

Navigating the Teen Years: Promise and Peril for Northern New Hampshire Youth

ANNE SHATTUCK

Young people face a number of risks and challenges during adolescence that, if not well navigated, can jeopardize their healthy and successful transition to adulthood. Much attention has been focused on the perils faced by youth growing up in poor urban neighborhoods, including failure to complete high school, criminal activity, substance abuse, and early parenthood. Less is known about the situation faced by rural youth. Although teens in rural areas face many of the same risks as their urban counterparts, the context in which they encounter these risks presents unique challenges to young people themselves, to the adults working with them, and to their communities. Young people growing up in rural areas of the Granite State come face to face with these unique challenges.

The three rural northern New Hampshire counties of Carroll, Coos, and Grafton have undergone economic and demographic changes in recent years that have impacted the climate for young residents. This report provides a snapshot of how youth are doing in these three counties and describes some of the difficulties they and their communities face as they negotiate the transition to adulthood. The study is based on data from several agencies that collect county- and community-level information about youth as well as from interviews with individuals working with youth in each of the three counties. Although an examination of youth well-being might reasonably include children as young as 10 or 12 and young adults as old as 25, the focus of this report is on high-school teens since most local data are collected in high school districts and since young people at this age are particularly vulnerable to several poor outcomes.

The report is presented in three parts. The first section describes the context with a brief profile of each county, particularly economic and demographic characteristics, including notable changes in recent years. The second section presents data on several indicators of youth well-being: high school dropout rates; postsecondary education plans

of high school graduates; substance abuse rates; court-involved youth; and teen birth rates. The final section surveys the landscape confronted by individuals who work with young people in their communities, focusing on gaps in services and programs and on the obstacles that youth service providers face in filling those gaps.

The story that emerges from the data and interviews is both encouraging and worrisome. In national comparisons, New Hampshire generally ranks high on common indicators of child and youth well-being (Annie E. Casey Foundation 2008). Indeed, as the data show, several communities in the northern counties do indeed fare well. In other communities, however, teens are having a more difficult time. These places represent pockets of disadvantage where a number of factors, particularly difficult economic circumstances faced by families, may put teens at greater risk. The greater challenges faced by teens in these communities would indicate a need for more resources and support to make a successful transition to adulthood. Unfortunately they generally have fewer. In particular, many communities have few healthy and constructive ways for teens to spend their out-of-school time. In short, the well-being of teens in the northern part of the state varies considerably from community to community, and in areas where teens face more difficult circumstances, communities struggle to find the resources needed to help them through this vulnerable period.

Profile of New Hampshire's Three Northern Counties

Carroll, Coos, and Grafton counties comprise nearly half of the state's land area and are home to about 13 percent of the state's population, including roughly 32,000 residents under age 18 (U.S. Census Bureau 2000). Although all three are rural counties, they are remarkably different from each other and offer diverse environments for their young people. Figure 1 shows the

TABLE 1: CHARACTERISTICS BY COUNTY

	Carroll	Coos	Grafton	NH
Estimated population, 2006	47,475	33,019	85,336	1,314,895
Median household income, 2005	\$49,634	\$39,558	\$46,870	\$56,557
Percent of persons with bachelor's degree or higher, 2000	27%	12%	33%	29%
Percent of children under 18 below poverty rate, 2005	12%	18%	12%	10%
Unemployment rate, 2007	3.5%	4.6%	3.0%	3.6%

Sources: U.S. Census Bureau, *State and County QuickFacts*, <http://quickfacts.census.gov>

U.S. Census Bureau, *Small Area Income and Poverty Estimates*, <http://www.census.gov/hhes/www/saipa/county.html>

Bureau of Labor Statistics, *Local Area Unemployment Statistics*, <http://stats.bls.gov/lau/home.htm>.

Unemployment figures not seasonally adjusted.

FIGURE 1: NORTHERN NEW HAMPSHIRE



Map by Charlie French, University of New Hampshire Cooperative Extension

three counties, including towns where public high schools are located. Table 1 shows selected population characteristics by county, and Table 2 lists the five largest private employment sectors in terms of number of jobs by county based on the North American Industrial Classification System (NAICS).

Coos County

Northernmost Coos County has historically depended on forest-related jobs in the timber and pulp and paper industries. However, jobs in this sector have been disappearing during the past few decades, leaving far fewer well-paying jobs for young people. As Table 2 indicates, the number of manufacturing jobs in Coos County declined by 18 percent between 2001 and 2006. The largest sectors of employment in Coos County are in retail trade and health care and social assistance. Many jobs in these sectors, particularly retailing, are likely to be low paying, part-time, and without benefits. Only about 12 percent of Coos County residents hold a bachelor's degree, which is substantially lower than the other two counties or the state as a whole. In 2007, Coos also had the highest unemployment rate of any county in the state, at 4.6 percent. In 2005, it had the highest child poverty rate, at 18 percent (Table 1). As Chris Colocousis reported elsewhere (2008), Coos is very much in a transitional period as it struggles to adjust to the decline of its manufacturing-based economy. The future prospects for young people in Coos are uncertain, and many leave the county in search of opportunities elsewhere. The county has been losing residents aged 20 to 39 for many years (Johnson 2007). Although the populations of Grafton and Carroll counties have grown in recent years, the population of Coos is similar to what it was in 1970 (Johnson 2007).

Carroll County

In contrast to Coos County, Carroll County has not depended heavily on industrial jobs. With the White Mountains at its northern end and Lake Winnepesaukee on its southern border, Carroll County is a popular year-round leisure destination, and its economy is based primarily on recreation and tourism. About 30 percent of its jobs are in either retailing or in accommodation and food services, and another 13 percent are in the construction industry (Table 2). In 2000, 43 percent of Carroll County housing consisted of second homes (U.S. Census Bureau 2000). The population of Carroll County has grown rapidly in recent years owing in large part to its appeal as an amenity-rich retirement area. Older adults have moved in, as have some adults in the 30–39 age group, but some younger adults under age 25 have left the area (Johnson 2007). The wealth brought in by older adults may partially explain Carroll County's relatively high median household income when compared with Coos and Grafton Counties (See Table 1). Child poverty, at 12 percent, is lower than in Coos,

although still higher than the statewide rate. The education level of Carroll County residents is slightly below that for adults in the state as a whole.

The climate for young people growing up in Carroll County would therefore appear to be somewhat mixed. Their county has been growing rapidly, and the influx of older adults undoubtedly creates additional demand for services, but the county economy has a high proportion of lower-paying retail and tourism-related jobs. Indeed, the authors of a recent Carsey Institute report find that “Carroll County consistently has the lowest percentage of livable wage jobs” of any county in the state (Kenyon and Churilla 2008).

Grafton County

Grafton County is by far the most populous of the three counties and its economy is more diverse. In the northwestern section, farms producing fruits and vegetables line the Connecticut River Valley, and the Littleton area has some manufacturing. The northeastern portion of the county contains a large section of the White Mountain National Forest and its economy is largely tourism-based, with major ski resorts located along the Interstate 93 corridor. The southeastern section includes the town of Plymouth and Plymouth State University and is part of the New Hampshire Lakes Region tourism area. This area also lies along the I-93 corridor, making Concord a manageable commute away. Along the southwest border with Vermont lie the town of Hanover and the city of Lebanon, home to Dartmouth College and the Dartmouth-Hitchcock Medical Center respectively. The medical center is the largest employer in the county, with approximately 5,800 employees. Lebanon is also the site of some manufacturing activity as well as mapping, software, and biotechnology enterprises. Grafton County has seen a decline in its manufacturing sector (11 percent between 2001 and 2006), although not quite as dramatic as in Coos County. As Table 2 indicates, the health care and social assistance sectors are the area’s largest employers. Grafton County residents are more educated than residents in the state as a whole, with 33 percent holding a bachelor’s degree or higher. Although its 2007 unemployment rate of 3.0 percent was slightly lower than the statewide rate of 3.6 percent, its child poverty rate of 12 percent was higher (Table 1). The diverse areas of Grafton make it difficult to paint the county with a single broad brush; young people growing up in Grafton face a wide variety of environments, depending on their location within the county.

Indicators of Youth Well-being

How are young people in these three rural counties faring with regard to common risk factors that can jeopardize a healthy and successful transition to adulthood? The picture that emerges from available data for high school

TABLE 2: LARGEST PRIVATE EMPLOYMENT SECTORS BY COUNTY, 2001 AND 2006

	Number of Jobs*		2006 Percent of total jobs	Percent change in number of jobs 2001-2006	Average Weekly Wage 2006
	2001	2006			
Carroll					
Total employment	29,537	33,296		13	
Retail trade	4,896	5,280	16	8	\$461.53
Accommodation and food services	4,624	4,660	14	1	\$322.56
Construction	NA	4,167	13	-	\$786.45
Health care and social assistance	2,747	3,136	9	14	\$635.97
Real estate and rental and leasing	1,341	1,978	6	48	\$650.30
Coos					
Total employment	18,889	20,020		6	
Retail trade	2,725	2,859	14	5	\$444.99
Health care and social assistance	2,454	2,690	13	10	\$652.21
Accommodation and food services	2,064	2,079	10	1	\$316.66
Manufacturing	2,163	1,766	9	-18	\$827.32
Construction	1,031	1,498	8	45	\$652.62
Grafton					
Total employment	66,251	72,009		9	
Health care and social assistance	9,452	10,965	15	16	\$1,016.97
Retail trade	8,548	9,592	13	12	\$496.90
Educational services	7,388	7,756	11	5	NA
Accommodation and food services	5,045	5,377	8	7	\$316.36
Manufacturing	6,745	6,023	8	-11	\$890.64

*Number of jobs includes full-time and part-time jobs.

Source: Bureau of Economic Analysis; U.S. Department of Commerce; Regional Economic Information System 1969-2006; Table CA25N
New Hampshire Employment Security; Economic and Labor Market Information Bureau;
<http://www.nh.gov/nhes/elmi/pdfzip/econstat/covempwag/Annual/county2006.xls>

youth is one of variation, both across and within counties. Simply put, in some communities, youth are doing quite well—better than youth in the state overall—while in other communities, they are not faring as well and face significant risks to their futures. Although some of the indicators are presented by high school, this report is not intended as an evaluation of high schools themselves but rather as a portrait of the well-being of teens living in the communities that the schools serve. For reference, Appendix A shows the public high schools located in these counties, the towns that are served by each school, and each school’s average enrollment from 2001-2007.

High School Dropout Rates

Young people who drop out of high school are more likely to be idle (Snyder and McLaughlin 2008), to abuse illicit

drugs (Van Gundy 2006), to be incarcerated (Harlow 2003), and to live in poverty. In addition, few if any well paid jobs are open to those without a high school diploma. High school graduation is thus a critical step in the transition to a productive adulthood. The dropout rates reported here are from the New Hampshire Department of Education for the academic years 2001-2002 through 2006-2007.

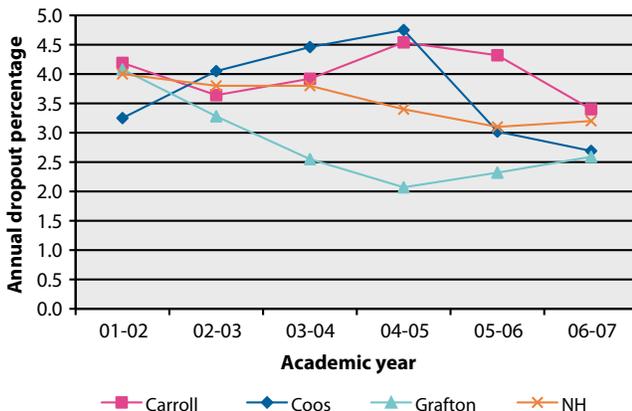
County-level comparison: Figure 2 shows the trends in annual dropout rates for grades 9 through 12 for the three northern counties and for the state as a whole from 2001 to 2007. For each academic year, aggregate annual county dropout rates were calculated from individual school data by totaling the enrollment and dropout numbers for all high schools located in each county.¹ As the graph indicates, Grafton County’s aggregate annual dropout rate is consistently below the overall state rate except in 2001-2002. Grafton’s dropout rate declined from slightly more than 4 percent in 2001-2002 to a low of approximately 2 percent in 2004-2005. Although it has increased slightly since, its annual rate of 2.6 percent in 2006-2007 was less than the statewide rate of 3.2 percent.

On the other hand, Carroll and Coos counties’ aggregate rates have frequently been higher than the statewide rate. The dropout rate in Coos rose between 2001-2002 and 2004-2005 but then fell substantially; in 2006-2007 it was lower than the statewide rate. Carroll County’s rate also climbed during the early years of this decade but has declined to 3.4 percent since and is now slightly above the overall state rate.

Overall, students in Grafton drop out of high school less frequently than their peers in Coos and Carroll counties. However, the gap between the counties has been closing as dropout rates have declined in Coos and Carroll and those in Grafton have increased slightly.

Disparity between communities: The decline in rates in Carroll and Coos, and indeed statewide, is encouraging.

FIGURE 2: DROPOUT RATES BY COUNTY – SCHOOLS COMBINED



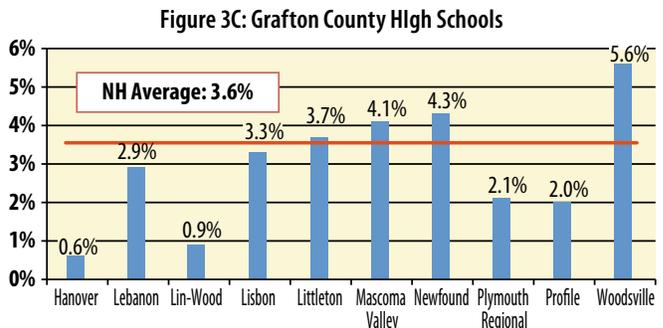
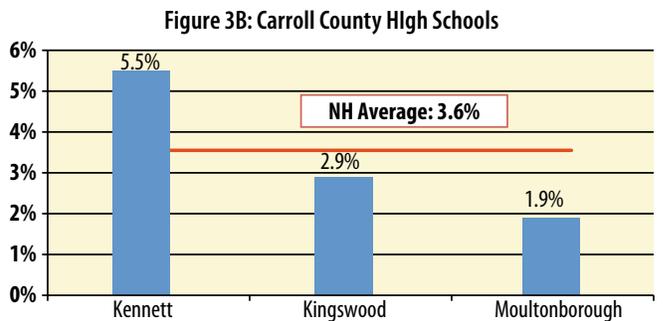
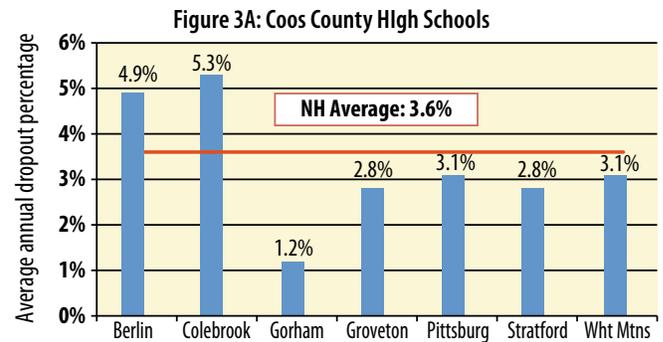
Source: Author’s calculations from NH Department of Education data.

However, aggregated rates mask wide variation within counties. Within each county, some schools are consistently well below the state dropout rate while a few are consistently above it. Teens in some communities are thus having a more difficult time than in others in reaching the crucial milestone of high school graduation.

Figure 3 shows average annual dropout rates by high school for each county during the same six-year period. Kennett High School in Carroll County, Berlin and Colebrook in Coos County, and Woodsville in Grafton County stand out for their higher dropout rates. Several others are notable for their very low rates, including Moultonborough in Carroll, Gorham in Coos, and Hanover and Lin-Wood in Grafton County.

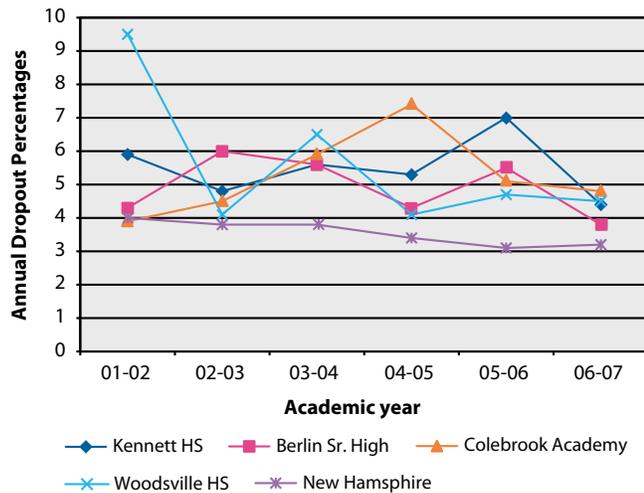
Figure 4 shows trends at the four schools with persistently higher rates. Several trends are notable. Woodsville High

FIGURE 3A, B, C: AVERAGE ANNUAL DROPOUT RATES, 2001-2002 TO 2006-2007 ACADEMIC YEARS



Source: Author’s calculations from NH Department of Education data.

FIGURE 4: ANNUAL DROPOUT RATES FOR SELECTED SCHOOLS



Source: New Hampshire Department of Education

School, located in Haverhill, has seen its annual dropout rate fall fairly dramatically from 9.5 percent in 2001-2002 to 4.5 percent in 2006-2007. Colebrook has also experienced a decrease since its 2004-2005 peak. Both Kennett and Berlin saw declines from the 2005-2006 to 2006-2007 academic years. In an encouraging trend, the rates of all four schools fell between 2005-2006 and 2006-2007 and appeared to be converging closer to the statewide rate in 2006-2007.

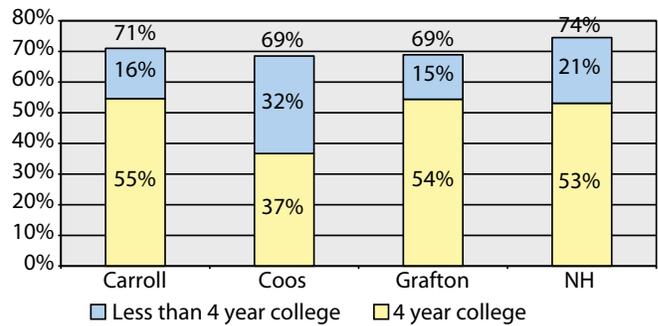
Beginning in December, 2006, Kennett, Berlin, and Woodsville High Schools began participating in the Apex II dropout prevention program along with seven other schools statewide. The program helps schools develop a positive behavioral intervention system; intensive services for students at high risk of dropping out; student leadership teams to create a positive school climate; and a plan to mentor incoming freshmen (NH Department of Education 2005). These programs may help stem the dropout rate further. In addition, the legal age for dropping out will increase from 16 to 18 on July 1, 2009, which may also lower dropout rates. However, 16- and 17-year-olds will still be able to leave school if they and their parents present the school with an alternative education plan.

Postsecondary Plans

Although high school graduation is a critical milestone, it no longer guarantees a job that pays a middle class wage. In contrast to earlier generations of high school graduates, who often found employment in relatively well-paid manufacturing jobs, today’s youth face a more complex job market in which positions that pay higher wages generally require additional education and training. This section explores the extent to which northern New Hampshire youth are preparing for this new economy.

The postsecondary plans of graduating seniors, collected by high schools and published by the New Hampshire

FIGURE 5: POSTSECONDARY EDUCATION PLANS OF 2007 HIGH SCHOOL GRADUATES BY COUNTY

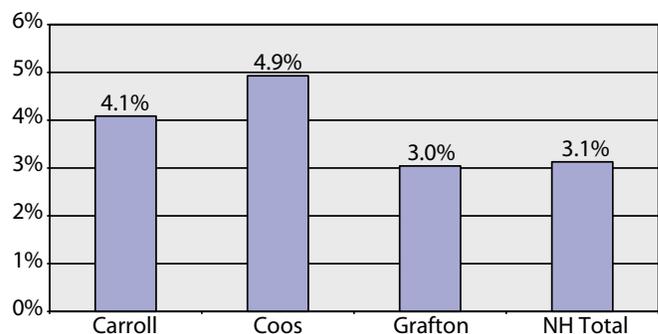


Source: New Hampshire Department of Education

Department of Education, gives some indication of where graduates in Grafton, Coos, and Carroll counties plan to go after they leave high school. Figure 5 shows that statewide in 2007, 53 percent of graduating seniors were bound for four-year colleges while 21 percent were planning to attend a community or technical college. Both Grafton and Carroll county graduates were more likely to attend four year colleges (54 and 55 percent respectively) than graduates statewide, but they were less likely to plan to attend community or technical colleges. Thus the overall share of students pursuing any type of postsecondary education was slightly lower in these two counties than for the state as a whole. In Coos County, graduates enrolled in four year colleges at a substantially lower rate that in either Grafton or Coos or in the state as a whole. Only 37 percent of 2007 Coos County seniors reported that they would attend a four year college, down from 42 percent in 2001.

As Figure 6 shows, Coos County graduates more often plan to enroll in the military. The average percentage of Coos students planning to join the armed forces across the seven year period was 4.9 percent, compared with 3.1 percent across New Hampshire. In 2007 (data not shown), nearly 6 percent of Coos graduating seniors joined the armed forces, double the statewide rate of 3 percent for that year. Carroll County youth also enrolled in the armed

FIGURE 6: AVERAGE PERCENTAGE OF GRADUATES ENTERING THE ARMED FORCES, 2001-2007



Source: New Hampshire Department of Education

forces at a higher average annual rate than the state (4.1 versus 3.1 percent), while Grafton students enrolled at rates similar to the state average. These higher rates of service in New Hampshire's rural counties are consistent with national research indicating that rural youth enter the military at a disproportionate rate compared with their urban and suburban counterparts (Kane 2005). It seems likely that young people are motivated not only by a desire to serve their country but also by the opportunities for employment and education that the armed forces provide which may otherwise be unavailable in economically stressed rural areas.

Substance Abuse

The use of alcohol or illicit drugs by young people is associated with a number of health risks, including driving while under the influence, risky sexual activity (National Institute on Alcohol Abuse and Alcoholism 1997), and delinquent and violent behavior (National Survey on Drug Use and Health 2005, 2006). In addition, early onset of alcohol use is associated with a higher likelihood of alcohol abuse and dependency in adulthood (Grant and Dawson 1997). Given these negative consequences, communities have a strong interest in preventing substance abuse among their youth.

In general, youth in Grafton, Coos, and Carroll counties show fairly high rates of drug and alcohol use, but once again there is wide variation from community to community. Table 3 shows substance abuse data for students in grades 9 through 12 at district, state, and national levels. The indicators of current substance abuse are: 1) whether a student used any alcohol in the last 30 days; 2) whether a student had 5 or more alcoholic drinks in a row on any day in the past 30 days (binge drinking); and 3) whether a student used marijuana in the past 30 days.

The district-level data were obtained from two sources: the New Hampshire Department of Health and Human Services, which administers community-level Youth Risk Behavior Surveys (YRBS) to all students in participating high schools; and Communities for Alcohol and Drug-free Youth in Plymouth, which conducted the 2007 Teen Assessment Project (TAP) survey of all students in Plymouth, Linwood, and Newfound High Schools. Information on substance abuse rates was not available for all high school districts in Grafton County. District-level rates in Table 3 represent the responses of all students in each school who completed surveys, but these rates should be interpreted with caution because participation is voluntary. Students who participated in the surveys could differ in important ways from those who did not. This might be a particular concern at schools with very small enrollment, where students might worry about the anonymity of their responses. Across all the districts for which data were available, survey participation rates ranged from 65 to 89 percent.

State and national substance abuse rates shown in Table

TABLE 3: PERCENT OF STUDENTS IN GRADES 9-12 WHO ENGAGED IN ALCOHOL AND MARIJUANA USE IN PAST 30 DAYS, 2007*

	# of students participating in survey	Any Alcohol Use	Binge Drinking	Marijuana Use
Carroll County				
Kennett HS	707	50%	31%	30%
Kingswood Regional HS *	709	48	29	31
Moultonborough Academy	177	27	17	12
Coos County				
Berlin Sr. High	475	55	41	34
Gorham HS	143	39	25	18
Colebrook Academy	150	37	26	15
Pittsburg	39	37	24	24
Groveton	131	47	31	19
Stratford	45	38	24	5
White Mtns Regional HS	394	47	32	14
Grafton County				
Hanover HS	—	—	—	—
Lebanon HS	577	48	31	23
Linwood	157	44	24	29
Lisbon	—	—	—	—
Littleton	202	39	28	16
Mascoma Valley Regional HS	330	47	31	25
Newfound Regional HS	589	37	23	19
Plymouth Regional HS	682	26	15	14
Profile	—	—	—	—
Woodsville HS	—	—	—	—
New Hampshire State Rate (CDC)		45	28	23
95% Confidence Interval		41-49	25-32	20-26
National Rate (CDC)		45	26	20
95% Confidence Interval		42-47	24-28	18-22

* Kingswood Regional High figures are from the 2005 community-level YRBS. 2007 data were not available.

Sources: All school data except Linwood, Newfound, and Plymouth are from the 2007 NH community-level Youth Risk Behavior Surveys (YRBS) conducted by the NH Department of Health and Human Services. Data for Linwood, Newfound, and Plymouth High Schools were obtained from 2007 Teen Assessment Project (TAP) conducted by Communities for Alcohol- and Drug-free Youth (CADY) of Plymouth. State and national rates were obtained from the Centers for Disease Control and Prevention, 2007 YRBS.

3 were obtained from the Centers for Disease Control and Prevention (2007a), which separately administers the YRBS biannually to large, representative samples of students in all 50 states. Both point estimates and 95 percent confidence intervals for the state and national rates are shown.

As with dropout rates, substance abuse rates vary considerably from community to community. In Carroll County,

Kennett High School students had used alcohol and marijuana at rates that were significantly higher than state levels. One half of Kennett students had used alcohol in the past 30 days, and 30 percent had used marijuana, compared with statewide estimates of 45 and 23 percent respectively. Kingswood Regional High students also reported high marijuana use rates at 31 percent. In contrast, Moultonborough Academy students reported alcohol use, binge drinking, and marijuana use at rates significantly lower than the state estimates. Binge drinking rates at Kingswood and Kennett do not differ significantly from the state rate since they fall within the state 95 percent confidence interval, but in both schools, roughly 30 percent of students had engaged in binge drinking in the past month compared with 17 percent at Moultonborough.

In Coos County, students in Berlin stand out for their high rates of current substance abuse. Fifty-five percent had used alcohol in the past 30 days, and 41 percent had engaged in binge drinking. More than one-third smoked marijuana in the last month. These rates exceed both state and national estimates by a substantial margin. Gorham, Colebrook, Pittsburg, and Stratford students were less likely than students statewide to have used alcohol in the past 30 days. Gorham, Colebrook, Groveton, Stratford, and White Mountains Regional students were less likely to have smoked marijuana. Pittsburg and Stratford students binge drank less frequently than their peers statewide.

Recent substance use data is available for only a limited number of schools in Grafton County. Lebanon High School reports slightly higher substance abuse rates than the state estimates, but these differences are not statistically significant. A smaller share of Littleton High students reports any alcohol use or marijuana use in the past month than students across the state. The TAP survey results for Newfound and Plymouth Regional High Schools indicate that each has rates of alcohol use, binge drinking, and marijuana use that are significantly lower than the state rates. Indeed, Plymouth Regional High School has the lowest rates of recent alcohol use (26 percent) and binge drinking (15 percent) of any of the schools for which data were available. At 14 percent, its students' marijuana use is also among the lowest in these counties. High school students at Linwood report rates that are very similar to the state rates, although their marijuana use is slightly higher.

Although alcohol and marijuana are the most common drugs among high schoolers, they are by no means the only ones. Individuals working in substance abuse prevention programs in these counties report that prescription drug abuse is a relatively new and growing problem in New Hampshire's northern rural areas. These reports are consistent with research showing that prescription drug abuse by teens has been increasing nationwide (National Center on Addiction and Substance Abuse 2004). At this time, there are no data available on the extent of this problem among New Hampshire youth.

Court-Involved Youth

The teen years are often a time of rebellion, and some young people end up in the juvenile justice system, either because of criminal activity or because they commit offenses, such as truancy, that while not criminal, indicate the need for intervention and services. In New Hampshire, the paths a young person might take through the juvenile justice or service system depend on the severity of the offense and the history of the offender. First-time offenders who commit non-violent offenses might be enrolled in "court diversion," a community-based program in which youth might write apology letters and perform community service designed to help them learn from their mistakes and avoid future ones. At the other end of the continuum, repeat offenders who commit serious offenses or are deemed a danger to themselves or the community might be committed to the Sununu Youth Services Center, a secure corrections facility located in Manchester. In between these two extremes lie many other possible options, such as probation, placement in a group-home, or treatment in a community-based program.

Obtaining even basic data on juvenile justice system cases proved to be extremely difficult, because New Hampshire lacks a unified system for collecting information on youth offenders. Agencies at each level of the juvenile justice system maintain their own data, and there is little interface between their systems. Data are collected separately by police departments, courts, diversion programs, the New Hampshire Department of Juvenile Justice Services (DJJS), and by other agencies that deal with youthful offenders. Because information is collected in different ways by different agencies and never entered into any central data system, there is no way to track a young person from the point of arrest to final disposition of the case. As a result, it is impossible to determine with any reasonable accuracy the proportion of offenders who take particular paths through the system or how the paths taken vary across counties or communities. It is also difficult to uncover changes or trends in types of offenses being committed². Moreover, without a unified data system, it is nearly impossible to conduct rigorous evaluations of efforts to reduce the rate or seriousness of youth offenses.

Therefore, the following is a rough and incomplete picture of juvenile justice trends in Grafton, Carroll, and Coos counties. Data provided by DJJS on the numbers of new delinquency and child-in-need-of-services (CHINS) cases opened at DJJS district offices from 2004 through 2007 point to a decrease in new cases over that time period at the DJJS district offices responsible for Coos, Carroll, and most of Grafton County. This decrease mirrored a statewide decline in new DJJS cases. Similarly, data provided by the Family Courts and by the Administrative Office of the Courts on numbers of new delinquency and CHINS petitions filed between 2004 and 2007 indicate that juvenile petitions have declined in Grafton County. Only two years

of petition data were available for Coos and Carroll county family courts, making it impossible to discern trends in these areas.

A decline in either the number of juvenile petitions filed in Family Court or in the number of new cases opened by DJJS district offices does not necessarily mean that fewer youth are being arrested. A young person who is arrested may never have a delinquency petition filed in court; instead the youth could be referred to a diversion program directly by the police department. Similarly, courts frequently refer to diversion programs, and a youth taking this path would never become a new case opened by DJJS. Moreover, counties and communities may vary widely in terms of which paths youth take through the system. Services such as diversion programs are not uniformly available across all three counties. Despite these caveats, declines in new DJJS cases across all three counties and a decline in new court petitions in Grafton are encouraging. This would be consistent with a national decline in youth arrests for most offenses for the period of 1996 to 2005 (Snyder 2008).

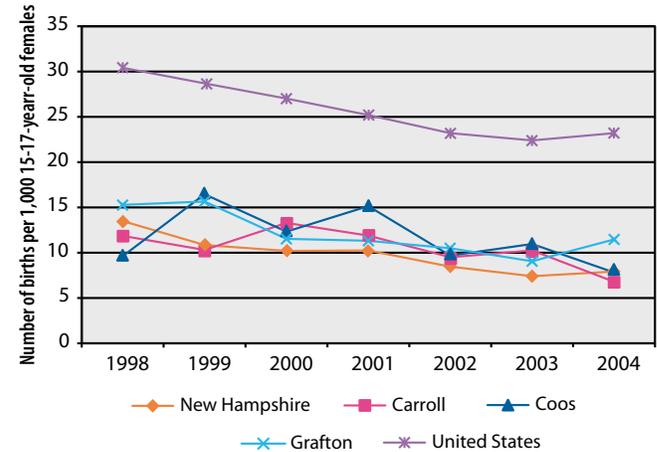
Teen Birth Rate

Early parenthood can lead to several negative consequences for both teen mothers and their children. Girls who become parents before age 18 are less likely to graduate from high school and are at greater risk of living in poverty (Maynard 1997). Children of teen mothers experience home environments that are often less stable and nurturing than the children of older mothers, and they are more likely to be victims of abuse and neglect, to drop out of high school, to become incarcerated, and to become teen parents themselves (Maynard 1997). Fortunately, the national teen birth rate declined substantially between 1991 and 2005, although it increased slightly in 2006 (Centers for Disease Control and Prevention 2007b). From 1998 to 2004, teen births in New Hampshire and in the three northern counties mirrored the declining national trend (see Figure 7).

As is evident in Figure 7, New Hampshire's teen birth rate is much lower than the national rate. In 2004, 8 in every 1,000 New Hampshire girls aged 15 to 17 had a child, compared with 23 in 1,000 nationwide. In general, teen girls in Carroll, Coos, and Grafton have birth rates that track the state trends fairly closely, although they have been higher than the state rate in most years. Because these counties have small populations, minor changes in the number of births in a county can have a substantial effect on the teen birth rate; this likely explains the greater year-to-year variation in county rates.

The good news is that teen birth rates in the northern counties have declined along with state and national rates. However, although teens in these counties have children at far lower rates than their peers nationwide, they are slightly more likely to become mothers than their peers in the rest of the state.

FIGURE 7: BIRTH RATE FOR FEMALES AGE 15-17, 1998-2004



Source: New Hampshire Department of Health and Human Services, Health Statistics and Data Management <http://www.dhhs.nh.gov/DHHS/HSDM/default.htm>
National Center for Health Statistics, Birth Data (<http://www.cdc.gov/nchs/births.htm>)

Note: The teen birth rate is calculated by dividing the number of births to females age 15-17 by the number of females age 15-17. The rate is presented on a "per 1,000" basis.

Data for number of females aged 15-17 come from the Census Bureau's intercensal estimates and the decennial census.

Summary

The well-being of New Hampshire teens in the three northern counties is a mixed story. Compared with national statistics on teen pregnancy and high school dropouts, northern New Hampshire teens, like their peers statewide, fare well. Teen pregnancy rates are much lower, and high school dropout rates do not approach those seen in urban areas with large disadvantaged minority populations or in chronically poor rural areas where it is common for roughly half of an entering freshman class to drop out before graduation³. Simply looking better than the worst cases, however, does not mean that young people in the northern half of the state are doing particularly well.

Grafton County youth fare better than their counterparts in Coos, Carroll, and across the state in terms of dropout rates and substance use. Coos County youth appear to be faring worse with respect to substance abuse and plans to attend a four-year college. Carroll County has higher aggregate dropout rates than the other two counties or the state. All three counties have slightly higher teen birth rates than the state as a whole. Grafton's relative advantage and Coos' relative disadvantage parallel closely the education and income characteristics of their populations as a whole seen in Table 1.

The story, however, is more mixed when comparing communities within counties. In some communities in each county, young people are clearly having a more dif-

ficult time. For example, in Coos, Berlin's dropout rate and substance abuse rates indicate that teens there are particularly disadvantaged. In Gorham, on the other hand, dropout rates and substance use rates look better than the statewide rates. Similarly in Carroll, young people from the communities served by Kennett High School in Conway appear more troubled than their peers in the southern Carroll community of Moultonborough. In Grafton County, too, communities vary. In general, where family incomes and education are higher, teens are less likely to engage in problematic behaviors.

On the whole, youth in the northern part of the state seem to be faring somewhat worse than their peers statewide, but their behavior, and thus their opportunities, vary widely across communities.

Improving Outcomes for Youth

In all three counties, groups and organizations are working to help young people make a successful transition to adulthood by providing various services and programs. Some are positive youth development programs that enable young people to develop skills and improve their resiliency in the face of adversity. Others are intervention and treatment programs and services that help troubled youth get back on more stable footing. There are also substance abuse prevention coalitions working to reduce substance abuse in their communities through a variety of strategies. Despite the work of these organizations, programs and services for young people are incomplete. Across all three rural counties, professionals report similar gaps in youth programming and similar obstacles that arise in working to help teens. The following discussion of these gaps and obstacles is based on interviews with 12 individuals in these counties who are working in the field of youth services.

Gaps in Youth Services

Positive youth development programs and safe places for young people to socialize. Young people benefit from programs that allow them to build life skills and to challenge themselves in new ways. Some examples of positive youth development programs are community service, athletics, performing arts, and peer-to-peer mentoring programs. There must, however, be a sufficient number and broad enough range of programs available to appeal to the varied interests of young people. Unfortunately, in all three counties, informants repeatedly cited a shortage of youth programs. Athletic programs appear to be the most readily available, either through recreation departments or through schools, but other youth programming is in short supply in most areas of these counties. This leaves teens uninterested in athletics to complain that “there’s nothing to do.” Parents with the time and resources to transport their children to programs elsewhere often do so, but clearly not all parents

can do this. Low-income or single parents are the least likely to be able to provide such opportunities to their children, yet their children often need these programs the most. In addition, traditional out-of-school programs focus on younger children, typically up to age 13, leaving many high school teens with little to occupy themselves while their parents are at work.

In addition to a shortage of organized programs, these rural counties lack recreational facilities where teens can just “hang out” and socialize in a safe and supervised setting. There are a few teen centers located in this part of the state, but these cannot come close to meeting the need, and there are few community centers. As one individual working with teens remarked, “there is no place where teens can go and be themselves and do things together.”

Central referral services and case management. Another frequently cited gap is the lack of central referral services to connect youth and their families to available programs and services. The “system” of programs and services is hardly a system but instead is fragmented and difficult to navigate. Although families can often access what they need, doing so often involves considerable effort and juggling, assuming they are even able to learn what services are available. One youth service provider in Grafton County suggested the need for a call center to educate families about available services and provide referrals to appropriate services. Along a similar line, a Coos County informant cited a shortage of “wrap-around” or case management services where the care of a young person in need of multiple services, such as behavioral, mental health, or substance abuse treatment, would be managed by professionals, and the youth and his or her family would be smoothly referred to appropriate programs and services. A fledgling program to provide integrated care management for young people who need services from several providers is operating in Grafton County, but programs like this are unusual.

The interviews suggest that families who are most in need of help for their teens—those families experiencing multiple problems and stressors in their lives—are probably the least able to successfully navigate the fragmented programs and services that are available. Youth in these families may well fall through the cracks.

Crisis intervention. The goal of positive youth development programs is to keep kids out of trouble and to help them develop healthy lifelong skills. Nevertheless, many young people end up engaging in risky and dangerous behaviors. Another frequently cited gap is a lack of 24-hour crisis intervention services for troubled youth. When troubled teens run into problems at odd hours of the day, sometimes the only resource families can call is the police, and this often means that the child gets funneled into the juvenile justice system when immediate help from a mental health profession might be more appropriate. Emergency services such as this are available in only a few areas.

Obstacles to Providing Youth Services

Although the gaps described above are widely recognized by youth professionals in the three counties, there are significant obstacles to filling the gaps.

Secure and sustainable funding. Secure, long-term funding for programs and services is the most frequently cited challenge to serving youth. Funding for youth programs is often provided through grants, both private and public, which last for a limited period of time and whose annual funding amounts decrease over the term of the grant. The motivation for such “seed funding” is to get a program off the ground but to have communities themselves build sustainable funding sources to continue the program beyond its initial grant phase. Unfortunately, in most economically stressed rural communities, finding long-term stable sources of funding is very difficult. Towns can seldom step up and fill the funding gap through the town budget. The lack of sustainable funding may affect a range of programs for young people, from positive development programs to mentoring programs to youth centers. As one informant said of a successful program that had to be abandoned when grant funding ended, “It’s almost worse to start a program for youth and have to end it than to never start it at all.”

The staff of youth programs report that they are constantly working to secure new sources of funds to keep their doors open, and the energy they devote to finding funding is energy they are unable to spend on the core mission and activities of their organizations. As another interviewee said, “Everyone wants our programs—schools, parents, courts, police—but no one wants to pay for them.” Even court diversion programs, which directly reduce costs to the state by keeping first-time offenders out of the formal juvenile justice system, are not fully funded by public money and their staff must engage in continual fundraising to keep their programs operating.

Funding is also an issue for services that rely heavily on public funding, particularly mental health and substance abuse treatment services. Declining state Medicaid budgets have severely challenged service providers. Declining or even flat budgets mean that providers have more difficulty attracting and retaining the staff needed to deliver services. Indeed, several informants cited the shortage of mental health professionals as a serious problem in these communities. Unfortunately, communities with families under economic stress have higher demand for mental health and substance abuse services, but families in these communities generally have fewer resources with which to pay.

Transportation. Not surprisingly in these rural counties, transportation is an ever-present obstacle to delivering programs and services to youth. Teens who live in more remote areas are simply less able to participate in programming or to access needed services because of distance. Attendance at

youth centers drops off when school buses are not running in the summer. Teens who need mental health services may be unable to get to an appointment with a provider. Young people who would like to participate in activities beyond their community may have no one to drive them or their families may simply be unable to afford to do so. Design and funding of youth programs and services should address transportation.

Collaboration and communication among youth-serving organizations. Several youth professionals pointed out that communication and collaboration among youth organizations are essential to effectively providing services. Strong networks of providers help prevent duplication of services and facilitate sharing information and expertise. Indeed, many grantors of youth programs require that communities demonstrate networks of coordinating agencies as a condition of funding. Some informants reported that their communities have quite strong networks of youth professionals and that they drew considerable support and energy from those networks. Other informants reported poor cooperation among providers in their communities. It is unclear why organizations work better together in some communities than in others, but informants suggested growing income inequality, large numbers of businesses owned by non-locals, more short-term residents, and geographic barriers between communities as possible explanations.

Conclusion

Young people in the northern part of New Hampshire face diverse circumstances and challenges. In the aggregate, Grafton County youth appear to be better off than the state as a whole on some key measures, while Coos youth appear to fare worse, but the story in all three counties is one of wide variation. Not surprisingly, the prospects of young people appear to be closely tied to the education and economic prospects of the adults in their communities. Nonetheless, outcomes for young people can be improved when there are sufficient programs and services to provide the opportunities and assistance that families may be unable to provide on their own.

This study points to several possible areas where policymakers might direct resources to help disadvantaged northern New Hampshire youth, but two appear to be particularly important:

- **Invest in positive youth development programs for teens.** Teens need safe, healthy, and constructive ways to spend their out-of-school time, but much programming focuses on children aged 13 and younger. Community-based positive youth development programs can build skills that help teens transition successfully to adulthood (Eccles and Gootman 2002). A shortage of such programs

was mentioned most frequently by informants in all three counties.

- **Provide secure and sustainable funding for youth programs and services.** The present system of funding means that youth programs are constantly vulnerable to decreases in funding and their staffs struggle to keep them operating. Programs that help young people develop life skills and keep them from engaging in risky behavior have the potential downstream to reduce costs associated with criminal activity, substance abuse, early pregnancy, and other risky behaviors. Ensuring that youth programs are adequately and securely funded would improve the lives of young people and save money in other areas.

Across the three counties, dedicated individuals are working to improve the life chances of young people, but they face formidable challenges in doing so. The teen years are an important but often overlooked period that has critical long-term impacts on youth's chances for success. Serving the needs of teens can bring enduring rewards. As a Grafton County youth service said of the potential consequences of ignoring the teen years: "Do we want to track them into the juvenile justice system or do we want them to have healthy lives? We're going to spend money on them no matter what."

The 2009 Peter C. Nordblom and Kristin Van Curan Nordblom Fellow at the University of New Hampshire will continue the Carsey Institute's look at northern New Hampshire youth by providing a more in-depth profile of youth programs and services in the northern counties.

ENDNOTES

¹ Rivendell Academy, located in the town of Orford in Grafton County, is an interstate school district and its data are not reported by the NH Department of Education. Data from Rivendell are not included in this report.

² A thorough examination of juvenile justice trends in New Hampshire would involve obtaining data from multiple separate sources and would still leave many important questions unanswered. The most comprehensive reports done in recent years were completed by Gebo and Burbank in 2005 and 2006 using data from 2003 and 2004. It is beyond the scope of this report to update their work with more recent data.

³ New Hampshire Department of Education does not publish cumulative dropout rates for a particular cohort of students but instead provides estimates of

APPENDIX A: CARROLL, COOS, AND GRAFTON HIGH SCHOOLS

	Towns Served	Average Enrollment 2001-2007
Carroll County*		
Kennett Senior High School	Albany, Bartlett, Conway, Eaton, Freedom, Hart's Location, Jackson, Madison, Tamworth	941
Kingswood Regional High School	Brookfield, Effingham, New Durham, Ossipee, Tuftonboro, Wolfeboro	926
Moultonborough Academy	Moultonborough	221
Coos County		
Berlin Senior High School	Berlin, Dummer, Errol, Milan	590
Colebrook Academy	Columbia, Dixville, Errol, Stewartstown, Brunswick VT, Bloomfield VT, Millsfield ME	183
Gorham High School	Gorham, Randolph, Shelburne	200
Groveton High School	Groveton, Northumberland, Stark	176
Pittsburg School (High)	Clarksville, Pittsburg, Stewartstown	62
Stratford Public School (High)	North Stratford, Stratford, Stratford Hollow, Bloomfield VT, Brunswick VT	59
White Mountain Regional HS	Carroll, Dalton, Jefferson, Lancaster, Whitefield	476
Grafton County**		
Hanover High School	Etna, Hanover, Norwich VT	750
Lebanon High School	Grantham, Lebanon, Plainfield	753
Lin-Wood Public School (High)	Lincoln, Woodstock	119
Lisbon Regional School (High)	Landaff, Lisbon, Lyman	145
Littleton High School	Littleton	322
Mascoma Valley Regional High	Canaan, Dorchester, Enfield, Grafton, Orange	466
Newfound Regional High School	Alexandria, Bridgewater, Bristol, Danbury, Groton, Hebron, Hill, New Hampton	474
Plymouth Regional High School	Ashland, Campton, Holderness, Plymouth, Rumney, Thornton, Wentworth	880
Profile School (High)	Bethlehem, Easton, Franconia, Sugar Hill	214
Woodsville High School	Bath, Benton, Haverhill, Monroe, Piermont, Warren	314

Source: NH Department of Education

*Two Carroll County towns send students to high schools located outside of the county. Kingswood serves one town outside Carroll county.

** Rivendell Academy located in Orford is not included because it is an interstate school district whose information is not published by the NH DOE. Newfound serves 3 towns outside of Grafton county.

each school's cumulative rate that are calculated using the annual dropout rate. Using the NH DOE formula, the statewide annual dropout rate in 2006-2007 of 3.2% yields an estimated 4-year cumulative rate of 12.2%, far below the more than 50% cumulative rate reported in many urban districts in other states. For a discussion of urban dropout rates, see Tsoi-A-Fatt, 2008.

AUTHOR

ANNE SHATTUCK is a Ph.D. student in sociology and a research assistant at the Carsey Institute.

ACKNOWLEDGEMENTS

The author wishes to thank Peter C. Nordblom and Kristin Van Curan Nordblom for their generous support of this research. The author also wishes to thank the individuals in Coos, Grafton, and Carroll counties who graciously shared their time and expertise during interviews for this report. Finally, thank you to Mil Duncan, Sally Ward, and Michele Dillon of the Carsey Institute and Steve Norton and Ryan Tappin of the New Hampshire Center for Public Policy Studies for their comments on earlier versions of this report.

REFERENCES

- Annie E. Casey Foundation. 2008 *Kids Count Data Book: State Profiles of Child Well-Being*. Baltimore: Annie E. Casey Foundation.
- Centers for Disease Control and Prevention. 2007a. National Center for Chronic Disease Prevention and Health Promotion. Youth Risk Behavior Surveillance System. <http://www.cdc.gov/HealthyYouth/data/index.htm>.
- Centers for Disease Control and Prevention. 2007b. National Vital Statistics Reports Volume 56, Number 7. Washington, DC: National Center for Health Statistics.
- Colocousis, Chris. 2008. "The State of Coos County: Local Perspectives on Community and Change." Issue Brief No. 7. The Carsey Institute, University of New Hampshire, Durham, NH.
- Eccles, Jacquelynne, and Jennifer Appleton Goodman, eds. 2002. *Community Programs to Promote Youth Development*. Washington, DC: National Academy Press.
- Gebo, Erica, and Melissa Burbank. 2005. *Status of Juvenile Justice in New Hampshire*. Justiceworks, University of New Hampshire, Durham, NH.
- Gebo, Erica (with Melissa Burbank). 2006. *Status of Juvenile Justice in New Hampshire*. Report for the New Hampshire State Advisory Group on Juvenile Justice, September 2006.
- Grant, Bridget F., and Deborah A. Dawson. 1997. "Age at Onset of Alcohol Use and Its Association with DSM-IV Alcohol Abuse and Dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey." *Journal of Substance Abuse* 9:103-110.
- Harlow, Caroline Wolf. 2003. "Education and Correctional Populations." Bureau of Justice Statistics Special Report NCH N95670. U.S. Department of Justice, Office of Justice Programs.
- Johnson, Kenneth. 2007. "The Changing Faces of New Hampshire: Recent Demographic Trends in the Granite State." Reports on New England, Vol. 1, No. 1. The Carsey Institute, University of New Hampshire, Durham, NH.
- Kane, Tim. 2005. "Who Bears the Burden? Demographic Characteristics of U.S. Military Recruits Before and After 9/11." Heritage Foundation, Center for Data Analysis Report #05-08. <http://heritage.org/Research/NationalSecurity/cda05-08.cfm>
- Kenyon, Daphne, and Allison Churilla. 2008. "Many New Hampshire Jobs Do Not Pay a Livable Wage." Issue Brief No. 9. The Carsey Institute, University of New Hampshire, Durham, NH.
- Maynard, Rebecca A., ed. 1997. *Kids Having Kids: Economic Costs and Social Consequences of Teen Pregnancy*. Washington, DC: Urban Institute Press.
- National Center on Addiction and Substance Abuse at Columbia University. 2004. "You've Got Drugs! Prescription Drug Pushers on the Internet." White paper. Columbia University, New York, NY.
- National Institute on Alcohol Abuse and Alcoholism. 1997. Alcohol Alert No. 37. <http://pubs.niaaa.nih.gov/publications/aa37.htm>.
- National Survey on Drug Use and Health. 2005. "Alcohol Use and Delinquent Behaviors among Youths." The NSDUH Report, April 1, 2005. Office of Applied Studies, Substance Abuse and Mental Health Services Administration.
- National Survey on Drug Use and Health. 2006. "Youth Violence and Illicit Drug Use." The NSDUH Report, Issue 5. Office of Applied Studies, Substance Abuse and Mental Health Services Administration.
- New Hampshire Department of Education. 2005. "NH Department of Education Receives Dropout Prevention Grant Award." News release 10/6/05. http://www.ed.state.nh.us/education/doe/organization/instruction/SpecialEd/documents/apex_grant.pdf.
- New Hampshire Employment Security, Economic and Labor Market Information Bureau. 2008. Community Profiles. <http://www.nh.gov/nhes/elmi/communpro.htm>.
- Snyder, Anastasia, and Diane McLaughlin. 2008. "Rural Youth are More Likely to Be Idle." Fact Sheet No. 11. The Carsey Institute, University of New Hampshire, Durham, NH.
- Snyder, Howard N. 2008. "Juvenile Arrests 2005." *Juvenile Justice Bulletin, August 2008*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Tsoi-A-Fatt. 2008. "A Collective Responsibility, A Collective Work: Supporting the Path to Positive Live Outcomes for Youth in Economically Distressed Communities." Washington, DC: Center for Law and Social Policy.
- U.S. Census Bureau. 2000. State and County Quick Facts. <http://quickfacts.census.gov>.
- Van Gundy, Karen. 2006. "Substance Abuse in Rural and Small Town America." Reports on Rural America, Volume 1, Number 2. The Carsey Institute, University of New Hampshire, Durham, NH.



Building knowledge for families and communities

The Carsey Institute conducts policy research on vulnerable children, youth, and families and sustainable community development. We give policymakers and practitioners timely, independent resources to effect change in their communities.

Huddleston Hall
73 Main Street
Durham, NH 03824
(603) 862-2821

www.carseyinstitute.unh.edu

