

Chapter 6

Education: Preparing for the Future



The Contours of Public Education

A sound education is the foundation for a prosperous future. A strong education system powers the local economy by providing graduates with the basic knowledge and skills necessary to enter the workforce. In addition, an excellent educational system leads students to seek higher education, which in turn raises technological discovery, produces higher paying jobs, and allows citizens to take a more active role in their community's economy. The state of the educational system touches nearly every aspect of a community from healthcare to government.

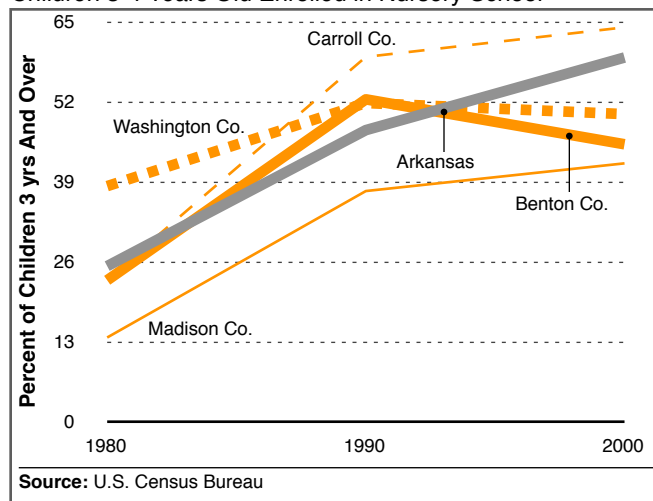
As part of the human capital growth in Northwest Arkansas, this investment becomes crucial to growing a vibrant and strong regional community. Beginning with pre-K education through post-secondary educational opportunities, how well communities manage to become stronger and increase their potential through this "human capital" investment will have an impact on the overall growth and success of the region well into the 21st Century.



Pre-Kindergarten

In 1991, the Arkansas legislature established the *Arkansas Better Chance* pre-K program. The intent of the program was to provide assistance to educationally disadvantaged young children from birth through age five. With some funding challenges, in 2003, the *Arkansas Better Chance* for School Success Program received a \$40 million appropriation.

Figure 6.1
Children 3-4 Years Old Enrolled in Nursery School



- ★ Early enrollments in pre-K schools in the Northwest Arkansas region have, until recently, kept pace with the rest of the state.
- ★ In 2000, Carroll County had the highest pre-K enrollments in the Northwest Arkansas region (55%) and Madison County reported the lowest pre-K enrollments (41%).
- ★ While the percentage of pre-K enrollments in Arkansas increased, enrollments in the Northwest Arkansas region have leveled off or declined between 1990-2000.



Primary Education

It is important to point out at that the results presented in this chapter are school district outcomes that have been aggregated to the county level. Clearly, this aggregation has an impact on what is reported and how it is reported. Whether proficiency or achievement, school districts are combined to provide a picture of what is taking place in each of the four Northwest Arkansas counties. While some of the school districts reported proficiency scoring in earlier years not all did. Thus, these three most recent years are consistently available for every school district in every county in the Northwest Arkansas region.

Under the No Child Left Behind Act (NCLB), every state has been required to report the percentages of students achieving proficiency in reading and mathematics for grades 3 through 8. For each subject and grade combination, the percentages vary widely across states, and within

states as well. The proficiency examined in this report reflects the percentage of students scoring at or above *Basic* levels established by the state for the 4th and 8th grades.

- ★ In the past 3 years basic reading and math proficiency among Northwest Arkansas' 4th graders have been as high or higher than the state average.
- ★ The state and Northwest Arkansas counties dropped slightly in reading proficiency between 2006 and 2007.
- ★ In 2007, Arkansas and Northwest Arkansas counties had lower reading and math proficiencies than the United States average.

Figure 6.2
Reading, "Proficient and Above": 4th Graders

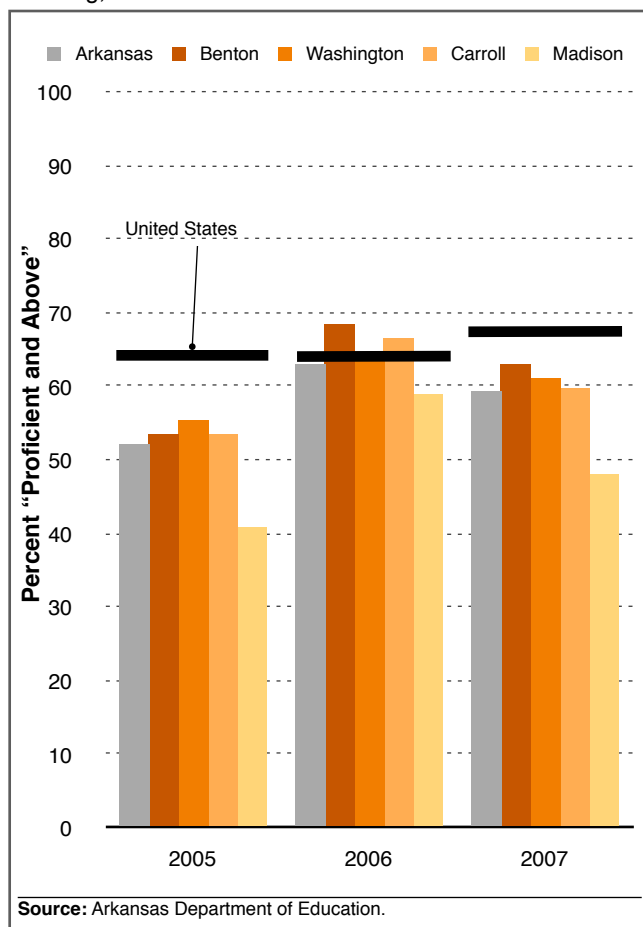
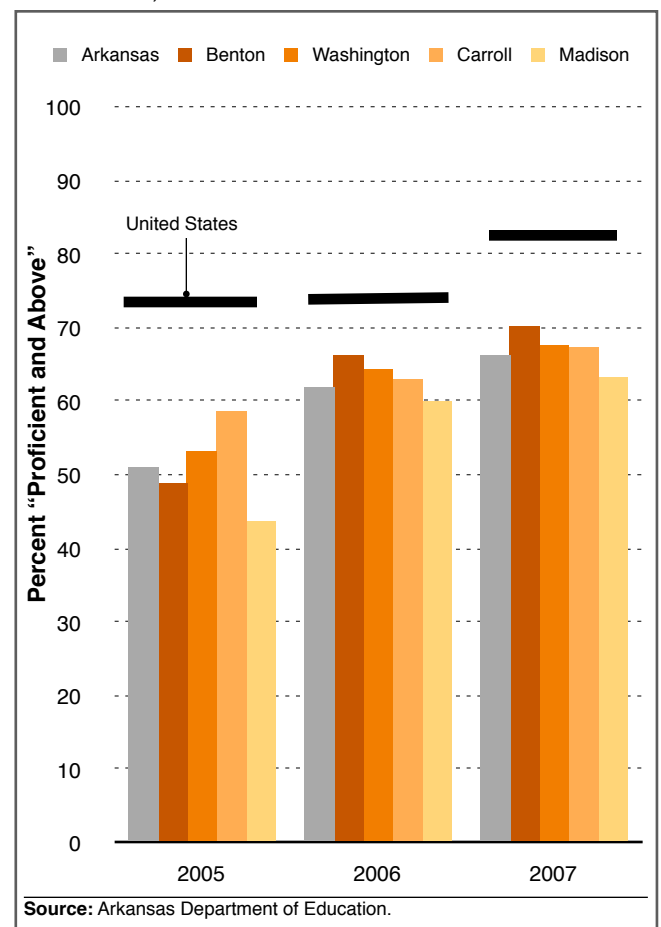


Figure 6.3
Mathematics, "Proficient and Above": 4th Graders



- ★ Reading and math proficiency among 8th graders in Northwest Arkansas counties was generally higher than the state average.
- ★ Reading proficiency among 8th grades was lowest in Carroll County and in all three years that level was lower than the state average.
- ★ The reading proficiency of Northwest Arkansas' 4th and 8th graders declined from 2006 to 2007.
- ★ 8th graders in the state and Northwest Arkansas counties had lower proficiencies in mathematics compared to the United States.
- ★ Math proficiency percentages have increased considerably in the last two years with both Washington and Benton Counties increasing by nearly 20 percent since 2005.

- ★ Madison County had the highest percentages of 8th graders at or above the Basic proficiencies levels in most years.
- ★ By 2007, the reading proficiency average of 8th graders at or above the Basic level in the United States was 74 percent. Only Benton County matched the national average with the state nearly 10 percentage points behind the national average.
- ★ In 2007, the math proficiency average of 8th graders at or above the Basic level in the United States was 82 percent. All the counties in Northwest Arkansas and the state were 20 percentage points (or more) behind the national average in math proficiency.

Figure 6.4
Reading "Proficient and Above": 8th Graders

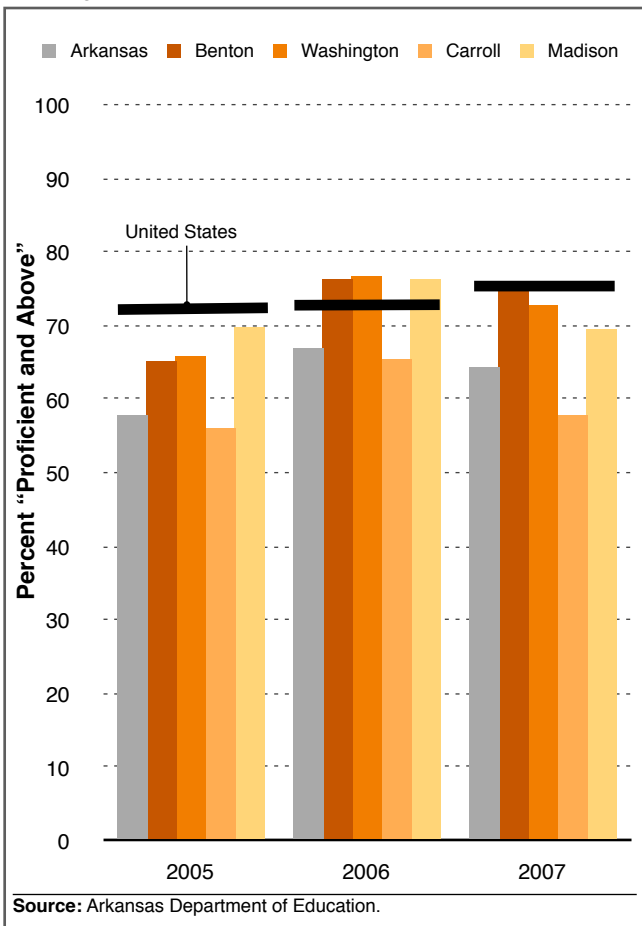
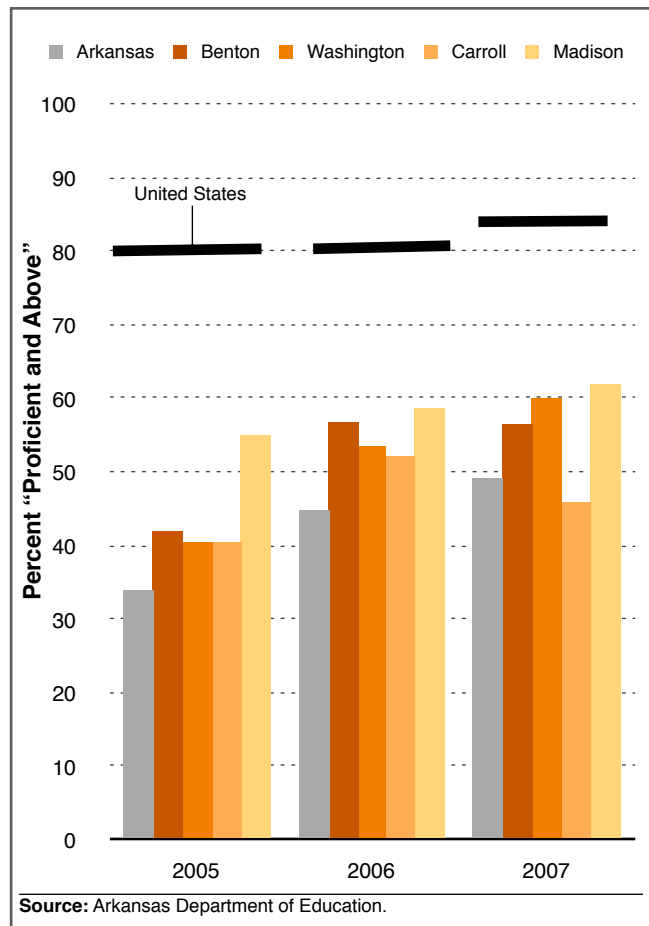


Figure 6.5
Mathematics, "Proficient and Above": 8th Graders



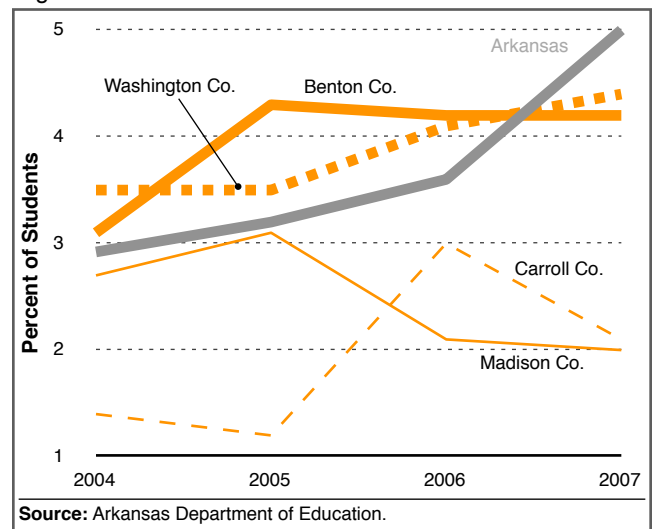
Secondary Education

In 2008, President Bush requested an additional \$1.2 billion in funding for Title I Grants to local educational agencies. This funding is designed to deliver greater resources to high-poverty high schools. While these resources are not earmarked they are intended to deliver resources to support more rigorous instruction and coursework in these schools with the goal of improving graduation rates and preparing all graduates for either post-secondary education or the workforce.

The nationwide initiatives to improve secondary education are voluminous. While many states and school districts depend on these types of federal initiatives, Arkansas on average only receives 11 percent of its education funding from the federal government. Thus, states like Arkansas are left having to find other sources for educational programming with nearly 60 percent of the funding for schools in Arkansas depending on state revenues for their success. That burden is nearly 12 percent higher than other states around the country.



Figure 6.6
High School Students Enrolled in AP Courses



- ★ Since 2004, the percent of high school students enrolled in advanced placement (AP) courses in Arkansas has risen to a current level of 5 percent.
- ★ Both Washington and Benton Counties, have higher percentages of AP enrolled students in high school yet they are still below the state average.
- ★ AP enrollments are low in both Carroll and Madison County; all Northwest Arkansas county AP enrollments are low relative to the state (5%) and national average of nearly 6 percent.

Figure 6.7
Average ACT Composite Score

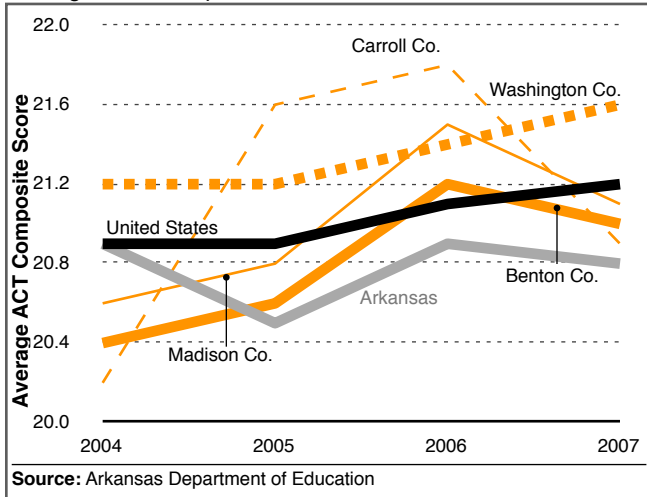
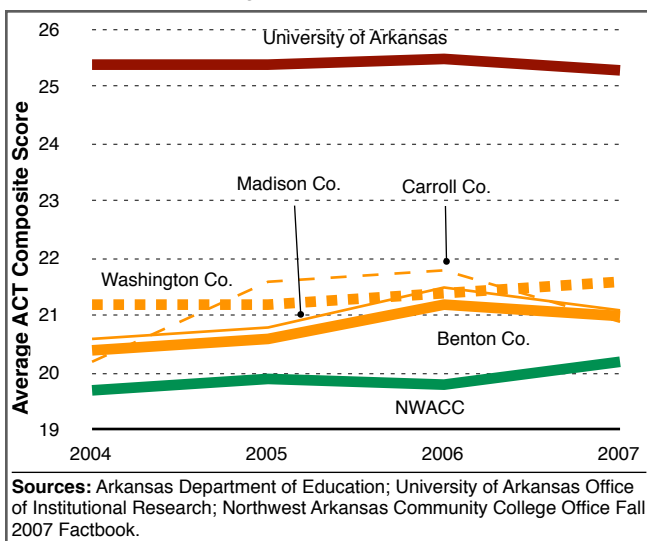


Figure 6.8
ACT Score Comparison for:
NWA High School Graduating Seniors, Entering NWACC
Freshmen and Entering University of Arkansas Freshmen



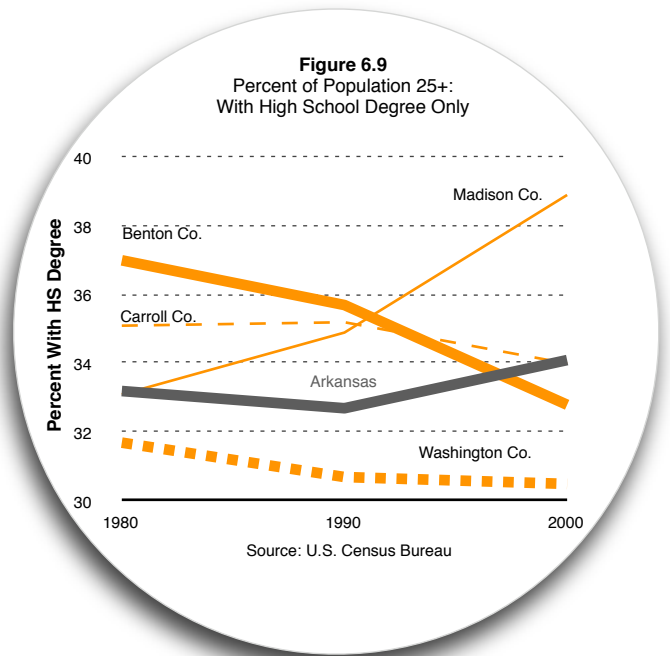
- ★ In 2004, the only Northwest Arkansas county with ACT composite scores exceeding the national average was Washington County.
- ★ All the Northwest Arkansas counties had higher ACT composite averages than the state average though the difference was very small.
- ★ Only Washington County mirrored the United States in terms of steadily rising ACT scores since 2004.
- ★ Relative to the average ACT composite score of entering freshmen at the University of Arkansas, Northwest Arkansas high school graduating seniors are scoring between 4 and 5 points lower.
- ★ Northwest Arkansas high schools graduating seniors in the four counties, on average, have a 1 to 2 point higher ACT composite score than the average entering freshmen at Northwest Arkansas Community College.



Indicator in the Spotlight: High School Education

Human capital is about investing in the skills and training required to increase a person's value in the labor market. Education becomes the primary mechanism for acquiring knowledge that can make a difference in development and economic productivity.

- ★ There has been a downturn in the percent of the population 25 years of age and over earning **only** a high school degree in most of the Northwest Arkansas counties since 1980.
- ★ With the presence of the University of Arkansas, more residents are being drawn into the county with significantly more years of education.
- ★ Only Madison County is lagging behind the state average of 34 percent with almost 39 percent of the population having **only** a high school education.
- ★ Northwest Arkansas is clearly a region in the state with a lower overall concentration of persons 25 years of age and over with **only** a high school degree.
- ★ While other regions are keeping pace with Northwest Arkansas, the majority of counties in the state have slightly more than a third of their residents with **only** a high school degree.



" Education is the most powerful weapon which you can use to change the world."

Nelson Mandela

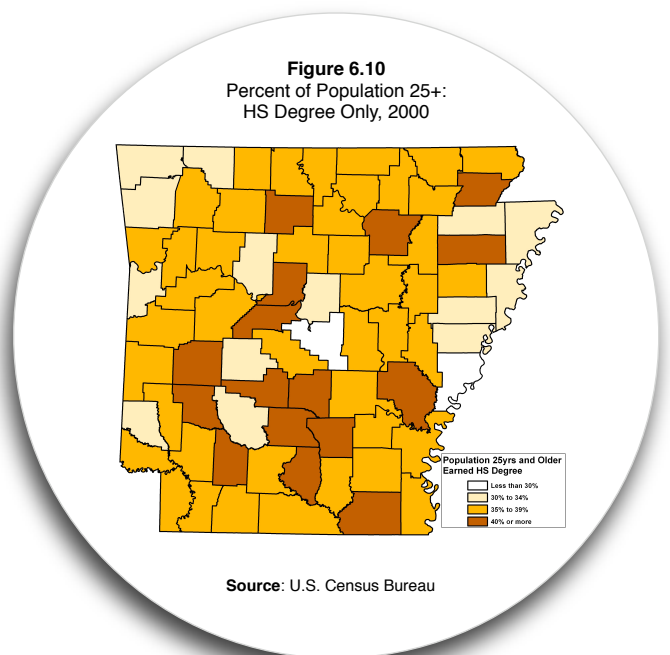


Figure 6.11
Average Graduation Rates

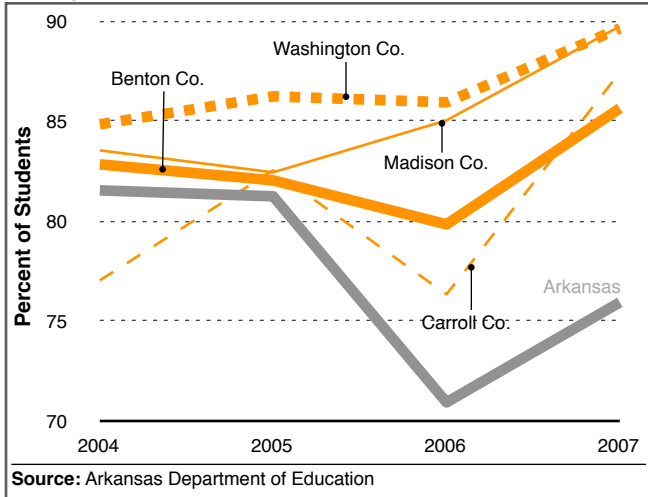


Figure 6.12
Average Dropout Rates

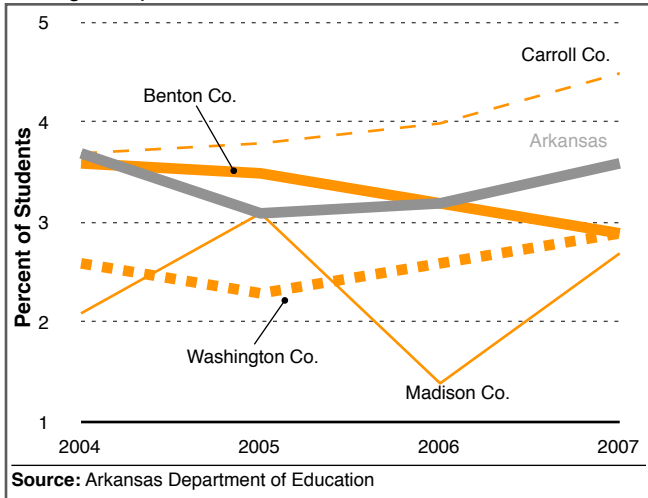
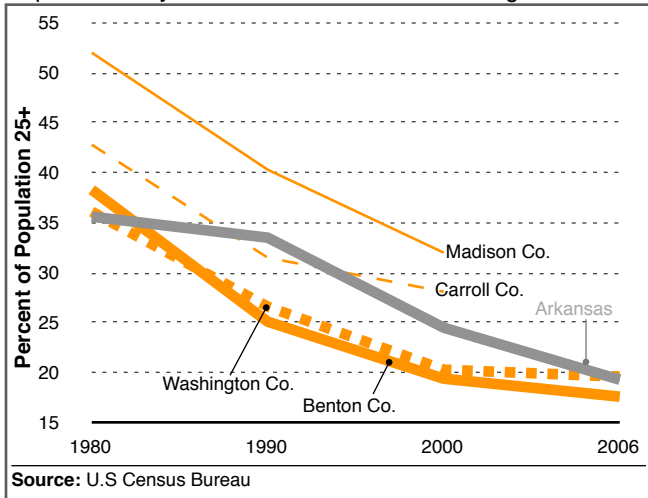


Figure 6.13
Population 25 yrs. and Over: Less Than HS Degree



- ★ Graduation rates are increasing in the state and region even though dropout rates have increased over the last few years in some of the Northwest Arkansas counties.
- ★ Over the last four years, the graduation rate in the state of Arkansas dropped from a high of 81 in 2005 to a low of approximately 75 percent in 2007.
- ★ All four Northwest Arkansas counties and the state of Arkansas improved their graduation rates between 2006-2007.
- ★ Carroll County experienced the greatest graduation rate flux in the last four years increasing and decreasing in big swings in alternating years.
- ★ All the Northwest Arkansas counties were above the United States 2007 average for high school graduation which was approximately 75 percent.
- ★ While dropout rates are difficult to gauge because individual school districts often use different formulas to compute them, the percentage of students dropping out of high school in Northwest Arkansas was relatively low.
- ★ The percent of high school students dropping out in the United States in 2007 was approximately 9 percent.
- ★ The percentage of residents with **less** than a high school degree has decreased significantly in the state and the Northwest Arkansas region over the last 25 years.
- ★ Madison and Carroll County both experienced declines in the percentage of their population with less than a high school degree. However, both counties still had a higher percentage of residents with **less** than a high school degree than the rest of the state in 2006.

Figure 6.14
Student:Teacher Ratios

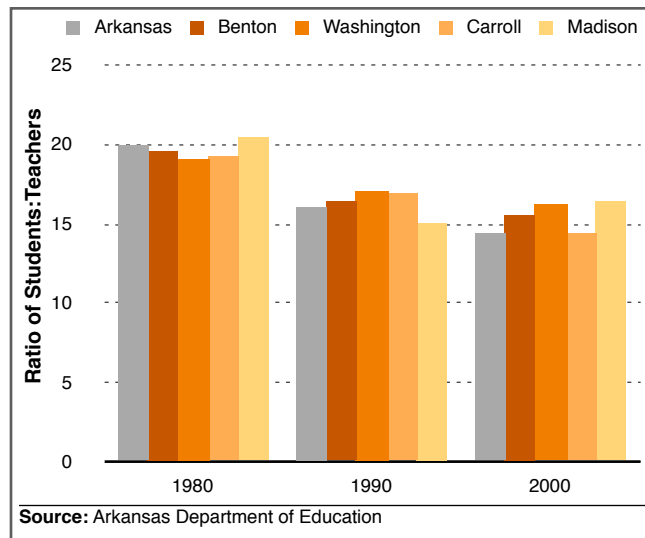


Figure 6.15
Average Annual Expenditures per Student

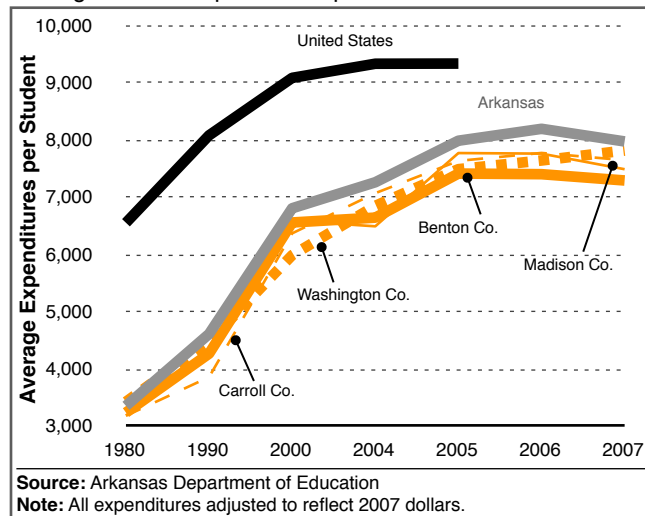
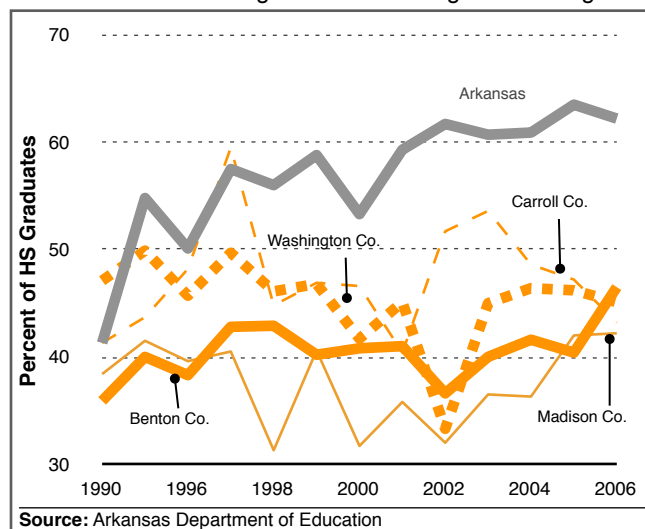


Figure 6.16
HS Graduates Attending Institutions of Higher Learning



- ★ Student-teacher ratios declined significantly across the state and in all of the Northwest Arkansas counties since 1980.
- ★ Madison and Washington Counties had slightly higher student teacher ratios than the other Northwest Arkansas counties and the state.
- ★ The student-teacher ratio for all public secondary schools in the United States in 2000 was approximately 16 students per classroom teacher.
- ★ Adjusted to reflect 2007 dollars, expenditures per student in Northwest Arkansas counties mirrored the steady increase reported in school districts throughout the country.
- ★ While Northwest Arkansas school districts have uniformly increased in their per student expenditures, the amount in all the districts averaged to the counties was still less than the Arkansas state average.
- ★ In 2005, Arkansas and the Northwest Arkansas counties were \$1,500 to \$2,000 less per student than the national average of \$9,355.
- ★ Over the last 16 years, the percentage of high school graduates attending institutions of higher learning increased statewide by nearly 20 percent.
- ★ All of the Northwest Arkansas counties had lower-than-average numbers of high school graduates attending institutions of higher learning.
- ★ Washington and Benton County school districts had the highest percentages of students attending institutions of higher education in 2007--approximately 45 percent.

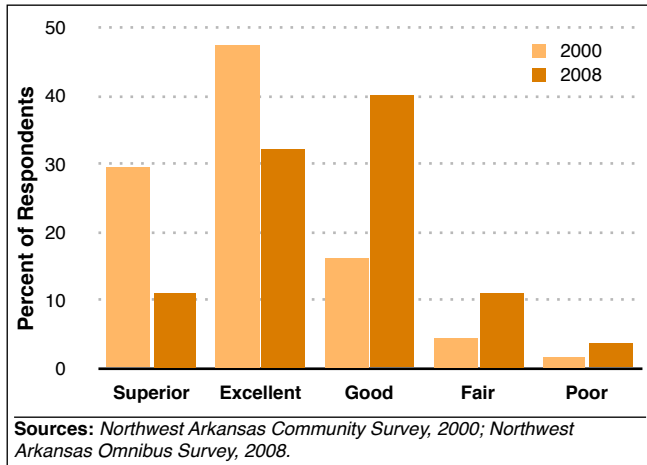
What People Are Saying About... Local Schools

Similar to the general growth and change patterns in Northwest Arkansas counties, the schools and school districts are experiencing some growing pains. Not all these pains are negative but clearly the schools are having to prepare for more students, more diverse students, more unprepared and disadvantaged students, and a greater number of students who are interested in attending some institution of higher education either locally or regionally.

In an effort to better understand how people in the Northwest Arkansas region are feeling about education, they were asked, both in 2000 and 2008, to rank the schools in their community from *Superior to Poor*...the results from those surveys can be found in Figure 6.17.



Figure 6.17
Satisfaction with Local Schools



- ★ In 2000, the overwhelming majority of Northwest Arkansas residents were pleased with the schools in their communities. Nearly 80 percent of respondents said they thought the local schools were either “*superior*” or “*excellent*.”
- ★ In 2008, the level of satisfaction in local schools among residents dropped considerably. A majority of Northwest Arkansas residents (51%) thought that the local schools were just “*good*” or “*fair*.”



Student Behaviors in the School Context

Exhibit 6.1. The Prevention Needs Assessment Project

Since 2002, Arkansas has participated in the *Prevention Needs Assessment* project which is administered in all school districts grades 6,8,10, and 12. The project uses a self-administered survey designed to measure need for prevention services in areas of substance abuse, delinquency, antisocial behavior and violence. It assesses problem behaviors as well as the protective mechanisms that moderate the negative effects of a wide range of social and behavioral risks. With nearly an 80 percent response rate in 2007, the survey reflects a well-balanced representation of students in junior and senior high schools across the state.

The results presented in this report are aggregated responses; comparisons are made across counties, the Northwest Arkansas region, and the state of Arkansas. In addition, a nationally representative normative sample of 200,000 students from seven states around the country is also used as a benchmark to compare Arkansas and its regions

Like all schools across the country, Arkansas schools struggle with a wide range of student behaviors that have consequences for achievement. While student behaviors outside of the school context have an important effect on student success, the graphs that are presented in the following pages look closely at a set of specific actions taking place in the school that have immediate consequences for the student-- **school suspension**. Tracking these types of behaviors are important for school personnel to understand both disruptive behaviors, as well as how best to plan for effective intervention.

Alcohol, tobacco, and marijuana are clearly the three most prevalent drugs being used by junior and senior high schools in the country. Arkansas and the Northwest Arkansas region mirror that use when looking at 30-day use percentages

among all grades. The 30-day drug use percentages tend to be highest among senior high school students, however, by 8th grade patterned use is beginning to be established. For example, in 2007, 30-day reported use of alcohol was approximately 15 percent among 8th graders but nearly double the percentage of users could be found in 10th grade. Likewise, for marijuana use in the last 30 days, more than 10 percent reported use in 8th grade and that number among 10th graders was nearly 16 percent. While these numbers are high, to put them in perspective to the national trend, all 30-day use rates in all grades for alcohol, tobacco, and marijuana in Arkansas were below the nationally normed average.

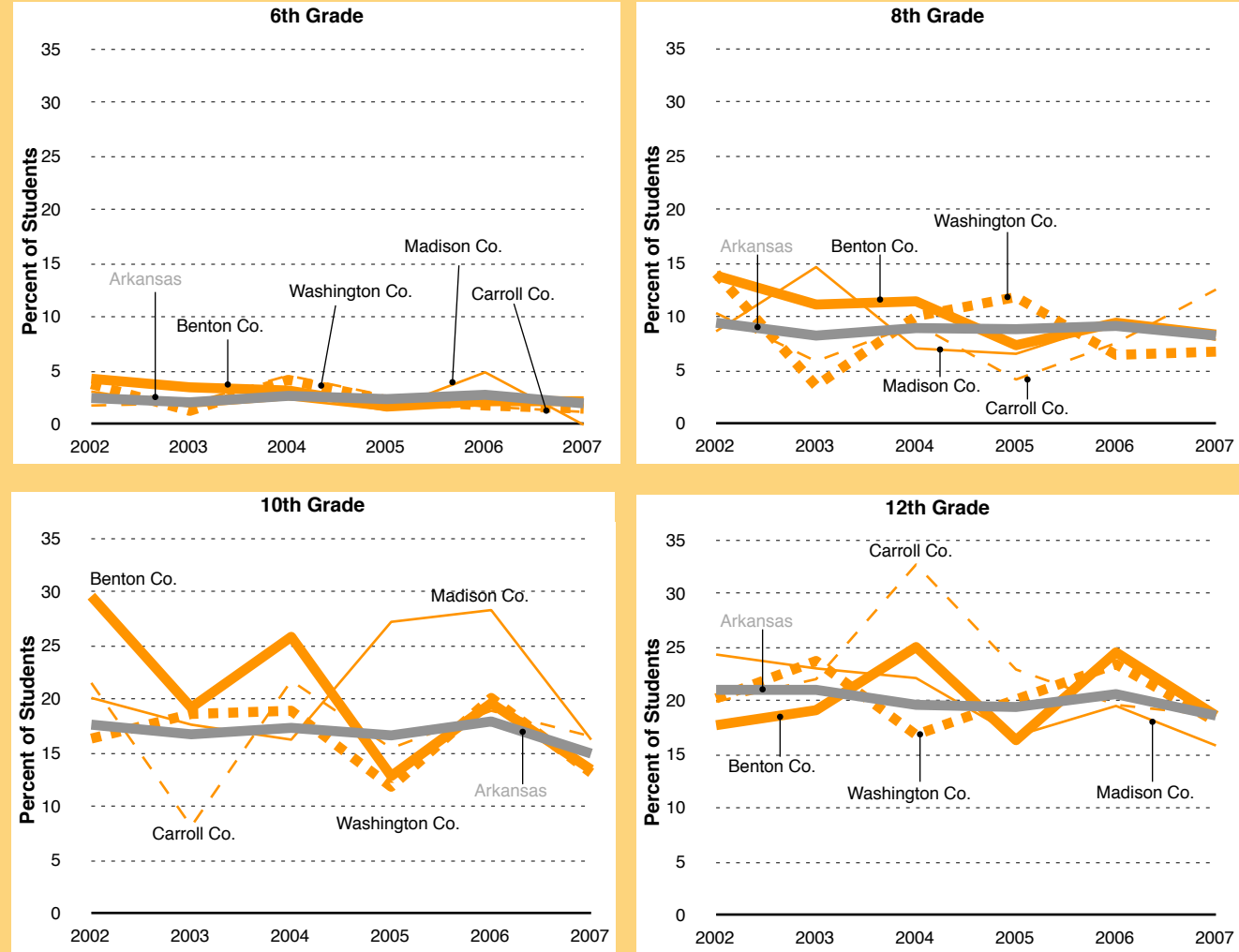
By 12th grade, more than 70 percent of Pride survey respondents in Northwest Arkansas claimed that all these drugs (alcohol, tobacco, and marijuana) were “*sort of easy*” or “*very easy*” to obtain in their respective communities.

Reported violence in and around schools across the country is a problem that has escalated in some cities and school districts to crisis levels. In 2007, Arkansas and the Northwest Arkansas region were well below the national average for school violence, nevertheless, the percentage of students who reported having been in a fight in or around the school property increased. The overall percentage of students in grades 6-12 who reported they intentionally attacked another student to seriously harm them in the last 12 months was 16 percent. Mirroring rates found at the national level, it appears that school violence is highest among 8th and 10th graders. Consistent with the findings of elevated violence among 8th and 10th graders, this same age group is also the group of students that report the highest percentages of not feeling safe at school--23 and 25 percent respectively.

Source: Arkansas Needs Assessment Student Survey (APNA) 2007.

Exhibit 6.2

Students Who Have Been Drunk or High At School, Past Year: 2002-2007



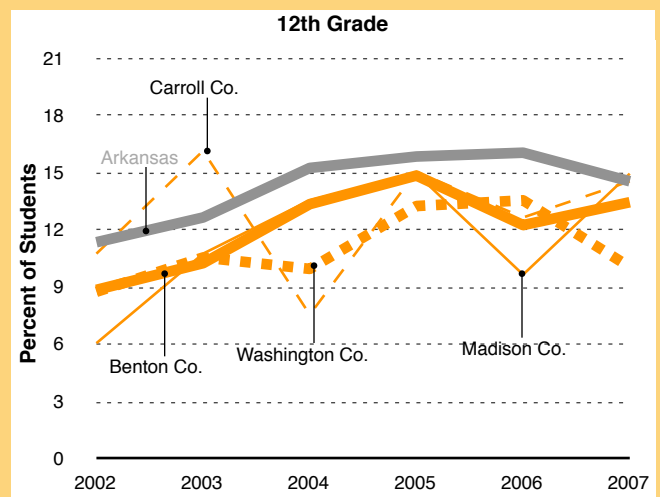
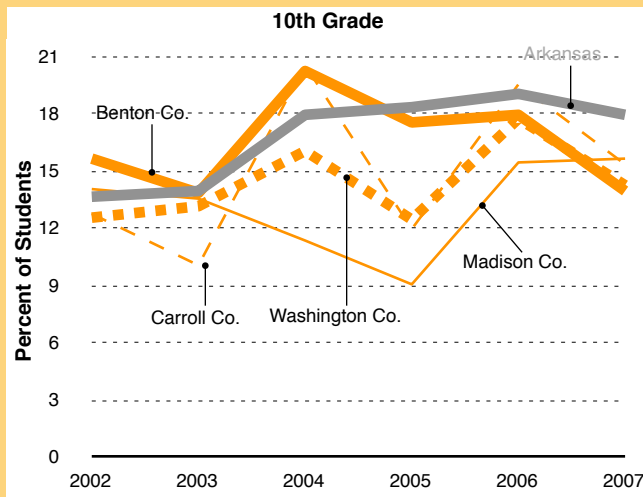
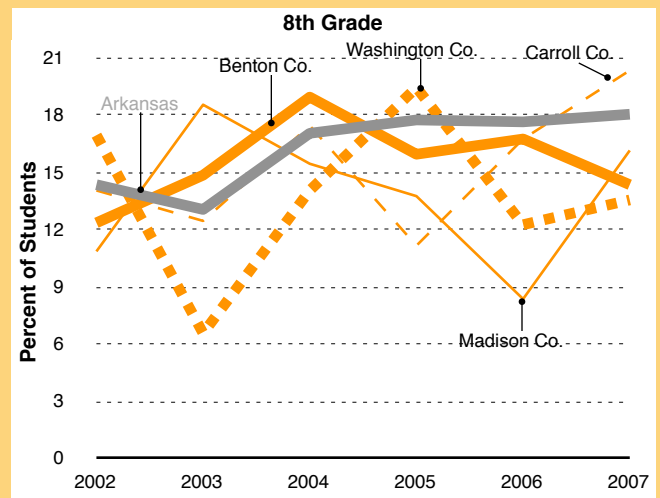
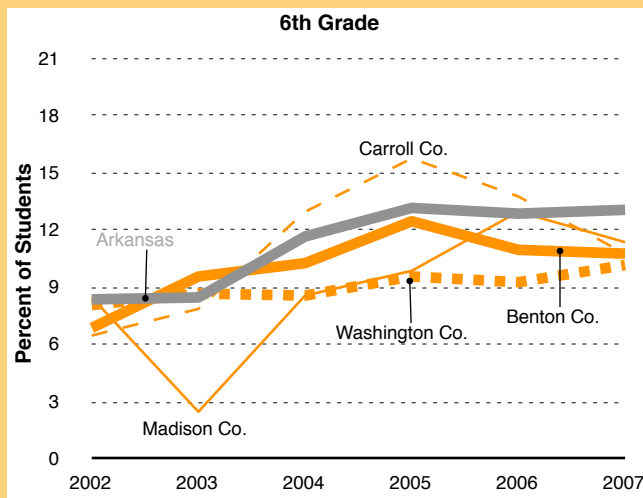
Source: Arkansas Department of Human Services. Arkansas Prevention Needs Assessment Survey.

- ★ The percentage of students (grades 6,8,10,12) in the state reporting being drunk or high at school in the past year has remained relatively constant since 2002.
- ★ The numbers of students showing up drunk or high increased substantially from 6th grade (state average of 3%) to 12th grade (state average of nearly 20%).
- ★ Many risk-taking behaviors begin their formation in early junior high school and by 8th and 9th grade are beginning to show signs of significant increases.
- ★ All the Northwest Arkansas counties experienced behavioral shifts among their

- 10th grade students reporting being drunk or high in school in the last year.
- ★ All Northwest Arkansas counties reported significant decreases in the percent of students showing up drunk or high to school in the last year between 2006-2007.

Exhibit 6.3

Students Who Have Intentionally Attacked Another To Seriously Hurt Them, Past Year: 2002-2007



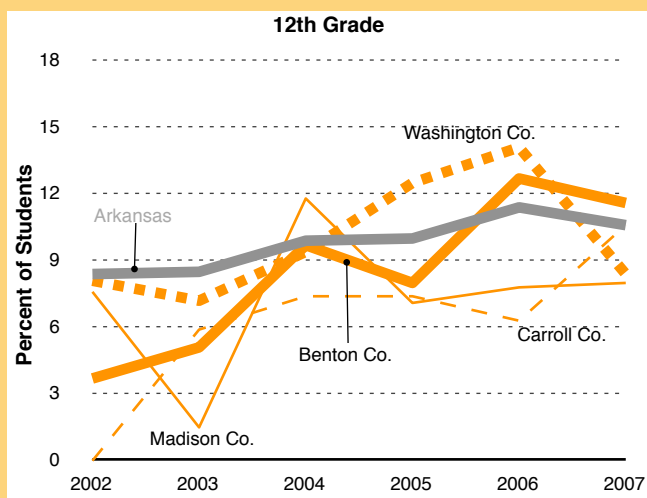
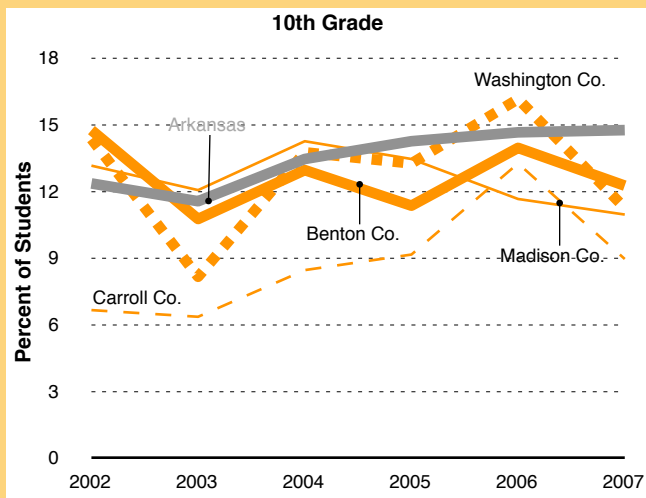
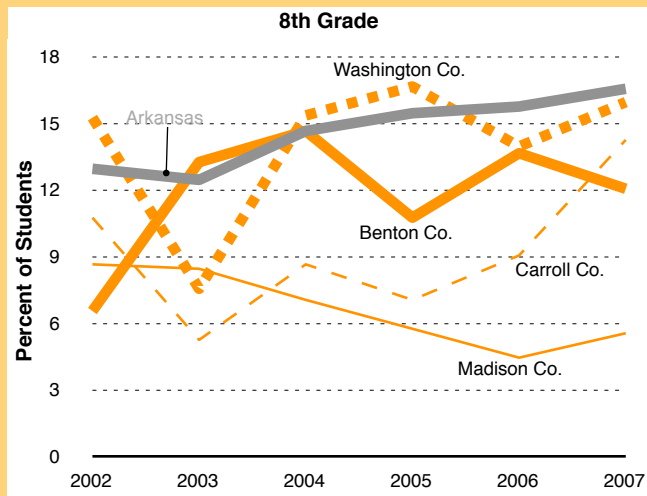
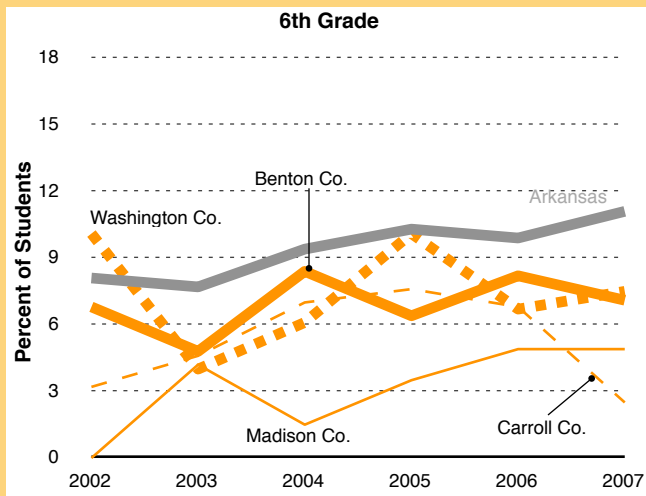
Source: Arkansas Department of Human Services. Arkansas Prevention Needs Assessment Survey.

- ★ The percentage of students (grades 6,8,10,12) in the state who reported intentionally attacking another student in the past year to seriously hurt them, steadily increased since 2002.
- ★ Among 10th and 12th graders there have been important declines in reported violence both in the state and Northwest Arkansas counties.
- ★ In 6th grade, all Northwest Arkansas counties in most years, except Carroll County from 2004-2006, had lower percentages of students reporting intentionally attacking another student compared to the state average.

- ★ Since 2002, some Northwest Arkansas counties registered significant percentage increases.
- ★ By 2007, only 8th grade Carroll County students reported a higher percentage of students engaging in violent behavior compared to the average Arkansas 8th grader.
- ★ While violence peaks by 10th grade in Northwest Arkansas counties and in the state, violence among 12th graders in Benton, Carroll, and Madison Counties increased between 2006-2007.

Exhibit 6.4

Student Suspensions, Past Year: 2002-2007



Source: Arkansas Department of Human Services. Arkansas Prevention Needs Assessment Survey.

- ★ Mirroring the steady increase in the state's students grades 6,8,10,12 who reported attacking another student to cause serious harm, the percentage of students across the state receiving suspension likewise has increased.
- ★ By 2007, more than 15 percent of 8th and 10th grade students in the state reported being suspended in the last year.
- ★ Except for Benton County 12th graders, the percentage of students reporting being suspended was lower in the Northwest Arkansas region compared to the state average.

- ★ The percent of students reporting being suspended between 2006-2007 has generally declined or leveled off in most Northwest Arkansas counties.
- ★ For 10th and 12th grade students in Northwest Arkansas counties and the state, there were fewer reported suspensions in the most recent year of data collection (2006-2007).
- ★ 12th graders in Carroll County schools reported an increase of nearly 3 percent in the past year regarding school suspensions.

Post-Secondary Education

Figure 6.18
Total Student Enrollments, 1999-2006

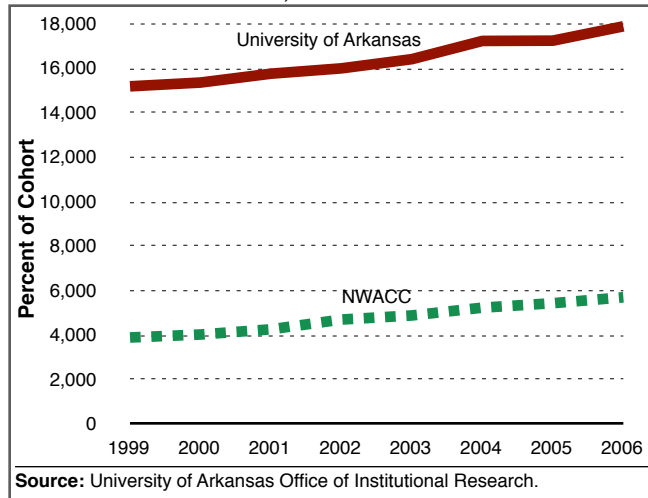
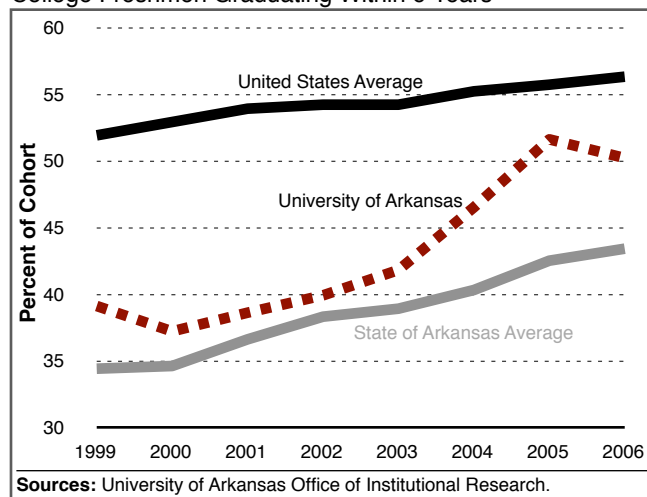


Figure 6.19
College Freshmen Graduating Within 6 Years



- ★ Since 1999, student enrollments at the University of Arkansas, Fayetteville have been steadily increasing.
- ★ Since 1999, the enrollments at Northwest Arkansas Community College have increased. By 2006, nearly 6,000 students were enrolled at NWACC.
- ★ Six year graduation rates in the United States and Arkansas have steadily increased since 1999.
- ★ The percentage of the cohort graduating in 1999 (entered in 1994) was 35 percent in the state. This same percentage has increased to nearly 45 percent in the last seven years.
- ★ In the last 7 years, 6-year graduation rates have increased nearly 10 percent at the University of Arkansas with over 50 percent of the 2000 cohort graduating in six years.

What's It All Mean?

The contours of education in Northwest Arkansas are changing. In many respects, school districts and counties have made significant strides in improving the structure of their schools and the performance of their students. But the question of how to sustain that trend in the face of limited school revenues, increasing economic hardship, and a growing ELL population remains a challenge for many of the school districts in the Northwest Arkansas region.

The positive upswing in graduation rates, the percentage of residents with more than a high school education, and the increasing opportunity for students to attend quality higher education institutions like the University of Arkansas-Fayetteville and the Northwest Arkansas Community College, are all important elements for a region that will require higher human capital investments in the next several decades. Not all the news is good, and despite the fact that some schools in some counties are lagging

considerably behind both the regional and state averages in measures of student “success,” the overall snapshot of education for the region is a positive one.

While school provides a context for learning, it can also provide a context for behaviors that if left unchecked, can have a serious impact on learning, achievement, and overall student development. While this report barely scratches the surface in terms of risk behaviors, there should be some concern among all school districts in the region with respect to these risky behaviors. With the increase in population growth, schools will need to continue to closely monitor in-school behaviors. Drug use and violence are two issues in particular that schools will have to focus on in the decades ahead.