3. CHANGES IN THE HOUSEHOLDS OF YOUTH WITH DISABILITIES

A child's household is his or her first educational setting. At home, children form their first emotional attachments, achieve their early developmental milestones, and acquire the foundation for their subsequent growth and learning. During adolescence, the family can be the context within which a youth wrestles with his or her desire for both independence and separation, and the need to stay connected to family and home. These already complex dynamics of households with adolescents can be made even more complex by the added element of an adolescent's disability. How families respond to that complexity can influence the family system itself, the nature of the adolescent years, and the transition to adulthood and independence.

This chapter examines changes over time in the household composition of youth with disabilities, including their living arrangements, the presence of parents and other children in their households, and whether any other child had a disability. The education and employment status of heads of households and the household's economic status also are considered.

Household Demographics

Household Composition

The living arrangements of youth with disabilities did not change markedly over time (Exhibit 3-1); the vast majority of youth with disabilities and youth in the general population lived with one or both parents. The exception to the stability in living arrangements was an increase of almost 4 percentage points in youth living with friends or family members other than parents (p<.001).

The percentage of youth living in single-parent households also was fairly stable over time for both youth with disabilities and youth in the general population; no decrease took place in the 10 percentage point higher rate of youth with disabilities living in single-parent households. However, the 4 to 6 percentage point increase (p<.01 and .05) in youth with disabilities who were living with only their biological mother or father suggests that two-parent households increasingly included stepparents. The percentage of youth with disabilities who were living with neither parent declined by 6 percentage points (p<.05), consistent with the decline in youth living in group settings other than households. This decline contrasts with a doubling of youth living in nonparent households in the general population. Nonetheless, the rate at which youth with disabilities lived in households with no biological parents in 2001 was more than twice that of youth in the general population—14% vs. 6%, p<.001).

The average number of children in households of youth with disabilities dropped marginally over time (from 2.6 to 2.3 children, p<.05). The percentage with an adult with a disability doubled (from 10% to 21%, p<.001), indicating that households increasingly were experiencing the challenges of multiple members with disabilities.

Exhibit 3-1
CHANGES IN HOUSEHOLD COMPOSITION OF YOUTH WITH DISABILITIES
AND YOUTH IN THE GENERAL POPULATION

<u> </u>	Youth with Disabilities			Youth in the General Population			
			Percentage Point			Percentage Point	
Individual Characteristics	Cohort 1	Cohort 2	Change	Cohort 1 ^a	Cohort 2 ^b	Change	
Percentage of youth living:							
With a parent or guardian	94.0 (1.0)	92.8 (1.5)	-1.2	94.0	94.0	.0	
With another family member or friend	2.2 (.6)	5.8 (.9)	+3.6***	NA	NA		
In a residential school	.6 (.3)	.1 (.1)	5	NA	NA		
In a supervised group home	.7 (.3)	.2 (.2)	5	NA	NA		
In an institution	1.0 (.4)	.4 (.1)	6	NA	NA		
In another arrangement	1.5 (.5)	.7 (.3)	8	NA	NA		
Percentage living in a single- parent household	35.8 (2.2)	37.2 (1.9)	+1.4	25.6	27.0	+1.4	
Percentage of households with:							
Both biological parents present	42.4 (2.2)	37.6 (1.9)	-4.8	73.1	67.8	-5.3	
Biological mother only present	34.8	41.2	+6.4*	21.3	21.9	+.6	
	(2.2)	(1.9)					
Biological father only present	3.8 (.9)	7.8 (1.0)	+4.0**	2.6	4.2	+1.6	
Neither biological parent present	19.0 (1.8)	13.5 (1.3)	-5.5*	3.0	6.0	+3.0	
Average number of children in the household	2.6 (.1)	2.3 (.1)	3*	2.2	NA		
Percentage with another child/other children with disabilities	21.5 (1.9)	26.1 (2.2)	+4.6	NA	NA		
Percentage with an adult with a disability	10.1 (1.4)	20.8 (1.5)	+10.7***	NA	NA		
Sample size	2,859	5,758					

Source for youth with disabilities: NLTS and NLTS2 Wave 1 parent interviews.

NA indicates that data are not available.

Standard errors are in parentheses.

^a U.S. Census Bureau (1987).

^b Federal Interagency Forum on Child and Family Statistics (2001).

Parents' Characteristics

The education and employment status of heads of households of both youth with disabilities and youth in the general population improved markedly (Exhibit 3-2). For example, the percentage of youth with disabilities living in households with a head who was not a high school graduate dropped by almost half (from 41% to 22%, p<.001), which greatly exceeded the 9 percentage point decline in the general population (from 22% to 13%). This closed the gap between the two groups from 19 percentage points in 1987 to 9 percentage points in 2001, with youth with disabilities still being more likely to have a head of household who was not a high school graduate. There were corresponding increases in youth with disabilities with heads of households who were at every other education level. However, greater increases in the general population of those with heads of households who had some college or college degrees indicates that the gap between youth with disabilities and youth in the general population in having college-educated heads of households widened over time.

The strong economy that characterized the late 1990s and early 21st century may have contributed to the higher rates of employment of heads of households of youth with disabilities. Unemployment among heads of households of youth with disabilities dropped by 11 percentage points (p<.001), and full-time employment increased by a similar amount. However, the employment status of heads of households in which youth with disabilities lived remained substantially below that of youth in the general population.

Exhibit 3-2
CHANGES IN THE EDUCATION AND EMPLOYMENT OF HEADS OF HOUSEHOLDS
OF YOUTH WITH DISABILITIES AND YOUTH IN THE GENERAL POPULATION

	You	th with Disabil	ities	Youth in the General Population			
Individual Characteristics	Cohort 1	Cohort 2	Percentage Point Change	1987 ^a	2001 ^b	Percentage Point Change	
Head of household's education (percentage)							
Less than high school	41.3 (2.2)	21.5 (1.6)	-19.8***	22.3	13.3	-9.0	
High school graduate or GED	34.9 (2.2)	41.4 (2.0)	+6.5*	38.8	29.7	-9.1	
Some college	15.4 (1.6)	23.6 (1.7)	+8.2***	17.8	28.8	+11.0	
Bachelor's degree or more	8.4 (1.3)	13.6 (1.4)	+5.2**	21.1	28.3	+7.2	
Head of household's employment (percentage)							
Not employed	29.0 (2.1)	18.4 (1.6)	-10.6***	NA	11.0 ^c (.6)		
Part time	8.7 (1.3)	7.9 (1.1)	8	NA	NA		
Full time	62.4 (2.2)	73.8 (1.8)	+11.4***	NA	NA		

Source for youth with disabilities: NLTS and NLTS2 Wave 1 parent interviews.

NA indicates that data are not available.

Standard errors are in parentheses.

^a U.S. Census Bureau (1988). Data are for youth ages 12 to 17 and living with at least one parent in March 1987.

^b U.S. Census Bureau (2001). Data are for children ages 6 through 17.

^c Computed using data for 13- to 17-year-olds from the National Household Education Survey, 1999.

Socioeconomic Status

In 1987, the annual unemployment rate was 6.2%, whereas in 2001, it was 4.8% (U.S. Bureau of Labor Statistics, 2002). This decrease in unemployment almost certainly contributed to an increase in the income of youths' households between cohort 2 and cohort 1 (Exhibit 3-3). Although a sizable increase in income would be expected because of inflation alone, the larger income gains for households of youth with disabilities than for those of youth in the general population suggest that more than inflation contributed to higher incomes for households of youth with disabilities. For example, the percentage of youth with disabilities whose household incomes were less than \$25,000 declined by 33 percentage points between 1987 and 2001 (p<.001), compared with a 19 percentage point decline in the general population. Nonetheless,

Exhibit 3-3
CHANGES IN HOUSEHOLD SOCIOECONOMIC STATUS OF YOUTH WITH
DISABILITIES AND YOUTH IN THE GENERAL POPULATION

	You	th with Disabil	ities	Youth in the General Population			
			Percentage Point			Percentage Point	
	Cohort 1	Cohort 2	Change	1987	2001	Change	
Percentage with annual household income:							
Up to \$25,000	67.8 (2.2)	34.9 (2.0)	-32.9***	38.6°	19.8⁵	-18.8	
\$25,000 to \$50,000	27.1 (2.0)	30.4 (1.9)	+3.3	35.6°	25.5 ⁵	-10.1	
More than \$50,000	5.1 (1.0)	34.7 (2.0)	+29.6***	25.8°	54.7⁵	+28.9	
In poverty	38.0 (1.6)	28.9 (1.1)	-9.1**	19.6 ^c	16.3⁴	-3.0	
Percentage recently receiving:							
AFDC/TANF	14.2 (1.6)	10.5 (1.1)	-3.8	12.6	8.6	-4.0	
Food Stamps	26.7 (2.0)	15.6 (1.4)	-11.1***	12.9 ^e	14.2 ^f	+1.3	
SSI	9.8 (1.4)	14.8 (1.3)	+5.0*	NA	NA	NA	

Source for youth with disabilities: NLTS and NLTS2 Wave 1 parent interviews.

NA indicates that data are not available.

Standard errors are in parentheses.

^a U.S. Census Bureau, (1988).

^b U.S. Census Bureau (2001).

^c Center for the Study of Social Policy (1993).

^d U. S. Census Bureau (2002).

^e U.S. Department of Education (1988). Figures are for households with children under age 18.

f Computed using data for 13- to 17-year-olds from the National Household Education Survey, 1999.

significantly more youth with disabilities continued to live in poverty than youth in the general population (29% vs. 16%, p<.001), despite a larger decline in the poverty rate for youth with disabilities than for youth in the general population (9 percentage points vs. 4 percentage points).

At the upper end of the income range, the proportion of youth with disabilities living in households with incomes of more than \$50,000 increased by 30 percentage points (p<.001), similar to the increase among youth in the general population. Thus, the household incomes of youth with disabilities were more likely than others to move from the lowest into the moderate income group, but were no more likely than households for other youth to have incomes move from the moderate to the high income group.

Both higher incomes and welfare reform may have contributed to the 11 percentage point reduction in Food Stamp Program participation (p<.001), which was much larger than the decline of less than 2 percentage points in the general population. Participation in the Supplemental Security Income (SSI) program increased significantly, by 5 percentage points (p<.05).

Disability Differences in Changes in Household Demographic Characteristics

Several of the changes in the households of youth with disabilities that were observed for the group as a whole affected disability categories differently (Exhibit 3-4). For example, the absence of significant change in the percentage of youth living in single-parent households that was evident for some disability categories contrasted with the declines of 12 and 17 percentage points among youth with speech/language and other health impairments (p<.05 and .01), the categories of youth with the highest rates in cohort 1. Similarly, changes in parent characteristics also did not always affect youth equally across the disability categories. For example, although all categories of cohort 2 youth were significantly less likely than those in cohort 1 to have heads of households who had not graduated from high school, the significant increase in college graduates that was evident for youth with disabilities as a whole occurred for parents of youth in only six disability categories, ranging from 7 to 12 percentage points (p<.05 and .01). There were no marked changes among parents of youth with learning disabilities, mental retardation, or visual impairments. Improvements in employment status also did not occur uniformly. Although there were fewer heads of households who were not employed in most categories, heads of households of youth with emotional disturbances, sensory impairments, and multiple disabilities did not experience those benefits.

Regarding economic status, the percentage of youth in poverty decreased significantly in six categories, ranging from 10 to 27 percentage points (youth with learning disabilities and other health impairments, respectively). Youth with mental retardation, emotional disturbances, and hearing impairments experienced no reduction in the percentage who were living in poverty. Poverty rates continued to be particularly high for youth with mental retardation or emotional disturbances (46% and 35%). Consistent with this fact, mental retardation or emotional disturbances were the only categories of youth for whom there was no significant drop in Food Stamp participation and for whom receipt of SSI increased significantly. The only groups that experienced a significant drop in receipt of Aid to Families with Dependent Children, now known as Temporary Assistance to Needy Families, were youth with orthopedic impairments or other health impairments.

Exhibit 3-4
CHANGES IN SELECTED HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS, BY DISABILITY CATEGORY

		Speech/						Other	
	Learning	Language	Mental	Emotional	Hearing	Visual	Orthopedic	Health	Multiple
	Disability	Impairment	Retardation	Disturbance	Impairment	Impairment	Impairment	Impairment	Disabilities
Percentage with head of household who									
was:									
A single parent	00.0	447	00.0	44.0	0.4.4	00.0	07.4	44 =	00.4
Cohort 1	33.6	44.7	36.3	41.8	34.1	36.2	37.4	44.7	38.1
Cohort 2	(3.3)	(4.5)	(3.6)	(4.0)	(3.4)	(4.8)	(4.5)	(5.0)	(6.9)
Cohort 2	35.3 (2.9)	33.1 (3.1)	43.7 (3.0)	46.5 (3.1)	34.6 (3.2)	41.5 (4.2)	31.6 (3.2)	27.4 (2.3)	34.3 (3.0)
Dercentage neint change	(2.9) +1.7	(3.1) -11.6 *	(3.0) +7.4	(3.1) +4.7				-17.3**	
Percentage point change	+1.7	-11.6	+7.4	+4.7	+.5	+5.3	-5.8	-17.3	-3.8
Not a high school graduate									
Cohort 1	37.3	46.1	52.9	46.8	32.2	36.8	37.5	35.9	27.1
0.1.10	(3.3)	(4.5)	(3.7)	(4.1)	(3.4)	(4.9)	(4.5)	(4.8)	(6.3)
Cohort 2	20.3	19.1	33.5	21.1	20.4	17.0	16.8	13.1	12.9
Develope point above	(2.5) -17.0 ***	(2.7) -27.0 ***	(3.0) -19.4***	(2.6) -25.7***	(2.8) -11.8**	(3.3) -19.8***	(2.6) -20.7***	(1.8) -22.8***	(2.2) -14.2 *
Percentage point change	-17.0	-27.0	-19.4****	-25./	-11.8***	-19.8	-20.7	-22.8	-14.2"
A college graduate					44.0				40 -
Cohort 1	8.8	11.4	5.7	6.0	11.2	15.4	17.3	17.1	12.7
	(2.0)	(2.9)	(1.7)	(1.9)	(2.3)	(3.6)	(3.5)	(3.8)	(4.7)
Cohort 2	11.9	22.6	9.3	13.4	23.0	17.1	27.8	27.4	23.9
5	(2.0)	(2.9)	(1.8)	(2.1)	(2.9)	(3.3)	(3.1)	(2.3)	(2.8)
Percentage point change	+3.1	+11.2**	+3.6	+7.4**	+11.8**	+1.7	+10.5*	+10.3*	+11.2*
Not employed									
Cohort 1	25.3	27.0	43.3	25.9	25.9	26.4	34.1	30.5	30.8
	(3.0)	(4.1)	(3.7)	(3.6)	(3.2)	(4.4)	(4.4)	(4.6)	(6.5)
Cohort 2	14.9	14.6	29.6	25.8	18.0	19.9	17.1	15.0	22.6
	(2.2)	(2.5)	(2.9)	(2.8)	(2.7)	(3.5)	(2.7)	(1.9)	(2.7)
Percentage point change	-10.4**	-12.4**	-13.7**	1	-7.9	-6.5	-17.0***	-15.5**	-8.2
Percentage in poverty									
Cohort 1	35.3	38.5	47.7	35.6	34.2	39.3	38.7	46.6	30.8
	(3.5)	(4.5)	(3.9)	(4.0)	(3.6)	(5.1)	(4.7)	(5.3)	(7.4)
Cohort 2	25.5	22.1	46.0	34.7	26.7	23.4	24.4	19.7	27.5
	(2.8)	(3.0)	(3.3)	(3.1)	(3.3\2)	(3.7)	(3.7)	(2.2)	(3.1)
Percentage point change	-9.8*	-16.7**	-1.7	9	-7.5	-15.8*	-14.3*	-26.9***	-17.2*

Exhibit 3-4
CHANGES IN SELECTED HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS, BY DISABILITY CATEGORY (Concluded)

		Speech/						Other	
Household Characteristics	Learning Disability	Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Health Impairment	Multiple Disabilities
Percentage who recently received:		- 				`			
AFDC/TANF									
Cohort 1	14.2 (2.4)	10.6 (2.8)	16.3 (2.7)	12.3 (2.7)	9.2 (2.1)	13.0 (3.4)	14.1 (3.2)	19.9 (4.0)	15.4 (5.1)
Cohort 2	9.2 (1.8)	8.9 (2.0)	15.2 (2.3)	14.9 (2.3)	8.5 (1.9)	11.0 (2.7)	6.0 (1.7)	7.5 (1.4)	9.7 (1.9)
Percentage point change	-5.0	-1.7	-1.1	+2.6	7	-2.3	-8.1*	-12.4**	-5.7
Food Stamps									
Cohort 1	25.7 (3.0)	22.9 (3.8)	33.0 (3.5)	25.5 (3.6)	18.8 (2.8)	19.9 (4.0)	24.7 (4.0)	24.7 (4.3)	27.9 (6.3)
Cohort 2	14.0 (2.2)	11.7 (2.2)	24.6 (2.7)	25.0 (2.8)	11.7 (2.2)	9.7 (2.5)	10.6 (2.2)	9.7 (1.6)	11.5 (2.1)
Percentage point change	-11.7**	-11.2*	-8.4	5	-7.1*	-10.2*	-14.1**	-15.0***	-16.4*
SSI									
Cohort 1	4.9 (1.5)	11.3 (2.9)	20.5 (3.0)	9.4 (2.4)	20.3 (2.9)	27.7 (4.5)	33.2 (4.4)	20.2 (4.0)	34.4 (6.6)
Cohort 2	8.8 (1.8)	8.7 (2.0)	35.6 (3.0)	18.8 (2.5)	23.4 (2.9)	29.5 (3.9)	29.7 (3.2)	15.2 (1.9)	31.8 (3.0)
Percentage point change	+3.8	-2.6	+15.1***	+9.4**	+2.9	+1.8	-3.5	-5.0	-2.6

Standard errors are in parentheses.

Demographic Differences in Changes in Household Characteristics

Some household characteristics did not change significantly for youth of either gender or youth who differed in household income or racial/ethnic background, including, for example, the rate at which they lived in single parent households or participated in TANF. However, some youth with different demographic characteristics did experience some kinds of changes in household circumstances, although to different degrees, as described below.

Gender. Girls showed greater gains relative to boys in both the education level and employment status of heads of households (Exhibit 3-5). There was a decline of 27 percentage points in the incidence of girls with disabilities whose head of household was not a high school graduate, compared with 16 percentage points for boys (p<.001). Declines in unemployed heads of households were 15 percentage points for girls and 9 percentage points for boys (p<.001 for both declines). With these changes, the disadvantage experienced by cohort 1 girls relative to boys regarding parents' education and employment was eliminated. The improvements in poverty status were quite similar in size for boys and girls, although it attained statistical significance only for the larger group of boys. There also were reductions of about 10 percentage points in Food Stamp participation for both groups (p<.001 and .05). However, only boys experienced a significant increase in receipt of SSI benefits.

Household income. Head of household education improved for all income levels, but improvements in employment occurred only among the lowest and middle income groups (19 and 13 percentage points, p<.001 and .01) (Exhibit 3-6). Both the lowest and middle income groups showed declines in poverty (18 and 9 percentage points, p<.001 and .01) and in Food Stamp participation (20 and 9 percentage points, p<.001 and .05). However, the increase in SSI participation noted for youth with disabilities as a whole occurred only among the lowest-income group (12 percentage points, p<.05), as would be expected.

Racial/ethnic background. Improvements in head of household's education were greatest for African American and Hispanic youth; there were declines of 30 and 31 percentage points (p<.001) in the high school dropout rate among their heads of households, compared with an 18 percentage point decline for white youth (p<.01), the group with lowest dropout rate initially (Exhibit 3-6). Similarly, significant reductions in the unemployment rate of heads of household occurred only for African American and Hispanic youth (22 and 20 percentage points, p<.001 and .05). However, these improvements did not translate into significant reductions in the poverty rate among African American and Hispanic students; only among white students did the percentage in poverty decline significantly (28% to 18%, p<.01). Further, Hispanic youth did not experience the significant declines in Food Stamp participation noted for the other groups (9 to 29 percentage points, p<.05 and .001).

Exhibit 3-5
CHANGES IN SELECTED HOUSEHOLD DEMOGRAPHIC
CHARACTERISTICS, BY YOUTH'S GENDER

	Boys	Girls
Percentage whose head of household was:		
Not a high school graduate		
Cohort 1	38.1	48.1
	(2.7)	(3.8)
Cohort 2	21.6	21.2
	(2.0)	(2.8)
Percentage point change	-16.5***	-26.9***
Not employed		
Cohort 1	26.7	34.0
	(2.5)	(3.7)
Cohort 2	17.9	19.4
	(2.0)	(2.8)
Percentage point change	-8.8**	-14.6**
Percentage in poverty		
Cohort 1	36.7	40.9
	(2.8)	(4.0)
Cohort 2	27.9	30.8
B	(2.3)	(3.3)
Percentage point change	-8.8*	-10.1
Percentage who recently received		
Food Stamps		
Cohort 1	25.6	29.1
Oak art 0	(2.4)	(3.6)
Cohort 2	14.8 (1.8)	19.1 (2.7)
Percentage point change	-10.8***	+10.0*
SSI	-10.0	+10.0
Cohort 1	8.9	11.6
Condit 1	(1.6)	(2.5)
Cohort 2	15.9	12.7
	(1.8)	(2.3)
Percentage point change	+7.0**	+1.1
5 1 5		

Standard errors are in parentheses.

Exhibit 3-6
CHANGES IN SELECTED HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS,
BY INCOME AND RACE/ETHNICITY

		Income		Race/Ethnicity			
	Lowest	Middle	Highest	White	African American	Hispanic	
Percentage with head of							
household who was:							
Not a high school graduate							
Cohort 1	59.1	40.6	18.9	33.4	55.2	69.4	
	(4.4)	(4.1)	(2.9)	(2.6)	(4.8)	(7.4)	
Cohort 2	40.4	17.9	5.6	15.8	25.2	38.2	
	(3.3)	(2.9)	(1.7)	(1.9)	(3.9)	(4.9)	
Percentage point change	-18.7**	-22.7***	-13.3***	-17.6***	-30.0***	-31.2***	
Not employed							
Cohort 1	56.6	22.0	4.4	20.0	49.3	37.4	
	(4.4)	(3.5)	(1.5)	(2.2)	(4.8)	(7.7)	
Cohort 2	37.8	9.3	5.2	14.7	27.0	17.8	
	(3.2)	(2.2)	(1.7)	(1.9)	(4.1)	(3.9)	
Percentage point change	-18.8***	-12.7**	+.8	-5.3	-22.3***	-19.6*	
Percentage in poverty							
Cohort 1	98.9	12.2	.0	28.4	62.1	51.0	
	(.9)	(2.8)	(.0)	(2.6)	(4.9)	(8.8)	
Cohort 2	81.2	3.2	.0	18.6	50.4	38.8	
	(2.6)	(1.3)	(.0)	(2.1)	(4.7)	(5.2)	
Percentage point change	-17.7***	-9.0**	.0	-9.8**	-11.7	-12.2	
Percentage who recently							
received:							
Food Stamps							
Cohort 1	61.3	15.2	1.7	17.1	49.2	34.7	
Cabart 2	(4.3)	(3.0)	(1.0)	(2.1)	(4.8)	(7.6)	
Cohort 2	41.6 (3.3)	6.3 (1.8)	1.0 (0.7)	8.5 (1.5)	25.1 (4.2)	27.2 (4.9)	
Percentage point change	- 19.7 ***	- 8.9 *	(0.7) 7	-8.6***	- 24.1 ***	-7.5	
SSI	-13.7	-0.9	1	-0.0	-24.1	-1.5	
Cohort 1	18.8	7.3	2.1	6.9	17.8	7.5	
Conort	(3.5)	(2.2)	(1.1)	(1.4)	(3.7)	(4.3)	
Cohort 2	30.6	10.1	4.1	11.0	27.7	14.0	
· - · -	(3.1)	(2.3)	(1.5)	(1.7)	(4.1)	(3.5)	
Percentage point change	+11.8*	+2.8	+2.0	+4.1	+9.9	+6.5	

Standard errors are in parentheses.

Parents' Expectations

Changes were apparent not only in the characteristics of households, but also in the aspirations and expectations parents held for their adolescent children. Parental expectations are important because past research has found them to be associated with both student achievement (e.g., Thorkildsen & Stein, 1998) and postschool outcomes (Wagner, Blackorby, Cameto, & Newman, 1993). For example, among youth in the general population, those whose parents expected them to continue on to postsecondary school were more likely to do so (Clark, 2002; Gill & Reynolds, 1996; Reynolds, 1998). Positive associations between parents' expectations and postschool outcomes also were found for youth with disabilities, even when factors such as disability category, family income, and functional skills were controlled for statistically (Wagner et al., 1993).

To assess family expectations, parents of youth in NLTS and NLTS2 were asked to report their perceptions of the likelihood that their adolescent children would attain specific goals, such as graduating from high school with a regular diploma, attending a 2- or 4-year college, being employed, and living independently. Parents' expectations regarding youth graduating from high school with a regular diploma, graduating from a 4-year college, and living independently remained essentially unchanged over time (Exhibit 3-7). For example, approximately half of youth in both cohorts were expected "definitely" to graduate from high school with a regular diploma. However, parents in cohort 2 were significantly more confident that youth would graduate from a 2-year college than those in the first cohort. Almost 13% of those in cohort 2 were expected "definitely" to graduate from a 2-year college, compared with 3% of those in cohort 1 (p<.001). Cohort 2 parents also were more optimistic about the employment outlook for youth, with more than 87% of those in cohort 2 being expected "definitely" to find paid employment, compared with 78% of those in cohort 1 (p<.001). It is unclear whether expectations for improved employment prospects reflected the stronger economy during the late 1990s and early 21st century, perceptions that youth were better prepared to find jobs, or other factors.

¹ That is, given two youth with the same disability category, household income, and level of functional skills, but with dissimilar parental expectations, those whose parents had higher expectations was more likely to have positive postschool outcomes.

Exhibit 3-7 CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH WITH DISABILITIES

	Cohort 1	Cohort 2	Percentage Point Change
Percentage expected to:			
Graduate from high school with			
a regular diploma			
Definitely will	51.1	52.6	+1.5
	(2.4)	(2.0)	
Probably will	32.7	30.5	-2.2
	(2.2)	(1.8)	
Definitely/probably won't	16.2	16.9	+.7
Graduate from a 2-year college	(1.8)	(1.5)	
,	0.0	40.7	. 40 4***
Definitely will	2.6 (.9)	12.7 (1.5)	+10.1***
Deal all 19			. 0. 0
Probably will	22.3	24.9	+2.6
Deficient to a later and	(2.3)	(2.0)	40.0***
Definitely/probably won't	75.0	62.4 (2.2)	-12.6***
Graduate from a 4-year college	(2.4)	(2.2)	
Definitely will	5.0	8.9	+3.9
Delifficely will	(1.0)	(1.2)	+3.9
Drobobly will	25.8	23.1	-2.7
Probably will	(2.1)	23. i (1.7)	-2.1
Definitely/probably won't	69.2	68.0	-1.2
Delinitely/probably won t	(2.2)	(1.9)	-1.2
Get a paid job	(2.2)	(1.5)	
Definitely will	78.3	87.1	+8.8***
Denimically with	(1.9)	(1.3)	10.0
Probably will	17.8	10.1	-7.7***
. robably will	(1.8)	(1.2)	
Definitely/probably won't	3.9	2.9	-1.0
Σοιο.,, ρ. οσασί, ποι. τ	(.9)	(.7)	
Live independently	, ,	, ,	
Definitely will	47.3	53.0	+5.7
·	(2.4)	(2.0)	
Probably will	35.9	31.3	-4.6
•	(2.3)	(1.9)	
Definitely/probably won't	16.8	15.7	-1.1
	(1.8)	(1.5)	

Source: NLTS and NLTS2 Wave 1 parent interviews.

Standard errors are in parentheses.

Disability Differences in Changes in Parents' Expectations

Although expectations related to graduating from high school with a regular diploma were fairly stable over time for all disability categories, there were notable differences across disability categories in expectations about other future attainments (Exhibit 3-8).

Youth with all disability categories experienced significant increases in expectations that they would graduate from a 2year college. In 1987, with the exception of the visual impairment group, fewer than 5% of youth in any category were expected to complete a 2-year college program, whereas in 2001, expectations ranged from 5% to 28% being expected to graduate from a 2-year college. Youth with visual impairments joined those with hearing and speech impairments in having the largest gains (18 and 23 percentage points, p<.001 and .01). Youth with speech or hearing impairments also were the only groups to experience a significant increase in the percentages of parents who said that they "definitely" would graduate from a 4-year college (10 and 8

^{***} Statistically significant difference in a two-tailed test at the p<.001 levels.

Exhibit 3-8
CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH,
BY DISABILITY CATEGORY

	Learning	Speech/ Language	Mental	Emotional	Hearing	Visual	Orthopedic	Other Health	Multiple
	Disability	Impairment	Retardation	Disturbance	Impairment	Impairment	Impairment	Impairment	Disabilities
Percentage expected to:									
Graduate from high school with a regular									
diploma									
Definitely will									
Cohort 1	58.9	60.3	31.1	35.1	69.6	65.4	51.0	49.6	18.7
	(3.6)	(4.7)	(3.7)	(4.1)	(3.6)	(5.0)	(4.8)	(5.3)	(5.6)
Cohort 2	58.8	67.0	30.6	42.7	69.3	68.0	53.5	52.0	28.4
	(3.1)	(3.2)	(2.9)	(3.1)	(3.2)	(4.1)	(3.5)	(2.6)	(2.9)
Percentage point change	1	+6.7	5	+7.6	3	+2.6	+2.5	+2.4	+9.7
Definitely/probably won't									
Cohort 1	9.0	14.9	35.9	22.5	8.9	10.2	23.4	18.2	60.0
	(2.1)	(3.4)	(3.9)	(3.6)	(2.2)	(3.2)	(4.0)	(4.1)	(7.1)
Cohort 2	11.2	7.4	37.1	20.8	10.5	15.3	22.1	18.0	48.3
	(2.0)	(1.8)	(3.1)	(2.6)	(2.1)	(3.1)	(2.9)	(2.1)	(3.3)
Percentage point change	+2.2	-7.5	+1.2	-1.7	+1.6	+5.1	-1.3	2	-11.7
Graduate from a 2-year college									
Definitely will									
Cohort 1	3.5	3.4	.8	1.4	4.7	7.1	2.6	.5	.5
	(1.6)	(2.4)	(8.)	(1.1)	(2.3)	(4.7)	(2.0)	(1.0)	(1.1)
Cohort 2	13.6	21.9	5.3	13.3	27.7	25.6	17.9	12.7	6.2
	(2.5)	(3.3)	(1.6)	(2.6)	(3.4)	(4.2)	(3.0)	(2.1)	(1.7)
Percentage point change	+10.1***	+18.5***	+4.5*	+11.9***	+23.0***	+18.5**	+15.3***	+12.2***	+5.7**
Definitely/probably won't									
Cohort 1	69.6	75.0	88.9	77.1	68.1	65.7	72.1	80.4	93.3
	(4.0)	(5.8)	(2.7)	(4.1)	(5.1)	(8.8)	(5.7)	(5.5)	(3.7)
Cohort 2	57.2	50.9	81.9 [°]	65.8	42.7	46.4	62.4	65.4	85.7
	(3.6)	(4.0)	(2.7)	(3.6)	(3.8)	(4.8)	(3.8)	(3.0)	(2.4)
Percentage point change	-12.4 [*]	-24.1***	-7.0	-11.3 [*]	-25.4***	-19.3	-9.7	-15.0 [*]	-7.6

Exhibit 3-8
CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH,
BY DISABILITY CATEGORY (Continued)

	Loorning	Speech/	Mental	Emotional	Haaring	Visual	Orthonodio	Other Health	Multiple
	Learning Disability	Language Impairment	Retardation		Hearing Impairment		Orthopedic Impairment	Impairment	Multiple Disabilities
Percentage expected to:									
Graduate from a 4-year college									
Definitely will									
Cohort 1	5.0	12.2	2.5	2.8	12.8	24.2	10.7	13.8	.4
	(1.6)	(3.2)	(1.2)	(1.4)	(2.6)	(4.5)	(3.0)	(3.7)	(.9)
Cohort 2	9.6	22.0	2.9	6.5	21.3	25.0	14.1	9.5	3.2
	(1.9)	(2.9)	(1.1)	(1.6)	(2.9)	(3.9)	(2.5)	(1.6)	(1.2)
Percentage point change	+4.6	+9.8*	+.4	+3.7	+8.5*	+.8	+3.4	-4.3	+2.8
Definitely/probably won't									
Cohort 1	65.8	53.2	84.5	74.9	46.0	36.1	65.1	56.9	91.3
	(3.4)	(4.9)	(2.9)	(3.7)	(3.9)	(5.0)	(4.6)	(5.4)	(4.0)
Cohort 2	63.9	48.6	85.2	74.5	44.4	42.6	64.6	69.3	89.3
	(3.1)	(3.5)	(2.3)	(2.8)	(3.5)	(4.4)	(3.4)	(2.5)	(2.0)
Percentage point change	-1.9	-4.6	+.7	4	-1.6	+6.5	5	+12.4*	-2.0
Get a paid job									
Definitely will									
Cohort 1	84.9	73.5	58.8	81.9	77.0	71.8	44.2	66.4	32.5
	(2.5)	(4.1)	(3.8)	(3.2)	(3.2)	(4.6)	(4.7)	(4.9)	(6.6)
Cohort 2	93.1	89.1	69.8	85.6	83.9	78.7	58.2	83.2	50.7
	(1.6)	(2.1)	(2.9)	(2.2)	(2.5)	(3.6)	(3.4)	(2.0)	(3.3)
Percentage point change	+8.2**	+15.6***	+11.0*	+3.7	+8.7	+6.9	+14.0*	+16.8***	+18.2*
Definitely/probably won't									
Cohort 1	.0	4.5	15.8	2.4	2.3	6.2	14.8	6.7	40.9
	(0.)	(1.9)	(2.8)	(1.3)	(1.1)	(2.5)	(3.3)	(2.6)	(7.0)
Cohort 2	.5	1.2	10.5	2.5	.6	6.6	12.5	3.0	24.1
	(.4)	(.7)	(2.0)	(1.0)	(.5)	(2.2)	(2.3)	(.9)	(2.8)
Percentage point change	+.5	-3.3	-5.3	+.1	-1.7	+.4	-2.3	-3.7	-16.8*

Exhibit 3-8
CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH,
BY DISABILITY CATEGORY (Concluded)

		Speech/						Other	
	Learning	Language	Mental	Emotional	Hearing	Visual	Orthopedic	Health	Multiple
	Disability	Impairment	Retardation	Disturbance	Impairment	Impairment	Impairment	Impairment	Disabilities
Percentage expected to:									
Live independently									
Definitely will									
Cohort 1	55.8	48.0	18.8	50.3	41.9	38.4	21.7	32.5	6.4
	(3.5)	(4.8)	(3.2)	(4.2)	(3.8)	(5.1)	(4.0)	(4.9)	(3.5)
Cohort 2	62.0	63.6	22.3	46.5	59.7	37.0	25.4	49.9	17.4
	(3.0)	(3.3)	(2.7)	(3.1)	(3.4)	(4.3)	(3.0)	(2.6)	(2.4)
Percentage point change	+6.2	+15.6**	+1.8	-3.5	+17.8***	-1.4	+3.7	+17.4**	+11.0**
Definitely/probably won't									
Cohort 1	9.4	15.7	38.9	15.8	10.6	23.0	42.1	36.2	74.4
	(2.1)	(3.6)	(3.9)	(3.1)	(2.4)	(4.5)	(4.8)	(5.1)	(6.2)
Cohort 2	7.7	10.5	43.4	16.4	10.2	25.3	43.8	19.5	62.1
	(1.7)	(2.1)	(3.2)	(2.3)	(2.1)	(3.8)	(3.5)	(2.1)	(3.1)
Percentage point change	-1.7	-5.2	+4.5	+.6	4	+2.3	+1.7	-16.7**	-12.3

Standard errors are in parentheses.

percentage points, respectively, p<.05). Youth with mental retardation and multiple disabilities experienced the smallest gains in expectations of 2-year college graduation (4 and 6 percentage points, p<.05 and .01), although those in cohort 2 still were significantly more likely than were those in cohort 1 to be expected to graduate from a 2-year college.

In contrast with the pattern of generally higher postsecondary education expectations, youth in cohort 2 with other health impairments were significantly *less* likely than their peers in cohort 1 to be expected to graduate from a 4-year college (a 12 percentage point increase in those expected "definitely or probably" *not* to graduate, p<.05).

Even with a stronger economy, not all categories of youth experienced significant increases in parents' expectations regarding their employment. Youth with emotional disturbances or sensory impairments were no more likely to be expected to have a paid job in 2001 than in 1987. In contrast, increases in "definite" employment expectations ranged from 4 to 18 percentage points for other groups, with those with speech, orthopedic, or other health impairments; mental retardation; or multiple disabilities experiencing the largest increases (11 to 18 percentage points p<.05 to .001).

The percentages of parents who expected that their sons or daughters definitely would live independently in the future also increased for youth speech, hearing, and/or other health impairments or multiple disabilities; increases ranged from 11 to 18 percentage points (p<.01). No significant differences in expectations for independence were found for youth in other disability categories.

Demographic Differences in Changes in Parents' Expectations

Gender. Parents' expectations for both sons' and daughters' graduating from high school with a regular diploma, graduating from a 4-year college, and living away from home remained fairly stable over time, with no significant differences between cohorts.

However, both genders experienced significant and similar increases in their parents' expectations for their "definitely" graduating from a 2-year college (10 and 11 percentage points, p<.001 and .01, Exhibit 3-9). Both genders also experienced significant increases in being expected "definitely" to have a paid job, but girls experienced a much larger increase than boys (16 vs. 6 percentage points, p<.001 and p<.05). This larger increase closed the gap in employment expectations between boys and girls. In cohort 1, only 70% of girls were expected "definitely" to be employed, compared with 82% of boys (p<.01), whereas in cohort 2, 86% of girls and 87% of boys were expected "definitely" to find a paid job.

Exhibit 3-9 CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH, BY YOUTH'S GENDER

	Boys	Girls
Percentage expected to:		
Graduate from a 2-year college Definitely will		
Cohort 1	2.2	3.7
	(1.0)	(1.9)
Cohort 2	11.8	14.6
	(1.8)	(2.8)
Percentage point change	+9.6***	+10.9**
Definitely/probably won't		
Cohort 1	75.5	73.8
	(2.9)	(4.4)
Cohort 2	64.7	57.7
	(2.7)	(3.9)
Percentage point change	-10.8 [*] *	-16.1 [*] *
Get a paid job		
Definitely will		
Cohort 1	81.9	69.8
	(2.2)	(3.7)
Cohort 2	87.4	86.3
	(1.6)	(2.3)
Percentage point change	+5.5*	+16.5***
Definitely/probably won't		
Cohort 1	3.1	5.7
	(1.0)	(1.9)
Cohort 2	2.7	3.3
_	(.8)	(1.2)
Percentage point change	4	-2.4

Source: NLTS and NLTS2 Wave 1 parent interviews.

Standard errors are in parentheses.

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

Household income. Parents' expectations for youth graduating from high school with a regular diploma and graduating from a 4-year college did not change markedly over time for youth at different income levels. However, cohort 1 youth of all income levels were more likely to be expected to graduate from a 2-year college than were those in cohort 1 (Exhibit 3-10), with increases ranging from 8 to 13 percentage points (p<.05 and .001). Cohort 2 parents at each income level also were more confident that youth would be gainfully employed, with gains of 6 to 13 percentage points (p<.05 and .01). The largest gains in employment expectations were for youth from middle-income families; closing the cohort 1 gap between the middle and highest income groups, with 92% of cohort 2 youth at both income levels "definitely" expected to have a paid job. Cohort 2 youth from the lowest-income families remained the least likely to be expected to be employed (79% vs. 92%; p<.001). Only youth from middle income families experienced significant gains in expectations for living independently (17 percentage points; p<.01).

Race/ethnicity. As with different income groups, parents'

expectations for high school and 4-year-college graduation did not change markedly for youth with different racial/ethnic backgrounds. However, expectations related to community college attendance did change, with white and African American youth experiencing increases (7 and 14 percentage points, p<.001). Only white youth experienced a significant change in their parent's expectations related to employment (9 percentage points, p<.001), remaining significantly more likely to be expected "definitely" to have a paid job than their African American or Hispanic peers (91% vs. 82% and 81%; p<.05).

Exhibit 3-10
CHANGES IN PARENTS' EXPECTATIONS FOR THE FUTURE EDUCATION AND INDEPENDENCE OF YOUTH, BY INCOME AND RACE/ETHNICITY

	Income			Race/Ethnicity		
	Lowest	Middle	Highest	White	African American	Hispanic
Percentage expected to: Graduate from a 2-year college Definitely will						
Cohort 1	.6 (.9)	2.9 (1.7)	2.7 (1.4)	2.4 (1.0)	1.0 (1.4)	11.1 (7.6)
Cohort 2	11.4 (2.5)	10.4 (2.6)	15.5 (3.2)	9.5 (1.8)	15.0 (3.7)	19.4 (4.7)
Percentage point change	+10.8***	+7.5*	+12.8***	+7.1***	14.0***	+8.3
Definitely/probably won't						
Cohort 1	79.0 (4.9)	75.6 (4.3)	70.1 (4.1)	78.1 (2.7)	65.1 (6.6)	61.6 (11.8)
Cohort 2	63.0 (3.8)	67.8 (4.0)	58.6 (4.4)	70.0 (2.8)	56.4 (5.2)	40.6 (5.8)
Percentage point change	-16.0**	-7.8	-11.5	-8.1*	-8.7	-21.0
Get a paid job Definitely will						
Cohort 1	68.3 (4.5)	78.8 (3.5)	86.0 (2.6)	81.9 (2.2)	71.2 (4.6)	65.7 (8.0)
Cohort 2	79.0 (2.7)	91.9 (2.1)	92.5 (2.0)	90.7 (1.5)	82.3 (3.5)	81.3 (4.0)
Percentage point change Definitely/probably won't	+10.7*	13.1**	+6.5*	+8.8***	+11.1	+15.6
Cohort 1	4.1 (1.9)	3.7 (1.6)	3.8 (1.4)	4.0 (1.1)	3.5 (1.9)	5.2 (3.7)
Cohort 2	5.0 (1.5)	1.9 (1.0)	1.5 (0.9)	2.1 (.7)	3.7 (1.7)	2.1 (1.5)
Percentage point change	+.9	-1.8	-2.3	-1.9	+.2	-3.1
Live independently Definitely will						
Cohort 1	35.7 (4.8)	40.7 (4.3)	65.4 (3.5)	54.5 (2.8)	32.6 (4.9)	22.6 (7.5)
Cohort 2	35.5 (3.3)	58.1 (3.8)	66.0 (3.6)	60.5 (2.6)	43.4 (4.5)	39.8 (5.1)
Percentage point change Definitely/probably won't	-0.2	+17.4**	+.6	+6.0	+10.8	+17.2
Cohort 1	16.6 (3.7)	16.0 (3.2)	14.1 (2.6)	14.8 (2.0)	17.2 (4.0)	33.5 (8.4)
Cohort 2	22.9 (2.9)	11.7 (2.5)	11.1 (2.4)	12.7 (1.7)	20.8 (3.7)	17.4 (3.9)
Percentage point change	+6.3	-4.3	-3.0	-2.1	+3.6	-16.1

Standard errors are in parentheses.

Summary

Several of the changes since 1987 in the households of youth with disabilities could have positive repercussions for youth. In 2001, youth with disabilities were more likely to be living in households with at least one biological parent present than in 1987, and the heads of their households were much less likely to be high school dropouts or unemployed. Consistent with higher educational and employment levels in 2001, youth with disabilities were less likely to be living in poverty in 2001 than in 1987. Yet, despite having made some strides in closing the income gap with the general population, youth with disabilities still were more likely than other youth to live in households with the risk factors of low income, unemployment, and poorly educated heads.

Other changes were less positive. In 2001, almost 6% of youth with disabilities lived with a family member other than a parent—a rate twice that in 1987—and they were significantly more likely to be living in households with an adult with a disability than previously. And youth with some disabilities continued to be at a particular disadvantage. For example, even with declines in the percentage of heads of households who were high school dropouts, youth with mental retardation or emotional disturbances continued to be more likely than other youth with disabilities to live in poverty and with unemployed heads of households and in households that participated in benefit programs.

Improvements in the education or employment status of heads of households were most apparent for the families of low- and middle-income families, which narrowed significantly the gap between middle- and higher-income youth. Similarly, African American and Hispanic youth benefited most from improvements in head of household education and employment. And several of the differences in household characteristics of boys and girls in 1987, which favored boys, narrowed because of larger gains for girls with disabilities. The lower employment expectations for girls with disabilities relative to boys that were evident in 1987 also were ameliorated over time, so that in 2001, boys and girls with disabilities were equally likely to be expected to have paid employment in the future.

Looking to the future, parents of youth with disabilities shifted their expectations for youth in some respects, but not in others. Youth with disabilities were about equally likely in 1987 and 2001 to be expected by parents "definitely" to graduate from high school with a regular diploma (about half of youth) and "definitely" to graduate from a 4-year college (fewer than 10% of youth), although significant increases in expectations for 4-year-college were apparent for youth with speech or hearing impairments. In contrast, 2-year colleges were considered a much more likely option in 2001 than in 1987 for youth in all disability categories, for both boys and girls, for white and African American youth, and for those at all income levels.

Employment expectations also rose for most categories of youth, and larger increases for girls than boys closed the gap in employment expectations that had existed in 1987. For all groups, expectations for independent living were lower than those for paid employment; overall, fewer than two-thirds as many parents expected their sons or daughters "definitely" to live independently as expected them "definitely" to have paid employment, suggesting that factors other than youth's ability to support themselves financially influenced parents' expectations.

Comparisons between the two cohorts of youth in early adulthood will reveal the extent to which parents' expectations of youth with disabilities were born out later in their education, employment, and independence outcomes.