent) were significantly more likely to receive accommodations than young adults with learning disabilities, speech/language or other health impairments, emotional disturbances, or traumatic brain injuries (3 percent to 8 percent, p < .001 for all comparisons except p < .01 for multiple disabilities vs. other health impairments and traumatic brain injuries). Young adults with deaf-blindness also were more likely to report receiving employment accommodations than those with hearing impairments (52 percent vs. 15 percent, p < .01). In addition, young adults with mental retardation (22 percent) were more likely to receive accommodations at work than young adults with learning disabilities, speech/language impairments, or emotional disturbances (22 percent vs. 3 percent to 5 percent, p < .001 for all comparisons except p < .01 for comparison with learning disabilities).

### Differences in Job Accommodations by Years Since Leaving High School

There were no significant differences in employers' awareness of young adults' disabilities based on years since leaving high school; percentages ranged from 23 percent to 34 percent (table 40). Similarly, differences in the receipt of accommodations, ranging from 5 percent to 15 percent, were not significant.

Table 40. Employers' awareness of young adults' disabilities and receipt of employment accommodations, by years since leaving high school	h
--	---

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
Percentage of employed young adults reported to have had:			
Their employers aware of their disability	33.6	27.2	23.0
	(8.69)	(5.60)	(4.22)
Received accommodations	15.2	4.7	7.0
	(6.68)	(2.69)	(2.56)

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,390 to 2,420 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Differences in Job Accommodations by Highest Level of Educational Attainment

Employers' awareness of young adults having disabilities and their receipt of accommodations varied by level of educational attainment (table 41). Young adults with disabilities who had not completed high school were more likely to have employers who were aware of their disabilities than those who had completed a postsecondary education program (36 percent vs. 13 percent, p < .01). Young adults with disabilities whose highest education level was high school completion reported a significantly higher rate of being accommodated at work than their peers who had not completed high school or those who had completed a postsecondary education program (14 percent vs. 1 percent and 2 percent, respectively, p < .01 for both comparisons).

Table 41.	Employers' awareness of young adults' disabilities and receipt of employment
	accommodations, by highest level of educational attainment

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage of employed young adults reported to have had:				
Their employers aware of their disability	22.5 (9.98)	36.2 (5.57)	26.0 (5.91)	13.3 (5.10)
Received accommodations	0.6 (1.85)	14.4 (4.10)	4.7 (2.88)	2.0 (2.11)

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,390 to 2,420 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Demographic Differences in Job Accommodations**

No significant differences in employers' awareness of young adults' disabilities or their receipt of accommodations were found based on their demographic characteristics (table 42). Rates of employer awareness of disability ranged from 16 percent to 33 percent across categories, whereas rates of accommodation receipt ranged from 3 percent to 11 percent.

Table 42. Employers' awareness of young adults' disabilities and receipt of employment accommodations, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percen	t			
Percentage of employed young adults reported to have had:								
Their employers aware of their disability	33.0 (6.43)	20.7 (6.07)	23.4 (4.39)	27.1 (3.80)	29.8 (8.21)	16.2 (8.87)	28.9 (3.92)	19.7 (5.33)
Received accommodations	9.2 (3.98)	5.2 (3.34)	5.5 (2.37)	7.5 (2.26)	3.4 (3.27)	10.6 (7.43)	7.9 (2.35)	5.4 (3.04)

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,390 to 2,420 young adults.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Perceptions of Working Conditions

The majority of young adults with disabilities had positive perceptions about their jobs.<sup>70</sup> In response to being asked whether they "usually like [their] job…very much, like it fairly well, not like it much, or not like it at all," 43 percent responded that they liked their job very much (figure 28), and an additional 45 percent responded that they liked their job fairly well, significantly more than the 8 percent who responded that they did not like their job much and the 4 percent who responded that they did not like their job at all (p < .001 for all comparisons). Most young adults (90 percent) also reported being "treated pretty well by others at [their] job."<sup>71</sup>

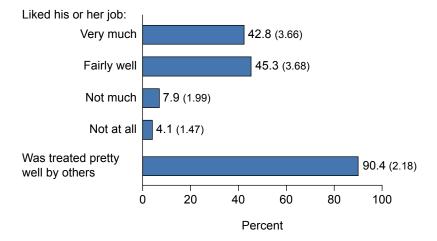


Figure 28. Job satisfaction of young adults with disabilities

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,170 to 2,190 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

Seventy-three percent of young adults with disabilities reported that their education and training was being "put to good use," and 68 percent reported that they had "lots of chances to work [their] way up" (figure 29).<sup>72</sup> Sixty-two percent stated they were "pretty well paid" for their work. Indeed, for young adults who had been employed 6 months or more, 70 percent had "been promoted or taken on more responsibility" since they started the job, and 75 percent were "paid more than when [they] started the job."<sup>73</sup>

<sup>&</sup>lt;sup>70</sup> Young adults were asked, "Do you usually like your job?"

<sup>&</sup>lt;sup>71</sup> Young adults were asked, "Do you think you are treated pretty well by others at your job?"

<sup>&</sup>lt;sup>72</sup> Young adults were asked, "Do you think your education and training is put to good use?" and "Do you think in your job, you have lots of chances to work your way up?"

<sup>&</sup>lt;sup>73</sup> Young adults were asked, "Have you been promoted or taken on more responsibility since you started the job?" "Do you think you are pretty well paid for your work?" and "Are you paid more than when you started the job?"

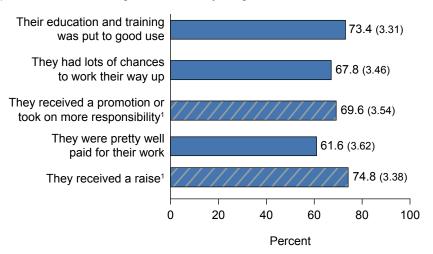


Figure 29. Perceptions of their working conditions of young adults with disabilities

<sup>1</sup> For young adults with disabilities employed 6 months or more at the job they had at the time of the interview or their most recent job. NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 2,160 young adults with disabilities for education and training put to good use, 2,160 for chances for advancement, 2,170 for how well paid, and 2,060 for received promotion and/or raise.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

#### **Disability Differences in Perceptions of Working Conditions**

A majority of young adults in all disability categories reported liking their jobs at least fairly well (84 percent to 94 percent, table 43) and feeling well treated by others at work (85 percent to 98 percent).

A majority of young adults in each disability category also reported positive perceptions of their working conditions. Between 63 percent and 86 percent reported that their education and training was being put to good use, and from 55 percent to 77 percent indicated they had opportunities for advancement. A majority of young adults in each disability category who had been employed for 6 months or more also reported taking on increased job responsibilities or receiving a promotion (51 percent to 74 percent) or a raise in pay (63 percent to 77 percent). Young adults with learning disabilities were more likely than those with speech/language or hearing impairments to have been promoted or taken on more job responsibilities (74 percent vs. 56 percent and 51 percent, respectively, p < .01 for both comparisons). Young adults with visual or orthopedic impairments were more likely to report being paid pretty well at work than young adults with learning disabilities (80 percent and 78 percent, respectively, vs. 57 percent, p < .01 for both comparisons).

		Speech/		Emo-			Ortho-	Other		Trau-		
	1	language			Hearing	Visual	pedic	health			Multiple	Deaf-
	Learning disability	impair- ment	retar- dation	distur- bance	impair- ment	impair- ment	impair- ment	impair- ment	Autism	brain injury	disabili- ties	blind- ness
	disability	ment	dation	barioe	ment	Perce		ment	71010111	nijary	100	11000
Percentage who reported:												
Liking his/her job:												
Very much	40.7 (5.11)	41.8 (4.88)	53.8 (6.69)	44.2 (6.12)	39.4 (7.42)	57.5 (7.59)	52.3 (6.84)	49.0 (5.50)	42.4 (9.47)	43.0 (10.02)	68.1 (10.84)	‡
Fairly well	48.2 (5.20)	42.3 (4.89)	32.1 (6.27)	40.4 (6.05)	44.4 (7.55)	29.6 (7.01)	36.8 (6.61)	41.8 (5.42)	47.5 (9.57)	46.6 (10.10)	26.0 (10.20)	‡
Not much	7.2	14.0	5.8	10.6	14.0	10.2	9.1	7.1	9.3	9.3	1.1	‡
	(2.69)	(3.43)	(3.14)	(3.79)	(5.27)	(4.64)	(3.94)	(2.82)	(5.56)	(5.88)	(2.43)	
Not at all	3.9	1.9	8.4	4.8	2.1	2.7	1.8	2.1	0.8	1.1	4.8	‡
	(2.01)	(1.35)	(3.72)	(2.63)	(2.18)	(2.49)	(1.82)	(1.58)	(1.71)	(2.11)	(4.97)	
Being treated												
pretty well by others at work	90.9 (3.00)	90.8 (2.86)	89.3 (4.17)	87.5 (4.07)	84.8 (5.48)	98.4 (1.93)	91.5 (3.83)	90.8 (3.18)	88.4 (6.17)	87.7 (6.65)	95.7 (4.72)	‡
Their education												
and training was put to good use	72.2 (4.72)	74.6 (4.34)	86.0 (4.68)	73.5 (5.49)	73.3 (6.74)	80.2 (6.12)	79.7 (5.53)	69.0 (5.11)	72.6 (8.60)	62.6 (9.79)	79.3 (9.57)	‡
Having lots of												
chances to work their way up	68.7 (4.83)	62.7 (4.81)	76.8 (5.68)	59.8 (6.01)	54.6 (7.63)	70.3 (7.06)	68.8 (6.41)	67.7 (5.17)	58.8 (9.82)	63.0 (9.80)	68.8 (10.84)	‡
Receiving a promotion or took												
on more responsibility <sup>1</sup>	74.2 (4.72)	56.1 (5.02)	57.5 (6.53)	60.0 (6.55)	51.0 (7.45)	56.1 (8.11)	55.1 (8.21)	69.4 (5.47)	53.4 (8.59)	70.5 (11.19)	50.7 (9.97)	‡
Being paid pretty well	57.4 (5.17)	63.6 (4.78)	74.2 (5.91)	70.4 (5.59)	65.8 (7.20)	80.3 (6.10)	78.3 (5.72)	73.2 (4.88)	68.6 (8.98)	64.4 (9.72)	75.9 (9.95)	‡
Receiving a raise <sup>1</sup>	77.2 (4.57)	68.7 (4.71)	68.1 (6.28)	68.7 6.26)	64.7 (7.22)	69.8 (7.52)	63.8 (7.97)	75.3 (5.11)	68.5 (8.14)	63.3 (11.83)	70.1 (9.22)	‡

Table 43. Job satisfaction and perceptions of working conditions of young adults, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

<sup>1</sup> For young adults with disabilities employed 6 months or more at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,060 to 2,160 young adults.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

### Differences in Perceptions of Working Conditions by Highest Level of Educational Attainment

There were no differences in the job satisfaction or perceptions of working conditions of young adults with disabilities who differed in their highest level of educational attainment (table 44) with one exception. Young adults whose highest education level was high school completion were more likely than those whose highest education level was some postsecondary education to report that their education was put to good use (84 percent vs. 63 percent, p < .01).

			Some	Post-
	High	High	post-	secondary
	school non-	school	secondary	school
	completer	completer	school	completion
		Perce	nt	
Percentage who reported:				
Liking his/her job:				
Very much	38.0	39.0	44.9	44.7
	(12.68)	(6.02)	(6.55)	(7.33)
Fairly well	51.9	45.5	41.8	48.5
	(13.06)	(6.14)	(6.50)	(7.37)
Not much	8.9	8.1	9.7	5.4
	(7.44)	(3.37)	(3.90)	(3.33)
Not at all	1.3	7.3	3.5	1.4
	(2.96)	(3.21)	(2.42)	(1.73)
Being treated pretty well by others at work	86.4	89.7	86.1	96.7
	(9.07)	(3.77)	(4.56)	(2.63)
Their education and training was put to good use	65.1	84.2	63.2	74.3
5 1 5	(12.84)	(4.54)	(6.46)	(6.45)
Having lots of chances to work their way up	57.6	68.9	65.7	72.2
5	(12.96)	(5.73)	(6.27)	(6.59)
Receiving a promotion or taking on more	60.3	68.7	69.4	73.7
responsibility <sup>1</sup>	(13.30)	(5.70)	(6.68)	(6.70)
Being paid pretty well	56.8	60.7	60.8	63.6
	(12.94)	(6.04)	(6.47)	(7.17)
Receiving a raise <sup>1</sup>	74.1	76.0	67.9	80.0
-	(12.24)	(5.36)	(6.80)	(6.08)

### Table 44. Job satisfaction and perceptions of working conditions of young adults with disabilities, by highest level of educational attainment

<sup>1</sup> For young adults with disabilities employed 6 months or more at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,060 to 2,160 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

## Differences in Perceptions of Working Conditions by Years Since Leaving High School

Young adults with disabilities who differed in the length of time they had been out of high school were similar in their reports of job satisfaction and perceptions of their working conditions (table 45). For example, from 38 percent to 46 percent reported liking their job very much, and from 89 percent to 91 percent reported being treated pretty well by others at work. From 69 percent to 76 percent said their education was put to good use at work, and about two-thirds of young adults, regardless of years out of high school, reported having opportunities to advance at work. From 58 percent to 69 percent of young adults with disabilities reported being paid pretty well. Among those who had been in their job at least 6 months, from 63 percent to 78 percent indicated receiving a promotion or an increase in responsibility, and from 69 percent to 78 percent indicated they had received a raise.

	Less than 3 years	3 up to 5 years	5 up to 8 years
	e youre	Percent	o youro
Percentage who reported:			
Liking his/her job:			
Very much	44.0 (9.11)	37.7 (6.26)	46.4 (5.06)
Fairly well	34.2 (8.70)	53.0 (6.45)	42.0 (5.01)
Not much	13.9	6.7	7.3
	(6.35)	(3.23)	(2.64)
Not at all	8.0	2.5	4.3
	(4.98)	(2.02)	(2.06)
Being treated pretty well	88.7	90.2	91.0
by others at work	(5.76)	(3.86)	(2.91)
Their education and			
training was put to good use	68.5 (8.59)	76.0 (5.59)	72.5 (4.59)
Having lots of chances to work their way up	67.3 (8.61)	66.8 (6.12)	68.6 (4.71)
Receiving a promotion or			
took on more responsibility <sup>1</sup>	62.6 (9.07)	67.3 (6.48)	72.5 (4.63)
Being paid pretty well	69.0	63.5	58.4
	(8.42)	(6.28)	(5.03)
Receiving a raise <sup>1</sup>	69.3 (8.79)	78.0 (5.78)	73.6 (4.63)

Table 45.	Job satisfaction and perceptions of working
	conditions of young adults with disabilities, by
	years since leaving high school

<sup>1</sup> For young adults with disabilities employed 6 months or more at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,060 to 2,160 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

### **Demographic Differences in Perceptions of Working Conditions**

Young adults with disabilities had similar views of their jobs, regardless of their parents' household income, or their race/ethnicity or gender (table 46). For example, from 35 percent to 51 percent reported liking their job very much, and from 51 percent to 72 percent reported being paid pretty well.

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
	1000	φ00,000	<i>\</i> 00,000	Percen		riiopariio	Male	remaie
Percentage who reported:								
Liking his/her job:								
Very much	41.4	38.4	45.1	42.7	35.4	50.6	43.5	41.8
	(6.60)	(7.47)	(5.31)	(4.38)	(8.38)	(11.35)	(4.54)	(6.16)
Fairly well	41.6	55.6	42.2	46.3	49.8	37.3	43.7	47.8
	(6.60)	(7.63)	(5.27)	(4.41)	(8.76)	(10.98)	(4.54)	(6.24)
Not much	10.4	3.6	9.3	7.5	11.9	5.3	8.5	6.8
	(4.09)	(2.86)	(3.10)	(2.33)	(5.67)	(5.09)	(2.55)	(3.14)
Not at all	6.6	2.5	3.3	3.6	3.0	6.8	4.4	3.5
	(3.33)	(2.40)	(1.91)	(1.65)	(2.99)	(5.72)	(1.88)	(2.29)
Being treated pretty well by	85.6	91.5	92.8	93.6	81.0	88.6	91.5	88.7
others at work	(4.73)	(4.30)	(2.77)	(2.17)	(6.93)	(7.15)	(2.55)	(3.97)
Their education and training	71.5	76.1	71.7	73.9	66.1	81.6	73.9	72.5
was put to good use	(6.14)	(6.67)	(4.84)	(3.94)	(8.35)	(8.87)	(4.06)	(5.67)
Having lots of chances to	69.0	67.0	67.1	64.9	69.0	82.9	71.1	62.3
work their way up	(6.22)	(7.24)	(5.02)	(4.23)	(8.11)	(8.59)	(4.15)	(6.08)
Receiving a promotion or took on more responsibility <sup>1</sup>	60.1	72.6	72.1	73.1	60.8	62.1	74.6	60.4
	(7.24)	(6.98)	(4.86)	(4.08)	(8.89)	(11.63)	(4.05)	(6.64)
Being paid pretty well	54.1	51.3	71.8	64.1	53.4	64.3	62.6	59.9
	(6.68)	(7.68)	(4.86)	(4.26)	(8.81)	(11.00)	(4.45)	(6.17)
Receiving a raise <sup>1</sup>	67.5	72.4	79.5	74.5	75.3	79.0	76.8	71.0
	(6.96)	(7.08)	(4.44)	(4.06)	(7.97)	(9.72)	(3.98)	(6.20)

Table 46. Job satisfaction and perceptions of working conditions of young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

<sup>1</sup> For young adults employed 6 months or more at current or most recent job.

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples ranging from approximately 2,060 to 2,160 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

### Job Leaving and Job Search Activities

Despite the positive feelings many young adults with disabilities had about their jobs, 53 percent of those who had been employed and left a job reported that they had quit<sup>74</sup> (figure 30). Twenty-one percent said they left because they had a temporary job that ended, 14 percent had been laid off, and 11 percent had been fired. They were more likely to have quit than to have left their job for any of the other reasons (53 percent vs. 11 percent to 21 percent, p < .001 for all comparisons).

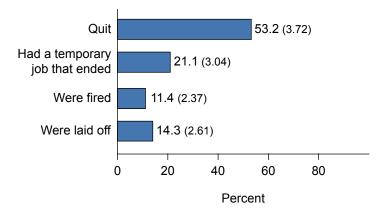


Figure 30. Reasons young adults with disabilities had left their most recent job

NOTE: Standard errors are in parentheses. Job characteristics are reported for the most recent job left by young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,090 young adults with disabilities.

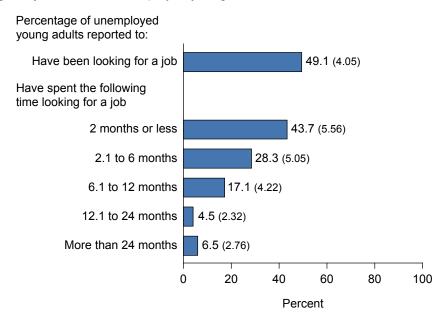
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

At the time of the interview, 40 percent of young adults with disabilities were not working, although 49 percent of these young adults with disabilities were actively looking for a paid job<sup>75</sup> (figure 31). The average length of the ongoing job search of unemployed young adults with disabilities was 7.6 months.<sup>76</sup> Forty-four percent of young adults with disabilities who were looking for work had been doing so for 2 months or less, 28 percent had been looking for work for between 2 and 6 months, and 38 percent had been looking for work longer than 6 months.

<sup>&</sup>lt;sup>74</sup> Respondents were asked, "When you (YOUTH) left that job did you (he/she) quit, were you (was he/she) fired, were you (was he/she) laid off, or was it a temporary job that ended?"

<sup>&</sup>lt;sup>75</sup> Respondents were asked, "Are you (is YOUTH) looking for a paid job now?"

<sup>&</sup>lt;sup>76</sup> Respondents were asked, "About how long have you (has YOUTH) been looking for work?"



#### Figure 31. Length of job search of unemployed young adults with disabilities

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on samples of approximately 2,200 young adults with disabilities for whether unemployed young adults were looking for work and 860 young adults with disabilities for length of job search for unemployed young adults. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Among young adults with disabilities who were employed, 55 percent reported finding work on their own; the other 45 percent reported receiving help from a variety of sources.<sup>77</sup> Eighteen percent of employed young adults reported having help finding their job from a family member, and 17 percent had help from friends or acquaintances (figure 32). Eight percent received help from an employment agency, and 4 percent had help from a teacher or other school staff member. A successful job search was more likely to be attributed to the young adults' own efforts than to any other source of help (54 percent vs. 4 percent to 18 percent, p < .001 for all comparisons).

<sup>&</sup>lt;sup>77</sup> Respondents were asked, "Did you (YOUTH) find this job yourself, or did you have help – like from a temporary agency or someone you know?" "Who helped you? Was it someone in an employment agency or other program, a teacher or someone at school, a family member, a friend or someone else you know?"

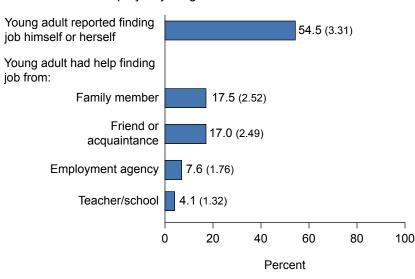


Figure 32. Job search activities of employed young adults with disabilities

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Disability Differences in Job Leaving and Job Search Activities

There were significant differences across disability categories in reported reasons for leaving a previously held job (table 47). Young adults with traumatic brain injuries; hearing, speech/language, or other health impairments; learning disabilities; multiple disabilities; or emotional disturbances were more likely to have quit their previous job (46 percent to 68 percent) than young adults with autism (23 percent, p < .001 for comparisons with traumatic brain injuries, hearing impairments, and learning disabilities and p < .01 for all other comparisons). In addition, young adults with autism were more likely to have a temporary job that ended than young adults with learning disabilities, mental retardation, emotional disturbances, or traumatic brain injuries (45 percent vs. 15 percent to 21 percent, p < .01).

	Learning disability	impair-	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
						Perce	ent					
Percentage reported to have:												
Quit	56.0 (5.26)	48.0 (5.02)	45.3 (6.85)	46.3 (5.90)	64.3 (7.19)	48.1 (8.09)	45.3 (8.21)	46.6 (5.57)	22.5 (6.79)	68.4 (10.33)	51.4 (9.03)	‡
Had a temporary job that ended	21.0 (4.32)	28.5 (4.53)	15.0 (4.91)	18.7 (4.62)	22.9 (6.31)	28.8 (7.34)	37.2 (7.97)	25.3 (4.86)	45.4 (8.10)	15.8 (8.10)	22.7 (7.57)	‡
Been fired	10.4 (3.23)	11.3 (3.18)	18.5 (5.34)	14.2 (4.13)	3.7 (2.83)	12.5 (5.36)	9.7 (4.88)	12.1 (3.64)	12.3 (5.34)	9.1 (6.39)	10.4 (5.52)	‡
Been laid off	12.7 (3.53)	12.2 (3.29)	21.1 (5.61)	20.7 (4.80)	9.2 (4.34)	10.6 (4.99)	7.8 (4.42)	15.9 (4.09)	19.8 (6.48)	6.7 (5.56)	15.4 (6.52)	‡

Table 47. Reasons young adults with disabilities left previous or most recent job, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,100 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

There also were significant differences in the percentages of young adults in different disability categories who were not working and were looking for a paid job at the time of the interview (table 48). Young adults with other health impairments were more likely to be looking for a paid job at the time of the interview than those with orthopedic impairments, mental retardation, autism, or multiple disabilities (67 percent vs. 29 percent to 36 percent, p < .001 for all comparisons). Young adults with emotional disturbances also were more likely to be looking for a paid job than young adults with orthopedic impairments, mental retardation, autism, or multiple disabilities (61 percent vs. 29 percent to 36 percent, p < .01 for those with orthopedic impairments or mental retardation and p < .001 for other comparisons). In addition, young adults with hearing impairments reported looking for a paid job at the time of the interview more often than young adults with multiple disabilities, autism, or mental retardation (60 percent vs. 29 percent to 35 percent, p < .01), as did young adults with speech/language impairments compared with those with mental retardation, orthopedic impairments, autism, or multiple disabilities (60 percent vs. 23 percent to 36 percent, p < .001 for all comparisons except p < .01 compared with those with multiple disabilities).

In contrast, there were no significant differences across disability categories in the average number of months unemployed young adults with disabilities had spent looking for a paid job before finding their current or most recent job. The average months of job search ranged from approximately 5 months for young adults with hearing impairments to 16 months for those with mental retardation.

	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	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
Percentage of unemployed young adults with disabilities reported:												
Had been looking for a job	50.7 (7.62)	58.7 (6.32)	34.6 (5.24)	61.0 (6.91)	59.6 (7.33)	43.1 (7.50)	35.7 (5.76)	66.5 (7.11)	31.7 (5.06)	46.1 (10.54)	29.3 (6.03)	39.1 (8.80)
Average months spent looking for work	5.6 (2.12)	6.7 (1.55)	16.1 (4.52)	8.1 (1.79)	5.3 (1.36)	6.0 (2.11)	9.9 (2.47)	6.2 (2.10)	12.3 (3.92)	10.5 (4.13)	9.1 (2.55)	‡

Table 48. Length of job search of unemployed young adults, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on samples of approximately 2,200 young adults with disabilities for whether young adult is looking for work and 860 young adults with disabilities for length of job search.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Among young adults with disabilities who had successfully found employment, there were significant differences in job search activities across several disability categories (table 49). Young adults with learning disabilities, speech/language impairments, emotional disturbances, or other health impairments (56 to 58 percent) were more likely to have found their current or most recent job on their own than young adults with mental retardation (30 percent), autism (24 percent), or multiple disabilities (24 percent, p < .001 for all comparisons). In addition, young adults with visual impairments were more likely to have found their current or most recent job on their own than young adults with multiple disabilities or autism (51 percent vs. 24 percent for both categories, p < .01). Young adults with hearing impairments also were more likely to have found their current vs. 24 percent vs.

Young adults with disabilities received help from a variety of sources that also significantly differed across the disability categories. Young adults with traumatic brain injuries, emotional disturbances, speech/language impairments, or mental retardation were more likely to have had a friend or someone else help them find their current job (20 percent to 30 percent) than those with multiple disabilities (5 percent; p < .01 for all comparisons). However, young adults with multiple disabilities were more likely to have had a teacher or someone at school help find their current or most recent job than those with hearing, visual, speech/language, orthopedic, or other health impairments; traumatic brain injuries; learning disabilities; or emotional disturbances (29 percent vs. 2 percent to 6 percent, p < .01 for all comparisons except p < .001 compared with young adults with emotional disturbances or other health impairments). Those with multiple disabilities also were more likely to use an employment agency than young adults with speech/language or other health impairments, traumatic brain injuries, emotional disturbances, or learning disabilities (32 percent vs. 6 percent to 9 percent, p < .01 for all comparisons). Similarly, young adults with autism were more likely to have had a teacher or someone at school help find their current or most recent job than those with emotional disturbances, speech/language or other health impairments, or learning disabilities (19 percent vs. 2 percent and 3 percent, p < .01 for all comparisons) or to have used an employment agency than young adults with learning disabilities, speech/language

impairments, or emotional disturbances (26 percent vs. 6 percent for all three categories, p < .01). Young adults with orthopedic impairments also were more likely to receive help from an employment agency than young adults with speech/language impairments (21 percent vs. 6 percent, p < .01).

	Learning disability	Speech/ language impair- ment	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment Perce	Ortho- pedic impair- ment	Other health impair- ment	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
Percentage reported to have:												
Found their job himself or herself Had help finding job from:	57.9 (4.78)	57.3 (4.50)	30.4 (5.18)	57.3 (5.47)	49.1 (6.54)	51.7 (7.04)	40.9 (6.75)	56.3 (4.98)	23.6 (6.20)	51.2 (9.62)	23.5 (7.49)	31.4 (10.43)
Family member	18.2 (3.74)	15.0 (3.25)	21.4 (4.62)	12.7 (3.68)	16.1 (4.81)	13.7 (4.85)	17.1 (5.17)	17.4 (3.81)	15.2 (5.24)	7.7 (5.13)	16.0 (6.48)	19.8 (8.96)
Friend or acquaintance	15.3 (3.49)	19.7 (3.62)	20.2 (4.52)	23.4 (4.68)	18.2 (5.05)	17.9 (5.40)	18.4 (5.32)	17.3 (3.80)	17.5 (5.54)	30.1 (8.83)	4.6 (3.70)	29.8 (10.28)
Employment agency Teacher/school	5.8 (2.26) 3.2 (1.70)	5.7 (2.11) 2.7 (1.48)	18.1 (4.34) 12.8 (3.76)	5.5 (2.52) 1.6 (1.39)	12.3 (4.30) 6.4 (3.20)	14.1 (4.91) 5.2 (3.13)	21.0 (5.59) 3.2 (2.42)	9.0 (2.87) 1.9 (1.37)	25.5 (6.36) 19.1 (5.74)	7.1 (4.94) 4.6 (4.03)	32.3 (8.26) 28.9 (8.01)	9.1 (6.47) 9.9 (6.71)

Table 49. Job search activities of employed young adults with disabilities, by disability category

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Differences in Job Leaving and Job Search Activities by Years Since Leaving High School

There were no significant differences in the reason why young adults left their previous jobs based on years since leaving high school (table 50). For example, forty-seven percent of young adults out of high school less than 3 years reported to have quit their previous or most recent job, and 59 percent of young adults out of high school 5 to 8 years reported to have quit their previous or most recent job.

Unemployed young adults with disabilities did not vary significantly in their looking for work or in the length of their job search, based on the number of years since leaving high school (table 51). The average length of job searching was approximately 8 months for young adults with disabilities out of high school less than 3 years, 6 months for those out of high school 3 up to 5 years, and 9 months for young adults out of high school 5 up to 8 years.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
Percentage reported to have:			
Quit	47.4	46.3	58.9
	(9.71)	(6.60)	(4.95)
Had temporary job that ended	24.4	23.5	18.9
	(8.35)	(5.61)	(3.94)
Been fired	15.7	14.8	8.3
	(7.07)	(4.70)	(2.77)
Been laid off	12.5	15.4	13.9
	(6.43)	(4.78)	(3.48)

# Table 50. Reasons young adults with disabilities left previous or most recent job, by years since leaving high school

NOTE: Standard errors are in parentheses. Job characteristics are reported for the most recent job left by young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,090 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Table 51. Length of job search of unemployed young adults with disabilities, by years since leaving high school

	Less than	3 up to	5 up to
	3 years	5 years	8 years
Percentage of unemployed young adults with disabilities' reported:			
Had been looking for a job	51.0	48.7	48.8
	(7.38)	(7.04)	(6.11)
Average months spent looking for work	8.1	5.8	8.6
	(3.82)	(1.46)	(2.38)

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on samples of approximately 2,200 young adults with disabilities for whether young adult is looking for work and 860 young adults with disabilities for length of job search.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009. Differences in how employed young adults found their jobs also were not apparent for young adults with disabilities based on years since leaving high school (table 52). Forty percent of employed young adults with disabilities out of high school less than 3 years reported to have found their job themselves. Employed young adults with disabilities out of high school 5 to 8 years reported to have found their job themselves at a rate of 53 percent.

	Less than	3 up to	5 up to				
	3 years	5 years	8 years				
		Percent					
Percentage reported to have:							
Found their job himself or herself	40.7	60.7	53.1				
·	(8.13)	(5.64)	(4.55)				
Had help finding job from:							
Family member	30.6	18.8	13.6				
	(7.63)	(4.51)	(3.13)				
Friend or acquaintance	18.7	10.8	21.1				
·	(6.45)	(3.59)	(3.72)				
Employment agency	5.5	7.9	8.0				
	(3.77)	(3.12)	(2.48)				
Teacher/school	5.6	2.6	5.1				
	(3.77)	(1.84)	(2.01)				

### Table 52.Job search activities of employed young adults with<br/>disabilities, by years since leaving high school

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

# Differences in Job Leaving and Job Search Activities by Highest Level of Educational Attainment

There were no significant differences in the reason why young adults left their previous jobs based on highest level of educational attainment (table 53). The percentage of young adults with disabilities who did not complete high school reported to have quit their job was 39 percent. Fifty-seven percent of young adults with disabilities with postsecondary school completion reported to have had quit their previous job.

Unemployed young adults with disabilities did not vary significantly in whether they were looking for work at the time of the interview or the length of their job search, by their highest level of educational attainment (table 54). The average amount of time spent looking for a job by a high school noncompleter as well as a young adult with postsecondary school completion was about 5 months.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage who reported to have:				
Quit	39.2	58.3	47.2	56.6
	(11.54)	(6.10)	(6.73)	(7.40)
Had a temporary job that ended	14.3	13.1	24.6	28.2
	(8.28)	(4.17)	(5.81)	(6.71)
Been fired	28.1	12.2	12.6	5.6
	(10.63)	(4.05)	(4.48)	(3.43)
Been laid off	18.4	16.4	15.7	9.6
	(9.16)	(4.58)	(4.91)	(4.40)

Table 53.	Reasons young adults with disabilities left previous or most recent job, by highest level
	of educational attainment

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,090 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Table 54. Length of job search of unemployed young adults with disabilities, by highest level of educational attainment

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
Percentage of young adults with disabilities reported:				
Had been looking for a job	37.1	48.1	53.0	55.9
	(9.71)	(5.88)	(8.07)	(10.19)
Average months spent looking for work	4.9	9.4	6.9	5.0
	(1.83)	(2.47)	(2.82)	(1.66)

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on samples of approximately 2,200 young adults with disabilities for whether young adult is looking for work and 860 young adults with disabilities for length of job search.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Differences in how young adults found their current or most recent job also were not apparent for young adults with disabilities based on years since leaving high school (table 55). For example, the percentage of young adults with disabilities reported to have found their job themselves ranged from 42 percent for high school noncompleters to 67 percent of postsecondary school completers.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage reported to have:				
Found their job himself or herself	41.9	43.4	60.5	66.7
	(10.91)	(5.22)	(6.00)	(6.48)
Had help finding job from:				
Family member	25.9	21.1	16.6	10.9
	(9.69)	(4.30)	(4.57)	(4.29)
Friend or acquaintance	23.8	24.3	11.0	12.1
	(9.42)	(4.51)	(3.84)	(4.49)
Employment agency	9.2	9.3	9.3	3.3
	(6.39)	(3.06)	(3.56)	(2.46)
Teacher/school	0.3	3.7	2.8	7.1
	(1.21)	(1.99)	(2.02)	(3.53)

### Table 55. Job search activities of employed young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Demographic Differences in Job Leaving and Job Search Activities

No significant differences in the reason why young adults left their previous jobs were noted for young adults with disabilities who differed in gender or race/ethnicity (table 56); however, one household income difference was apparent. Young adults with disabilities from parents' households with incomes of \$25,000 or less were more likely to be fired from their most recent job than those from household with incomes of more than \$50,000 (20 percent vs. 4 percent, p < .001).

	\$25,000 or	\$25,001 to	More than		African						
	less	\$50,000	\$50,000	White	American	Hispanic	Male	Female			
		Percent									
Percentage reported to have:											
Quit	47.9	52.8	54.5	52.3	56.9	49.0	49.7	59.2			
	(6.85)	(7.64)	(5.33)	(4.45)	(8.52)	(11.51)	(4.52)	(6.42)			
Had a temporary job that	17.6	17.9	26.9	20.3	21.0	27.3	24.3	15.6			
ended	(5.22)	(5.87)	(4.75)	(3.58)	(7.01)	(10.26)	(3.87)	(4.74)			
Been fired	19.5	14.4	4.4	12.3	9.8	9.9	8.8	16.0			
	(5.43)	(5.37)	(2.20)	(2.93)	(5.12)	(6.87)	(2.56)	(4.79)			
Been laid off	14.9	14.9	14.2	15.1	12.3	13.8	17.1	9.3			
	(4.88)	(5.45)	(3.74)	(3.19)	(5.65)	(7.94)	(3.40)	(3.80)			

Table 56.	Reasons young adults with disabilities left previous or most recent job, by parents' household
	income and young adults' race/ethnicity and gender

NOTE: Standard errors are in parentheses. Job characteristics are reported for the most recent job left by young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,090 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

In addition, unemployed young adults with disabilities did not vary significantly in whether they were looking for work at the time of the interview or the length of their job search, by household income, race/ethnicity, or gender (table 57). From 42 percent to 55 percent of unemployed young adults with disabilities across demographic categories indicated they had been looking for a job, spending from 5 to 12 months on average doing so.

Table 57. Length of job search of unemployed young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
Percentage of unemployed young adults with disabilities reported:								
Had been looking for a job	45.6	52.7	53.3	45.2	55.6	53.6	54.9	41.9
	(6.29)	(8.38)	(6.63)	(5.24)	(7.70)	(11.37)	(5.27)	(6.19)
Average months spent looking for work	11.8	4.7	5.4	8.2	7.9	4.5	8.4	6.3
	(2.85)	(1.66)	(1.60)	(2.01)	(3.09)	(1.43)	(1.83)	(2.23)

NOTE: Standard errors are in parentheses. Job search characteristics are reported for young adults with disabilities out of high school up to 8 years who were looking for paid employment at the time of the interview. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,200 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Nor were differences apparent related to household income, race/ethnicity, or gender in how young adults with disabilities found their current or most recent job (table 58). For example, from 48 percent to 64 percent of young adults with disabilities across demographic categories reported finding their job themselves, and from 11 percent to 20 percent reported having help from a family member.

	\$25,000 or	\$25,001 to	More than		African			
	less	\$50,000	\$50,000	White	American	Hispanic	Male	Female
				Percen	ıt			
Percentage reported to have:								
Found their job himself or	52.6	58.3	54.9	52.3	63.9	48.2	50.8	61.4
herself	(6.07)	(6.66)	(4.80)	(3.96)	(7.55)	(10.40)	(4.01)	(5.71)
Had help finding job from:								
Family member	16.6	13.0	18.4	20.3	10.7	13.4	16.5	19.4
	(4.52)	(4.54)	(3.73)	(3.19)	(4.86)	(7.09)	(2.98)	(4.64)
Friend or acquaintance	18.2	21.3	14.0	18.5	12.5	16.5	19.0	13.2
	(4.69)	(5.53)	(3.34)	(3.08)	(5.20)	(7.72)	(3.15)	(3.97)
Employment agency	10.9	5.7	7.0	6.8	7.3	14.2	9.9	3.5
	(3.79)	(3.13)	(2.43)	(1.99)	(4.09)	(7.26)	(2.40)	(2.16)
Teacher/school	2.0	2.9	6.8	3.2	5.7	8.1	4.8	2.9
	(1.70)	(2.27)	(2.43)	(1.39)	(3.64)	(5.68)	(1.72)	(1.97)

 Table 58.
 Job search activities of employed young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

NOTE: Standard errors are in parentheses. Job characteristics are reported for the current or most recent job of young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 2,740 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

This chapter has presented a national picture of the employment experiences of young adults with disabilities. Chapter 2 examined postsecondary school experiences, and chapter 4 will focus on the overlap between these two outcomes, describing engagement in school, work, or preparation for work.

#### 4. Productive Engagement in the Community

According to the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004), one of the primary purposes of special education is to prepare students "for further education, employment, and independent living" [20 U.S.C. § 1400(33)(c)(1)]. At the time they were in high school, the majority of young adults with disabilities included in this report had employment and postsecondary education as primary transition goals (Newman et al. 2009; Wagner et al. 2007). Research and policies related to transition from high school to early adulthood have primarily focused on employment and postsecondary school attendance (e.g., Johnson et al. 2002; Savage 2005; Wehman and Evans Getzel 2005); improving high school transition planning, services, and strategies (Carter et al. 2009; Guy et al. 2009); and promoting the career awareness of young adults with disabilities (Carter et al. 2010b). Other transition-related topics have included research into outcomes for young adults who differ in their primary disability category (Carter et al. 2010a; Neece, Kraemer, and Blacher 2009), gender (Powers et al. 2008), and cultural or linguistic background (Fabian 2007; Povenmire et al. 2010).

Chapters 2 and 3 of this report describe separately involvement in two important post-high school outcomes—employment and postsecondary education. However, some young adults engage in one of these activities but not in the other. For example, some might spend their early post-high school years attending postsecondary school but are not employed. To provide a broader understanding of the extent to which young adults are productively engaged in their communities, this chapter focuses on a broader measure of successful transition—the combination and the overlap of these two types of engagement—employment and postsecondary education.

Addressing this broader concept of engagement, rather than considering individual outcomes separately, was encouraged by the advisory panel during the design of the initial NLTS; as a result, NLTS was one of the first studies to present a broader perspective on how young adults with disabilities could be productively engaged in their communities. The advisory panel for the current study continued to endorse that view of engagement. The importance of this broader view of what constitutes a successful transition is now incorporated in the current federal policy that requires states to collect data on "Indicator 14"—i.e., "the percent of youth who had IEPs, are no longer in secondary school, and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school" [20 U.S.C. 1416(a)(3)(B)]. The NLTS2 operationalization of this concept, as endorsed by the NLTS2 design advisory panel, is somewhat broader than Indicator 14 in that NLTS2 includes all forms of employment, not just competitive employment, and includes job training as a productive form of preparation for work in addition to enrollment in postsecondary education.

In this chapter, young adults with disabilities are considered productively engaged in the community if they had participated in one or more of the following activities since leaving secondary school:

- Employment—worked for pay, other than work around the house, including supported or sheltered employment.<sup>78</sup>
- Education—attended a vocational, business, or technical school; a 2-year, junior, or community college; or a 4-year college or university.
- Job training—received training in specific job skills (e.g., car repair, web page design, food service) from someone other than an employer or a family member, such as an agency or a government training program.

### Engagement in Employment and Postsecondary Education or Training for Employment at the Time of the Interview and Since Leaving High School

At the time of the Wave 5 interview, 65 percent of young adults with disabilities reported having been productively engaged in postsecondary education, training for employment, and/or employment (figure 33). Forty-eight percent of young adults with disabilities reported having paid employment as their only mode of engagement at the time of the interview. Nine percent of posthigh school young adults with disabilities reported being involved in both employment and education concurrently at the time of the interview—juggling the demands of going to school while working. Postsecondary education was the only mode of engagement at the time of the interview for 5 percent of young adults with disabilities. Two percent were involved in employment and job training concurrently, and 1 percent of young adults with disabilities reported "other" modes of engagement. Other modes included involvement in job training only, involvement in postsecondary education and job training, and involvement in employment, job training and postsecondary education.

A larger proportion of young adults with disabilities (94 percent) reported having been productively engaged in postsecondary education or training for employment and employment at some time since leaving high school (figure 34). Thirty percent of young adults with disabilities reported having paid employment as their only mode of engagement. Others had been employed since leaving high school and had concurrently been involved in other activities, including

- postsecondary education (42 percent);
- postsecondary education and job training (14 percent); or
- job training (5 percent).

<sup>&</sup>lt;sup>78</sup> The focus of this chapter is on involvement in any type of paid employment (other than work around the house), mirroring much of what is presented in this report's employment chapter. Current federal policy requires states to measure transition from high school to post-high school years in terms of competitive employment. The State Performance Plan (SPP) and Annual Performance Report (APR) to the Office of Special Education Programs (OSEP) for the reporting of Indicator 14 require the "Percent of youth who had IEPs, are no longer in secondary school and who have been competitively employed, enrolled in some type of postsecondary school, or both, within one year of leaving high school" [20 U.S.C. 1416(a)(3)(B)]. In NLTS2, *when restricting the definition of employment to competitive employment*, 88 percent of young adults with disabilities reported having been competitively employed and/or enrolled in postsecondary school within up to 8 years after leaving high school and 85 percent reported having been competitively employed and/or enrolled in postsecondary education within the 1 year post-high school period specified in the regulations.

Postsecondary education was the only mode of engagement since high school for 3 percent of young adults with disabilities. Less than 1 percent of young adults with disabilities reported "other" modes of engagement. Other modes included job training only, and postsecondary education and job training.

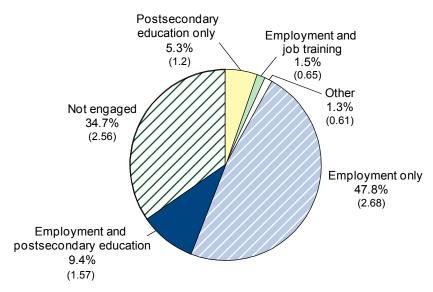
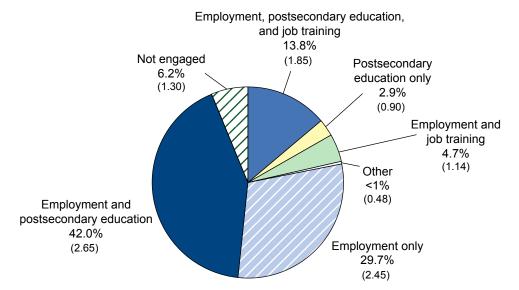


Figure 33. Modes of engagement of young adults with disabilities at the time of the interview

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Figure 34. Modes of engagement of young adults with disabilities since leaving high school

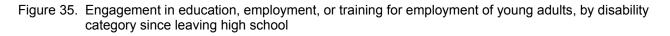


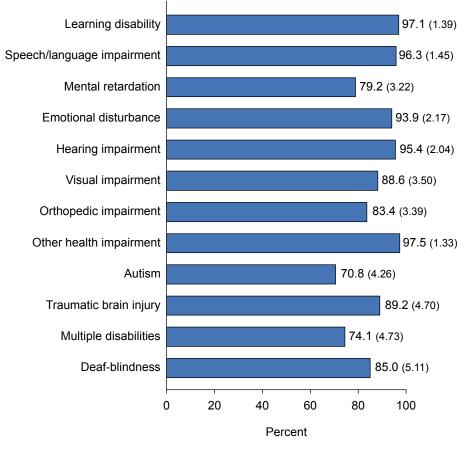
NOTE: Standard errors are in parentheses. Findings are reported for young adults out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### *Disability Differences in Engagement in Employment and Postsecondary Education or Training for Employment Since Leaving High School*

Engagement in employment and postsecondary education or training since leaving high school varied by disability category, ranging from 71 percent to 98 percent (figure 35). Young adults in several disability categories were more likely to report ever having been engaged than were those with autism. Ninety-eight percent of those with other health impairments, 97 percent of those with learning disabilities, 96 percent of those with speech and language impairments, 95 percent of those with hearing impairments, and 94 percent of those with emotional disabilities had ever been engaged, compared with 71 percent of young adults with autism (p < .001 for all comparisons)

Young adults with other health impairments also were more likely ever to have been engaged in productive activities (98 percent) than were those with multiple disabilities (74 percent), mental retardation (79 percent), and orthopedic impairments (83 percent, p < .001 for all comparisons).





NOTE: Standard errors are in parentheses. Findings are reported for young adults out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Modes of engagement also varied by disability category (table 59). Thirty-nine percent of young adults with mental retardation and 38 percent of those with emotional disturbances were more likely than those in several other categories to have paid employment as their only mode of engagement: 13 percent of those with orthopedic impairments (p < .001 for both comparisons), 15 percent of those with visual impairments (p < .001 for both comparisons), 16 percent of young adults with autism (p < .001 for both comparisons), and 17 percent of those with hearing impairments (p < .001 for both comparisons).

Young adults with learning disabilities were more likely to have employment as their only mode of engagement (28 percent) than were those with orthopedic impairments (14 percent, p < .01).

		Speech/		Emo-			Ortho-	Other		Trau-		
		language	Mental	tional	Hearing	Visual	pedic	health		matic	Multiple	Deaf-
	Learning	impair-	retar-	distur-	impair-	impair-	impair-	impair-		brain	disabili-	blind-
	disability	ment	dation	bance	ment	ment	ment	ment	Autism	injury	ties	ness
-						Perce	ent					
Employment only	27.8 (3.70)	25.5 (3.36)	39.2 (3.88)	37.6 (4.40)	16.7 (3.64)	14.9 (4.02)	12.9 (3.06)	27.5 (3.80)	16.3 (3.46)	25.3 (6.58)	28.9 (4.89)	19.2 (5.64)
Postsecondary	2.9	2.7	1.9	2.4	3.3	8.5	12.8	1.9	2.8	7.1	6.0	8.0
education only	(1.39)	(1.25)	(1.08)	(1.39)	(1.74)	(3.07)	(3.05)	(1.16)	(1.55)	(3.89)	(2.56)	(3.88)
Employment and												
postsecondary	47.7	53.3	15.5	37.1	45.7	39.0	33.2	46.8	20.6	35.9	13.3	27.2
education	(4.13)	(3.84)	(2.87)	(4.38)	(4.86)	(5.37)	(4.29)	(4.25)	(3.79)	(7.26)	(3.67)	(6.37)
Employment, postsecondary												
education, and job	14.3	11.0	11.8	12.4	24.4	20.5	13.0	16.3	16.7	16.2	9.8	14.3
training	(2.89)	(2.41)	(2.56)	(2.99)	(4.19)	(4.45)	(3.07)	(3.14)	(3.50)	(5.58)	(3.21)	(5.01)
Employment and job	4.0	3.7	9.3	3.4	3.9	2.8	8.2	4.8	8.4	3.3	10.4	9.1
training	(1.62)	(1.45)	(2.31)	(1.64)	(1.89)	(1.82)	(2.50)	(1.82)	(2.66)	(2.70)	(3.30)	(4.12)
Other combination of	0.4	0.1	1.6	1.1	1.4	3.0	3.3	0.3	6.0	1.3	5.8	7.3
activities	(0.52)	(0.24)	(1.00)	(0.95)	(1.15)	(1.88)	(1.63)	(0.47)	(2.23)	(1.71)	(2.52)	(3.73)
No engagement	2.9	3.7	20.8	6.1	4.6	11.4	16.6	2.5	29.2	10.8	25.9	15.0
	(2.41)	(1.94)	(3.72)	(2.28)	(2.66)	(3.9)	(3.71)	(2.13)	(4.4)	(5.39)	(5.07)	(6.23)

Table 59. Modes of engagement of young adults, by disability category since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and young adult interview/survey, 2009.

Postsecondary school enrollment as the only form of engagement was more likely for young adults with orthopedic impairments (13 percent) than for those in five of the other disability categories: young adults with learning disabilities (3 percent, p < .01), speech/language impairments (3 percent, p < .01), hearing impairments (3 percent, p < .01), emotional disturbances (2 percent, p < .01), mental retardation (2 percent, p < .001), and other health impairments (2 percent, p < .001).

Young adults with speech/language impairments (53 percent) or learning disabilities (48 percent) were more likely to report having been employed and to have enrolled in postsecondary education at some point since high school than were those with autism (21 percent), mental retardation (16 percent), or multiple disabilities (13 percent), (p < .001 for all

comparisons). Young adults with other health impairments (47 percent) or hearing impairments (46 percent) were more likely than those with autism (21 percent, p < .001) mental retardation (16 percent, p < .001 for both comparisons) or multiple disabilities (13 percent, p < .001 for both comparisons) to have been employed and to have attended postsecondary school since leaving high school.

Engagement since high school in employment and postsecondary education and job training did not differ significantly by disability category, nor did engagement since high school in employment and training in job skills or other combinations of modes of engagement.

### Differences in Engagement in Employment and Postsecondary Education or Training for Employment by Years Since Leaving High School

Both the overall engagement rate in employment, postsecondary education, and/or training and engagement in the various combinations of modes of engagement did not vary significantly by years since leaving high school (table 60).

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
Engaged in at least one of the three modes of engagement	85.3	93.8	95.8
	(4.41)	(2.28)	(1.49)
Employment only	27.7	30.2	29.7
	(5.57)	(4.33)	(3.40)
Postsecondary education only	4.4	1.9	3.3
	(2.55)	(1.29)	(1.33)
Employment and postsecondary education	38.5	42.2	42.4
	(6.05)	(4.66)	(3.68)
Employment, postsecondary education, and job training	9.5	12.8	15.5
	(3.65)	(3.15)	(2.69)
Employment and job training	4.1	6.2	3.9
	(2.47)	(2.28)	(1.44)
Other combination of activities	1.0	0.3	1.0
	(1.24)	(0.67)	(0.74)
No engagement	14.7	6.2	4.2
	(4.41)	(2.28)	(1.49)

Table 60.	Modes of engagement in education, employment, or training
	for employment of young adults with disabilities, by years
	since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on based on a sample of approximately 4,800 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and young adult interview/survey, 2009.

# *Differences in Engagement in Employment and Postsecondary Education or Training for Employment by Highest Level of Educational Attainment*

As would be expected by the definition of the engagement variable, all young adults with disabilities who had completed postsecondary education or had attended some postsecondary school reported engagement in employment, postsecondary education, or training for employment (table 61). Young adults who had attended and/or completed postsecondary school were more likely to have been productively engaged than were those who had not completed high school (77 percent, p < .001 for both comparisons) or who had finished their high school programs (90 percent, p < .001 for both comparisons).

Table 61. Modes of engagement in education, employment, or training for employment of young adults with disabilities, by highest level of educational attainment since leaving high school

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Engaged in at least one of the three modes of engagement	76.5 (6.48)	89.7 (2.53)	100.0	100.0
Employment only	63.4 (7.36)	60.4 (4.06)	0.0	0.0
Postsecondary education only	2.2 (2.24)	0.7 (0.69)	6.5 (2.49)	2.4 (1.89)
Employment and postsecondary education	6.2 (3.69)	14.2 (2.9)	76.2 (4.30)	59.9 (6.06)
Employment, postsecondary education, and job training	0.5 (1.08)	2.9 (1.39)	15.6 (3.66)	37.2 (5.97)
Employment and job training	4.1 (1.86)	11.0 (1.51)	0.0 (1.64)	0.0 (2.33)
Other combination of activities	0.0	0.5 (0.59)	1.6 (0.95)	0.5 (0.87)
No engagement	23.5 (6.48)	10.3 (2.53)	0.0	0.0

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and young adult interview/survey, 2009.

# *Demographic Differences in Engagement in Employment and Postsecondary Education or Training for Employment*

Modes of engagement varied by income levels. Young adults with disabilities from families with incomes of more than \$50,000 were more likely than those from families with incomes of \$25,000 or less to have been employed and to have attended postsecondary school (50 percent vs. 32 percent, p < .01; table 62). The modes of engagement of young adults with disabilities did not vary significantly by parent's household income, race/ethnicity or gender.

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
	0.1000	<i><b>Q</b></i> <b>OOOOOOOOOOOOO</b>	<i><b>Q</b></i> <b>OOOOOOOOOOOOO</b>	Percer		Thepaine	indio	. emaie
Engaged in at least one of the three modes of engagement	90.0	94.4	96.9	95.3	90.0	92.2	94.1	93.4
	(2.8)	(2.53)	(1.42)	(1.36)	(3.62)	(4.48)	(1.57)	(2.26)
Employment only	34.2	30.8	24.8	31.2	26.2	24.5	32.2	25.3
	(4.42)	(5.07)	(3.53)	(2.97)	(5.30)	(7.19)	(3.11)	(3.96)
Postsecondary education only	4.5	1.6	2.3	2.3	2.2	7.3	2.5	3.7
	(1.93)	(1.38)	(1.23)	(0.96)	(1.77)	(4.35)	(1.07)	(1.72)
Employment and postsecondary education	32.2	44.6	49.7	45.3	37.4	33.2	41.2	43.0
	(4.35)	(5.46)	(4.09)	(3.19)	(5.84)	(7.87)	(3.27)	(4.51)
Employment, postsecondary education, and job training	12.0	10.7	16.6	11.2	16.3	23.5	13.5	14.4
	(3.03)	(3.40)	(3.04)	(2.02)	(4.45)	(7.09)	(2.27)	(3.2)
Employment and job training	6.4	5.6	2.8	4.8	6.2	3.0	4.2	5.7
	(2.28)	(2.53)	(1.35)	(1.37)	(2.91)	(2.85)	(1.33)	(2.11)
Other combination of activities	0.7	1.1	0.7	0.6	1.6	0.8	0.5	1.3
	(0.78)	(1.15)	(0.68)	(0.50)	(1.51)	(1.49)	(0.47)	(1.03)
No engagement	10.0	5.6	3.1	4.7	10.0	7.8	5.9	6.6
	(2.8)	(2.53)	(1.42)	(1.36)	(3.62)	(4.48)	(1.57)	(2.26)

Table 62.	Modes of engagement of young adults with disabilities by parents' household income and
	young adults' race/ethnicity and gender

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,720 to 4,800 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and young adult interview/survey, 2009.

The beginning chapters of this report have focused on the postsecondary education and employment experiences of young adults with disabilities. The following chapters shift the focus from these two post-high school outcomes to household circumstances and social and community involvement.

### 5. Household Circumstances of Young Adults With Disabilities

Although postsecondary education and employment are important postschool outcomes for young adults, household circumstances (e.g., independent residence) also are important to transition success (Chambers, Rabren, and Dunn 2009). Markers on the path to adult responsibility typically have included financial and residential independence and self-sufficiency, marriage, and parenting (Arnett 2000; Rindfuss 1991; Settersten 2006). However, youth in the general population are taking longer to attain these traditional markers as they transition from high school to adulthood than in the past (Furstenberg et al. 2004; Mortimer and Larson 2002; Shanahan 2000). NLTS2 provides the opportunity to examine such trends among young adults with disabilities.

This chapter examines these key aspects of independence for young adults with disabilities who have been out of high school for up to 8 years. Specifically, it explores the experience of young adults with disabilities with regard to

- residential independence;
- dimensions of independent lifestyle activities and family formation, including parenting and marital status; and
- indicators of financial independence, such as the use of personal financial management tools, reliance on government benefit programs, and young adults' household income.

Descriptive findings are reported for young adults with disabilities as a whole and for those who differed in their primary disability category, years since leaving high school, highest level of educational attainment, and selected demographic characteristics.

### **Residential Independence**

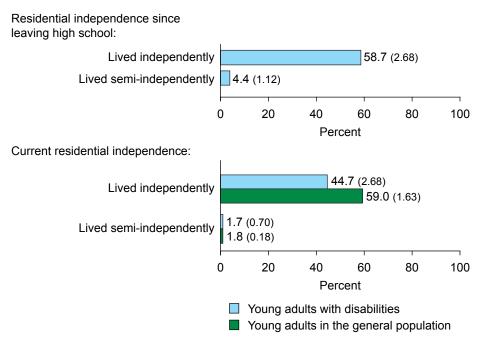
When youth with disabilities were in high school, less than 1 percent had lived independently (i.e., on their own or with a spouse, partner, or roommate) (Wagner et al. 2003). Within 8 years of leaving high school, however, 59 percent had lived independently at some time since high school<sup>79</sup> (p < .001; figure 36). Fewer young adults had lived semi-independently since leaving high school (4 percent, p < .001)—a transitional living arrangement between "leaving the parental home and establishing an independent residence" (Goldscheider and Davanzo 1986, p. 187), including in a college dormitory, military housing, or a group home.<sup>80</sup>

<sup>&</sup>lt;sup>79</sup> Respondents were asked where young adults had lived in the past 2 years and where they lived "now." A variable measuring the degree of residential independence since high school was derived from three items: if the young adult had lived independently or semi-independently in the past 2 years, was currently living independently or semi-independently, and when he or she had left school.

<sup>&</sup>lt;sup>80</sup> This section focuses on young adults who lived independently or semi-independently. Young adults not included in this figure are those who lived with a parent or family member or guardian (52 percent at the time of the interview), in an institution (1 percent at the time of the interview), or in a group home (1 percent at the time of the interview).

At the time of the interview, 45 percent of young adults with disabilities were living independently<sup>81</sup> (p < .001). Young adults with disabilities were less likely to live independently than were their peers in the general population<sup>82</sup> (45 percent vs. 59 percent, p < .001).

### Figure 36. Residential independence of young adults with disabilities and young adults in the general population



NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,640 young adults with disabilities. Young adults with disabilities are considered to be living independently if they were living alone or with a spouse, partner, or roommate. Young adults with disabilities are considered to be living semi-independently if they were living in a college dormitory, military housing, or a group home.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 2005 youth survey; responses calculated for 21- to 25-year-olds.

<sup>&</sup>lt;sup>81</sup> Respondents were asked where young adult lived currently.

<sup>&</sup>lt;sup>82</sup> Calculated from the National Longitudinal Survey of Youth (NLSY), 2005, for out-of-high school young adults who were between 21 to 25 years old. This calculation was created based on two items in NLSY; current residence and relationship to others in the household. Response categories for the first item were, "home, condo, apartment, dormitory, hotel/boarding house, shelter, in jail, mobile home, hospital, group home, and farm." The second item focused on the respondent's relationship to others in the household. Respondents were coded as currently living independently if they lived in a house, condo, apartment, farm, mobile home, hotel/boarding house and if they were not living with a biological, adoptive, or foster parent(s) or other relative.

Of the 59 percent of young adults with disabilities who had lived independently at some time since high school, 36 percent currently lived alone and 37 percent currently lived with a spouse, partner, or roommate.<sup>83</sup> Of those who had lived semi-independently, 4 percent currently lived in a college dormitory and 18 percent were in military housing.

When young adults with disabilities who were living independently or semi-independently were asked about their satisfaction with their living arrangement at the time of the interview, 69 percent reported being satisfied with their residential arrangement, 24 percent said they would prefer living elsewhere, and 7 percent were ambivalent<sup>84</sup> (figure 37).

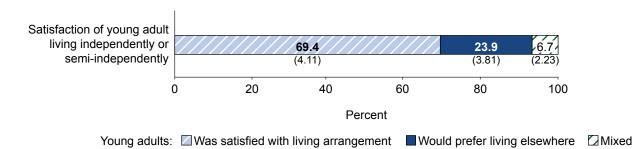


Figure 37. Satisfaction with current living arrangement of young adults with disabilities

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 1,470 to 3,100 young adults with disabilities across variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### **Disability Differences in Residential Independence**

Rates of living independently ranged from 16 percent to 65 percent of young adults across disability categories (table 63). Fifty percent or more of young adults in several disability categories who had been out of high school up to 8 years lived independently (65 percent of those with learning disabilities, 51 percent of those with speech/language and hearing impairments, 63 percent of those with emotional disturbances, 55 percent of those with visual impairments, and 58 percent of those with other health impairments). The rates of living independently were significantly higher for young adults in all six of these disability categories than the rates for young adults with orthopedic impairments (31 percent, p < .01 compared with young adults with hearing impairments and p < .001 for all other comparisons), autism (17 percent and p < .001 for all comparisons), or deafblindness (26 percent, p < .01 compared with young adults with speech/language and hearing impairments and p < .001 for all other comparisons).

Young adults in five of these six disability categories (excluding those with hearing impairments) also were more likely to live independently than young adults with mental retardation (36 percent, p < .01 compared with young adults with speech/language or visual

<sup>&</sup>lt;sup>83</sup> Percentages not included in tables or figures.

<sup>&</sup>lt;sup>84</sup> Youth who were age 18 years or older, no longer in high school, and not living with their parents were asked, "Are you happy with this living arrangement, or would you like to change where you live or who you live with?"

	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	Autism	Trau- matic brain	Multiple disabili-	Deaf- blind-
	uisability	ment	uation	Dance	ment	Perce		ment	Autisiii	injury	ties	ness
Lived independently	64.9 (4.01)	51.2 (3.91)	36.3 (3.90)	63.1 (4.42)	50.5 (5.01)	55.4 (5.56)	30.5 (4.24)	58.2 (4.24)	17.0 (3.66)	42.8 (7.55)	16.4 (4.08)	26.4 (6.56)
Lived semi- independently	5.2 (1.86)	5.0 (1.71)	0.2 (0.36)	2.8 (1.51)	6.0 (2.38)	9.0 (3.2)	6.5 (2.27)	5.8 (2.01)	3.4 (1.76)	6.2 (3.68)	1.5 (1.34)	8.2 (4.09)
Satisfaction of young adult living independently or semi-independently	68.2 (5.66)	70.9 (5.70)	76.7 (8.04)	72.5 (6.18)	72.3 (8.45)	65.2 (8.09)	80.9 (7.14)	68.1 (6.26)	45.8 (16.96)	79.7 (10.62)	68.0 (13.62)	76.2 (13.35)

Table 63.	Residential independence and satisfaction of young adults since leaving high school, by
	disability category

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,640 young adults with disabilities for residential independence and approximately 1,470 young adults with disabilities for satisfaction of living arrangement. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

impairments and p < .001 for all other comparisons). Young adults in the category of learning disability were more likely than those with traumatic brain injuries to live independently (43 percent, p < .01). In addition, young adults with mental retardation or traumatic brain injuries were more likely to live independently than young adults with autism or multiple disabilities (p < .001 compared with young adults with mental retardation and p < .01 compared with those with traumatic brain injuries).

Young adults with learning disabilities or speech/language impairments were more likely to have lived semi-independently at some time since high school than were those with mental retardation (5 percent vs. < 1 percent, p < .01 for both comparisons). In addition, young adults with visual (9 percent), orthopedic (7 percent), or other health impairments (6 percent) were more likely to live semi-independently than those with mental retardation (p < .01 for all comparisons). Reported satisfaction with living arrangements did not differ significantly by disability category.

### Differences in Residential Arrangements by Years Since Leaving High School

The percentages of young adults with disabilities who were reported to live independently ranged from 39 percent of those out of high school less than 3 years to 71 percent for those out of high school between 5 and 8 years (table 64). Young adults with disabilities out of high school the longest time (5 to 8 years) were more likely to report living independently (71 percent) than both those out of high school the shortest time (less than 3 years, 39 percent, p < .001) and those out of high school 3 to 5 years (48 percent, p < .001). Eight percent of young adults with disabilities out of school between 5 and 8 years lived semi-independently, whereas 2 percent of those out of school between 5 and 8 years lived semi-independently (p < .01). Reported satisfaction with living arrangements did not differ significantly by years since leaving high school.

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
Lived independently	38.9	47.8	70.5
	(6.22)	(4.79)	(3.43)
Lived semi-independently	3.2	7.7	2.3
	(2.24)	(2.56)	(1.13)
Satisfaction of young adult living independently or semi-	79.0	72.1	66.8
independently	(9.97)	(7.41)	(5.40)

#### Table 64. Residential independence and satisfaction of young adults with disabilities, by years since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,640 young adults with disabilities for residential independence and approximately 1,470 young adults with disabilities for satisfaction of living arrangement.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

# Differences in Residential Arrangements by Highest Level of Educational Attainment

Young adults with disabilities who had completed postsecondary education were significantly more likely to have lived independently than were those whose highest level of education was a completed high school program (74 percent vs. 50 percent, p < .001; table 65). Level of satisfaction with residential arrangements and the rate of living semi-independently did not differ significantly by level of educational attainment.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion			
	Percent						
Lived independently	55.1	50.2	60.7	73.8			
	(7.73)	(4.27)	(4.93)	(5.46)			
Lived semi-independently	0.8	2.2	5.7	7.9			
	(1.39)	(1.25)	(2.34)	(3.35)			
Satisfaction of young adult living independently or	63.9	72.5	68.2	69.3			
semi-independently	(15.37)	(7.09)	(7.12)	(7.71)			

 Table 65.
 Residential independence and satisfaction of young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,640 young adults with disabilities for residential independence and approximately 1,470 young adult with disabilities for satisfaction of living arrangement.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

#### Demographic Differences in Residential Independence

Rates of living independently or semi-independently and satisfaction with living situation did not differ significantly by gender, race/ethnicity, or parents' household income (table 66). For example, the rate of living independently ranged from 47 percent of African American young adults with disabilities to 63 percent of White young adults with disabilities.

 Table 66.
 Residential independence and satisfaction of young adults with disabilities since leaving high school, by parents' household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percer	ıt			
Lived independently	55.0	60.1	60.7	63.2	47.4	51.2	54.6	65.7
	(4.72)	(5.47)	(4.02)	(3.13)	(6.15)	(8.45)	(3.35)	(4.40)
Lived semi-independently	1.3	4.1	7.6	4.7	5.0	0.5	5.9	1.7
	(1.07)	(2.22)	(2.18)	(1.37)	(2.68)	(1.19)	(1.59)	(1.20)
Satisfaction of young adult living independently or semi-independently	72.3	66.1	68.0	74.1	57.8	50.1	70.0	68.5
	(7.43)	(8.69)	(5.97)	(4.54)	(10.78)	(16.79)	(5.25)	(6.62)

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,640 young adults with disabilities for residential independence and approximately 1,470 young adults with disabilities for satisfaction of living arrangement. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Waves 2, 3, 4, and 5 parent interview and youth interview/survey, 2003, 2005, 2007, and 2009.

#### **Parenting and Marriage**

This section focuses on several dimensions of independent lifestyle activities and family formation, including parenting and marital status.

#### Parenting Status

Twenty-nine percent of young adults with disabilities reported that they had had or had fathered a child<sup>85</sup> by the time they had been out of high school up to 8 years (figure 38). This proportion did not differ significantly from the 28 percent of similar-age young adults in the general population<sup>86</sup> who were parents. Of young adults with disabilities who had had or had fathered children, 49 percent had had one child, 27 percent had had two, and 25 percent had had three or more children.<sup>87</sup> Eighty-three percent of young adults with disabilities who had had or had fathered a child reported that their children currently lived with them.<sup>88</sup>

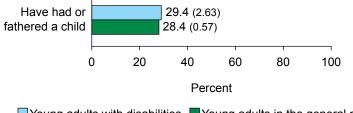
<sup>&</sup>lt;sup>85</sup> Respondents were asked, "Have you [has YOUTH] ever had or fathered any children?"

<sup>&</sup>lt;sup>86</sup> Calculated from the National Longitudinal Survey of Youth (NLSY), 2005, for out-of-high school 21- to 25-year-olds.

<sup>&</sup>lt;sup>87</sup> Percentages not included in tables or figures.

<sup>&</sup>lt;sup>88</sup> Respondents were asked, "[Does this child] or [Do any of these children] live with you now?"

Figure 38. Parenting status of young adults with disabilities and young adults in the general population



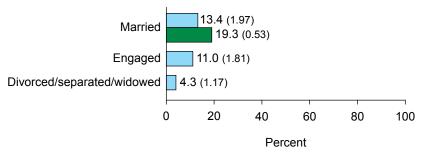
□ Young adults with disabilities ■ Young adults in the general population

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,800 young adults with disabilities. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97), 2005 youth survey, responses calculated for 21- to 25-year-olds.

#### Marital Status

Within 8 years of leaving high school, 13 percent of young adults with disabilities reported being married<sup>89</sup> (figure 39). The marriage rate for young adults with disabilities was lower than that of their peers in the general population (19 percent, p < .01).<sup>90</sup> An additional 11 percent reported being engaged to be married, and 4 percent were divorced, separated, or widowed.

Figure 39. Marital status of young adults with disabilities and young adults in the general population at the time of the interview



□ Young adults with disabilities ■ Young adults in the general population

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on a sample of approximately 4,150 young adults with disabilities. General population comparison data not available for engagement or divorced, separated or widowed.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; U.S. Department of Labor, Bureau of Labor Statistics, National Longitudinal Survey of Youth 1997 (NLSY97) 2005 youth survey, responses calculated for 21- to 25-year-olds.

<sup>&</sup>lt;sup>89</sup> Respondents were asked, "What is your current marital status? Are you [is YOUTH] engaged, single, never married, married, divorced, separated, or widowed?"

<sup>&</sup>lt;sup>90</sup> Calculated from the National Longitudinal Survey of Youth (NLSY), 2005, for out-of-high school 21- to 25-year-olds. Engaged and divorced/separated/widowed were not available in NLSY.

### Disability Differences in Parenting and Marriage

Young adults' reports of ever having had or fathered a child ranged from 3 percent of young adults with autism to 39 percent of those with emotional disturbances (table 67). Young adults with emotional disturbances were more likely to have had or fathered a child than were those in 9 of the 11 other disability categories, including young adults with speech/language (18 percent), hearing (21 percent), visual (11 percent), orthopedic (8 percent), or other health impairments (22 percent); autism (3 percent); traumatic brain injuries (17 percent); multiple disabilities (7 percent); or deaf-blindness (7 percent), (p < .01 compared with young adults with hearing or other health impairments or traumatic brain injuries and p < .001 for all other comparisons).

Young adults with learning disabilities; mental retardation; or speech/language, hearing, or other health impairments were more likely than were those with autism to have had or fathered a child (p < .001 for all comparisons). Young adults with learning disabilities, mental retardation, or other health impairments also were more likely to have had or fathered children than were those with multiple disabilities (p < .01 compared with young adults with other health impairment and p < .001 for other comparisons), orthopedic impairments (p < .01 compared with young adults with other health impairments and p < .001 for other comparisons) or deaf-blindness (p < .01 compared with young adults with other health impairments and p < .001 for other comparisons).

In addition, young adults with learning disabilities or mental retardation were more likely to have had or fathered a child than were those with visual impairments (p < .01 compared with young adults with mental retardation and p < .001 compared with those with learning disabilities), and young adults with learning disabilities were more likely to have had or fathered a child than were those with speech/language impairments (p < .01).

	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	Autism		Multiple disabili- ties	Deaf- blind- ness
						Perce	nt					
Ever had or fathered a child	31.6	17.6	25.3	39.1	20.6	10.7	8.1	21.8	3.0	17.3	6.9	7.4
	(4.21)	(3.11)	(3.72)	(4.85)	(4.48)	(3.57)	(2.64)	(3.81)	(1.61)	(5.94)	(2.93)	(3.95)
Were married	15.1	13.2	10.5	11.1	11.4	8.3	2.2	15.3	0.9	10.9	1.3	3.8
	(3.25)	(2.77)	(2.62)	(3.14)	(3.50)	(3.20)	(1.42)	(3.34)	(0.90)	(4.89)	(1.32)	(2.86)

Table 67. Parenting and marital status of young adults, by disability category

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years.NLTS2 percentages are weighted population estimates based on samples of approximately 4,800 young adults with disabilities for having or fathering a child to 4,150 young adults with disabilities for marriage status.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Marriage rates ranged from 1 percent for young adults with autism to 15 percent for those with other health impairments. Young adults with other health impairments (15 percent), learning disabilities (15 percent), speech/language impairments (13 percent), mental retardation (11 percent), or emotional disturbances (11 percent) were more likely to be married at the time of the interview than were those with orthopedic impairments (2 percent, p < .01 compared with those with mental retardation or emotional disturbances and p < .001 for all other comparisons), multiple disabilities (1 percent, p < .01 compared with those with mental retardation or emotional disturbances and p < .001 for all other comparisons), or autism (1 percent, p < .01 compared with

those emotional disturbances and p < .001 for all other comparisons). Similarly, young adults with hearing impairments were more likely to be married (11 percent) than were those with multiple disabilities or autism (p < .01 for both comparisons). In addition, young adults with other health impairments or learning disabilities were more likely to be married than were young adults with deaf-blindness (4 percent, p < .01 for both comparisons).

## Differences in Parenting and Marriage by Years Since Leaving High School

Young adults with disabilities out of high school between 5 and 8 years were more likely to report having had or fathered a child than those out of high school less than 3 years (36 percent vs. 18 percent, p < .01). Similarly, the marriage rate among those out of high school between 5 and 8 years was significantly higher than that for those less than 3 years out of high school (17 percent vs. 3 percent, p < .001; table 68).

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
Ever had or fathered a child	17.8 (4.93)	23.7 (4.32)	36.3 (3.90)
Were married	3.4 (2.34)	12.6 (3.37)	16.6 (3.03)

Table 68. Parenting and marital status of young adults with disabilities, by years since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,800 young adults with disabilities for having or fathering a child to 4,150 young adults with disabilities for marriage status.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth survey, 2009.

# Differences in Parenting and Marriage by Highest Level of Educational Attainment

Young adults with disabilities who had not completed high school were more than twice as likely to have had or fathered a child than young adults with disabilities who had earned a postsecondary degree or license/certificate (48 percent vs. 21 percent, p < .01; table 69). There were no statistically significant differences in marriage status by level of educational attainment for young adults with disabilities out of high school up to 8 years.

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Ever had or fathered a child	47.7	31.4	28.7	21.7
	(8.47)	(4.04)	(4.98)	(5.38)
Were married	7.3 (4.45)	13.9 (3.02)	10.1 (3.33)	19.2 (5.16)

# Table 69. Parenting and marital status of young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,800 young adults with disabilities for having or fathering a child to 4,150 young adults with disabilities for marriage status. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth survey, 2009.

#### Demographic Differences in Parenting and Marriage

Forty-two percent of women with disabilities out of high school up to 8 years were reported to have had a child since high school, whereas 22 percent of young men with disabilities reportedly had fathered a child (p < .001; table 70). In addition, young adults with disabilities from families in the lowest and middle income brackets were more likely to have had or fathered a child than were those from households with incomes of more than \$50,000 (38 percent and 37 percent, respectively vs. 15 percent, p < .001 for both comparisons). African American young adults with disabilities were more likely to have had or fathered a child than their White counterparts (45 percent vs. 26 percent, p < .01).

The percentage of young adults with disabilities who were reported to be married did not differ significantly by household income or gender. White young adults with disabilities were more likely to be reported to be married than were their African American peers (17 percent vs. 4 percent, p < .001).

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percer	nt			
Ever had or fathered a child	38.0	37.3	15.4	25.7	44.7	26.0	22.0	41.6
	(8.47)	(5.71)	(3.16)	(3.08)	(6.24)	(7.71)	(2.98)	(4.74)
Were married	13.5	16.8	11.6	16.7	4.4	10.0	11.4	16.8
	(3.40)	(4.45)	(2.80)	(2.63)	(2.60)	(5.28)	(2.29)	(3.61)

 Table 70.
 Parenting and marital status of young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

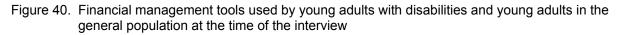
NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,800 young adults with disabilities for having or fathering a child to 4,150 young adults with disabilities for marriage status.

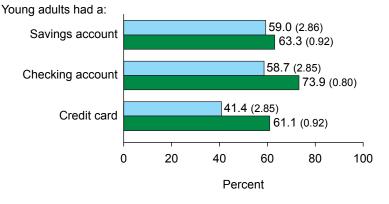
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### **Financial Independence**

Being able to manage bank accounts and credit cards is a stepping-stone for young adults to achieve financial security and responsibility (Bell et al. 2006). This section focuses on whether young adults with disabilities have obtained bank accounts, credit cards, and government benefits.

By the time they had been out of high school up to 8 years, 59 percent of young adults with disabilities were reported to have a savings account<sup>91</sup> and a similar percentage had a checking<sup>92</sup> account (figure 40). A significantly smaller percentage had a credit card in their own name<sup>93</sup> (41 percent, p < .001 for both comparisons). The rate at which they had a savings account did not differ significantly between young adults with disabilities and those in the general population. In contrast, young adults in the general population<sup>94</sup> were more likely than those with disabilities to have a checking account (74 percent vs. 59 percent, p < .001) or a credit card (61 percent vs. 41 percent, p < .001).





□ Young adults with disabilities ■ Young adults in the general population

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,100 to 4,120 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009; National Institutes of Health, National Institute of Child Health and Human Development (NICHD), The National Longitudinal Study of Adolescent Health (Add Health), Wave 3, 2001–02, responses calculated for 21- to 25-year-olds.

<sup>&</sup>lt;sup>91</sup> Respondents were asked, "Do you [does YOUTH] have a savings account?"

<sup>&</sup>lt;sup>92</sup> Respondents were asked, "Do you [does YOUTH] have a checking account where you write checks?"

<sup>&</sup>lt;sup>93</sup> Respondents were asked, "Do you [does YOUTH] have a credit card or charge account in your own name?"

<sup>&</sup>lt;sup>94</sup> Calculated from the National Longitudinal Study of Adolescent Health (Add Health), Wave 3, 2001–02, for outof-high school 21- to 25-year-olds.

Although young adults with disabilities were accessing these financial management tools, 74 percent of them were reported to have annual individual incomes (or for those living with a spouse, household incomes) of \$25,000 or less.<sup>95</sup> More than one fifth of young adults with disabilities (22 percent) had an annual income of less than \$5,000 in a year. Twenty percent had annual incomes between \$25,001 and \$50,000, and 6 percent had incomes of more than \$50,000.

In addition to these indicators, NLTS2 tracked participation in the Temporary Assistance for Needy Families (TANF) and Food Stamps programs by young adults with disabilities. Twenty-three percent of those who were living independently or semi-independently had received Food Stamps at some time since leaving high school.<sup>96</sup> Similarly, 23 percent of young adults with disabilities who were living independently or semi-independently and had or fathered a child reported that they had received money from TANF or the state welfare program at some time since high school.<sup>97</sup>

## Disability Differences in Financial Independence

Rates of having a savings or checking account or credit card varied by disability category. Rates of having a savings account ranged from 42 percent of young adults with mental retardation to 67 percent of those with other health impairments, and rates of having a checking account ranged from 29 percent of those with mental retardation to 74 percent of those with hearing impairments. In addition, personal credit card possession ranged from 19 percent of young adults with mental retardation to 57 percent of those with visual impairments (table 71).

Young adults with mental retardation were less likely to have used these types of financial tools than were young adults in several other disability categories. Young adults with mental retardation were less likely to have a savings account (42 percent) than were those with learning disabilities (63 percent); speech/language (65 percent), hearing (65 percent), visual (66 percent), orthopedic (62 percent), or other health impairments (67 percent); or deaf-blindness (64 percent), (p < .01 for those with orthopedic impairments and deaf-blindness and p < .001 for all other comparisons). Those with mental retardation also were less likely to have a checking account (29 percent); speech/language (66 percent), hearing (74 percent), visual (73 percent), orthopedic (63 percent), or other health impairments (64 percent), visual (73 percent), orthopedic (63 percent), or other health impairments (64 percent); traumatic brain injuries (53 percent), or autism (45 percent), (p < .01 for comparisons with autism and traumatic brain injuries and p < .001 for all other comparisons). In addition, young adults with mental retardation were less

<sup>&</sup>lt;sup>95</sup> For the 13 percent of young adults who were married, reported annual income included their spouse's income. For all other respondents, independent of their residential status, annual income was based on their individual income. Respondents were asked, "Studies like these often group people according to income. Please tell me which group best describes your [YOUTH's] total income [if spouse included] in the last tax year, including salaries or other earnings, money from public assistance, retirement, and so on, before taxes. Was your income in the past year \$25,000 or less or more than \$25,000?" Questions with more detailed income categories followed.

<sup>&</sup>lt;sup>96</sup> Percentages not included in tables or figures.

likely to have a credit card (19 percent) than were those with learning disabilities (47 percent); speech/language (52 percent), hearing (53 percent), visual (57 percent), orthopedic (47 percent), or other health impairments (48 percent) (p < .001 for all comparisons).

I <u></u>		Speech/		Emo-			Ortho-	Other		Trau-		
	Learning	language impair-	Mental retar-	tional distur-	Hearing impair-	Visual impair-	pedic impair-	health impair-		matic brain	Multiple disabili-	Deaf- blind-
	disability	ment	dation	bance	ment	ment	ment	ment	Autism	injury	ties	ness
						Perce	ent					
Young adult had a:												
Savings account	62.8 (4.41)	64.7 (3.94)	42.0 (4.25)	51.5 (5.02)	64.7 (5.32)	66.2 (5.50)	61.8 (4.81)	66.7 (4.37)	56.7 (4.76)	50.9 (7.90)	52.1 (5.83)	64.3 (7.22)
Checking account	65.2 (4.32)	66.0 (3.89)	29.0 (3.90)	51.6 (5.03)	73.5 (4.89)	72.9 (5.17)	63.4 (4.74)	63.7 (4.45)	45.0 (4.78)	53.1 (7.84)	44.7 (5.79)	46.9 (7.47)
Credit card	46.5 (4.53)	52.3 (4.10)	19.4 (3.41)	31.4 (4.65)	52.9 (5.59)	57.4 (5.76)	47.1 (4.91)	48.4 (4.63)	26.9 (4.23)	36.6 (7.55)	24.1 (4.97)	29.2 (6.81)
Young adult's annual income:												
\$25,000 or less	67.4 (4.41)	76.5 (3.67)	93.4 (2.32)	81.1 (4.07)	77.4 (5.00)	81.7 (4.67)	90.7 (3.02)	73.1 (4.39)	91.1 (2.88)	80.8 (6.52)	91.3 (3.18)	84.7 (5.62)
\$25,001 to \$50,000	24.9 (4.07)	19.0 (3.40)	5.9 (2.20)	14.1 (3.62)	19.6 (4.75)	16.4 (4.48)	5.7 (2.41)	21.4 (4.06)	6.0 (2.40)	14.9 (5.90)	7.8 (3.03)	11.4 (4.96)
More than \$50,000	7.7 (2.51)	4.6 (1.81)	0.7 (0.78)	4.7 (2.20)	3.0 (2.04)	1.9 (1.65)	3.6 (1.94)	5.6 (2.28)	2.9 (1.70)	4.3 (3.36)	0.9 (1.07)	3.8 (2.98)
Young adults living independently/semi- independently who received:												
Food Stamps	19.2 (4.22)	18.7 (4.32)	48.4 (7.53)	36.5 (5.78)	15.1 (5.56)	22.0 (6.39)	28.2 (7.81)	21.4 (4.81)	33.6 (12.72)	19.0 (9.49)	34.0 (10.69)	38.8 (13.13)
TANF	22.8 (7.26)	29.1 (9.57)	26.5 (9.05)	21.8 (7.95)	16.4 (8.68)	15.9 (13.13)	‡	15.4 (8.01)	‡	‡	‡	‡

# Table 71. Financial independence of young adults at the time of the interview, by disability category

‡ Responses for items with fewer than 30 respondents are not reported.

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,100 young adults with disabilities for financial management tools, 3,690 young adults with disabilities for annual income, 1,900 young adults with disabilities for Food Stamps, and 540 young adults with disabilities for TANF.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Young adults with autism were less likely to have a checking account (45 percent) or a credit card (27 percent) than were those with visual, hearing, speech/language, or other health impairments, or learning disabilities (p < .01 compared with young adults with learning disabilities and other health impairments, and p < .001 for all other comparisons for having had a checking account; p < .01 compared with young adults with learning disabilities, and p < .001 for all other comparisons for having had a credit card). Young adults with autism also were less likely to have a checking account or a credit card than young adults with orthopedic impairments (p < .01).

Similarly, young adults with multiple disabilities were less likely to have a checking account (45 percent) or credit card (24 percent) than were those in several disability categories, including

those with visual, hearing, speech/language, or other health impairments or learning disabilities (p < .01 compared with young adults with learning disabilities, speech/language impairments, and other health impairments and p < .001 for all other comparisons for having had a checking account; p < .001 for all comparisons for having had a credit card). In addition, multiple disabilities were less likely to have a credit card than were those with orthopedic impairments (p < .001).

Young adults with emotional disturbances or deaf-blindness were less likely to have a checking account (52 percent and 47 percent, respectively) or a credit card (31 percent and 29 percent, respectively) than were those with of hearing or visual impairments (p < .01 for all comparisons) and less likely to have a credit card than those with speech/language impairments (p < .01 for comparison with emotional disturbances and p < .001 for comparison with deaf-blindness). In addition, those with emotional disturbances were less likely to have a credit card than those with other health impairments (p < .01).

Income level also differed by disability category. Young adults with mental retardation, autism, orthopedic impairments, or multiple disabilities were more likely to be reported to have household incomes of \$25,000 or less than were those with learning disabilities; speech/language or other health impairments (93 percent, 91 percent, 91 percent, 91 percent, respectively vs. 67 percent, 77 percent, 73 percent, p < .001 for all comparisons with the exception of p < .01 for comparison of youth with mental retardation with those with speech/language impairments). Young adults with mental retardation also were more likely to have household incomes of \$25,000 or less than were those with emotional disturbances or hearing impairments (81 percent and 77 percent, respectively, p < .01 for both comparisons).

Young adults with mental retardation (48 percent) were more likely to receive Food Stamps than were young adults with learning disabilities or speech/language, hearing, visual, or other health impairments (19 percent, 19 percent, 15 percent, 22 percent, 21 percent, respectively p < .001 for all comparisons; with the exception of p < .01 for comparisons with those with hearing or other health impairments). In addition, young adults with emotional disturbances were more likely to receive Food Stamps than were those with hearing impairments (37 percent vs. 15 percent, p < .01).

## Differences in Financial Independence by Years Since Leaving High School

The annual incomes of young adults with disabilities did not differ significantly by school completion status, and none of the financial independence measures differed significantly by length of time out of high school. The percentages of out-of-high school young adults with disabilities who were reported to have a savings account ranged from 54 percent for young adults with disabilities out of high school up to 3 years to 62 percent for those out of high school from 3 to 5 years. The rate of having a checking account ranged from 53 percent for young adults out of high school up to 3 years to 60 percent for those out of high school up to 8 years, and the rate of having a credit card ranged from 39 percent for those out of high school up to 3 years to 45 percent for those out of school from 3 to 5 years (table 72).

	Less than	3 up to	5 up to
-	3 years	5 years	8 years
Financial independence		Percent	
Young adult had a:			
Savings account	53.5	62.3	58.1
	(6.54)	(4.95)	(4.02)
Checking account	53.4	58.2	60.4
	(6.52)	(5.05)	(3.97)
Credit card	38.8	45.1	39.4
	(6.35)	(5.08)	(3.95)
Young adult's reported annual income:			
\$25,000 or less	78.8	77.8	69.7
	(5.72)	(4.39)	(3.95)
\$25,001 to \$50,000	16.8	16.4	23.7
	(5.23)	(3.91)	(3.66)
More than \$50,000	4.4	5.8	6.6
	(2.87)	(2.47)	(2.14)
Young adults living independently/semi-independently who received:			
Food Stamps	30.3	15.6	26.7
	(9.74)	(5.09)	(4.49)
TANF	9.2	12.0	28.1
	(10.79)	(8.35)	(6.96)

Table 72.	Financial independence of young adults with disabilities at
	the time of the interview, by years since leaving high school

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,100 young adults with disabilities for financial management tools, 3,690 young adults with disabilities for annual income, 1,900 young adults with disabilities for Food Stamps, and 540 young adults with disabilities for TANF.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Differences in Financial Independence by Highest Level of Educational Attainment

Young adults with disabilities who had completed postsecondary education were consistently more likely to have savings or checking accounts or credit cards than were young adults with lower levels of educational attainment (table 73). Young adults with disabilities who had completed postsecondary education were approximately three times as likely to have a savings or checking account or credit card than young adults who had not completed high school (78 percent vs. 25 percent, 86 percent vs. 25 percent, and 64 percent vs. 19 percent, respectively, p < .001 for all comparisons). In addition, young adults with disabilities who had completed postsecondary education were more likely than those whose highest level of education was completing high school to have a savings (49 percent, p < .001) or checking account (47 percent, p < .001) or credit card (32 percent, p < .001). Similarly, young adults with disabilities who had completed their program (61 percent; p < .001).

	High	High	Some post-	Post- secondary
	school non- completer	school completer	secondary school	school completion
Financial independence		Perce	nt	
Young adult had a:				
Savings account	24.9	49.4	65.2	77.9
	(7.48)	(4.40)	(5.27)	(5.45)
Checking account	25.0	47.3	61.4	85.5
	(7.40)	(4.38)	(5.36)	(4.64)
Credit card	19.3	31.5	43.0	63.8
	(6.80)	(4.08)	(5.41)	(6.33)
Young adult's reported annual income:				
\$25,000 or less	82.6	79.5	75.2	58.9
	(6.83)	(3.77)	(5.00)	(6.64)
\$25,001 to \$50,000	17.1	16.0	20.4	28.7
	(6.79)	(3.42)	(4.66)	(6.11)
More than \$50,000	0.3	4.5	4.4	12.4
	(0.99)	(1.94)	(2.37)	(4.45)
Young adults living independently/semi- independently who received:				
Food Stamps	38.7	23.6	34.8	8.1
	(11.97)	(5.61)	(6.65)	(4.12)
TANF	23.3	16.8	36.0	10.4
	(13.60)	(7.10)	(11.47)	(9.93)

Table 73. Financial independence of young adults with disabilities at the time of the interview, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,100 young adults with disabilities for financial management tools, 3,690 young adults with disabilities for annual income, 1,904 young adults with disabilities for Food Stamps, and 540 young adults with disabilities for TANF.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Young adults with disabilities who attended postsecondary school were more likely to have a savings or checking account or credit card than young adults with disabilities who did not complete high school (65 percent vs. 25 percent, 61 percent vs. 25 percent, and 43 percent vs. 19 percent, respectively, p < .01 for credit card comparisons and p < .001 for savings or checking account comparisons). In addition, young adults who had completed high school were more likely than non-completers to have a savings or checking account (49 percent and 47 percent, respectively, p < .01 for both comparisons).

The annual incomes of young adults with disabilities also differed by level of educational attainment. Eighty percent of young adults with disabilities whose highest level of educational attainment was high school completion earned \$25,000 or less annually, compared with 59 percent of young adults with disabilities who completed postsecondary education (p < .01). In addition, young adults who attended postsecondary education but had not completed their program were more likely to receive Food Stamps than were young adults with disabilities who completed postsecondary school (35 percent vs. 8 percent, p < .001).

## Demographic Differences in Financial Independence

Young adults with disabilities from higher income parents' households were more likely than those from lower income households to have savings or checking accounts or credit cards (table 74). Compared with young adults with disabilities from parent households in the lowest income bracket (\$25,000 or less), those in the highest income bracket (more than \$50,000) were more likely to have a savings account (72 percent vs. 43 percent, p < .001), checking account (70 percent vs. 40 percent, p < .001), or credit card (50 percent vs. 26 percent, p < .001). In addition, young adults with disabilities from parent households in the middle income bracket (\$25,001 to \$50,000) were more likely than those from households in the lowest bracket (\$25,000 or less) to have a savings account (63 percent vs. 43 percent, p < .01), checking account (66 percent vs. 40 percent, p < .001), or credit card (48 percent vs. 26 percent, p < .01). Young adults with disabilities with the lowest annual incomes (\$25,000 or less) were more likely to come from parent households with incomes of \$25,000 or less, than from households with incomes of \$50,000 or more (87 percent vs. 68 percent, p < .001). In addition, young adults with disabilities from parent households with incomes of \$25,000 or less were more likely to receive Food Stamps than were young adults with disabilities from households with higher incomes (more than \$50,000; 41 percent vs. 11 percent, p < .001).

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
	1033	ψ30,000	ψ50,000	Percer		пізрапіс	Wale	I emale
Young adult had a:					-			
Savings account	42.8	63.1	72.1	62.0	54.7	46.8	63.0	52.5
	(4.96)	(5.81)	(3.92)	(3.45)	(6.32)	(8.91)	(3.51)	(4.82)
Checking account	39.6	66.4	70.4	66.0	39.3	50.3	59.6	57.3
	(4.88)	(5.62)	(4.00)	(3.35)	(6.23)	(8.85)	(3.56)	(4.76)
Credit card	26.1	47.8	50.3	43.7	26.2	50.6	44.8	35.8
	(4.36)	(5.96)	(4.38)	(3.51)	(5.63)	(8.64)	(3.59)	(4.62)
Young adult's annual income:								
\$25,000 or less	86.6	69.2	68.1	71.2	82.1	73.9	72.2	76.4
	(3.62)	(5.82)	(4.19)	(3.35)	(5.19)	(8.12)	(3.35)	(4.42)
\$25,001 to \$50,000	12.7	24.0	21.6	22.4	10.3	24.5	21.7	17.7
	(3.54)	(5.38)	(3.70)	(3.09)	(4.12)	(7.95)	(3.08)	(3.97)
More than \$50,000	0.7	6.8	10.2	6.4	7.7	1.6	6.1	5.9
	(0.89)	(3.17)	(2.72)	(1.81)	(3.61)	(2.32)	(1.79)	(2.45)
Young adults living independently/semi- independently who received:								
Food Stamps	41.4	23.2	10.8	19.4	37.1	25.9	14.1	37.3
	(7.15)	(6.70)	(3.44)	(3.56)	(9.23)	(12.64)	(3.39)	(6.19)
TANF	24.9	20.8	24.7	21.0	25.4	17.6	11.9	32.1
	(8.63)	(9.70)	(8.28)	(6.46)	(11.30)	(15.11)	(5.64)	(8.50)

Table 74.	Financial independence of young adults with disabilities at the time of the interview,
	by parents' household income and young adults' race/ethnicity and gender

NOTE: Standard errors are in parentheses. Findings are reported for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,100 young adults with disabilities for financial management tools, 3,690 young adults with disabilities for annual income, 1,904 young adults with disabilities for Food Stamps, and 540 young adults with disabilities for TANF.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

The rate of having a checking account or credit card also differed by racial/ethnic background. White young adults with disabilities were more likely to have a checking account or credit card than their African American peers (66 percent vs. 39 percent for checking account, p < .001; 44 percent vs. 26 percent for credit card, p < .01). The annual income of young adults with disabilities did not differ significantly by race/ethnicity.

Males and females did not differ significantly in their use of financial management tools or annual income. Young women with disabilities were more likely to have received Food Stamps since leaving high school than were their male counterparts (37 percent vs. 14 percent, p < .001).

This chapter has focused on the residential independence; parenting and marital status; and financial independence of young adults with disabilities. Chapter 6 will describe their social and community involvement.

### 6. Social and Community Involvement of Young Adults With Disabilities

Clearly, participating in postsecondary education and competitive employment are critical outcomes for young adults, whether or not they have identified disabilities. However, the broader notion of "social inclusion" is increasingly being used to characterize transition success. Social inclusion "rests on the principle that democratic societies are enriched by the full inclusion of their citizens in the ebb and flow of community affairs" (Osgood et al. 2005, p. 12). Consistent with this notion, the domains encompassed in an understanding of a successful transition to young adulthood for individuals with disabilities have long included living successfully in one's community (Halpern 1985; National Center on Educational Outcomes 1993). An important aspect of whether a young adult is living successfully in the community is the "adequacy of his or her social and interpersonal network [which] is possibly the most important of all" aspects of adjustment for young adults with disabilities (Halpern 1985, p. 480). This chapter adds to an understanding of the social inclusion of young adults with disabilities who had been out of high school for up to 8 years by addressing three dimensions of their community integration:

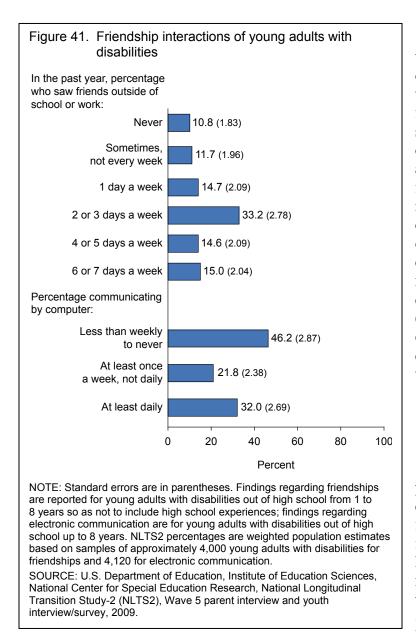
- friendship interactions;
- participation in community/civic activities; and
- negative community involvement (i.e., involvement in violence-related activities and with the criminal justice system).

Findings for each of these dimensions of involvement are presented first for young adults with disabilities as a whole, followed by discussions of significant differences in these factors for those who differed in their primary disability category, in years since leaving high school, in highest level of educational attainment, and in selected demographic characteristics.

#### **Friendship Interactions**

Unlike adolescence, which is a time for discovering who one is and what one's role in the world is, the primary developmental task for young adults is forming intimate relationships (Erikson 1974). Considerable research has documented the importance of personal relationships as "protective factors"<sup>98</sup> against a variety of risk behaviors. For example, results regarding factors associated with emotional health, youth violence, substance use, and sexuality from the National Longitudinal Study on Adolescent Health (Add Health), the largest, most comprehensive survey of adolescents to date, provide "consistent evidence that perceived caring and connectedness to others is important in understanding the health of young people today" (Resnick et al. 1997, p. 830). Connectedness with friends has been found to be associated with a variety of behaviors in either a prosocial or antisocial direction, depending on the nature of the friendships (e.g., Bearman and Moody 2004; Crosnoe and Needham 2004; Fraser 1997; Rodgers and Rose 2002; Smith et al. 1995).

<sup>&</sup>lt;sup>98</sup> Protective factors have been defined as "those aspects of the individual and his or her environment that buffer or moderate the effect of risk" (U.S. Department of Health and Human Services 2001, chapter 4, para. 1).



A majority of young adults with disabilities who had been out of high school from 1 to 8 years were reported to have active friendships<sup>99</sup> (figure 41); 78 percent saw friends outside of school or organized activities at least weekly. although 11 percent never saw friends informally (p < .001). The majority of young adults with disabilities were reported to use electronic means of communication<sup>100</sup> (i.e., e-mail, chat rooms, instant messaging) to some degree. Almost one-third (32 percent) reported using electronic communication at least daily, whereas 46 percent did so less than once a week.

### Disability Differences in Friendship Interactions

Eighty percent or more of young adults with learning disabilities, speech/language impairments, or other health impairments who had been out of high school from 1 to 8 years were reported to see friends at least weekly (83 percent, 84 percent, and 80 percent, respectively; table 75). From 75 percent to 77 percent of

young adults in the categories of emotional disturbance, hearing and visual impairment, and traumatic brain injury and 66 percent of those with orthopedic impairments also saw friends outside of school or work this often. The rates of seeing friends at least weekly were significantly higher for young adults in all eight of these disability categories than the rates for young adults with autism (48 percent;

<sup>&</sup>lt;sup>99</sup> Respondents were asked, "During the past 12 months, about how many days a week [did you/did name of youth] get together with friends (outside of school if youth was in school) and outside of organized activities or groups?" Because the friendship interaction item refers to activities in the preceding 12 months findings are reported only for the 98 percent of young adults who had been out of secondary school at least a year so as to avoid including secondary school experiences.

Respondents were asked, "How frequently do you [does youth] use e-mail, instant messaging, or take part in chat rooms? Would you say several times a day, once a day, several times a week, once a week, or less often than that?"

	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	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind- ness
						Perce	ent					
In the past year, percentage who saw friends outside of school or work at least weekly	82.5 (3.51)	84.4 (3.03)	58.1 (4.28)	75.2 (4.42)	76.3 (4.79)	77.2 (4.96)	66.0 (4.68)	80.0 (3.75)	48.2 (4.94)	77.3 (6.69)	52.8 (5.97)	62.3 (7.31)
Percentage communicating by computer at least daily	33.8 (4.29)	43.0 (4.07)	17.0 (3.25)	31.5 (4.67)	51.4 (5.50)	49.0 (5.78)	41.5 (4.82)	34.2 (4.40)	24.5 (5.50)	32.3 (7.37)	20.9 (4.78)	41.2 (7.37)

Table 75. Friendship interactions of young adults, by disability category

NOTE: Standard errors are in parentheses. Findings regarding friendships are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; findings regarding electronic communication are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,000 young adults with disabilities for friendships and 4,120 for electronic communication.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

p < .01 compared with young adults with orthopedic impairments; p < .001 for all other comparisons). With the exception of young adults with orthopedic impairments, these groups also were more likely to see friends at least weekly than young adults with multiple disabilities (53 percent; p < .01 compared with young adults with emotional disturbances, hearing or visual impairments, or traumatic brain injuries; p < .001 for all other comparisons). Young adults in six of these disability categories (excluding young adults with orthopedic impairments or traumatic brain injuries), also were more likely to see friends at least weekly than those with mental retardation (58 percent; p < .01 compared with young adults with emotional disturbances or hearing or visual impairments; p < .001 for all other comparisons), and young adults with multiple disabilities (p < .01 compared with young adults with emotional disturbances, hearing or visual impairments; p < .001 for other comparisons). Young adults with speech/language impairments also were more likely than those in the categories of orthopedic impairment and deaf/blindness to see friends at least weekly (66 percent and 62 percent, respectively; p < .01 for both comparisons), and young adults with learning disabilities were more likely to do so than young adults with orthopedic impairments (p < .01).

The reported rate of communicating by computer at least daily was highest for young adults with hearing impairments (51 percent) and lowest for those with mental retardation (17 percent, p < .001). Young adults with learning disabilities; speech/language, visual, orthopedic, or other health impairments; or deaf-blindness also were more likely to have at least daily electronic communication (34 percent to 51 percent) than those with mental retardation (17 percent; p < .001 compared with young adults with speech/language, hearing, visual, or orthopedic impairments; p < .01 for other comparisons). Young adults with hearing impairments also were reported to be more likely than those with emotional disturbances, autism, or multiple disabilities to communicate by computer at least daily (51 percent vs. 32 percent, 25 percent, and 21 percent, respectively; p < .01 compared with young adults with emotional disturbances, p < .001 for other comparisons). Young adults with emotional disturbances are more likely to computer at least daily (51 percent vs. 32 percent, 25 percent, and 21 percent, respectively; p < .01 compared with young adults with emotional disturbances, p < .001 for other comparisons). Young adults with emotional disturbances also were more likely to computer at least daily (51 percent vs. 32 percent, 25 percent, and 21 percent, respectively; p < .01 compared with young adults with emotional disturbances, p < .001 for other comparisons). Young adults with speech/language or visual impairments also were more likely to compare by computer at least daily than those young adults with autism or multiple

Table 76.	Friendship interactions of young adults with
	disabilities, by years since leaving high school

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
In the past year, percentage who saw friends outside of school or work at least weekly	67.4 (6.69)	74.7 (4.48)	81.7 (3.16)
Percentage communicating by computer at least daily	19.4	28.0	37.9
	(5.15)	(4.55)	(3.92)

NOTE: Standard errors are in parentheses. Findings regarding friendships are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; findings regarding electronic communication are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,000 young adults with disabilities for friendships and 4,120 for electronic communication.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview, and youth interview/survey, 2009. disabilities (43 percent and 49 percent vs. 25 percent and 21 percent, p < .001for all comparisons), as were young adults with orthopedic impairments (42 percent vs. 24 percent and 21 percent, p < .01 for both comparisons).

#### Differences in Friendship Interactions by Years Since Leaving High School

The percentages of out-of-high school young adults with disabilities who were reported to see friends at least weekly ranged from 67 percent for those out of high school from 1 up to 3 years to 82 percent for those out of high school from 5 up to 8 years (table 76). Young adults with

disabilities out of high school the longest time were more likely to report communicating by computer at least daily than those out of high school the shortest time (38 percent vs. 19 percent, p < .01).

# Differences in Friendship Interactions by Highest Level of Educational Attainment

The rate in which young adults with disabilities saw friends outside of organized activities at least weekly was higher among those who had completed postsecondary education than those whose highest level of education was completing high school (90 percent vs. 70 percent, p < .001, table 77). Young adults with disabilities who had completed postsecondary education also were more likely to communicate by computer at least daily (55 percent) than those in each of the other categories of educational attainment (19 percent to 33 percent, p < .01 compared with those with some postsecondary education; p < .001 for other comparisons).

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
In the past year, percentage who saw friends outside of school or work at least weekly	73.9	69.5	78.4	90.1
	(7.65)	(4.11)	(4.61)	(4.01)
Percentage communicating by computer at	19.4	20.7	32.9	54.8
least daily	(6.83)	(3.52)	(5.15)	(6.52)

# Table 77. Friendship interactions of young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings regarding friendships are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; findings regarding electronic communication are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,000 young adults with disabilities for friendships and 4,120 for electronic communication.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

## Demographic Differences in Friendship Interactions

The percentage of out-of-high school young adults with disabilities who were reported to see friends at least weekly did not differ by parents' household income, or young adults' racial/ethnic background or gender (table 78). One difference was apparent, however, regarding the rate in which they communicated by computer. Young adults with disabilities from parent households with incomes of \$50,000 or more were more likely to be reported to have electronic communication at least daily than those from households with incomes of \$25,000 or less (37 percent vs. 20 percent, p < .01).

Table 78.	Friendship interactions of young adults with disabilities, by parents' household income and
	young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percer	nt			
In the past year, percentage who saw friends outside of school or work at least weekly	74.5 (4.41)	75.8 (5.15)	81.7 (3.51)	79.2 (2.91)	77.9 (5.40)	69.2 (8.54)	78.2 (3.07)	76.4 (4.14)
Percentage communicating by computer at least daily	20.0 (3.93)	36.8 (5.76)	36.5 (4.21)	33.1 (3.31)	30.5 (5.93)	28.4 (7.77)	31.6 (3.36)	32.7 (4.48)

NOTE: Standard errors are in parentheses. Findings regarding friendships are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; findings regarding electronic communication are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 4,000 young adults with disabilities for friendships and 4,120 for electronic communication. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

## **Community Participation**

Engaging in activities in the community can provide opportunities for young adults to meet people with like interests, develop new skills, and experience the satisfaction of shared accomplishments and of making a contribution to the community. NLTS2 investigated three forms of community participation in the year preceding the Wave 5 interview/survey by young adults with disabilities:

- taking lessons or classes outside of formal school enrollment;<sup>101</sup>
- participating in a volunteer or community service activity;<sup>102</sup> and
- belonging to an organized community or extracurricular group.<sup>103</sup>

Because these items refer to activities in the preceding 12 months and because the focus of this report is activities of young adults with disabilities after high school, findings for these aspects of community participation are reported only for young adults who had been out of secondary school at least a year so as to avoid including secondary school experiences.<sup>104</sup> The full sample of young adults with disabilities is included in findings regarding whether they had driving privileges<sup>105</sup> and were registered to vote.<sup>106</sup>

Overall 'young adults with disabilities who had been out of secondary school from 1 to 8 years were said to have engaged in some kind of extracurricular activity in the preceding year (figure 42), with the rates of participation in extracurricular lessons or classes, volunteer or community service activities, and community groups ranging from

A driver's license or learner's permit had been earned by 78 percent of young adults with disabilities, and 71 percent were reported to be registered to vote. This voter registration of 72 percent rate is higher than the rate of 59 percent (p < .001) for young adults in the general population ages 18 through 24 (File and Crissey 2010).

<sup>&</sup>lt;sup>101</sup> Respondents were asked, "During the past 12 months [have you/has *name of youth*] taken lessons or classes (outside of school *for those in school*) in things like art, music, dance, a foreign language, religion, or computer skills?"

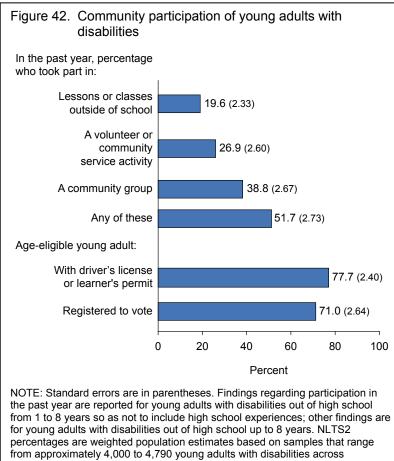
<sup>&</sup>lt;sup>102</sup> Respondents were asked, "During the past 12 months [have you/has *name of youth*] done any volunteer or community service activities? This could include community service that is part of a school class or other group activity."

<sup>&</sup>lt;sup>103</sup> Respondents were asked, if a youth was not enrolled in school, "During the past 12 months [have you/has name of youth] participated in any school activities outside of class, such as a sports team, band or chorus, a school club, or student government?" All respondents were asked, "During the past 12 months [have you/has name of youth] participated in any [out-of-high school, for those in school] group activity, such as scouting, church or temple youth group, or nonschool team sports like soccer or softball?"

<sup>&</sup>lt;sup>104</sup> Ninety-three percent of young adults included in this report have been out of high school 1 or more years.

<sup>&</sup>lt;sup>105</sup> Respondents were asked for youth at least 15 years old, "[Do you/does *name of youth*] have a driver's license or learner's permit?"

<sup>&</sup>lt;sup>106</sup> Respondents were asked for youth at least 18 years old, "[Are you/is *name of youth*] registered to vote?"



variables. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

### Disability Differences in Community Participation

The proportions of young adults with disabilities who were reported to have taken part in at least one of the social activities investigated in NLTS2 ranged from 46 percent of those with mental retardation to 67 percent of those in the categories of visual impairment and deafblindness (table 79, p < .001compared with young adults with visual impairments and p < .01compared with those with deafblindness). Young adults with visual or orthopedic impairments, deaf-blindness, or multiple disabilities were more likely than those with mental retardation to have taken lessons, volunteered in community service activities, and/or participated in community groups (67 percent, 62 percent, 67 percent, and 63 percent, respectively, vs. 46 percent, p < .01 for all comparisons). Young adults with visual

impairments also were more likely to have participated in these types of activities than were young adults with emotional disturbances (47 percent, p < .01).

				_			<b>0</b> //	<u></u>		-		
		Speech/	Maintal	Emo-	Llaarina	Viewel	Ortho-	Other		Trau-	Multiple	Deef
	Learning	language impair-	retar-	distur-	Hearing impair-	Visual impair-	pedic impair-	health impair-		matic brain	Multiple disabili-	Deaf- blind-
	disability	ment		bance	ment	ment	ment	ment	Autism	injury	ties	
	diodoliity	mont	dation	barroo	mont	Perce		mont	/ tationi	ngary		11000
In the past year, percentage who took part in:												
Lessons or classes outside of school	19.7 (3.64)	24.2 (3.51)	13.2 (2.91)	20.6 (4.10)	25.3 (4.84)	37.9 (5.70)	29.3 (4.44)	20.5 (3.74)	32.2 (4.52)	12.0 (5.15)	24.2 (5.08)	38.1 (7.32)
A volunteer or												
community service activity	27.4 (4.08)	26.3 (3.64)	18.9 (3.38)	28.8 (4.57)	34.4 (5.29)	44.0 (5.87)	30.6 (4.52)	28.4 (4.21)	34.0 (4.61)	32.2 (7.39)	32.3 (5.57)	36.6 (7.26)
A community group (e.g., sports team,	()	()	()	()	(0.20)	()	()	(,	()	(,	()	(
hobby club, religious group)	40.1 (4.12)	38.4 (3.82)	36.6 (3.88)	31.6 (4.31)	45.9 (4.95)	50.9 (5.64)	45.8 (4.58)	39.0 (4.19)	46.1 (4.77)	30.4 (7.08)	40.4 (5.46)	51.0 (7.20)
Any of these	52.7 (4.20)	53.4 (3.92)	46.7 (4.00)	45.9 (4.60)	59.3 (4.86)	66.9 (5.28)	62.2 (4.46)	53.1 (4.28)	61.1 (4.66)	49.0 (7.65)	63.0 (5.35)	66.9 (6.78)
Percentage who had a												
driver's license or learner's permit	88.2 (2.92)	81.4 (3.17)	39.2 (4.17)	73.9 (4.36)	83.5 (4.07)	23.3 (4.88)	52.8 (4.83)	83.3 (3.43)	33.4 (4.47)	74.1 (6.85)	31.2 (5.34)	26.9 (6.64)
Percentage registered to vote	70.9 (4.15)	79.3 (3.32)	62.1 (4.23)	77.0 (4.27)	71.0 (5.04)	81.2 (4.60)	77.6 (4.09)	78.2 (3.85)	55.4 (4.76)	72.5 (7.07)	55.0 (5.78)	56.9 (7.42)

#### Table 79. Community participation of young adults, by disability category

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,000 to 4,790 young adults with disabilities across variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

Young adults with visual impairments or deaf-blindness were more likely to take lessons or classes outside of formal school (38 percent for both groups) than those in several other disability categories. Young adults with visual impairments were significantly more likely than those with learning disabilities, mental retardation, other health impairments, or traumatic brain injuries to participate in lessons or classes outside school (38 percent vs. 20 percent, 13 percent, 21 percent, and 12 percent, respectively; p < .001 compared with young adults with mental retardation or traumatic brain injuries; p < .01 for other comparisons), and young adults in the deaf-blindness and autism categories were more likely than those with traumatic brain injuries to do so (38 percent and 32 percent vs. 12 percent, p < .01). Rates of participation in lessons or classes also were higher for young adults in the categories of orthopedic impairments and autism (29 percent and 32 percent) than for those with mental retardation (13 percent, p < .01 and p < .001, respectively).

The rate of participation in volunteer or community service activities was highest for young adults with visual impairments and lowest for those with mental retardation (44 percent and 19 percent, respectively; p < .001); young adults with visual impairments also exceeded those with speech/language impairments in the extent to which they volunteered or took part in community service activities (44 percent vs. 26 percent, p < .01). Rates of participation in community groups

was highest for young adults with visual impairments (51 percent) and lowest for those with emotional disturbances (32 percent), a statistically significant difference (p < .01).

Approximately 80 percent or more of young adults with learning disabilities (88 percent) or speech/language, hearing, or other health impairments (81 percent, 84 percent, and 83 percent) were reported to have driving privileges, as were 74 percent of young adults with emotional disturbances or traumatic brain injuries. In contrast, between 23 percent and 53 percent of young adults with mental retardation, visual or orthopedic impairments, autism, multiple disabilities, or deaf-blindness had a driver's license or learner's permit (p < .001 for all comparisons except p < .01 comparing those with emotional disturbances and those with orthopedic impairments, and the difference in rates between those with traumatic brain injuries and with orthopedic impairments was not statistically significant). Although the rate of having a driver's license or learner's permit among young adults in several other categories, those with orthopedic impairments were more likely than young adults with multiple disabilities or deaf-blindness to have driving privileges (53 percent vs. 31 percent and 27 percent, p < .001).

Voter registration rates for young adults with disabilities ranged from 77 percent or more for young adults with speech/language, visual, orthopedic, or other health impairments or emotional disturbances to 55 percent to 62 percent for young adults with mental retardation, autism, multiple disabilities or deaf-blindness. Young adults with speech/language, visual, or orthopedic impairments were more likely to be registered to vote than were those with autism or multiple disabilities (p < .001 for all comparisons) or mental retardation (p < .01 for all comparisons). Those with other health impairments also were more likely to be registered to vote than were young adults with mental retardation (p < .01). In addition, young adults with emotional disturbances or orthopedic impairments had higher voter registration rates than those with multiple disabilities (p < .01) and those with visual impairments have higher rates than those with deaf-blindness (p < .01).

#### Differences in Community Participation by Years Since Leaving High School

The rates of reported participation in extracurricular lessons or classes in the past year by young adults with disabilities who had been out of high school 1 to 8 years ranged from 18 percent to 24 percent (table 80). Rates of participation in volunteer or community service activities ranged from 24 percent for those out of high school less than 3 years to 30 percent for those who had left high school between 5 and 8 years earlier. Rates of participation in organized community groups ranged from 30 percent to 42 percent. From 62 percent of those who were out of school between 1 and 3 years to 74 percent of young adults with disabilities out between 5 and 8 years were reported to be registered to vote. Only rates of having a driver's license differed significantly by the number of years young adults with disabilities had been out of high school; 83 percent of those who had been out of high school between 5 and 8 years were reported to have driving privileges, compared with 60 percent who had been out of high school from 1 up to 3 years (p < .001).

Table 80.	Community participation of young adults with
	disabilities, by years since leaving high school

	Less than	3 up to	5 up to
_	3 years	5 years	8 years
		Percent	
In the past year, percentage who took part in:			
Lessons or classes	23.6	20.7	18.1
outside of school	(6.06)	(4.13)	(3.13)
A volunteer or community	24.2	23.5	29.8
service activity	(6.15)	(4.30)	(3.72)
A community group (e.g.,			
sports team, hobby club,	30.2	36.4	42.2
religious group)	(6.30)	(4.58)	(3.70)
Any of these	47.8	50.6	53.3
	(6.85)	(4.75)	(3.73)
Percentage who had a			
driver's license or learner's	60.1	76.4	82.9
permit	(6.32)	(4.30)	(3.07)
Percentage registered	62.1	69.7	74.2
to vote	(6.31)	(4.74)	(3.56)

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,000 to 4,790 young adults with disabilities across variables. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Differences in Community Participation by Highest Level of Educational Attainment

Young adults with disabilities who had some postsecondary education and those who had earned a postsecondary degree or license/certificate were significantly more likely to have taken part in extracurricular lessons or classes (26 percent and 34 percent, respectively; table 81) than the two groups of young adults with disabilities who had completed high school and those who had not (8 percent for each group; p < .01 comparing those with some postsecondary education and high school noncompleters; p < .001 for other comparisons). Those who had completed a postsecondary education program also were more likely than high school completers to have participated in a volunteer or community service activity (39 percent vs. 18 percent, p < .01) and were more likely than high school noncompleters to have been a member of a community

group (48 percent vs. 25 percent, p < .01). Both young adults with disabilities who had some postsecondary education and those who had completed a postsecondary program were more likely to have taken part in at least one of the modes of community participation investigated in NLTS2 than those who had not completed high school (54 percent and 66 percent vs. 29 percent, p < .01and p < .001, respectively).

Having driving privileges was more common among young adults with disabilities who had completed a postsecondary education program than among either high school noncompleters or completers (95 percent vs. 62 percent and 66 percent, respectively; p < .001 for both comparisons). Young adults with disabilities who had some postsecondary education also were more likely than high school completers to have a driver's license or learner's permit (84 percent vs. 66 percent, p < .01). Being registered to vote also was more likely among postsecondary education attenders and completers (78 percent and 89 percent, respectively) than among high school completers (48 percent and 60 percent; p < .01 compared with postsecondary education completers).

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
In the past year, percentage who took part in:				
Lessons or classes outside of school	7.5	8.2	26.1	33.6
	(4.45)	(2.43)	(4.90)	(6.34)
A volunteer or community service activity	18.9	17.9	30.3	39.1
	(6.69)	(3.39)	(5.11)	(6.51)
A community group (e.g., sports team, hobby club, religious group)	24.0	35.7	39.4	48.4
	(6.61)	(4.06)	(5.03)	(6.23)
Any of these	29.2	46.2	54.3	66.3
	(6.90)	(4.21)	(5.13)	(5.89)
Percentage who had a driver's license or	62.2	66.1	84.4	95.1
learner's permit	(8.16)	(4.12)	(3.96)	(2.86)
Percentage registered to vote	47.9	60.0	78.2	88.5
	(8.59)	(4.33)	(4.54)	(4.24)

Table 81.	Community participation of young adults with disabilities, by highest level of educational
	attainment

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,000 to 4,790 young adults with disabilities across variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Demographic Differences in Community Participation

Only with regard to having driving privileges was there a significant difference associated with parents' household income or the racial/ethnic background of young adults with disabilities (table 82). Young adults with disabilities from families in the upper income group (more than \$50,000) were significantly more likely to have driving privileges than those from households with incomes of \$25,000 or less (87 percent vs. 67 percent, p < .001). Additionally, White young adults with disabilities were more likely than African American peers to have a driver's license or learner's permit (84 percent vs. 63 percent, p < .01).

There were no statistically significant differences in any form of community participation between male and female young adults with disabilities who had been out of high school from 1 to 8 years. Approximately one-fifth of both groups were reported to have taken lessons or classes outside of school; 29 percent of males and 24 percent of females had taken part in a volunteer or community service activity; 39 percent and 38 percent of young men and women with disabilities, respectively, were reported to have belonged to an organized community group; and 54 percent of males and 48 percent of females were reported to have taken part in at least one of these forms of community involvement. A driver's license or learner's permit reportedly had been earned by 80 percent of young adult males with disabilities and 74 percent of their female counterparts. Rates of voter registration were reported to be 72 percent and 70 percent for the two groups.

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
	1635	φ <b>30,000</b>	\$30,000	Percer		Пізрапіс	Male	I emale
In the past year, percentage who took part in:								
Lessons or classes outside of	13.5	15.2	26.7	19.5	19.2	20.0	20.8	17.8
school	(3.45)	(4.29)	(3.99)	(2.82)	(5.07)	(7.39)	(3.00)	(3.70)
A volunteer or community	19.6	29.5	32.6	27.9	26.3	24.4	28.6	24.0
service activity	(3.96)	(5.45)	(4.23)	(3.19)	(5.68)	(7.89)	(3.33)	(4.14)
A community group (e.g., sports team, hobby club, religious group)	39.5 (4.64)	36.5 (5.40)	38.6 (4.05)	37.1 (3.14)	48.9 (6.17)	34.5 (8.15)	39.2 (3.31)	38.1 (4.50)
Any of these	48.5	49.8	54.3	51.8	58.5	43.0	53.9	47.9
	(4.73)	(5.60)	(4.13)	(3.24)	(6.07)	(8.49)	(3.37)	(4.62)
Percentage who had a driver's license or learner's permit	67.4	77.3	86.5	83.9	62.6	67.3	79.8	74.1
	(4.63)	(4.94)	(3.03)	(2.58)	(6.11)	(8.39)	(2.91)	(4.19)
Percentage registered to vote	66.7	61.0	80.9	69.5	83.9	61.9	71.5	70.2
	(4.70)	(5.81)	(3.48)	(3.29)	(4.67)	(8.43)	(3.28)	(4.42)

Table 82. Community participation of young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that range from approximately 4,000 to 4,790 young adults with disabilities across variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### **Negative Community Involvement**

The preceding section described generally positive modes of community participation by young adults with disabilities. However, the community participation of some of them had negative repercussions, both for them and for their communities. NLTS2 has investigated two forms of negative community involvement: participation in violence-related activities and involvement with the criminal justice system.

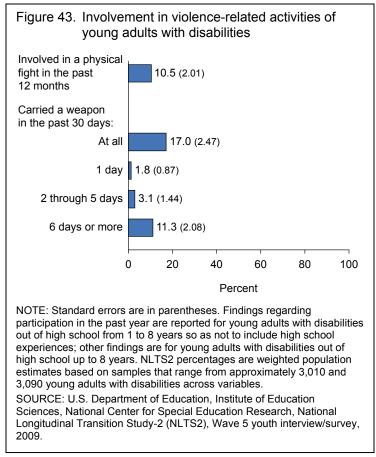
#### Involvement in Violence-Related Activities

NLTS2 has investigated the reported involvement of young adults with disabilities in three forms of violence-related activities: physical fights,<sup>107</sup> carrying a weapon,<sup>108</sup> and belonging to a gang.<sup>109</sup> Less than one-half of 1 percent of young adults with disabilities reported belonging to a gang, so no further analysis of that form of violence-related activity is presented.

<sup>&</sup>lt;sup>107</sup> Youth were asked, "In the past 12 months, have you gotten in a physical fight?"

<sup>&</sup>lt;sup>108</sup> Youth age 18 or older were asked, "During the past 30 days, on how many days did you carry a weapon, such as a gun, knife, or club?"

<sup>&</sup>lt;sup>109</sup> Youth age 18 or older were asked, "Do you belong to a gang?"



Because the question about fighting referred to involvement in the past 12 months and because the focus of this report is on experiences of young adults with disabilities after high school, those findings are reported only for those who had been out of high school at least 1 year so as to avoid including secondary school experiences. Findings for weapons carrying address activities in the preceding 30 days; thus, they include the full sample of young adults with disabilities who had been out of high school up to 8 years.

Eleven percent of young adults with disabilities who had been out of high school 1 to 8 years reported being in a physical fight in the 12 months preceding the Wave 5 interview/survey (figure 43); 17 percent reported carrying a weapon in the past 30 days, and 11 percent had carried a weapon for 6 or more days in

that time period.

#### **Disability Differences in Involvement in Violence Related Activities**

Fourteen percent of young adults with emotional disturbances who had been out of high school 1 to 8 years reported being involved in a physical fight in the preceding year compared with 2 percent of young adults with orthopedic impairments (p < .01, table 83). Rates at which young adults with disabilities reported carrying a weapon in the preceding 30 days were 24 percent for those with emotional disturbances and 4 percent for those with orthopedic impairments (p < .001). Young adults with learning disabilities also were more likely to carry a weapon than those with orthopedic impairments (18 percent vs. 4 percent, p < .001). Young adults with emotional disturbances also had a significantly higher rate of carrying weapons than did those with speech/language impairments or multiple disabilities (9 percent and 6 percent, respectively; p < .01).

	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	Autism	Trau- matic brain injury	Multiple disabili- ties	Deaf- blind -ness
						Perce	ent					
Reported involvement in a physical fight in the past 12 months Reported carrying	11.1 (3.12)	6.8 (2.28)	6.2 (2.57)	14.0 (3.86)	7.8 (3.51)	3.4 (2.31)	2.3 (1.58)	8.9 (2.91)	5.1 (3.09)	11.6 (5.59)	6.3 (4.50)	12.2 (6.22)
a weapon in the past 30 days	18.2 (3.81)	9.2 (2.58)	12.2 (3.44)	23.7 (4.69)	11.0 (4.07)	12.6 (4.16)	3.8 (1.99)	11.9 (3.30)	13.5 (4.69)	15.1 (6.20)	6.3 (4.32)	7.3 (4.95)

	Table 83.	Involvement in violence-related	d activities by young	adults, by	disability category
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NOTE. Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,010 and 3,090 young adults with disabilities for the two variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

# Differences in Involvement in Violence-Related Activities by Years Since Leaving High School

There were no significant differences in involvement in either of the two forms of violencerelated activities reported here between young adults with disabilities who differed in the years since they had left high school (table 84). From 7 percent to 12 percent across groups reported having been in a physical fight in the preceding year, and from 14 percent to 21 percent reported

Table 84. Involvement in young adults w leaving high so	ith disabilitie							
	Less than	3 up to	5 up to					
	3 years	5 years	8 years					
Percent								
Reported involvement in a								
physical fight in the past	7.0	9.7	11.5					
12 months	(4.04)	(3.43)	(2.91)					
Reported carrying								
a weapon in the past 13.5 21.2 14.9								
30 days	(5.22)	(4.73)	(3.24)					

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,010 and 3,090 young adults with disabilities for the two variables. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009. carrying a weapon in the preceding 30 days.

#### Differences in Violence Related Activities by Highest Level of Educational Attainment

There were no significant differences in involvement in either of the two forms of violence-related activities reported here between young adults with disabilities who differed in the years since they had left high school (table 85). From 8 percent to 17 percent across groups reported having been in a physical fight in the preceding year, and from 8 percent to 21 percent reported carrying a weapon in the preceding 30 days.

Table 85.	Investment in violence-related activities of young adults with disabilities, by highest level
	of educational attainment

	High school non- completer	High school completer	Some post- secondary school	Post- secondary school completion
		Perce	nt	
Percentage reporting involvement in a physical fight in the past 12 months	17.0	12.0	8.4	9.3
	(8.21)	(3.38)	(3.29)	(4.11)
Percentage reporting carrying a weapon in the past 30 days	7.9	21.1	16.0	15.0
	(5.90)	(4.24)	(4.35)	(5.05)

NOTE: Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,010 and 3,090 young adults with disabilities for the two variables.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent interview and youth interview/survey, 2009.

#### Demographic Differences in Involvement in Violence-Related Activities

There were no significant differences in reported involvement in violence-related activities between young adults of different racial/ethnic backgrounds or those who came from parent households with different income levels (table 86). Young men and women with disabilities also did not differ significantly in their reported participation in physical fights. However, they did differ in the proportion who reported carrying a weapon. Among young adults with disabilities who had been out of high school up to 8 years, 24 percent of males reported carrying a weapon in the past 30 days, compared with 7 percent of females (p < .001).

Table 86.	Involvement in violence-related activities by young adults with disabilities, by parents'
	household income and young adults' race/ethnicity and gender

	\$25,000 or less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Male	Female
				Percen	ıt			
Percentage reporting involvement in a physical fight in the past 12 months	13.6 (3.83)	4.0 (2.66)	12.6 (3.32)	9.3 (2.31)	10.8 (4.58)	18.8 (8.01)	13.9 (2.92)	5.4 (2.37)
Percentage reporting carrying a weapon in the past 30 days	19.5 (4.43)	17.7 (5.19)	15.4 (3.61)	21.1 (3.24)	9.9 (4.41)	6.1 (4.98)	23.9 (3.61)	6.7 (2.60)

NOTE. Standard errors are in parentheses. Findings regarding participation in the past year are reported for young adults with disabilities out of high school from 1 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples of approximately 3,010 and 3,090 young adults with disabilities for the two variables.

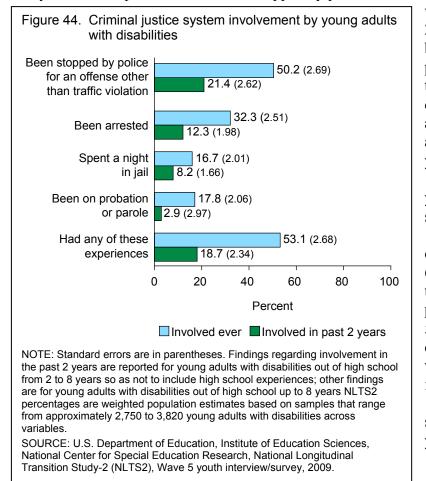
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

### Criminal Justice System Involvement

The actions of some young adults with disabilities violate the laws or norms of their communities to such a degree that they become involved with the criminal justice system. NLTS2 provides information on the percentages of young adults with disabilities out of high school up to 8 years who were reported ever and in the preceding 2 years to have

- been stopped by police for an offense other than a traffic violation;<sup>110</sup>
- been arrested;<sup>111</sup>
- spent a night in jail;<sup>112</sup>
- been on probation or parole;<sup>113</sup> or
- been involved with the criminal justice system in any of these ways.

At some time in their lives, 50 percent of young adults with disabilities out of high school up to 8 years were reported to have been stopped by police for an offense other than a traffic



violation (figure 44), and 22 percent were reported to have been stopped by police in the preceding 2 years. Thirtytwo percent of young adults with disabilities reportedly had been arrested at some time. The rate of arrest in the preceding 2 years for young adults with disabilities was 12 percent. Overall, 17 percent of young adults with disabilities had spent a night in jail, and 18 percent had been on probation or parole; 8 percent and 6 percent, respectively, had had those experiences in the preceding 2 years. Overall, 53 percent of young adults with disabilities had been involved with the criminal justice system in one or more of these ways; 19 percent had been involved in some way in the preceding 2 years.

<sup>112</sup> Respondents were asked, "In the past 2 years, [have you/has *name of youth*] been in jail overnight?"

<sup>&</sup>lt;sup>110</sup> Respondents were asked, "In the past 2 years, [have you/has *name of youth*] been stopped and questioned by police except for a traffic violation?"

<sup>&</sup>lt;sup>111</sup> Respondents were asked, "[Have you/has *name of youth*] been arrested at any time in the past 2 years?"

<sup>&</sup>lt;sup>113</sup> Respondents were asked, "In the past 2 years, [have you/has *name of youth*] been on probation or parole?"

#### **Disability Differences in Criminal Justice System Involvement**

There were many significant differences across disability categories in the various aspects of involvement with the criminal justice system, particularly involving young adults with emotional disturbances (table 87). Overall, 75 percent of young adults with emotional disturbances had been involved with the criminal justice system at some point in their lives, 33 percent in the preceding 2 years; 72 percent had been stopped by police for an offense other than a traffic violation, 43 percent in the past 2 years. Rates of ever being involved and being involved in the past 2 years are 61 percent and 27 percent, respectively, for arrests; 37 percent and 19 percent for overnight incarceration; and 44 percent and 15 percent for probation or parole.

		Speech/		Emo-			Ortho-	Other		Trau-		
	Learning	language impair-	Mental retar-	tional distur-	Hearing impair-	Visual impair-	pedic impair-	health impair-		matic brain	Multiple disabili-	Deaf- blind-
	disability	ment		bance	ment	ment	ment	ment	Autism	injury	ties	ness
						Perce	ent					
Stopped by police for an offense other than a traffic violation												
Ever	51.8	39.7	33.4	71.8	36.7	28.6	21.6	52.7	23.0	49.2	25.8	27.2
	(4.15)	(3.78)	(3.75)	(4.09)	(4.71)	(4.98)	(3.76)	(4.25)	(3.95)	(7.62)	(4.74)	(6.37)
In past 2 years	20.2	16.3	15.0	43.2	19.0	10.7	7.6	20.5	4.1	21.5	11.7	12.7
	(4.00)	(3.24)	(3.36)	(5.64)	(4.63)	(3.85)	(2.70)	(4.03)	(2.15)	(7.37)	(4.20)	(5.32)
Arrested												
Ever	32.3	20.9	19.6	60.5	14.1	7.4	10.1	29.8	10.3	35.0	10.2	10.4
	(3.87)	(3.13)	(3.15)	(4.44)	(3.40)	(2.88)	(2.75)	(3.89)	(2.85)	(7.27)	(3.27)	(4.37)
In past 2 years	11.9	7.3	6.6	27.1	3.6	2.1	4.3	12.5	0.6	12.2	3.9	3.7
	(3.03)	(2.10)	(2.26)	(4.64)	(2.13)	(1.74)	(2.04)	(3.14)	(0.81)	(5.34)	(2.50)	(2.96)
Spent a night in jail												
Ever	15.6 (3.00)	8.5 (2.15)	11.0 (2.49)	37.3 (4.39)	5.4 (2.21)	5.2 (2.44)	3.8 (1.75)	17.0 (3.20)	2.1 (1.35)	16.5 (5.66)	3.8 (2.06)	3.8 (2.74)
In past 2 years	7.9 (2.53)	4.5 (1.74)	4.3 (1. 87)	18.7 (4.15)	2.3 (1.70)	1.6 (1.52)	2.3 (1.50)	7.1 (2.47)	0.2 (0.47)	8.5 (4.60)	2.7 (2.10)	2.5 (2.43)
Been on probation or parole												
Ever	15.9 (3.02)	10.0 (2.32)	9.8 (2.36)	44.2 (4.51)	6.5 (2.41)	3.7 (2.08)	6.3 (2.22)	17.9 (3.26)	3.4 (1.70)	23.3 (6.44)	6.0 (2.56)	2.8 (2.36)
In past 2 years	5.5 (2.13)	3.6 (1.56)	4.2 (1.81)	15.2 (3.74)	1.2 (1.21)	1.7 (1.56)	2.9 (1.68)	7.6 (2.52)	0.3 (0.54)	7.2 (4.22)	1.8 (1.73)	1.2 (1.73)
Had any of these experiences	, , ,		<b>、</b> ,	, ,	<b>、</b> ,	<b>χ</b>	χ <i>γ</i>	<b>χ</b>	、 <i>,</i>	, , ,	, , , , , , , , , , , , , , , , , , ,	. ,
Ever	54.7 (4.12)	43.0 (3.81)	37.0 (3.84)	74.7 (3.95)	39.1 (4.77)	29.2 (5.01)	22.8 (3.83)	53.5 (4.24)	26.7 (4.15)	52.4 (7.61)	27.3 (4.81)	27.2 (6.37)
In past 2 years	17.8 (3.57)	15.0 (2.98)	13.9 (3.14)	33.4 (4.80)	17.5 (4. 31)	10.3 (3.69)	7.4 (2.62)	18.4 (3.66)	3.9 (2.02)	18.3 (6.32)	11.5 (4.10)	12.0 (5.08)

Table 87. Criminal justice system involvement of young adults, by disability category

NOTE: Standard errors are in parentheses. Findings regarding involvement in the past 2 years are reported for young adults with disabilities out of high school from 2 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that are approximately 4,800 young adults with disabilities for variables related to involvement "ever" and range from 2,750 to 3,820 young adults with disabilities for involvement in the past 2 years.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

For all these forms of involvement, young adults with emotional disturbances were significantly more likely than those in most other categories to have been involved with the criminal justice system. The rate of ever having been involved in the criminal justice system at all and in each form of involvement all were significantly higher for young adults with emotional disturbances than the rates for those in all other disability categories (p < .001 for all comparisons except p < .01 for all comparisons with young adults with traumatic brain injuries). With the exception of those with traumatic brain injuries, young adults with emotional disturbances also had significantly higher rates of being stopped by police for other than a traffic violation in the past 2 years and arrested in the past 2 years than young adults in all other categories (p < .01 for both comparisons with young adults with other health impairments and for arrests with those with learning disabilities; p < .001 for all other comparisons. Young adults with emotional disturbances also exceeded those in all other categories except learning disability, other health impairment, and traumatic brain injuries in their rates of having been incarcerated over night in the past 2 years and having been on probation or parole in the past 2 years (p < .001 for all comparisons). Finally, with the exceptions of young adults with hearing impairments, other health impairments, or traumatic brain injuries, the rate of ever having been involved at all with the criminal justice system exceeded the rates of those in all other disability categories (p < .01 compared with youth with learning disabilities, speech/language impairments, or deaf-blindness; p < .001 for all other comparisons.

Young adults with learning disabilities, other health impairments, or traumatic brain injuries were significantly more likely than those in several disability categories to ever have been involved with the criminal justice system. Young adults in these three disability categories, learning disability, other health impairment, or traumatic brain injury, were reported to have higher rates of ever being stopped by police for other than a traffic violation (52 percent, 53 percent, and 49 percent respectively) than young adults with orthopedic impairments, autism, or multiple disabilities (22 percent, 23 percent, and 26 percent, respectively, p < .01 for all comparisons with those with traumatic brain injuries, p < .001 for all other comparisons). Young adults with learning disabilities, other health impairments, or traumatic brain injuries also were more likely ever to have been arrested (32 percent, 30 percent, 35 percent) than were those with hearing, visual, or orthopedic impairments; autism; multiple disabilities, or deaf-blindness (14 percent, 7 percent, 10 percent, 10 percent, 10 percent, and 10 percent, respectively, p < .001for all comparisons with those with learning disabilities; p < .001 for all comparisons for those with other health impairments except p < .01 for their comparison with young adults with hearing impairments; p < .01 for all comparisons with those with traumatic brain injuries except p < .001for their comparison with young adults with visual impairments).

Young adults with learning disabilities, other health impairments, or traumatic brain injuries also were more likely ever to have been on probation or parole (16 percent, 18 percent, 23 percent) than those in the categories of orthopedic impairment, autism, or multiple disabilities (6 percent, 3 percent, and 6 percent, respectively, p < .001 for all comparisons with those with learning disabilities or other health impairments, p < .01 for all comparisons with those with traumatic brain injuries). Finally, young adults with learning disabilities, other health impairments, and traumatic brain injuries also had higher rates of ever having any criminal justice system involvement (55 percent, 54 percent, and 52 percent, respectively) than those with orthopedic impairments, autism, or multiple disabilities (23 percent, 27 percent, and 27 percent, respectively, p < .001 for all comparisons with learning disabilities or other

health impairments, p < .001 comparing those with traumatic brain injuries and orthopedic impairments, p < .01 comparing those with traumatic brain injuries and those with both autism and multiple disabilities).

Young adults with learning disabilities or other health impairments (although not those with traumatic brain injuries) were more likely than those with visual impairments or deaf-blindness ever to have been involved with the criminal justice system (29 percent and 27 percent, respectively, p < .001 for all comparisons). Those with other health impairments also were more likely than young adults with mental retardation to have any criminal justice system involvement (37 percent p < .01).

In the 2 years preceding the Wave 5 interview, young adults in the categories of learning disability (20 percent) and other health impairment (21 percent) were more likely than those with orthopedic impairments or autism to have been stopped by police for an offense other than a traffic violation (8 percent and 4 percent, respectively, p < .01 for comparisons with those with orthopedic impairments, p < .001 for comparisons with young adults with autism). Young adults with learning disabilities (12 percent) or other health impairments (13 percent) also were more likely than those with visual impairments or autism to have been arrested in the preceding 2 years (2 percent and 1 percent, p < .01 for comparisons with those with visual impairment, p < .001 for comparisons with young adults with autism). Those with learning disabilities (8 percent) or other health impairments (7 percent) also were more likely than young adults with autism to have been incarcerated over night or involved at all in the criminal justice system in the preceding 2 years (less than <1 percent, p < .01 for comparisons regarding overnight incarceration, p < .001regarding comparisons of any involvement in the criminal justice system). Young adults with other health impairments (18 percent) were more likely than those with hearing or orthopedic impairments or multiple disabilities ever to have been on probation or parole (4 percent, 6 percent, and 6 percent, respectively, p < .01 for all comparisons). Those with other health impairments (8 percent) also were more likely than young adults with autism to have been on probation or parole in the preceding 2 years (less than <1 percent, p < .01).

Disability differences also were apparent for young adults in other disability categories. For example, young adults with learning disabilities were more likely than those with orthopedic impairments to to have been stopped by police for an offense other than a traffic violation in the past 2 years (20 percent vs. 8 percent, p < .01). Further, those with speech/language impairments were more likely than young adults with autism to have been stopped by the police for an offense other than a traffic violation in the past 2 years (16 percent vs. 4 percent, p < .01) and to have been involved with the criminal justice system ever and in the past 2 years (15 percent vs. 4 percent, p < .01). In addition, young adults with speech/language impairments were more likely than those with orthopedic impairments ever to have been stopped by police for an offense other than a traffic violation (40 percent vs. 22 percent, p < .001), and ever to have been arrested (21 percent vs. 10 percent, p < .01). Those with speech/language impairments also were more likely ever to have been arrested than were young adults with visual impairments (8 percent p < .01).

Young adults with hearing impairments (39 percent) were more likely than those with orthopedic impairments (23 percent) ever to have been involved with the criminal justice system and than those with autism to have had criminal justice system involvement in the past 2 years (18 percent vs. 4 percent, p < .01 for both comparisons). Those with mental retardation were more likely ever to have been incarcerated overnight or have had any criminal justice system

involvement, compared with those with autism (11 percent vs. 2 percent and 37 percent vs. 27 percent p < .01 for both comparisons).

#### Differences in Criminal Justice System Involvement by Years Since Leaving High School

There were no differences in the indicators of criminal justice system involvement by years since leaving high school (table 88). The rates of ever having been involved with the criminal justice system in various ways ranged from 41 percent to 52 percent for police stops for an offense other than a traffic violation, 27 percent to 36 percent for arrest, 14 percent to 19 percent for overnight incarceration, 10 percent to 23 percent for being on probation or parole, and 48 percent to 55 percent for involvement in any one or more of these ways. Rates of involvement in the 2 years preceding the Wave 5 interview/survey ranged from were 18 percent to 22 percent for police stops and from 11 percent to 13 percent for arrest, 3 percent to 10 percent for overnight incarceration, 4 percent to 8 percent for having been on probation or parole, and 17 percent to 19 percent for any form of involvement in the past 2 years.

#### Differences in Criminal Justice System Involvement by Highest Level of Educational Attainment

Table 88.	Criminal justice system involvement of young adults with disabilities, by years since leaving
	high school

	Less than	3 up to	5 up to
	3 years	5 years	8 years
		Percent	
Stopped by police for an offense other than a traffic violation			
Ever	41.1	50.7	51.9
	(6.13)	(4.72)	(3.74)
In past 2 years	17.5	20.8	22.1
	(6.87)	(4.34)	(3.67)
Arrested			
Ever	34.5	26.6	35.9
	(5.91)	(4.17)	(3.57)
In past 2 years	10.7	11.4	13.2
	(5.39)	(3.25)	(2.76)
Spent a night in jail			
Ever	16.4	14.0	18.7
	(4.61)	(3.28)	(2.91)
In past 2 years	2.9	6.9	9.8
	(2.97)	(2.63)	(2.44)
Been on probation or parole			
Ever	16.3	10.3	23.3
	(4.60)	(2.87)	(3.15)
In past 2 years	3.5	3.9	8.4
	(3.19)	(1.99)	(2.25)
Had any of these experiences			
Ever	48.3	51.8	55.0
	(6.22)	(4.72)	(3.71)
In past 2 years	16.5	19.0	18.8
	(6.46)	(4.01)	(3.17)

NOTE: Standard errors are in parentheses. Findings regarding involvement in the past 2 years are reported for young adults with disabilities out of high school from 2 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years. NLTS2 percentages are weighted population estimates based on samples that are approximately 4,800 young adults with disabilities for variables related to involvement "ever" and range from 2,750 to 3,820 young adults with disabilities for involvement in the past 2 years.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

Young adults with disabilities who had not completed high school were significantly more likely to have had involvement in the criminal justice system than those with higher levels of educational attainment (table 89). Three-fourths of young adults with disabilities who had not completed high school had at some time been stopped by police for an offense other than a

			Some	Post-
	High	High	post-	secondary
	school non-	school	secondary	school
	completer	completer	school	completion
		Perce	nt	
Stopped by police for an offense other than a traffic violation				
Ever	74.7	47.7	53.2	42.4
	(6.70)	(4.16)	(5.04)	(6.14)
In past 2 years	33.9	23.5	19.7	16.1
	(9.33)	(4.19)	(4.81)	(5.18)
Arrested				
Ever	58.5	32.4	33.8	21.7
	(7.59)	(3.89)	(4.77)	(5.10)
In past 2 years	23.8	15.4	9.3	8.0
	(7.61)	(3.33)	(3.32)	(3.64)
Spent a night in jail				
Ever	40.0	17.1	15.6	10.2
	(7.55)	(3.13)	(3.66)	(3.74)
In past 2 years	14.5	10.9	5.5	5.6
	(6.51)	(2.89)	(2.62)	(3.10)
Been on probation or parole				
Ever	38.7	18.6	16.9	10.4
	(7.51)	(3.23)	(3.78)	(3.78)
In past 2 years	14.4	8.0	5.4	2.1
	(6.22)	(2.50)	(2.61)	(1.92)
Had any of these experiences				
Ever	76.1	51.0	56.4	44.6
	(6.57)	(4.15)	(5.01)	(6.15)
In past 2 years	29.3	20.8	16.9	14.7
. ,	(8.05)	(3.74)	(4.27)	(4.73)

# Table 89. Criminal justice system involvement of young adults with disabilities, by highest level of educational attainment

NOTE: Standard errors are in parentheses. Findings regarding involvement in the past 2 years are reported for young adults with disabilities out of high school from 2 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years NLTS2 percentages are weighted population estimates based on samples that are approximately 4,800 young adults with disabilities for variables related to involvement "ever" and range from 2,750 to 3,820 young adults with disabilities for involvement in the past 2 years.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

traffic violation compared with 48 percent of high school completers and 42 percent of postsecondary school completers (p < .001). The rate of ever having been arrested was 59 percent for high school noncompleters compared with 32 percent of high school completers, 34 percent of those who had some postsecondary education, and 22 percent of those who had completed a postsecondary education program (p < .001 compared with postsecondary completers and p < .01 for other comparisons). Overnight incarceration at some time had been experienced by 40 percent of young adults with disabilities who had not completed high school, compared with 17 percent of high school completers, 16 percent of those who had some postsecondary education, and 10 percent of those who had completed a postsecondary education program (p < .001 compared with postsecondary education, and some postsecondary education, and 10 percent of those who had completed a postsecondary education program (p < .001 compared with postsecondary completers and p < .01 for other comparisons). Thirty-nine percent of high school noncompleters with disabilities had at some time been on probation or parole, significantly more than the 17 percent of those with some postsecondary education and 10 percent of

postsecondary completers with disabilities (p < .001 compared with postsecondary completers and p < .01 compared with those with some postsecondary education). Finally, 76 percent of young adults with disabilities who had not completed high school had had one or more of these forms of criminal justice system involvement at some time, compared with 51 percent of high school completers and 45 percent of postsecondary education program completers (p < .01 and p < .001, respectively).

None of the forms of criminal justice system involvement in the preceding 2 years were significantly different for young adults with disabilities who differed in their levels of educational attainment.

#### **Demographic Differences in Criminal Justice System Involvement**

There were no statistically significant differences in reported criminal justice system involvement between young adults with disabilities from parent households with different income levels or those who differed in their racial/ethnic backgrounds (table 90). However, significant gender differences were apparent. Males were more likely than females ever to have been stopped by police for an offense other than a traffic violation (58 percent vs. 37 percent, p < .001) and in the preceding 2 years (28 percent vs. 11 percent, p < .001). Males also were more likely than females ever to have been arrested (39 percent vs. 21 percent, p < .001). Reported rates also were more than twice for males compared with females regarding ever having spent a night in jail (21 percent vs. 9 percent, p < .01) and were more than four times higher for doing so in the preceding 2 years (12 percent vs. 3 percent, p < .01). With their higher rates of experiencing these various forms of criminal justice system involvement, males also were much more likely ever to have had any criminal justice involvement (62 percent vs. 38 percent, p < .001) and to have been involved in the preceding 2 years (24 percent vs. 10 percent, p < .001).

	\$25,000 or		More than		African			
	less	\$50,000	\$50,000	White	American	Hispanic	Male	Female
				Percen	it			
Stopped by police for other than a traffic violation								
Ever	56.4	43.4	51.2	49.2	53.5	49.0	57.8	36.9
	(4.63)	(5.47)	(4.10)	(3.21)	(6.07)	(8.35)	(3.30)	(4.40)
In the past 2 years	26.3	15.2	21.0	19.3	25.6	26.2	28.0	10.8
	(4.83)	(4.72)	(3.98)	(3.07)	(6.24)	(8.93)	(3.69)	(3.19)
Arrested								
Ever	39.9	24.4	30.4	30.1	36.4	34.4	38.7	21.1
	(4.58)	(4.72)	(3.76)	(2.94)	(5.83)	(7.94)	(3.24)	(3.72)
In the past 2 years	16.3	7.5	12.2	12.1	13.2	11.9	15.2	7.7
	(3.85)	(3.24)	(3.00)	(2.39)	(4.52)	(6.17)	(2.71)	(2.67)
Spent a night in jail								
Ever	24.4	10.2	14.9	15.4	21.8	15.0	21.2	8.9
	(4.02)	(3.32)	(2.91)	(2.31)	(5.00)	(5.97)	(2.72)	(2.59)
In the past 2 years	12.1	5.7	6.5	8.1	9.3	6.7	11.6	2.6
	(3.45)	(2.85)	(2. 26)	(2.01)	(3.94)	(4.77)	(2.44)	(1.60)
On probation or parole								
Ever	20.1	17.5	16.5	18.6	20.3	7.3	21.4	11.4
	(3.74)	(4.18)	(3.04)	(2.50)	(4.87)	(4.35)	(2.73)	(2.90)
In the past 2 years	10.0	3.6	4.9	6.4	9.4	1.0	8.2	3.1
	(3.12)	(2.29)	(1.97)	(1.79)	(3.88)	(1.87)	(2.07)	(1.73)
Had any of these experiences								
Ever	61.2	44.5	51.8	50.5	60.5	53.5	61.5	38.3
	(4.55)	(5.46)	(4.09)	(3.21)	(5.92)	(8.34)	(3.24)	(4.43)
In the past 2 years	23.4	13.2	18.7	17.4	21.0	23.5	24.0	10.0
	(4.40)	(4.13)	(3.55)	(2.76)	(5.41)	(8.07)	(3.21)	(2.99)

Table 90. Criminal justice system involvement of young adults with disabilities, by parents' household income and young adults' race/ethnicity and gender

NOTE. Standard errors are in parentheses. Findings regarding involvement in the past 2 years are reported for young adults with disabilities out of high school from 2 to 8 years so as not to include high school experiences; other findings are for young adults with disabilities out of high school up to 8 years NLTS2 percentages are weighted population estimates based on samples that range from approximately 2,750 to 3,820 young adults with disabilities.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 youth interview/survey, 2009.

This chapter has focused on the social and community involvement of young adults with disabilities, and it is the final chapter in this report presenting a national picture of the post-high school experiences and outcomes of young adults with disabilities who had been out of high school for up to 8 years.

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# Appendix A

NLTS2 Sampling, Data Collection, and Analysis Procedures

# Appendix A. NLTS2 Sampling, Data Collection, and Analysis Procedures

This appendix describes several aspects of the NLTS2 methodology relevant to the data reported here, including

- sampling local education agencies (LEAs) and students;
- data sources and response rates;
- weighting the data;
- estimation and use of standard errors;
- unweighted and weighted sample sizes;
- calculating statistical significance; and
- measurement and reporting issues.

# **NLTS2 Sample Overview**

The NLTS2 sample was constructed in two stages. A stratified random sample of 3,634 LEAs was selected from the universe of approximately 12,000 LEAs that serve students receiving special education in at least one grade from 7th through 12th grades. These LEAs and 77 state-supported special schools that served primarily students with hearing and vision impairments and multiple disabilities were invited to participate in the study, with the intention of recruiting 497 LEAs and as many special schools as possible from which to select the target sample of about 12,000 students. The target LEA sample was reached; 501 LEAs and 38 special schools agreed to participate and provided rosters of students receiving special education in the designated age range, from which the student sample was selected.

The roster of all students in the NLTS2 age range who were receiving special education from each LEA<sup>114</sup> and special school was stratified by disability category. Students then were selected randomly from each disability category. Sampling fractions were calculated that would produce enough students in each category so that, in the final study year, findings will generalize to most categories individually with an acceptable level of precision, accounting for attrition and for response rates to the parent/youth interview. A total of 11,270 students were selected and eligible to participate in NLTS2.

Details of the LEA and student samples are provided below.

# The NLTS2 LEA Sample

# Defining the Universe of LEAs

The NLTS2 sample includes only LEAs that have teachers, students, administrators, and operating schools—that is, "operating LEAs." It excludes such units as supervisory unions; Bureau of Indian Affairs schools; public and private agencies (e.g., correctional facilities); LEAs

<sup>&</sup>lt;sup>114</sup> LEAs were instructed to include on the roster any student for whom they were administratively responsible, even if the student was not educated within the LEA (e.g., attended school sponsored by an education cooperative or was sent by the LEA to a private school). Despite these instructions, some LEAs may have underreported students served outside the LEA.

from U.S. territories; and LEAs with 10 or fewer students in the NLTS2 age range, which would be unlikely to have students with disabilities.

The public school universe data file maintained by Quality Education Data (Quality Education Data 1999) was used to construct the sampling frame because it had more recent information than the alternative list maintained by the National Center for Education Statistics. Correcting for errors and duplications resulted in a master list of 12,435 LEAs that met the selection criteria. These comprised the NLTS2 LEA sampling frame.

# Stratification

The NLTS2 LEA sample was stratified to increase the precision of estimates, to ensure that low-frequency types of LEAs (e.g., large urban districts) were adequately represented in the sample, to improve comparisons with the findings of other research, and to make NLTS2 responsive to concerns voiced in policy debate (e.g., differential effects of federal policies in particular regions, LEAs of different sizes). Three stratifying variables were used: region, size (student enrollment), and community wealth. The three variables generate a 64-cell grid into which the universe of LEAs was arrayed.

**Region.** This variable captures essential political differences, as well as subtle differences in the organization of schools, the economic conditions under which they operate, and the character of public concerns. The regional classification variable selected has been used by the Department of Commerce, the Bureau of Economic Analysis, and the National Assessment of Educational Progress (categories are Northeast, Southeast, Midwest, and West).

**Size (student enrollment).** LEAs vary considerably in size, the most useful available measure of which is student enrollment. A host of organizational and contextual variables are associated with size that exert considerable potential influence over the operations and effects of special education and related programs. In addition, total enrollment serves as an initial proxy for the number of students receiving special education served by an LEA. The QED database provides enrollment data from which LEAs were sorted into four categories serving approximately equal numbers of students:

- very large (estimated<sup>115</sup> enrollment greater than 14,931 in grades 7 through 12);
- large (estimated enrollment from 4,661 to 14,930 in grades 7 through 12);
- medium (estimated enrollment from 1,622 to 4,660 in grades 7 through 12); and
- small (estimated enrollment from 11 to 1,621 in grades 7 through 12).

<sup>&</sup>lt;sup>115</sup> Enrollment in grades 7 through 12 was estimated by dividing the total enrollment in all grade levels served by an LEA by the number of grade levels to estimate an enrollment per grade level. This was multiplied by 6 to estimate the enrollment in grades 7 through 12.

**Community wealth.** As a measure of district wealth, the Orshansky index (the proportion of the student population living below the federal definition of poverty, Employment Policies Institute 2002) is a well-accepted measure. The distribution of Orshansky index scores was organized into four categories of LEA/community wealth, each containing approximately 25 percent of the student population in grades 7 through 12:

- high (0 percent to 13 percent Orshansky);
- medium (14 percent to 24 percent Orshansky);
- low (25 percent to 43 percent Orshansky); and
- very low (more than 43 percent Orshansky).

# LEA Sample Size

On the basis of an analysis of LEAs' estimated enrollment across LEA size and estimated sampling fractions for each disability category, 497 LEAs (and as many state-sponsored special schools as would participate) was considered sufficient to generate the student sample. Taking into account the rate at which LEAs were expected to refuse to participate, a sample of 3,635 LEAs was invited to participate, from which 497 participating LEAs might be recruited. A total of 501 LEAs actually provided students for the sample, 101 percent of the target number needed and 14 percent of those invited. Analyses of the region, size, and wealth of the LEA sample, both weighted and unweighted, confirmed that the weighted LEA sample closely resembled the LEA universe with respect to those variables.

In addition to matching the LEA sample to the universe of LEAs on variables used in sampling, it was important to ascertain whether the stratified random sampling approach resulted in skewed distributions on relevant variables not included in the stratification scheme. Several analyses were conducted.

First, three variables from the QED database were chosen to compare the "fit" between the first-stage sample and the population: the LEA's racial/ethnic distribution of students, the proportion who attended college, and the urban/rural status of the LEA. This analysis revealed that the sample of LEAs somewhat underrepresented African American students and college-bound students and overrepresented Hispanic students and LEAs in rural areas. Thus, in addition to accounting for stratification variables, LEA weights were calculated to achieve a distribution on the urbanicity and racial/ethnic distributions of students that matched the universe.

To determine whether the resulting weights, when applied to the participating NLTS2 LEAs, accurately represented the universe of LEAs serving the specified grade levels, data collected from the universe of LEAs by the U.S. Department of Education's Office of Civil Rights (OCR) and additional items from QED were compared for the weighted NLTS2 LEA sample and the universe. Finally, the NLTS2 participating LEAs and a sample of 1,000 LEAs that represented the universe of LEAs were surveyed to assess a variety of policies and practices known to vary among LEAs and to be relevant to secondary-school-age young adults with disabilities. Analyses of both the extant databases and the LEA survey data confirm that the weighted NLTS2 LEA sample accurately represents the universe of LEAs (Javitz and Wagner 2003).

#### The NLTS2 Student Sample

Determining the size of the NLTS2 student sample took into account the duration of the study, desired levels of precision, and assumptions regarding attrition and response rates. Analyses determined that approximately three students would need to be sampled for each student who would have a parent/youth interview in Wave 5 of NLTS2 data collection.

The NLTS2 sample design called for findings to be generalizable to students receiving special education as a whole and for the 12 special education disability categories currently in use and reported in this document. Standard errors were to be no more than 3.6 percent, except for the low-incidence categories of traumatic brain injury and deaf-blindness. Thus, by sampling 1,250 students per disability category (with the two exceptions noted), 402 students per category were expected to have a parent or youth interview in year 9 (Wave 5). Assuming a 50 percent sampling efficiency<sup>116</sup> (which is likely to be exceeded for most disability categories), 402 students would achieve a standard error of estimate of slightly less than 3.6 percent. All students with traumatic brain injury or with deaf-blindness in participating LEAs and special schools were selected. Students who are age 24 or older at the conclusion of the study. Among the eligible students, 40.2 percent are 24 or older as of the final interview.

LEAs and special schools were contacted to obtain their agreement to participate in the study and request rosters of students receiving special education who were 13 to 16 years old on December 1, 2000, and in at least seventh grade.<sup>117</sup> Requests for rosters specified that they contain the names and addresses of students receiving special education under the jurisdiction of the LEA, the disability category of each student, and the students' birthdates or ages. Some LEAs would provide only identification numbers for students, along with the corresponding birthdates and disability categories. When students were sampled in these LEAs, identification numbers of selected students were provided to the LEA, along with materials to mail to their parents/guardians (without revealing their identity).

After estimating the number of students receiving special education in the NLTS2 age range, the appropriate fraction of students in each category was selected randomly from each LEA and special school. In cases in which more than one child in a family was included on a roster, only one was eligible to be selected. LEAs and special schools were notified of the students selected, and contact information for their parents/guardians was requested.<sup>118</sup>

## **Data Sources**

Data are reported here for the subset of NLTS2 sample members (approximately 4,810) who were out of high school at the time of Wave 5 data collection and who have data from the Wave 5 youth telephone interview or mail survey or the Wave 5 parent telephone

<sup>&</sup>lt;sup>116</sup> "50 percent sampling efficiency" means that a simple random sample of half the size as NLTS2 would have the same standard error as obtained in NLTS2 when the complex sampling design is taken into account. Sampling efficiency is the inverse of the DEFT, where DEFT is the square foot of DEFF (the design effect).

<sup>&</sup>lt;sup>117</sup> Students who were designated as being in ungraded programs also were sampled if they met the age criteria.

<sup>&</sup>lt;sup>118</sup> In the process of selecting the student sample, random numbers were generated and the sample universe file was sorted by these numbers. Sample members were selected beginning at the start of the file until the required number of students had been selected. If two students were selected from the same family, the first student on the list was chosen for the sample (i.e., the one with the smaller random number).

interview (2009). In addition to Wave 5 data, several variables that were created for this report indicate whether a young adult had had a particular experience "since high school," (e.g. postsecondary enrollment, employment status, wages, and living arrangements). Eight percent of out-of-high school respondents (approximately 390 young adults with disabilities) had left high school since the Wave 4 data collection; thus, Wave 5 data are all that are required to generate values for these variables for them. However, the remainder of the out-of-high school respondents were already out of school in Wave 2, 3, or 4. Thus, data from prior waves needed to be taken into account to generate values for variables measuring experiences "since high school."

Wave 2 through Wave 4 data collection mirrored procedures followed for Wave 5. The Wave 4 parent/youth interview/survey produced data for approximately 3,980 young adults included in the Wave 5 report. Wave 3 provided information for approximately, 2,080 report sample members and Wave 2 for approximately 850 report sample members who had been out of high school since Wave 2.

Because of the relatively small percentage of young adults enrolled in postsecondary schools at the time of the Wave 5 interview (15 percent), Wave 2 through Wave 4 data also were used to augment data for variables related to the postsecondary education experiences of young adults in the Wave 5 report who had been enrolled in these types of schools in prior waves but not in Wave 5. Including earlier wave data increased the sample size, enabling broader analyses of these variables, particularly analyses by disability category. Postsecondary experience variables included, timing and intensity of enrollment, course of study, receipt of and accommodations and supports. For young adults in the Wave 5 report who were not in postsecondary school in Wave 5, but who had been enrolled in postsecondary school in an earlier wave, data from the most recent wave in which they had been enrolled in postsecondary education were combined with the responses of postsecondary attendees in Wave 5.

Wave 1 parent telephone interview or mail survey data are the source for data about youth's gender, race/ethnicity, and household income. High school transcripts provided data on high school completion status and completion date. Information about the primary disability category of NLTS2 sample members came from rosters of students in the NLTS2 age range receiving special education services in the 2000–01 school year under the auspices of participating school districts and state-supported special schools. Each source is described below. Although Wave 5 data have generated the majority of findings reported in this document, parent/youth telephone interviews/mail surveys are described in chronological order because procedures applied in earlier waves of data collection shape the respondent groups for Wave 5.

# Wave 1 Parent Interview/Survey<sup>119</sup>

The NLTS2 conceptual framework suggests that a youth's nonschool experiences, such as extracurricular activities and friendships; historical information, such as age when disability was first identified; household characteristics, such as socioeconomic status; and a family's level and type of involvement in school-related areas are crucial to student outcomes. Parents/guardians are the most knowledgeable about these aspects of students' lives. They also are important sources of information on outcomes across domains. Thus, parents/guardians of NLTS2 sample members were interviewed by telephone or surveyed by mail in 2001, as part of Wave 1 data collection.

<sup>&</sup>lt;sup>119</sup> All NLTS2 instruments are available on the NLTS2 website, www.nlts2.org.

Matches of names, addresses, and telephone numbers of NLTS2 parents with existing national locator databases were conducted to maximize the completeness and accuracy of contact information and subsequent response rates. A student was required to have a working telephone number and an accurate address to be eligible for the parent interview sample.

Letters were sent to parents to notify them that their child had been selected for NLTS2 and that an interviewer would be attempting to contact them by telephone. The letter included a toll-free telephone number for parents to call to be interviewed if they did not have a telephone number where they could be reached reliably or if they wanted to make an appointment for the interview at a specific time.

Computer-assisted telephone interviewing (CATI) was used for parent interviews, which were conducted between mid-May and late September 2001. Ninety-five percent of interviews were conducted in English and 5 percent in Spanish.

All parents who could not be reached by telephone were mailed a self-administered questionnaire in a survey period that extended from September through December 2001. The questionnaire contained a subset of key items from the telephone interview. Overall, 91 percent of respondents reported that they were parents of sample members (biological, adoptive, or step), and 1 percent were foster parents. Six percent were relatives other than parents, 2 percent were nonrelative legal guardians, and less than 1 percent reported other relationships to sample members.

# Wave 2 Parent/Youth Interviews

NLTS2 sample members for whom working telephone numbers and addresses were contacted for the Wave 2 parent/youth telephone interview or youth mail survey in 2003, independent of response status in Wave 1. Database matching procedures were used to maximize the eligible sample, as in Wave 1. Contact procedures alerting parents of the interviews also were similar for the two waves. The major distinction between the data collection methods in Waves 1 and 2 is that interviews in Wave 2 were sought both with parents of NLTS2 sample members and with the youth themselves if they were able to respond to questions.

The first interview contact was made with parents of eligible sample members. Those who agreed to participate were interviewed with CATI. Items in this portion of the interview, referred to as Parent Part 1, focused on topics for which the parent was considered the most appropriate respondent (e.g., services received, family expectations, and support). At the end of Parent Part 1, the respondent was asked the following:

My next questions are about jobs (YOUTH'S NAME) may have had, schools (he/she) may have gone to, and about (his/her) feelings about (him/herself) and (his/her) life. The questions are similar to those I've been asking you, where (he/she) will be asked to answer using scales, like "very well," "pretty well," "not very well," or "not at all well." The interview would probably last about 20 to 30 minutes. Do you think that (YOUTH'S NAME) would be able to accurately answer these kinds of questions over the telephone? If youth could answer questions by phone, they also were told:

I also have some questions about (his/her) involvement in risk behaviors, like smoking, drinking, and sexual activity. Is it all right for me to ask (YOUTH'S NAME) questions like that?

If parents consented, interviewers asked to speak with the youth or asked for contact information to reach the youth in order to complete the youth portion of the interview, referred to as Youth Part 2.

Parents who reported that youth could not answer questions by telephone were asked:

*Would (he/she) be able to accurately answer these kinds of questions using a written questionnaire?* 

If parents indicated that youth could complete a written questionnaire, they were asked for the best address to which to send a questionnaire, and a questionnaire was sent. The questionnaire contained a subset of items from the telephone interview that were considered most important for understanding the experiences and perspectives of youth. Multiple follow-up phone or mail contacts were made to maximize the response rate for the mail survey. Data from the mail survey and Youth Part 2 of the telephone interview were merged for analysis purposes.

If parents reported that youth could not answer questions either by telephone or written questionnaire or declined to have youth asked questions related to risk behaviors, interviewers asked them to continue the interview, referred to as Parent Part 2. If youth were reported to be able to complete a telephone interview or a written questionnaire but did not do so after repeated attempts, parents were contacted again and asked to complete Parent Part 2 in lieu of Youth Part 2.

# Waves 3 through 5 Parent/Youth Interviews/Surveys

As in early waves of data collection, NLTS2 sample members for whom working telephone numbers and addresses were available were contacted for the Wave 3 (2005), Wave 4 (2007) and Wave 5 (2009) parent/youth telephone interviews/surveys, independent of response status in prior waves. Database matching procedures were used to maximize the eligible sample, as previously. Contact procedures alerting respondents of the interviews also were similar across waves. Wave 3 through Wave 5 data collection was similar to Wave 2 in that both parents and youth were sought as respondents, and youth respondents who were reported to be able to respond for themselves but not by telephone were surveyed by mail. The major distinction between the data collection methods in Waves 2 and in later waves is that for youth for whom Wave 2 data had been collected, interviews were sought with parents and with youth themselves simultaneously, rather than interviewing parents first, relying on parents' reports in Wave 2 regarding youth's ability to respond for themselves by telephone or mail. For sample members who were eligible for Wave 3 through Wave 5 data collection but who could not be reached for data collection in an earlier wave, a telephone interview was sought first with parents, and the screening process for the youth interview survey that was described for Wave 2 was repeated when a parent was reached. Table A-1 reports the response rates for Wave 1 Parent telephone/mail survey and from Waves 2, 3, 4, and 5 Parent Part 1 and Parent Part 2 telephone interviews and Youth Part 2 telephone/mail surveys.

Respondents	Number	Percent
Wave 1		
Total sample	11,240	
Respondents		
Completed telephone interview	8,670	76.9
Completed partial telephone interview	300	2.7
Completed mail questionnaire	260	2.3
Total respondents	9,220	81.9
Total nonrespondents	2,0450	18.1
Wave 2		
Total sample	11,230	
Respondents		
Completed Parent Part 1 telephone interview	6,860	61.1
Completed Parent Part 2 telephone interview	2,960	26.4
Completed Youth Part 2 telephone interview or mail questionnaire	3,360	30.0
Total respondents with Part 1 and either Parent or Youth Part 2	6,320	56.3
Total nonrespondents (no parent or youth data)	1,350	12.0
Wave 3		
Total sample	11,220	
Respondents		
Completed Parent Part 1 telephone interview	5,190	46.2
Completed Parent Part 2 telephone interview	1,580	14.1
Completed Youth Part 2 telephone interview or mail questionnaire	3,290	29.3
Total respondents with Part 1 and either Parent or Youth Part 2	4,660	41.5
Total respondents with Parent Part 1 or Parent Part 2, or Youth Part 2	5,370	47.8
Total nonrespondents (no parent or youth data)	2,620	23.3
Wave 4		
Total sample	11,130	
Respondents		
Completed Parent Part 1 telephone interview	4,610	41.4
Completed Parent Part 2 telephone interview	1,590	14.3
Completed Youth Part 2 telephone interview or mail questionnaire	2,500	22.5
Total respondents with Part 1 and either Parent or Youth Part 2	3,790	34.1
Total respondents with Parent Part 1 or Parent Part 2, or Youth Part 2	4,900	44.0
Total nonrespondents (no parent or youth data)	3,230	29.0
Wave 5		
Total sample	11,080	
Respondents		
Completed Parent Part 1 telephone interview	4,450	41.0
Completed Parent Part 2 telephone interview	1,440	13.0
Completed Youth Part 2 telephone interview or mail questionnaire	3,190	29.0
Total respondents with Part 1 and either Parent or Youth Part 2	4,070	37
Total respondents with Parent Part 1 or Parent Part 2, or Youth Part 2	4,970	44.9
Total nonrespondents (no parent or youth data)	3,110	28.1
High School Transcripts		
Total transcript data	9,070	80.5

## High School Transcripts

High school completion status and high school leave date were based on data from high school transcripts. High school transcripts were requested for all NLTS2 sample members. Transcript data were collected for approximately 3,990 young adults included in this report. For those for whom transcript data were not available, school completion status and leave dates were based on information from parent/youth interviews.

# **Combining Parent and Youth Data**

As noted above, for youth who had a parent interview through which they were determined to be eligible for a youth interview/survey, interviews with both parents and youth were pursued simultaneously. Anticipating that for some young adults, only one of the two interviews would be completed, items related to key post-high school outcomes were included in both interviews. If a youth interview/survey was completed, youth's responses to these items were used. If a youth interview/survey could not be completed for an eligible youth or if a youth was reported by parents not to be able to participate in an interview/survey, parents' responses were used. For the subsample of out-of-high school youth included in this report, the youth interview/survey was the source of data for post-high school outcomes for 65 percent of youth, and the parent interview was the source for 35 percent of youth.

Combining data across respondents raises the question of whether parent and youth responses would concur—i.e., would the same findings result if parents' responses were reported instead of youth's responses. Table A-2 shows the level of congruence in parents' and youth's responses to four items related to key outcomes of interest.

When both parents and youth were asked whether the youth had attended community college, belonged to an organized community group, currently worked for pay, and worked for pay in the past 2 years, their responses agreed from 73 percent to 88 percent of the time. The greatest congruence (88 percent, K = .76, p < .001) is noted regarding youth's current employment status. There was 86 percent congruence (K = .63, p < .001) evident regarding employment in the preceding 2 years; an 85 percent congruence (K = .70, p < .001) related to community college enrollment, and 73 percent agreement (K = .44, p < .001) regarding whether youth belonged to an organized group in the community.

		Percentage with:							
	Congruent responses	Parent answering yes (higher), youth no (lower)	Parent answering no (lower), youth yes (higher	Kappa ( <i>K</i> ) score <sup>1</sup>					
Youth currently working for pay	88.1	5.4	6.5	.76					
Youth worked for pay in past 2 years	86.0	5.3	8.7	.63					
Youth belongs to an organized group in the community	72.9	13.9	13.2	.44					
Youth ever enrolled in a community college since high school	85.0	5.5	9.5	.70					

Table A-2. Congruence of parent and youth responses to key items

<sup>1</sup> Adjusted agreement score for amount of agreement that would have been expected by chance.

It is impossible to determine the cause of discrepant responses. Complete congruence would not be expected, even with both respondents answering accurately, because the parent interview and youth interview/survey could have been completed several months apart during the 7-month interview period; the status of youth could have changed in the intervening period. In such cases, both responses would be accurate at the time given. However, discrepancies also could result from one response being inaccurate, either because a respondent gave a socially desirable response (e.g., reported a youth was employed when he or she was not) or because the respondent (usually the parent) had inaccurate information (e.g., a youth no longer living with a parent had not informed the parent regarding a community group he or she had joined, leading to a negative parent response regarding group membership when a positive response was accurate). Although it is not possible to tell which of two discrepant responses is correct, it is noteworthy that with the exception of current employment, discrepant cases are more likely to result from a positive response from youth when parents responded negatively (e.g., youth reported higher wages or a higher rate of group membership than parents). Thus, for some items, youth for whom data were collected through the youth interview/survey may appear to have more positive experiences than those for whom data were collected through a parent interview because of the source of the data, in addition to or instead of actual differences in their experiences. Again, this difference does not necessarily imply inaccuracies in the data, but it does affirm the difference in the knowledge and perspectives of parents and youth.

# Weighting the Wave 5 Young Adult/Parent Data

The percentages and means reported in the data tables throughout this report are estimates of the true values for the population of young adults with disabilities in the NLTS2 age range. The response for each sample member is weighted to represent the number of young adults in his or her disability category in the kind of LEA (i.e., region, size, and wealth) or special school from which he or she was selected. Responses also are weighted to represent the best estimate of the number of young adults with disabilities by racial/ethnic category (non-Hispanic White, non-Hispanic Other, and Hispanic).

Table A-3 illustrates the concept of sample weighting and its effect on percentages or means that are calculated for young adults with disabilities as a group. In this example, 10 young adults are included in a sample, 1 from each of 10 disability groups, and each has a hypothetical value regarding whether that youth participated in organized group activities in the community (1 for yes, 0 for no). Six young adults participated in such activities. Summing the hypothetical values for the 10 youth results in an average of 60 percent for the full group. However, this would not accurately represent the national population of young adults with disabilities because many more young adults are classified as having a learning disability than as having orthopedic or other health impairments, for example. Therefore, in calculating a population estimate, weights in the example are applied that correspond to the proportion of young adults in the population who are from each disability category (actual NLTS2 weights account for disability category and several aspects of the districts from which young adults were chosen). The sample weights for this example appear in column C. Using these weights, the weighted population estimate is 88 percent. The percentages in all NLTS2 tables are similarly weighted population estimates, whereas the sample sizes are the actual numbers of cases on which the weighted estimates are based (similar to the 10 cases in column A in table A-3).

	А	В	С	D		
Disability category	Number in sample	Participated in group activities	Example weight for category	Weighted value for category		
Total	10	6	10.0	8.8		
Learning disability	1	1	5.0	5.0		
Speech/language impairment	1	1	1.9	1.9		
Mental retardation	1	1	1.0	1.0		
Emotional disturbance	1	0	.8	0		
Hearing impairment	1	1	.2	.2		
Visual impairment	1	1	.1	.1		
Orthopedic impairment	1	0	.1	0		
Other health impairment	1	1	.6	.6		
Autism	1	0	.2	0		
Multiple disabilities	1	0	.1 0			
	Unweighted sample 60 percent (Column by Column A total)		Weighted populatio 88 percent (Colur by Column C total)	n estimate = mn D total divided		

Table A-3. Example of weighted percentage calculation

The students in LEAs and state schools with data for each survey were weighted to represent the universe of students in LEAs and state schools by using the following methodology:

- Let i=1, 2, 3, ..., 64 index the NLTS2 LEA strata and i = 65 denote the state school stratum. Let N(i) denote the number of LEAs or state schools in the i-th strata. Let M(i) denote the prespecified sample size of LEAs or state schools in the i-th strata. Within each stratum, all N(i) LEAs and state schools were assigned a uniformly distributed random number and were sorted on the basis of that random number in increasing order. The first M(i) of those LEAs or state schools were selected for the sample in the i-th stratum; consequently the LEA/state school sample in each stratum was drawn with equal probabilities and without replacement. Let P(i, j) denote the probability of selection of the j-th LEA or state school in the i-th stratum. Then P(i, j) = M(i) / N(i). The j-th selected LEA or state school in the i-th stratum was assigned an initial weight of W(i, j) = 1/P(i, j) = N(i) / M(i).
- Let Q(i) denote the number of respondent LEAs or state schools in the i-th stratum. Let R(i) denote the response rate in the i-th stratum. Then R(i) = Q(i)/M(i). The adjusted weight for the j-th selected LEA or state school in the i-th stratum, denoted W\*(i, j), was set to 0 if the j-th selected LEA or state school in the i-th stratum was a nonrespondent and to W\*(i, j) = W(i, j)/R(i) = N(i)/Q(i) if the j-th selected LEA or state school was a respondent. Note that all LEAs in the i-th stratum have the same adjusted weight.
- When rosters were obtained from each respondent LEA or state school, they were separated by disability category and student age groups (13 to 15.99, and 16 to 17.99). Samples were independently selected and weighted for each disability and age category, using the same methodology (with the exception of deaf-blind as discussed later). Without loss of generality, therefore, discussion is restricted to the selection and weighting of students with learning disabilities in the older age category.

- Let (i, j, k) denote the k-th older students with learning disabilities in the j-th LEA/state school in the i-th stratum. Let Ns(i, j) denote the number of older students with learning disabilities in the (i, j)-th LEA/state school. Let V(i) denote the predetermined sampling fraction for older students with learning disabilities in the i-th stratum. A uniformly generated random number, denoted U(i, j, k) was generated for each older student with learning disabilities in the (i, j)-th LEA/state school roster. The (i, j, k)-th older student with learning disabilities was selected for the study without replacement if U(i, j, k) < V(i). Let Ws(i, j, k) denote the initial weight for the (i, j, k)-th older student with learning disabilities. Then Ws(i, j, k) = W\*(i, j) / V(i). Since W\*(i, j) is a constant for all LEA/state schools in the i-th stratum, note that Ws(i, j, k) is constant for all older students with learning disabilities in the i-th stratum.</li>
- Let Ms(i, j) be the number of sampled older students with learning disabilities in the (i, j)-th LEA/state school and let Ms(i) be the total number of selected older students with learning disabilities in the i-th stratum. Let Qs(i, j) be the number of responding older students with learning disabilities in the (i, j)-th LEA/state school and let Qs(i) be the total number of responding older LD students in the i-th stratum. Let Rs(i) denote the older students with learning disabilities response rate in the i-th stratum among selected students. Then Rs(i) = Qs(i) / Ms(i). The adjusted weight for the (i, j, k)-th older student with learning disabilities, denoted Ws\*(i, j, k) is defined to be 0 if the student is a non-respondent and Ws\*(i, j, k) = Ws(i, j, k) / R(i) otherwise. Note that Ws\*(i, j, k) is a constant for all responding older students with learning disabilities in the i-th stratum.
- Data from Department of Education reports, the Common Core, the rosters of the respondent LEAs and state schools, and the student weights were combined to estimate the following: (1) total number of students in each disability category by age category (for example, the total number of older students with learning disabilities in the universe), (2) the total number of students by disability and race/ethnicity (coded non-hispanic white, non-Hispanic Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska native), and (3) the total number of students by disability and LEA/state school strata. Deming's raking algorithm was used to adjust the Ws\*(i, j, k) weights so that the sum of the adjusted weights in these subgroups (for example, older students with learning disabilities in the universe) approximated their known or estimated national totals.
- Analysis of NLTS2 data after the first wave revealed that respondents to the later waves differed from the Wave 1 respondents with respect to the distribution of their household incomes, whether the parents had volunteered at the school, and whether the student had been held back one or more grade levels. The Wave 1 weights and parental survey responses were used to estimate, by disability and age category, the national number of students in each household income category, each parental volunteering category, and each student advancement category (i.e., whether the student had ever been held back). To reduce nonresponse bias in these later waves, the Deming raking algorithm was extended to modify weights so that their totals also approximate these estimated national totals.
- Recruitment was attempted with all students with deaf-blindness who appeared on the rosters of the responding LEAs and state schools and these students were subject to the same weighting approach as described above (excluding the Deming raking). A few

students in the hearing impairment disability category and in the visually impaired disability category with sufficiently severe hearing and vision problems to be classified as deaf-blind were identified. These students were retained in their original disability/age categories for purposes of developing weights for students in those categories, but were classified as deaf-blind for purposes of analysis. The sum of the weights for all students with deaf-blindness (i.e., those originally found in the deaf-blind category and those who were later reclassified as deaf-blind) was equal to 3,196. Due to the small number of students who qualified for the deaf-blind category, SRI and the Department of Education agreed that the weights for all of these students would be set to a constant, such that the sum of those weights was equal to 3,196.

#### **Estimating Standard Errors**

Each estimate reported in the data tables is accompanied by a standard error. A standard error acknowledges that any population estimate that is calculated from a sample will only approximate the true value for the population. The true population value will fall within the range demarcated by the estimate, plus or minus 1.96 times the standard error, 95 percent of the time. For example, if the estimate for young adult's current postsecondary enrollment is 23.5 percent, with a standard error of 2.67, one can be 95 percent confident that the true current postsecondary enrollment rate for the population is between 18.3 percent and 28.7 percent.

Because the NLTS2 sample is both stratified and clustered, calculating standard errors by formula is not straightforward. Standard errors for means and proportions can, however, be estimated by using pseudoreplication, a procedure that is widely used by the U.S. Census Bureau and other federal agencies involved in fielding complex surveys. To that end, a set of weights was developed for each of 32 balanced half-replicate subsamples. Each half-replicate involved selecting half of the total set of LEAs that provided contact information, using a partial factorial balanced design (resulting in about half of the LEAs being selected within each stratum) and then weighting that half to represent the entire universe. The half-replicates could be used to estimate the variance of a sample mean by (1) calculating the mean of the variable of interest on the full sample and each half-sample, using the appropriate weights; (2) calculating the squares of the deviations of the half-sample estimate from the full-sample estimate; and (3) adding the squared deviations and dividing by (n-1), where n is the number of half-replicates. Since there were 32 replicates, the variance estimates would have 31 degrees of freedom.

Because the method of using replicate weights is computationally intensive and was not easily implemented in the Statistical Analysis System (SAS) during the first years of NLTS2, we sought a simpler formula-based procedure. We selected a variety of categorical and continuous Wave 1 variables and calculated their standard errors using replicate weights. We compared those standard error estimates with those obtained using a formula appropriate for an independent and identically distributed sample with unequal weights. (Under the latter assumptions, the effective sample size can be approximated as

$$N_{eff} = N \begin{pmatrix} E^2[W] \\ E^2[W] + V[W] \end{pmatrix}$$

where  $N_{eff}$  is the effective sample size,  $E^2[W]$  is the square of the arithmetic average of the weights, and V[W] is the variance of the weights. For a variable X, the standard error of estimate can typically be approximated by  $\sqrt{V[X]/N_{eff}}$ , where V[X] is the weighted variance of X.) As

expected, due to the complex sampling design in NLTS2, the use of the formula given above was not fully adequate. However, we found that if we multiplied these formula-based standard errors by 1.25, this yielded estimates that slightly exceeded the variance estimates via pseudo-replication for approximately 90 percent of the categorical and 90 percent of the continuous variables that were examined. Therefore we modified our formula by including a design factor of 1.25, which accounts for the stratified and clustered nature of the sample.

All standard errors in this report were calculated using formula-based estimates rather than estimates based on the replicate weights. Since our formula based estimates tend to be slightly larger than the variances using pseudo-replicates, and the cutoff values for *t*-statistics based on infinite degrees of freedom rather than 31 degrees of freedom are similar, we calculated our p values based on infinite degrees of freedom. As a 10-year longitudinal study, NLTS2 has continued to use this formula-based procedure to calculate standard errors rather than use currently available procedures. This decision to maintain consistency in analytical approaches was based on the need to support comparisons of findings across NLTS2 reports. For example, key post-high school outcomes, such as employment rates, postsecondary enrollment rates, and wages, have been reported for NLTS2 data collection waves 2, 3, 4, and 5. Changing the analytic approach would call into question the longitudinal look at such variables. To examine possible differences between the approaches, replicate weights were created for-chapter 5 of this report. Findings using the replicate weights were then compared with the findings using formula-based estimates. Of the 904 possible comparisons in the chapter, 29 differences (3 percent) were noted: 14 differences that were reported at the p < .01 level dropped to p < .05; 2 differences dropped from p < .01 to less than 05; 9 decreased from p < .001 to p < .01; and 4 increased from p < .01to p < .001.

# **Determining Statistical Significance**

The following formula was used to determine the statistical significance of the differences between independent groups.

$$F = \frac{(P_1 - P_2)^2}{SE_1^2 + SE_2^2}$$

For example, this formula could be used to determine whether the difference in the percentages of students who report a particular view among students with learning disabilities and among those with hearing impairments is greater than would be expected to occur by chance. In this formula,  $P_1$  and  $SE_1$  are the first percentage and its standard error and  $P_2$  and  $SE_2$  are the second percentage and its standard error. The squared difference between the two percentages of interest is divided by the sum of the two squared standard errors.

If the product of a calculation is larger than 3.84 (i.e.,  $1.96^2$ ), the difference is significant at the .05 level—that is, it would occur by chance fewer than 5 times in 100. If the result of the calculation is at least 6.63, the significance level is .01; products of 10.8 or greater are significant at the .001 level (Owen 1962, pp. 12, 51).

Testing for the significance of differences in responses to two survey items for the same individuals involves identifying for each young adult the pattern of response to the two items. Responses to items (e.g., the young adult reported receiving vacation or sick leave—yes or no—and reported receiving health insurance—yes or no) are scored as 0 or 1, producing difference

values for individual students of +1 (responded affirmatively to the first item but not the second), 0 (responded affirmatively to both items or neither item), or -1 (responded affirmatively to the second item but not the first). The test statistic is the square of a ratio, where the numerator of the ratio is the weighted mean change score and the denominator is an estimate of the standard error of that mean. Since the ratio approaches a normal distribution by the Central Limit Theorem, for samples of the sizes included in the analyses, this test statistic approximately follows a chi-square distribution with one degree of freedom—i.e., an F(1, infinity) distribution.

Regardless of whether comparisons are for independent or dependent samples, a large number of statistical analyses were conducted and are presented in this report. Since no explicit adjustments were made for multiple comparisons, the likelihood of finding at least one statistically significant difference when no difference exists in the population is substantially larger than the type I error for each individual analysis. This may be particularly true when many of the variables on which the groups are being compared are measures of the same or similar constructs, as is the case in this report. To partially compensate for the number of analyses that were conducted, we used a relatively conservative p value of .01. The text mentions only differences that reach a level of significance of at least p < .01 level. Readers also are cautioned that the meaningfulness of differences reported here cannot be inferred from their statistical significance.

# **Measurement and Reporting Issues**

The chapters in this report provide information on specific variables included in analyses. However, several general points about NLTS2 measures that are used repeatedly in analyses should be clear to readers as they consider the findings reported here.

**Categorizing students by primary disability.** Information about the nature of students' disabilities came from rosters of all students in the NLTS2 age range receiving special education services in the 2000–01 school year under the auspices of participating LEAs and state-supported special schools. In analyses in this report, each student is assigned to a disability category on the basis of the primary disability designated by the student's school or district. Although there are federal guidelines in making category assignments (table A-4), criteria and methods for assigning students to categories vary from state to state and even between districts within states, with the potential for substantial variation in the nature and severity of disabilities included in the categories (see, for example, MacMillan and Siperstein 2002). Therefore, NLTS2 data should not be interpreted as describing students who truly had a particular disability, but rather as describing students who were categorized as having that primary disability.

#### Table A-4. Definitions of disabilities

**Autism.** A developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has a serious emotional disturbance as defined below.

**Deafness.** A hearing impairment so severe that the child cannot understand what is being said even with a hearing aid.

**Deaf-blindness.** A combination of hearing and visual impairments causing such severe communication, developmental, and educational problems that the child cannot be accommodated in either a program specifically for the deaf or a program specifically for the blind.

**Emotional disturbance.**<sup>1</sup> A condition exhibiting one or more of the following characteristics, displayed over a long period of time and to a marked degree that adversely affects a child's educational performance:

An inability to learn that cannot be explained by intellectual, sensory, or health factors

An inability to build or maintain satisfactory interpersonal relationships with peers or teachers

Inappropriate types of behavior or feelings under normal circumstances

A general pervasive mood of unhappiness or depression

A tendency to develop physical symptoms or fears associated with personal or school problems.

This term includes schizophrenia, but does not include students who are socially maladjusted, unless they have a serious emotional disturbance.

**Hearing impairment.** An impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness as listed above.

**Mental retardation.** Significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period that adversely affects a child's educational performance.

**Multiple disabilities.** A combination of impairments (such as mental retardation-blindness, or mental retardation-physical disabilities) that causes such severe educational problems that the child cannot be accommodated in a special education program solely for one of the impairments. The term does not include deaf-blindness.

**Orthopedic impairment.** A severe orthopedic impairment that adversely affects educational performance. The term includes impairments such as amputation, absence of a limb, cerebral palsy, poliomyelitis, and bone tuberculosis.

**Other health impairment.** Having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, rheumatic fever, asthma, hemophilia, and leukemia, which adversely affect educational performance.<sup>2</sup>

**Specific learning disability.** A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. This term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. This term does not include children who have learning problems that are primarily the result of visual, hearing, or motor disabilities; mental retardation; or environmental, cultural or economic disadvantage.

**Speech or language impairment.** A communication disorder such as stuttering, impaired articulation, language impairment, or a voice impairment that adversely affects a child's educational performance.

See notes at end of table.

#### Table A-4. Definitions of disabilities—Concluded

**Traumatic brain injury.** An acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem solving; sensory, perceptual and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or brain injuries induced by birth trauma.

**Visual impairment, including blindness.** An impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.

SOURCE: Definitions taken from Knoblauch and Sorenson (1998).

The exception to reliance on school or district category assignment involves students with deaf-blindness. Because of district variation in assigning students with both hearing and visual impairments to the category of deaf-blindness many students with those dual disabilities are assigned to other primary disability categories, most often hearing impairment, visual impairment, and multiple disabilities. As a result of these classification differences, national estimates suggest that there were 3,196 students with deaf-blindness who were 12 to 17 years old in 1999 (National Technical Assistance Center 1999), whereas the federal child count indicates that 681 were classified with deaf-blindness as their primary disability (Office of Special Education Programs 2001).

To describe the characteristics and experiences of the larger body of young adults with deafblindness more precisely, students who were reported by parents or by schools or school districts<sup>120</sup> as having both a hearing and a visual impairment were assigned to the deaf-blindness category for purposes of NLTS2 reporting, regardless of the primary disability category assigned by the school or school district.

**Comparisons with the general population of students.** In cases in which databases for the general population of young adults are publicly available (e.g., the National Longitudinal Survey of Youth), comparisons have been calculated from those databases for young adults with disabilities who match in age to those included in NLTS2. However, some comparisons have been made by using published data. For some of these comparisons, differences in samples (e.g., ages of young adults) or measurement (e.g., question wording on surveys) reduce the direct comparability of NLTS2 and general population data. Where these limitations affect the comparisons, they are pointed out in the text and the implications for the comparisons are noted.

<sup>&</sup>lt;sup>1</sup>P.L. 105-17, the Individuals with Disabilities Education Act Amendments of 1997, changed "serious emotional disturbance" to "emotional disturbance." The change has no substantive or legal significance. It is intended strictly to eliminate any negative connotation of the term "serious."

<sup>&</sup>lt;sup>2</sup> OSEP guidelines indicate that "children with ADD, where ADD is a chronic or acute health problem resulting in limited alertness, may be considered disabled under Part B solely on the basis of this disorder under the 'other health impaired' category in situations where special education and related services are needed because of the ADD" (Davila, Williams, and MacDonald 1991).

<sup>&</sup>lt;sup>120</sup> Some special schools and school districts reported secondary disabilities for students. For example, a student with visual impairment as his or her primary disability category also could have been reported as having a hearing impairment as a secondary disability.

**Reporting statistics.** Statistics are not reported for groups with fewer than 30 members. Statistics with a decimal of .5 or higher in the tables and figures are rounded to the next whole number when reported in the text.

A number of interview items related to post-high school experiences were presented to respondents as open-ended questions, with no predefined response categories. For example:

- "What kind of work do you do for this job?" (asked of employed young adult).
- "What services, accommodations, or other help have you received?" (asked of postsecondary school students who reported seeking help at school).
- "What was the main reason you quit?" (asked of young adult who quit their previous or most recent job).

For each such question, interviewers had a set of response categories into which they coded responses when the match of the response to the categories was straightforward. For example, a response from a young adult who reported he quit his most recent job because "it was September and I was going back to school" could readily be assigned to the precoded category of "went back to school." When responses did not readily match precoded categories, interviewers were trained to record the verbatim response and leave the item uncoded. Approximately the first 100 verbatim responses for each question were then reviewed by the survey data team to identify responses that were frequent enough to develop additional precoded categories and responses that could be included in existing precoded categories by expanding the response category description (e.g., "went back to school" could be expanded to include "started school" without changing the intent of the category to identify young adult who left employment to pursue their education). New categories or expanded category definitions were then incorporated.

# **Appendix A References**

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# Appendix B

# Additional Analyses

# **Appendix B. Additional Analyses**

# **Characteristics of Out-of-High School Young Adults With Disabilities**

NLTS2 represents youth with disabilities nationally who were ages 13 through 16, in secondary school, and receiving special education services in grade 7 or above in the 2000–01 school year. This report focuses on the subset of young adults no longer in secondary school in 2009. Understanding the characteristics of young adults with disabilities is important for interpreting their after-high school experiences. Tables B-1 through B-3 describe this subsample—young adults with disabilities who were out of high school and for whom data were reported, either by young adult themselves or by their parents, as part of the NLTS2 Wave 5 parent and youth telephone interviews and youth mail survey. They report data for young adults as a group and for those for whom parents and young adults themselves, respectively, were

Table B-1. Primary disability category of out-of-high school young adults, overall and by respondent										
	All out-of-high school youth	Parent respondents	Youth respondents							
Primary disability category		Percent								
Learning disability	62.5	58.3	64.2							
	(2.60)	(4.67)	(3.16)							
Speech/language	4.1	3.0	4.6							
impairment	(1.07)	(1.63)	(1.39)							
Mental retardation	11.7	14.9	10.4							
	(1.73)	(3.37)	(2.01)							
Emotional disturbance	11.5	12.9	10.8							
	(1.71)	(3.18)	(2.05)							
Hearing impairment	1.4	1.5	1.3							
	(0.62)	(1.15)	(0.74)							
Visual impairment	0.5	0.4	0.5							
	(0.37)	(0.57)	(0.48)							
Orthopedic impairment	1.1	1.2	1.1							
	(0.57)	(1.03)	(0.69)							
Other health impairment	4.6	3.8	5.0							
	(1.13)	(1.81)	(1.44)							
Autism	0.6	1.0	0.4							
	(0.42)	(0.92)	(0.44)							
Traumatic brain injury	0.3	0.3	0.3							
	(0.29)	(0.49)	(0.37)							
Multiple disabilities	1.6	2.6	1.1							
	(0.67)	(1.50)	(0.69)							
Deaf-blindness	0.1	0.2	0.1							
	(0.20)	(0.40)	(0.22)							

NOTE: Standard errors are in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent and youth telephone interview/mail survey, 2009. respondents.

The out-of-high school young adult's subsample, like the universe of secondaryschool-age young adults with disabilities, is heavily dominated by young adults with learning disabilities; 63 percent of young adults represented by the out-of-high school subsample were classified for special education services in the learning disability category when they were in high school (table B-1). At 12 percent each, the categories of emotional disturbance and mental retardation are the next largest categories. All other categories comprise 13 percent of the weighted sample. The disability category distributions of the groups of young adults for whom parents were respondents and those who responded for themselves do not differ significantly.

parents responded									
	All out-of-high school youth	Parent respondents	Young adult respondents						
Functional characteristics		Percent							
Functional cognitive skills scale score:									
High (13-16)	68.9	55.7	74.3						
	(2.96)	(5.78)	(3.35)						
Medium (8-12)	27.8	36.6	24.2						
	(2.86)	(5.60)	(3.29)						
Low (4-7)	3.3	7.7	1.5						
	(1.14)	(3.11)	(0.92)						
Youth had at least "some trouble":									
Seeing	16.8	19.1	15.6						
	(2.10)	(3.94)	(2.49)						
Speaking	27.3	31.7	25.2						
	(2.51)	(4.70)	(2.98)						
Understanding speech	30.8	36.8	28.0						
	(2.60)	(4.84)	(3.08)						
Conversing with others	31.8	39.2	28.5						
	(2.63)	(4.93)	(3.10)						
Using one or more	11.1	13.9	9.6						
appendages	(1.76)	(3.46)	(2.02)						
Youth's general health was excellent	24.0	30.8	21.5						
	(2.38)	(4.90)	(2.71)						

Table B-2. Functional characteristics of out-of-high school young adult respondents and those for whom parents responded

NOTE: Standard errors are in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent and youth telephone interview/mail survey, 2009.

The majority of out-ofhigh school young adults (69 percent) were reported to have high functional cognitive skills,<sup>121</sup> from 11 percent to 32 percent had at least some limitation in the functional domains reported in table B-2, and almost one-fourth (24 percent) had excellent health. More young adults were reported to have high functional cognitive skills (74 percent) than those for whom parents responded (56 percent, p < .01). The majority of out-of-high school young adults were identified as having a disability at school entry or in their early years in school (table B-3); 47 percent were reported to have had their disability first identified at ages of 5 to 7, although almost a one-third (30 percent) had had their disabilities first identified in their infant, toddler, or preschool years. The majority of out-of-high school young

adults first began receiving special education services in elementary school, with 51 percent receiving services in their first few years in school and 30 percent receiving services for the first time between ages 8 and 10. No significant differences in age disability was first identified or services were first received were apparent between the two respondent groups.

<sup>&</sup>lt;sup>121</sup> Parents were asked to use a 4-point scale ranging from "not at all well" to "very well" to evaluate four of their sons' or daughters' skills that often are used in daily activities: reading and understanding common signs, telling time on a clock with hands, counting change, and looking up telephone numbers and using the telephone. These skills are referred to as "functional cognitive skills" because they require the cognitive ability to read, count, and calculate. As such, they suggest much about students' abilities to perform a variety of more complex cognitive tasks. However, they also require sensory and motor skills—to see signs, manipulate a telephone, and so on. Consequently, a high score indicates high functioning in all of these areas, but a low score can result from a deficit in the cognitive, sensory, and/or motor domains. A summative scale of parents' ratings of these functional cognitive skills ranges from 4 (all skills done "not at all well") to 16 (all skills done "very well").

	All out-of-high school youth re		Youth respondents
Youth's age		Percent	
Disability first identified			
at age:			
Birth-1	14.2	18.4	12.6
	(2.11)	(4.24)	(2.42)
2-4	16.0	18.2	15.2
	(2.22)	(4.22)	(2.62)
5-7	46.7	42.1	48.8
	(3.01)	(5.40)	(3.64)
8-10	15.6	15.5	15.3
	(2.19)	(3.96)	(2.62)
11 or older	7.5	5.8	8.2
	(1.59)	(2.56)	(2.00)
Special education			
services in school first			
received at age:			
5-7	50.7	50.3	52.5
	(3.01)	(3.62)	(5.48)
8-10	29.5	27.4	34.1
	(2.75)	(3.23)	(5.20)
11-13	16.3	17.9	12.3
	(2.22)	(2.77)	(3.60)
14 or older	3.5	4.5	1.2
	(1.11)	(1.49)	(1.17)

#### Table B-3. Age at identification of and first services for disabilities of out-of-high school young adults respondents and those for whom parents responde

NOTE: Standard errors are in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent and youth telephone interview/mail survey, 2009.

# **Distribution of Demographic Characteristics Across Disability Categories**

Findings in this report are presented for young adults with disabilities as a group and then are reported separately for young adults in each federal special education disability category. Findings also are reported for young adults who differ in secondary school-leaving status, highest level of education attainment, length of time since leaving high school, gender, race/ethnicity, and household income. These bivariate analyses should not be interpreted as implying that a factor on which subgroups are differentiated (e.g., disability category) has a causal relationship with the differences reported. Further, readers should be aware that demographic factors (e.g., race/ethnicity and household income) are correlated among young adults with disabilities, as well as being distributed differently across disability categories.

Table B-4a and B-4b presents demographic characteristics of out-of-high school young adults with disabilities overall and within each disability category.<sup>122</sup>

	All disabili- ties	Learning disability	Speech/ language impair- ment	retar-	Emo- tional distur- bance	Hearing impair- ment	Visual impair- ment	Ortho- pedic impair- ment	Other health impair- ment	Autism		Multiple disabili- ties	Deaf- blind- ness
Characteristics						I	Percent						
Age													
21	9.5	10.1	15.2	6.1	9.4	7.8	6.9	6.1	7.8	6.3	4.3	8.0	8.4
	(1.57)	(2.49)	(2.77)	(1.89)	(2.65)	(2.62)	(2.80)	(2.17)	(2.29)	(2.27)	(3.07)	(2.92)	(3.97)
22	24.9	26.9	29.9	19.6	22.3	20.6	18.5	17.4	22.3	23.1	18.7	14.4	25.8
	(2.32)	(3.66)	(3.53)	(3.15)	(3.78)	(3.94)	(4.28)	(3.45)	(3.54)	(3.95)	(5.90)	(3.79)	(6.27)
23	21.8	20.6	24.4	23.4	24.4	20.8	25.1	27.7	25.7	21.1	23.3	19.5	19.9
	(2.22)	(3.34)	(3.31)	(3.36)	(3.90)	(3.96)	(4.78)	(4.07)	(3.72)	(3.83)	(6.39)	(4.28)	(5.72)
24	24.0	21.9	20.6	31.3	23.7	31.6	27.0	30.6	29.5	27.4	39.0	35.3	25.1
	(2.30)	(3.41)	(3.12)	(3.68)	(3.86)	(4.53)	(4.89)	(4.20)	(3.88)	(4.18)	(7.38)	(5.16)	(6.21)
25	19.7	20.6	9.9	19.7	20.3	19.2	22.4	18.2	14.7	22.0	14.7	23.0	20.9
	(2.14)	3.34	(2.31)	(3.16)	(3.65)	(3.84)	(4.59)	(3.52)	(3.01)	(3.89)	(5.36)	(4.54)	(5.82)
Since leaving high school													
Less than 3 years	11.5	9.7	13.4	17.7	11.5	8.9	15.7	12.3	9.8	29.1	10.0	27.9	18.8
	(1.71)	(1.95)	(2.14)	(2.42)	(3.30)	(1.40)	(1.62)	(1.94)	(2.49)	(1.56)	(3.54)	(2.61)	(2.50)
3 up to 5 years	36.5	37.8	42.8	33.3	30.5	36.7	31.9	38.8	35.5	39.7	33.4	35.5	49.1
	(2.59)	(4.01)	(3.81)	(3.74)	(4.18)	(4.70)	(5.13)	(4.44)	(4.07)	(4.59)	(7.14)	(5.17)	(7.16)
5 up to 8 years	52.0	52.5	43.8	49.0	58.1	54.5	52.4	48.8	54.7	31.2	56.6	36.5	32.0
	(2.68)	(4.13)	(3.82)	(3.97)	(4.48)	(4.86)	(5.50)	(4.55)	(4.24)	(4.34)	(7.50)	(5.20)	(6.68)
High school-leaving status													
Completed high school	90.6	92.2	90.7	88.9	82.5	97.6	96.8	94.6	88.3	96.7	92.3	93.8	96.9
	(1.58)	(2.24)	(2.24)	(2.50)	(3.47)	(1.49)	(1.94)	(2.07)	(2.75)	(1.68)	(4.05)	(2.63)	(2.50)
Did not complete	9.4	7.9	9.3	11.1	17.5	2.4	3.2	5.4	11.7	3.3	7.7	6.2	3.1
high school	(1.58)	(2.24)	(2.24)	(2.50)	(3.47)	(1.49)	(1.94)	(2.07)	(2.75)	(1.68)	(4.05)	(2.63)	(2.50)
Highest level of educational attainment													
High school non-	7.6	5.8	8.4	10.3	15.6	2.1	2.2	4.7	9.4	2.8	5.8	6.1	3.1
completer	(1.43)	(1.95)	(2.14)	(2.42)	(3.30)	(1.40)	(1.62)	(1.94)	(2.49)	(1.56)	(3.54)	(2.61)	(2.50)
High school	40.5	36.5	31.0	67.6	40.3	27.9	27.9	37.9	30.3	54.7	36.5	63.9	41.1
completer	(2.65)	(4.01)	(3.57)	(3.73)	(4.46)	(4.38)	(4.94)	(4.44)	(3.92)	(4.69)	(7.29)	(5.21)	(7.05)
Some post- secondary school	30.3	32.1	34.5	15.6	29.0	40.1	37.6	36.6	40.9	25.0	32.3	20.2	37.6
Post-secondary school completion	(2.48)	(3.88)	(3.67)	(2.89)	(4.13)	(4.79)	(5.34)	(4.41)	(4.19)	(4.08)	(7.09)	(4.36)	(6.94)
	21.6	25.6	26.1	6.5	15.2	30.0	32.3	20.8	19.3	17.5	25.4	9.7	18.1
	(2.22)	(3.63)	(3.39)	(1.96)	(3.27)	(4.48)	(5.15)	(3.71)	(3.36)	(3.58)	(6.60)	(3.21)	(5.52)

Table B-4a.	Demographic characteristics of out-of-high school young adults with disabilities, by disability
	category

NOTE: Standard errors are in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent and youth telephone interview/mail survey, 2009.

<sup>&</sup>lt;sup>122</sup> See Wagner et al. (2003) for relationships of demographic factors and disability categories for the full NLTS2 sample.

	All disabili- ties	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	Autism		Multiple disabili- ties	Deaf- blind- ness
Characteristics						I	Percent						
Gender													
Male	63.6	63.2	62.2	56.5	72.1	49.2	55.2	54.8	72.8	86.5	69.5	60.4	62.7
	(2.59)	(3.98)	(3.74)	(3.94)	(4.07)	(4.88)	(5.48)	(4.53)	(3.79)	(3.20)	(6.97)	(5.28)	(6.92)
Female	36.4	36.8	37.8	43.5	27.9	50.8	44.8	45.2	27.2	13.5	30.5	39.6	37.3
	(2.59)	(3.98)	(3.74)	(3.94)	(4.07)	(4.88)	(5.48)	(4.53)	(3.79)	(3.20)	(6.97)	(5.28)	(6.92)
Race/ethnicity													
White	65.6	65.6	70.8	57.8	65.7	64.3	68.3	70.2	77.2	74.1	72.8	70.6	65.2
	(2.57)	(3.97)	(3.50)	(3.93)	(4.34)	(4.74)	(5.16)	(4.17)	(3.61)	(4.16)	(6.83)	(5.02)	(6.82)
African American	20.2	17.8	16.6	33.4	24.3	17.0	19.3	15.6	15.1	17.8	17.1	18.2	10.1
	(2.17)	(3.19)	(2.87)	(3.75)	(3.92)	(3.71)	(4.38)	(3.31)	(3.08)	(3.62)	(5.77)	(4.25)	(4.32)
Hispanic	14.2	16.6	12.6	8.8	10.1	18.8	12.4	14.2	7.7	8.2	10.2	11.3	24.7
	(1.89)	(3.11)	(2.55)	(2.26)	(2.75)	(3.86)	(3.66)	(3.18)	(2.30)	(2.60)	(4.63)	(3.48)	(6.18)
Household income													
\$25,000 or less	35.2	34.8	23.4	50.5	37.6	25.0	26.6	26.4	16.8	17.7	30.4	28.3	30.1
	(2.57)	(3.95)	(3.28)	(4.02)	(4.41)	(4.26)	(4.92)	(4.04)	(3.21)	(3.60)	(6.95)	(5.00)	(6.61)
\$25,001 - \$50,000	26.5	26.9	27.0	25.1	26.4	24.4	27.5	29.1	26.3	28.8	17.8	27.1	18.1
	(2.38)	(3.68)	(3.43)	(3.49)	(4.01)	(4.23)	(4.97)	(4.16)	(3.78)	(4.27)	(5.78)	(4.93)	(5.55)
More than \$50,000	38.3	38.4	49.6	24.4	36.1	50.7	45.9	44.5	56.9	53.5	51.8	44.6	51.8
	(2.62)	(4.03)	(3.87)	(3.46)	(4.37)	(4.92)	(5.55)	(4.56)	(4.26)	(4.70)	(7.55)	(5.51)	(7.20)

# Table B-4b. Demographic characteristics of out-of-high school young adults with disabilities, by disability category, concluded

NOTE: Standard errors are in parentheses.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Special Education Research, National Longitudinal Transition Study-2 (NLTS2), Wave 5 parent and youth telephone interview/mail survey, 2009.

This report represents young adults who were in the 21- to 25-year-old age range. Fewer young adults were at the younger end of the age range. Ten percent of young adults were 21-year-olds compared with 25 percent who were 22-year-olds (p < .001), 22 percent who were 23-year-olds (p < .001), 24 percent who were 24-year-olds (p < .001), and 20 percent who were 25-year-olds (p < .001). Fewer young adults with speech/language impairments (10 percent) than young adults with disabilities as a group (20 percent) were in the oldest age category (25 years old, p < .01).

Twelve percent young adults with disabilities had left high school within 3 years. More young adults with autism (29 percent) than those with disabilities overall (12 percent) had left high school within 3 years (p < .001).

Nine percent of out-of-high school young adults with disabilities left high school without a diploma or a certificate of completion.<sup>123</sup> More young adults with emotional disturbances (18 percent) than those with disabilities overall (9 percent) did not complete high school (p < .05).

<sup>&</sup>lt;sup>123</sup> This includes 19 percent of youth who were reported to have dropped out and 1 percent who reportedly left high school without finishing for other reasons (e.g., permanent expulsion).

Forty-one percent of young adults with disabilities completed high school as the highest level of education compared with those who did not complete high school (8 percent, p < .001), received some post-secondary school (30 percent, p < .01), or completed postsecondary education or training (22 percent, p < .001). More young adults with mental retardation (68 percent) than those with disabilities overall (42 percent) completed high school as the highest level of education (p < .001).

Whereas about half of young adults in the general population (52 percent) were male, <sup>124</sup> almost two-thirds of out-of-high school young adults with disabilities (64 percent) were male (p < .001). Young adults with hearing impairments and autism differed significantly in their gender balance when compared with young adults with disabilities overall. (72 percent and 87 percent vs. 64 percent, p < .01 for hearing impairment and p < .001 for autism).

Young adults with disabilities differed from those in the general population in their racial/ethnic backgrounds. They were disproportionately likely to be African American, relative to the general population; African Americans comprised 14 percent of young adults in the general population<sup>125</sup> but 20 percent of young adults with disabilities (p < .01). Young adults with other health impairments were more likely to be White than were young adults with disabilities as a group (77 percent vs. 66 percent, p < .01). In addition, young adults with mental retardation were more likely to be African American than were young adults with disabilities as a group (33 percent vs. 20 percent, p < .01).

Young adults with disabilities who were out of high school were more likely than those in the general population to have parents' households with lower income levels. Approximately one-third of those with disabilities (35 percent) included in this report had families with incomes of \$25,000 or less; in comparison, 29 percent<sup>126</sup> of their peers in the general population lived in low-income-level households (p < .01). There were few significant differences by disability category in comparison with household incomes of young adults with disabilities overall, with the exception that young adults with mental retardation (51 percent) were more likely to come from families with incomes of \$25,000 or less than were young adults with disabilities as a group (35 percent, p < .01).

## **Appendix B Reference**

Wagner, M., Marder, C., Levine, P., Cameto, R., Cadwallader, T.W., Blackorby, J., Cardoso, D., and Newman, L. (2003). *The Individual and Household Characteristics of Youth With Disabilities. A Report From the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.

<sup>&</sup>lt;sup>124</sup> General population data computed for 21- to 25-year-olds, using United States Census Bureau 2000 data.

<sup>&</sup>lt;sup>125</sup> See footnote 4.

<sup>&</sup>lt;sup>126</sup> See footnote 4.