



2010 NEEDS REASSESSMENT / PREVALENCE

REPORT OF THE GEORGIA UNDERAGE DRINKING PREVENTION INITIATIVE

Progress Made, Areas of Need, and Future Directions

July 31, 2010

PREPARED BY THE
INSTITUTE OF PUBLIC HEALTH
GEORGIA STATE UNIVERSITY

FOR
THE COUNCIL ON ALCOHOL AND DRUGS

SUBMITTED TO
THE GEORGIA DEPARTMENT OF
BEHAVIORAL HEALTH AND DEVELOPMENTAL DISABILITIES (DBHDD)
DIVISION OF ADDICTIVE DISEASES (DAD)
OFFICE OF PREVENTION SERVICE AND PROGRAMS (OPSP)

A CKNOWLEDGMENTS

This report was developed for the Georgia Underage Drinking (UAD) Prevention Initiative of The Council on Alcohol and Drugs for submission to the Georgia Department of Behavioral Health and Developmental Disabilities, Division of Addictive Diseases, Office of Prevention Services and Programs. The Council would like to acknowledge the contributions of the following persons for their support and assistance:

Sheryl Strasser, Ph.D.

Assistant Professor

Institute of Public Health

Partnership for Urban Health Research

Georgia State University

Phillip W. Graham, Dr. P.H.

Senior Public Health Researcher

RTI International

Gregg Raduka, Ph.D., LPC, CPP

Program Director

Georgia Underage Drinking Prevention Initiative

Director of Prevention/Intervention

The Council on Alcohol and Drugs

Lisa Shockley Moery

Special Projects Administrator

Georgia Department of Behavioral Health and Developmental Disabilities

Division of Addictive Diseases

Office of Prevention Services and Programs

Michael P. Eriksen, Sc.D.

Professor and Director

Institute of Public Health

Partnership for Urban Health Research

Georgia State University

TABLE OF CONTENTS

Introduction and Background.....	1
Georgia Underage Drinking Prevention Initiative Summary.....	1
Goals of the Needs Reassessment.....	1
Literature Review	2
<i>Costs and Consequences of Underage Drinking.....</i>	<i>3</i>
<i>Underage Access to Alcohol.....</i>	<i>6</i>
<i>Age of Drinking Onset.....</i>	<i>8</i>
History of Alcohol Laws and Policies in Georgia.....	9
Alcohol Laws and Policies Not in Georgia.....	15
Underage Drinking Laws.....	15
Social Host Laws.....	15
Excise Taxes	16
Methodology.....	18
Limitations.....	20
Results	20
Alcohol Use among Georgia Youth—NSDUH and YRBS.....	20
Alcohol Use among Georgia Youth—GSHSii.....	23
<i>Perceived Difficulty in Obtaining Alcohol 2007-2009.....</i>	<i>28</i>
<i>Perceived Difficulty in Obtaining Cigarettes, Marijuana, and Other Illicit Drugs.....</i>	<i>29</i>
<i>Individual Ratings for How Harmful it is to Drink Regularly.....</i>	<i>32</i>
<i>Individual Ratings for How Harmful it is to Smoke Cigarettes.....</i>	<i>33</i>
<i>Individual Ratings for How Harmful it is to Smoke Marijuana.....</i>	<i>34</i>
<i>Individual Ratings for How Harmful it is to Use Illicit Drugs.....</i>	<i>35</i>
Summary.....	36
Georgia Social Indicator Study (2006 and 2008).....	37
Reassessment of Risk Construct Results.....	38
<i>Changes on Key Social Indicators (2006 SIS Report to 2008 SIS Report).....</i>	<i>38</i>
DoR Compliance Checks: Indicators of Youth Access.....	47
Reassessing Communities of High Need.....	52
Discussion and Recommendations.....	55
Recommendations for the Georgia Underage Drinking Prevention Initiative.....	56

References.....	60
Appendices	66

LIST OF TABLES

Table 1. Problems and Costs Associated with Underage Drinking	5
Table 2. Chronology of Alcohol-Related Laws and Policy Changes.....	11
Table 3. Current Underage Drinking Laws in Georgia	12
Table 4. Alcohol Related Laws Used Outside of Georgia.....	17
Table 5. Data Source and Variables Examined	19
Table 6. Selected Communities Using 2006 and 2008 SIS Report.....	53
Table 7. Top 10 Highest Risk Ranks Overall (2009)	54
Table 8. Domain 1 Only (Juvenile Specific Indicators) vs. Combination of Three Domains	55

LIST OF FIGURES

Figure 1. Costs of Underage Drinking in Georgia, 2007	4
Figure 2. Regional Map of Georgia used in NSDUH Study	22
Figure 3. Reported Frequency of Alcohol Use in the Past 30 Days 2007–2009	28
Figure 4. Perceived Difficulty in Obtaining Alcohol 2007–2009	29
Figure 5. Perceived Difficulty in Obtaining Cigarettes 2007–2009	30
Figure 6. Perceived Difficulty in Obtaining Marijuana 2007–2009	31
Figure 7. Perceived Difficulty in Obtaining other Illicit Drugs 2007–2009	32
Figure 8. Individual Ratings of How Harmful it is to Drink Regularly 2007–2009	33
Figure 9. Individual Ratings of How Harmful it is to Smoke Cigarettes 2007–2009	34
Figure 10. Individual Ratings of How Harmful it is to Smoke Marijuana 2007–2009	35
Figure 11. Individual Ratings of How Harmful it is to Use Illicit Drugs 2007–2009	36
Figure 12. Percentage of Violations Per DoR Investigation in 2009	48
Figure 13. Alcohol Sales Violations By County 2009	49
Figure 14. Number of Investigations of Illegal Alcohol Sales to Underage Persons That Led to a Sanction of Some Kind	50
Figure 15. Number of Underage Alcohol Investigations	50
Figure 16. Number of Underage Alcohol Citations	51
Figure 17. Revenue from Excise Taxes (Beer)	51
Figure 18. Revenue from Excise Taxes (Liquor)	51
Figure 19. Revenue from Excise Taxes (Wine)	52

APPENDICES

Appendix 1. Healthy People 2010—goals and objectives for underage drinking.....	67
Appendix 2. Target County Risk Indicators 2006 and 2008	69
Appendix 3. Risk Domain 1—Juvenile-Specific Alcohol Indicators by County.....	95
Appendix 4. Risk Domain 2—Community Alcohol Prevalence by County.....	100
Appendix 5. Risk Domain 3—Youth Risk Correlates by County.....	105
Appendix 6. Weighted Rank Version 1 of Risk Domains	109
Appendix 7. Weighted Rank Version 2 of Risk Domains	116
Appendix 8. Top 2 and 5 Highest Risk Ranks By Region.....	123
Appendix 9. Top 10 Highest Risk Ranks Overall.....	129

INTRODUCTION AND BACKGROUND

GEORGIA UNDERAGE DRINKING PREVENTION INITIATIVE SUMMARY

The Georgia Underage Drinking Prevention Initiative 2007 Needs Assessment/Prevalence Report was specifically designed to (1) acquire knowledge relative to underage drinking in Georgia, (2) identify existing gaps in services associated with underage drinking, and (3) use these findings to inform and lead data-driven action that would reduce and/or prevent underage drinking in Georgia. The purpose of the needs reassessment is to provide a background summary of youth substance use behavior and how this has changed since the time of the 2007 report. This report synthesizes quantitative data from the National Survey on Drug Use and Health (NSDUH), the Youth Risk Behavior Survey (YRBS), county-level assessment of youth alcohol use using social indicator data and student data from the Georgia Student Health Survey (GSHSii). This document also contains compliance data from the Department of Revenue (DoR) to assess retailers' adherence to alcohol laws.

GOALS OF THE NEEDS REASSESSMENT

The goals of this needs reassessment include (1) examining the prevalence of underage drinking and related consequences using improved data sources and (2) examining changes in key risk factors for underage drinking among the Underage Drinking Prevention Initiative (UADPI) 10 targeted communities. The 10 target communities were selected based on a methodology developed by Applied Research Services (ARS) using indicators included in the Georgia Social Indicator

Study (SIS). Ten social indicators were selected and organized into three domains: (1) juvenile specific alcohol indicators, (2) community alcohol prevalence, and (3) high risk youth correlates. Counties were ranked on these domains at the regional level and the two counties with the highest risk in each of the state's five behavioral regions were selected.

LITERATURE REVIEW

Despite extensive publication of the costs, hazards and negative physical effects of underage drinking, "Alcohol is the drug of choice among youth, often with deadly consequences" [National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2004/2005]. According to data from the Monitoring the Future (MTF) study—an annual survey of youth in the United States from 1975–2008—three-fourths of 12th graders, more than two-thirds of 10th graders, and approximately two in every five 8th graders have consumed alcohol. Alcohol has been tried by 39% of current 8th graders, 58% of 10th graders, and 72% of 12th graders (Johnston, O'Malle, Bachman, & Schulenberg, 2009). The literature affords a comprehensive understanding of the scope of the problem and consequences associated with underage drinking, yet underage drinking persists and has become a leading public health problem in this country.

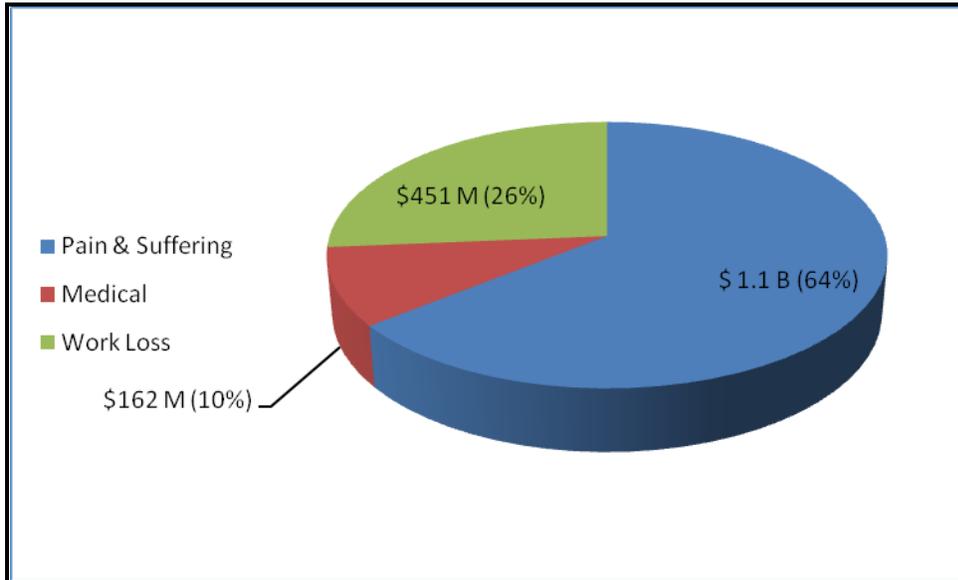
The scope of the underage-drinking problem in Georgia may become evident by examining literature relative to the (1) costs of underage drinking, (2) underage access to alcohol, and (3) age of drinking onset.

COSTS AND CONSEQUENCES OF UNDERAGE DRINKING

Costs associated with underage drinking vary across states, but research findings confirm that the widespread use of alcohol by youth results in serious health, social, and economic problems. Despite minimum-purchase-age laws, young people continue to drink alcohol regularly, and the costs of problems resulting from underage drinking continue to soar. Costs associated with underage drinking vary across states, but research findings confirm that the widespread use of alcohol by youth results in serious health, social, and economic problems. As can be seen in Figure 1, data compiled in 2009 by the Pacific Institute for Research and Evaluation (PIRE) estimated the annual 2007 costs associated with underage drinking in Georgia to be \$1.7 billion, which includes annual costs of medical care and loss of work estimated at \$613 million. According to PIRE's findings, among the 50 states, Georgia has the 42nd highest costs per youth associated with underage drinking which demonstrates the need for greater public health attention and prevention and intervention programming.

According to the 2004–2006 Youth Risk Behavior Survey (YRBS) designed by the Centers for Disease Control and Prevention (CDC), alcohol use is one of the six categories of health behaviors considered a leading cause of injury, violence, morbidity, and mortality among youth (CDC, 2006). The 2005 Georgia Student Health Survey (GSHSii) includes alcohol and other drug use as one of the most immediate and long-term threats to the health of middle school and high school age students in Georgia (Kanny, Horan, & Melstrom, 2006).

Figure 1. Costs of Underage Drinking in Georgia, 2007



Adapted from the PIRE, 2009.

The YRBS also reported that, with respect to 17 health behaviors that are targeted in the national public health objectives for 2010 (*Healthy People 2010*, see Appendix 1), Georgia high school students are meeting only one objective—23.9% rode with a drunk driver in the past 30 days compared to the U.S. objective of 30.0% (2007 GSHSii). With respect to societal costs in Georgia, there are many serious problems that stem from underage drinking, including traffic accidents, violence, property crime, suicides, engaging in risky sexual behaviors, which can result in HIV and other STDs, Fetal Alcohol Syndrome (FAS), traumatic injuries such as burns, drowning, alcohol poisoning, psychoses, and alcohol dependence (PIRE, 2004). As can be seen in Table 1, youth violence associated with underage drinking represent the largest costs for the state of Georgia.

Table 1. Problems and Costs Associated with Underage Drinking

Problem	Total Costs (in millions)
Youth traffic crashes	\$278.0
High-risk sex among youth ages 14–20	\$138.2
Youth violence	\$1,027.3
Youth property crime	\$113.0
Youth injury	\$50.4
Poisonings and psychoses	\$8.8
FAS among mothers 15–20	\$38.2
Youth alcohol treatment	\$27.8
Total	\$1,681.7

Adapted from PIRE, 2009.

In the United States, approximately 5,000 youth under 21 die each year from the consequences of underage drinking. Of this total, approximately 1,900 deaths are caused by motor vehicle crashes, followed by 1,600 homicides, 300 suicides, and hundreds of deaths from injuries like falls, burns, and drowning (NIAAA, 2006). Illegal and unhealthy behavior initiated during adolescence, such as underage drinking, has the potential to extend into adulthood. The consequences associated with underage drinking are serious. NIAAA estimates that youth who start drinking before the age of 15 are four times more likely to develop alcohol dependence later in life (NIAAA, 2004/2005). These findings suggest that examining and understanding how youth access substances is an important factor in reducing alcohol consumption and related consequences.

UNDERAGE ACCESS TO ALCOHOL

Nationwide, access to alcohol by persons under the age of 21 is commonplace. More than half of underage college students surveyed over a decade say that alcohol is easy to obtain. These data, collected by the Harvard School of Public Health (2005) through the administration of the College Alcohol Study (CAS), have shown over time that alcohol is acquired through various sources. These sources, although slightly varied in rank order throughout the country, are as follows:

- From a student 21 or older
- From someone else under 21
- Themselves without being carded
- From parents or relatives
- Using their own fake ID
- From a stranger 21 or older

In 2009 the CDC released a report that detailed alcohol use and access in Georgia. This report was based on data from the 2007 Youth Risk Behavior Surveillance System (YRBSS). Among students that reported using alcohol, 44% chose to consume liquor. Fifty-eight percent of students reported that when they consumed alcohol, they did so in another person's home, and 30% reported drinking in their own homes. When asked about the source of alcohol, 37% reported someone giving it to them, 25% said that they had given money to someone to buy alcohol, and 11% said they took it from a store or a family member (CDC *MMWR*, 2009). Furthermore, according to the Applied Research Services Georgia Alliance for Drug Endangered Children: Needs Assessment report (2006), approximately 600,000

Georgian youth are estimated to be endangered by living in a household with a binge or heavy drinker.

Research has identified several factors that can have an impact on the accessibility of alcohol to young people, including access to alcohol in the home and the surrounding environment. Recent research has focused on these two areas as ways to limit underage access to alcohol. The first strategy is to increase parental monitoring of both young people and alcohol in the home. Access to alcohol in the home has been associated with alcohol consumption, and parental monitoring has been associated with decreased access to alcohol (Tobler et al., 2009). Results from a longitudinal study conducted by Komro et al (2007) clearly support these findings. The study examined students beginning at 12 years of age and followed them through 14. The findings indicate that students who either received alcohol from their parents or took alcohol from their home by the age of 12 were much more likely to have negative alcohol use trajectories by the age of 14 (Komro et al., 2007). Hearst and colleagues also found that social sources of alcohol were more prominent than commercial sources in 12- to 14-year-olds. The most common sources were parents, friends' parents, taking the alcohol from the home, and peers (Hearst et al., 2007).

Alcohol outlet type and density have also been examined as risk factors for increased access to alcohol. Paschall and colleagues studied whether the type of alcohol outlet made a difference in a minor's ability to purchase alcohol (2007). They found that underage-looking decoys without identification were able to purchase

alcohol at 38% of convenience stores, at 36% of grocery stores, but at only 14% of locations such as liquor stores (Paschall et al., 2007). Alcohol outlet density has been positively associated with both the actual use of retail liquor or beer outlets and the perceived ease of access to alcohol (Treno et al., 2008). After controlling for individual level factors and median household income, Chen and colleagues found that alcohol outlet density was significantly associated with both the likelihood of accessing alcohol and the frequency of accessing alcohol (Chen, Gruenewald, & Remer, 2009). These studies indicate that focusing on preventing alcohol sales in locations such as convenience stores and grocery stores, as well as limiting alcohol outlet densities, may limit underage access to alcohol.

AGE OF DRINKING ONSET

According to the Youth Risk Behavioral Surveillance System (2007), nearly a quarter (24%) of high school students reported consuming alcohol before the age of 13 (Eaton et al., 2008). Research has shown that young people who use alcohol in their mid-teens are more likely to experience alcohol dependence than people who began drinking at 21 (Hingson, Heeren, & Winter, 2006).

Age of alcohol initiation has also been linked to peer and dating violence. The data was collected as part of the Youth Violence Survey, and was collected in 7th, 9th, and 11th/12th grades in an anonymous high-risk school district. After adjusting for demographic characteristics, heavy episodic drinking, other substance use, and peer drinking, it was found that early alcohol initiation was significantly associated with dating violence perpetration and victimization, as well as peer violence perpetration and victimization, relative to non-drinkers. Upon further controlling

for impulsivity and depression, dating violence perpetration and victimization and peer violence perpetration were still significantly associated relative to non-drinkers (Swahn, Bossarte, & Sullivent, 2008). In Georgia, the average age of drinking onset was reported to be 12.9 according to 2008 and 2009 Georgia Student Health Survey data.

Research has also shown that drinking alcohol before the age of 13 leads to other negative outcomes later in life. Peleg-Oren and colleagues found that students who consumed alcohol before 13 were more likely to report problems in school and other behaviors such as carrying a weapon to school or recent marijuana use (Peleg-Oren et al., 2009). Another study found that young persons who started drinking before 13 were more likely to experience alcohol dependence or abuse, participate in binge drinking, drive under the influence of alcohol, or injure themselves or others (Hingson & Wenxing, 2009). Finally, Dawson and colleagues examined age of alcohol initiation for adolescents who started drinking before 15. They found that age of onset was significantly associated with alcohol dependence or abuse; however the effects were greatly reduced after controlling for volume and frequency of consumption (Dawson et al., 2008).

HISTORY OF ALCOHOL LAWS AND POLICIES IN GEORGIA

Alcohol policies in Georgia have been enacted for the purpose of offering guidelines for the administration and enforcement of alcohol-related laws. In addition to general provisions, laws have been established for the regulation of alcoholic beverages. However, state regulations vary for distilled spirits, malt beverages, and

wine. Per the Georgia Alcoholic Beverage Code, O.C.G.A. 3-1-1, Chapter 6, alcohol-related laws in Georgia define these three categories of alcoholic beverages, regulate what entities may sell them, and provide for penalties for sales violations. Legal directives also monitor the sale or possession of alcohol in some counties and designated municipalities in Georgia, as well as sales at catered functions. Adapted from Kenneth Coleman's *Georgia History in Outline, 1997, 1991*, the chronology outlined in Table 2 is intended to provide a historical glimpse of the development of alcohol-related laws and policies in Georgia between 1866 and 1938. In 1980, laws in Georgia were enacted to prohibit the sale, possession, concealment, storage, or conveyance of untaxed alcoholic beverages. Local authorization and regulation of alcohol sales was also imposed, as was the prohibition of alcoholic beverages at coliseums. In 1981, a law was passed that prohibited the furnishing of alcohol to and possession of alcohol by persons under the age of 21. Legislation also made it a violation of law to possess alcoholic beverages on a public school ground. The National Minimum Drinking Age Act of 1984 was passed by the United States Congress, requiring states to legislate and enforce the age of 21 as a minimum age for purchase or public possession of alcoholic beverages.

Table 2. Chronology of Alcohol-Related Laws and Policy Changes

1866	Veterans in Georgia were given a free license to sell anything except alcohol
1899	The first attempt at statewide prohibition failed
1900	Many Georgians perceived prohibition as the only solution to the dangers of alcohol
1907	The first prohibition law was enacted
1919	Prohibition became national. It was illegal in Georgia for persons to manufacture, sell, or possess alcohol.
1933	The 21st Amendment established new liquor control policy allowing states to regulate the manufacture, distribution, and policy of intoxicating liquors
1935	Beer and wine were legalized in Georgia
1937	Law prohibiting the sale or furnishing of alcohol to intoxicated persons
1938	A local option was enacted and many counties in Georgia became wet
1960s	Driving under the influence of an alcoholic beverage considered a minor offense leading to a modest fine in most states
1962	The National Purchase/Production Age Act outlawed any person under the age of 21 from buying, producing, or distributing alcoholic beverages
1970s	Following the passage of the 26th Amendment, which granted voting rights to citizens 18 to 20 years of age, many states, including Georgia, lowered the legal drinking age from 21 to 18. Supporters of the legislation contended that if one is old enough to vote and serve his/her country, he/she should be allowed to consume alcohol.
1980s	States, including Georgia (1985), began to raise the drinking age back to the age of 21 as a result of an increase in alcohol-related deaths across the United States
2000s	States begin to require teenagers to complete an Alcohol and Drug Abuse Program (ADAP) before they are issued a driver's license

Since the original UAD needs assessment in 2007 (Council on Alcohol and Drugs, 2007), the policies relating to alcohol in general and underage drinking specifically have not changed. The laws targeted at addressing drinking by those who are under the minimum legal drinking age of 21 years can be categorized in

several ways. Please see Table 3 for a current list of laws Georgia has in place to prevent or reduce underage drinking throughout the state.

Table 3. Current Underage Drinking Laws in Georgia

Category	Does Georgia Have a Law in Place?	Specifications of the Law
Underage possession of alcohol (Social Host)	Yes (with exceptions)	Possession is prohibited except within the parent/guardian home and with the parent/guardian presence and consent
Underage purchase of alcohol	Yes	Prohibited in all circumstances
Furnishing of alcohol to minors	Yes (with exceptions)	Furnishing is prohibited except within the parent/guardian home and with the parent/guardian presence and consent
Minimum ages for on-premises servers and bartenders	Yes	18 for beer, wine, and spirits
False identification for obtaining alcohol	Yes	Use of false ID to obtain alcohol is a criminal offense and is punishable by suspension of driver's license
BAC limits	Yes	.02 for drivers under 21
Keg registration	Yes	Requires retailers to record the form of ID used to purchase keg, as well as name, address, and DOB
Loss of driving privileges for alcohol violations by minors	Yes	Use/lose penalties: 180 days suspension of driver's license

It should be noted that some of the laws that target the above categories contain exemptions. In Georgia, underage possession and consumption of alcohol carries the following exceptions: (1) parent/guardian's home and parent/guardian's presence and consent, or (2) one or more specified religious, educational, or medical purposes (NIAAA/APIS, n.d.).

Under the Federal Aid Highway Act, a state not enforcing the minimum age would be subjected to a 10% decrease in its annual federal highway allotment of federal dollars. In 1985, Georgia law required state and local entities to provide notice to the Department of Revenue regarding violations relative to the sale of alcoholic beverages to persons under the age of 21. The next year, legislation in Georgia required retailers to post warnings that consumption of alcohol during pregnancy is dangerous. In the 1990s, driving under the influence of an alcoholic beverage began to be considered a major offense leading to serious consequences in all states. In 1997, The Teenage and Adult Driver Responsibility Act (TADRA) was enacted in an effort to reduce the number of fatal motor vehicle accidents involving young, inexperienced drivers. TADRA is a graduated driver's license program for young drivers ages 15 to 18. The law significantly changed the way young people earn and maintain their driving privileges. The three-step TADRA process consists of an instructional permit (Class CP) granted to 15-year-olds upon successful completion of an examination. In Georgia, recognizing that alcohol is correlated with crash deaths, all youth under the age of 18 must complete and pass the Georgia Alcohol and Drug Awareness Program (ADAP) in order to receive their Class D driver's license. The course is provided through the Department of Driver Services. This alcohol-specific requirement built upon the safe driving TADRA program.

In 2001, Georgia lowered the blood alcohol concentration (BAC) level to .08% for drinking and driving. As of 2005, all 50 states adopted a national standard of

.08. In Georgia, a zero-tolerance law pertains to underage drunk driving. That is, it is against the law for a person under the age of 21 to drive a vehicle with a BAC level above 0.2. The violation is driving while impaired or under the influence.

In 2004, Georgia passed a bill making child endangerment a felony. This was Georgia's first child endangerment law and Georgia was the last state to enact a child endangerment statute. In effect the law criminalizes neglecting children in a manner that leads to harm. This would include using alcohol in a manner leading to neglect and endangerment, a behavior perhaps more likely to occur in Georgia and 11 other states where it is legal for parents to serve alcohol to their underage child in their home.

In 2005, Senate Bill 226, also known as "Joshua's Law," passed the Georgia General Assembly: "Beginning January 1, 2007, all 16-year-olds applying for a Class D Driver's License must complete an approved driver education course AND complete a total of 40 hours supervised driving, six hours of which must be at night, with a parent or guardian's sworn verification that these driving requirements have been met (Georgia Department of Driver Services, n.d.)." The Department of Driver Services (DDS) will "suspend the license of a minor who has been found in violation by a hearing officer, panel, or tribunal of one of the following offenses, or has waived his or her right to a hearing and pleaded guilty to one of the following offenses: possession or sale of drugs or alcohol on school property or at a school sponsored event. Any infraction of the above conduct offenses will result in a 1-year

suspension, or the minor shall be suspended until his or her 18th birthday, whichever comes first (Georgia Department of Driver Services, n.d.).”

ALCOHOL LAWS AND POLICIES NOT IN GEORGIA

Georgia maintains a fairly comprehensive package of laws and policies to prevent and reduce underage drinking and alcohol-related problems. However, there are additional alcohol-related laws that are being used in other states that are not currently in use in Georgia. Information provided by the National Institute of Alcohol Abuse and Alcoholism’s Alcohol Policy Information Systems (APIS) effectively describes and clearly illustrates deficiencies in Georgia laws associated with underage drinking. The following sections describe the absence of certain underage drinking laws in Georgia when compared to other states in the nation.

UNDERAGE DRINKING LAWS

As stated above, Georgia does not have some alcohol-related laws specifically targeting underage youth. It is not explicitly prohibited for a minor to consume alcohol, and there are exceptions to possession and furnishing laws. Additional provisions could be made to existing alcohol-related laws in an effort to prevent or reduce underage drinking. For example, provisions that target minors might include “Use/Lose” laws. Alcohol violations committed by minors would result in the complete loss of driving privileges (NIAAA/APIS, n.d.).

SOCIAL HOST LAWS

Social host laws are among the 11 underage drinking policy topics that NIAAA’s APIS tracks in their state-by-state profiles. Social host laws establish

criminal and civil liabilities for those hosting underage drinking parties. These laws are closely associated with similar laws that prohibit providing alcohol to minors. According to the APIS, “Although research on the topic is limited, what is available suggests that parties are high-risk settings for binge drinking and associated alcohol problems (n.d.)” The APIS also reports that, as of January 2009, a social host law which involves criminal liability has not been enacted in many states, including Georgia.

The National Institute on Alcohol Abuse and Alcoholism, Alcohol Policy Information System and Mothers Against Drunk Driving (MADD, 2010) currently track about 40 alcohol-related laws and traffic-safety state laws that they perceive as significant in combating drunk driving and underage drinking. Table 4 presents laws in use in other states but *not* currently in use in Georgia, according to MADD.

EXCISE TAXES

Taxes on alcohol are another legal avenue to potentially curb underage drinking rates. Alcohol taxes have fallen by 37% in inflation-adjusted terms since 1991, when Congress last adjusted them, and are expected to fall another 8 percent over the next decade. Reversing the erosion of alcohol taxes would not only raise needed revenues to help finance health care reform but also reduce the costs that alcohol abuse imposes on American society. Two-thirds of Americans support

Table 4. Alcohol Related Laws Used Outside of Georgia

Felony DUI	Law that makes DUI a felony offense based on the number of prior convictions.
Happy Hour Laws	A term used to refer to reduced price or multiple-drink alcohol sales practices and promotions that encourage excessive alcohol consumption. Happy hours laws (1) prohibit the sale and service of alcohol to intoxicated people, and/or (2) prohibit sales practices (including happy hours, drink specials, and other drink promotions) that effectively reduce the price of drinks and encourage excessive consumption of alcohol.
Hospital BAC Reporting	A statute that requires or authorizes hospital personnel to report blood alcohol concentration test results of drivers involved in crashes to local law enforcement, where the results are available as a result of treatment.
Lower BAC for Repeat Offender	These laws pertain to offenders who have had one or more prior DUI convictions. Laws affecting the repeat intoxicated offender include: licensing sanctions, vehicle sanctions, addressing alcohol abuse, and mandatory sentencing.
Mandatory Server Training	Beverage service training and related practices establish requirements or incentives for retail alcohol outlets to participate in programs (often referred to as “Responsible Beverage Service [RBS]” or “server training” programs).
Preliminary Breath Tester	Portable breath testing device used to determine BAC of suspected DUI offenders
Vehicle Impoundment	Seizure and impoundment of the vehicle operated by a DWI offender for a predetermined period of time.
Vehicle Sanctions While Suspended	Seizure and sale of the vehicle operated by an offender at the time the alcohol-related offense was committed.
Victim Rights Constitutional Amendment	An amendment to the U.S. or to a state’s Constitution that guarantees a crime victim the right to be notified of, present at, and heard at all stages of the criminal justice process at which the defendant has such rights. These rights should also include the right to restitution and the right to be notified of an inmate’s escape or release

raising alcohol taxes to help finance health care reform, according to a recent poll. A report by the Surgeon General noted that increasing the cost of alcohol use could reduce alcohol consumption by teenagers (2007). In the United States, taxes on alcoholic beverages account for 0.69% percent of state tax collections (on average), while taxes on alcoholic beverages account for 0.86% of Georgia's state tax collection (FY 2007). Georgia ranks 28th highest in the nation in alcohol taxes on liquor at \$3.79 a gallon. The national mean is \$5.94. Georgia ranks 6th highest in the nation in taxes on wine, at \$1.51 per gallon, the national mean is \$0.79. Georgia's excise tax on beer ranks 7th highest nationally with \$0.48 a gallon, with the national mean being \$0.27 (Turner & Wallace, 2009).

METHODOLOGY

The Council on Alcohol and Drugs, in partnership with the Georgia State University Institute of Public Health and an independent consultant, reviewed a variety of data and scientific sources to update the 2007 Needs Assessment/Prevalence Report. The methodology for reassessing unmet needs identified in the 2007 report includes analysis of additional data sources to better understand the context and nature of underage drinking among Georgia youth. The most significant change to this prior report will be reflected in data sources selected to measure alcohol consumption and related consequences. The original needs assessment report relied on focus groups, interviews, and a convenience sample of community surveys to identify issues related to underage drinking. This report will build on these initial findings and use more quantitative data sources to assess the

nature and extent of, and needs associated with, underage drinking. Table 5 presents the data sources and variables examined in this reassessment.

Table 5. Data Source and Variables Examined

Data Source	Variables Examined in Reassessment
National Survey on Drug Use and Health	<ul style="list-style-type: none"> • Alcohol consumption past 30 days • Binge drinking • Regional drinking
Youth Risk Behavior Survey	<ul style="list-style-type: none"> • Lifetime alcohol use • Current drinking • Binge drinking
Georgia Student Health Survey ⁱⁱ	<ul style="list-style-type: none"> • Frequency of alcohol use in the past 30 days prior to the survey being taken • Perceived difficulty in obtaining alcohol, cigarettes, marijuana and illicit drugs • Individual ratings of how harmful it is to drink regularly, smoke cigarettes, smoke marijuana, and use other illicit drugs.
Social Indicator Study Data	<ul style="list-style-type: none"> • Lack of School Commitment • Family Conflict/Management Problems • Juvenile Sexual Behavior • Juvenile Alcohol and Drug Abuse • Juvenile Community Crime
Department of Revenue	<ul style="list-style-type: none"> • Underage drinking sale violations

The report includes analysis of state-level youth substance use behavior using the National Survey on Drug Use and Health (NSDUH), the Youth Risk Behavior Survey (YRBS), county-level assessment of youth alcohol use using social indicator data and student data from the Georgia Student Health Survey (GSHSⁱⁱ). Data from the Social Indicator Study to Assess Substance Use Prevention Needs at the State and County Levels in Georgia (Weimer & Graham, 2006; conducted in

2006 and 2008) examines social and behavioral risk factor variables that can help illustrate counties within Georgia that have clusters of risk. The report also includes data from the Georgia Department of Revenue (DoR) to assess retailers' adherence to alcohol laws.

LIMITATIONS

There is no primary data included in this reassessment. The utilization of national, state, and county level data is limiting in that only aggregate information can be used to make conclusions. There likely is greater variability within a state, but the richness of this data is lost. A pilot adult knowledge and attitudinal survey regarding underage drinking laws (both in Georgia as well as nationally), is currently being administered at Georgia Underage Drinking Prevention Initiative (GUADPI) events and at other related prevention events as well as to Georgia Coalition to Prevent Underage Drinking members. Results of this pilot will be disseminated separately as data collection is currently underway.

RESULTS

ALCOHOL USE AMONG GEORGIA YOUTH—NSDUH AND YRBS

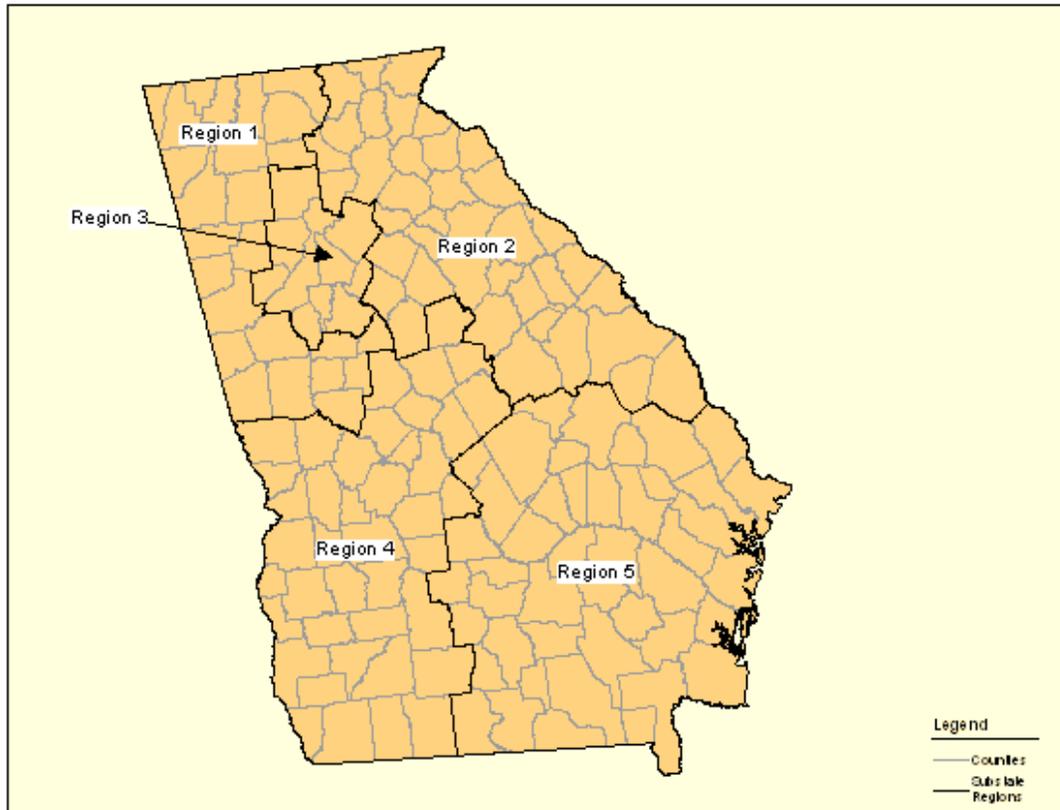
The National Survey on Drug Use and Health (NSDUH) defines current alcohol consumption as imbibing one or more alcoholic beverages in the past 30 days. The most recent national results from the NSDUH (based on 2008 data) indicate that nearly 51% of individuals ages 12–25 were current alcohol users which is a considerable increase from the 46% reported in 2006 (2009). In 2008, rates of

current alcohol use were 3.4% among persons aged 12 or 13, 13.1% of persons aged 14 or 15, 26.2% of 16 or 17 year olds, 48.7% of those aged 18 to 20, and 69.5% of 21 to 25 year olds. These estimates showed significant declines from 2007 for the 14- or 15-year-olds (from 14.7% to 13.1%) and for the 16 or 17 year olds (from 29.0% to 26.2%). In terms of binge drinking (defined by NSDUH as 'one or more episodes where 5 or more drinks (in men) or 4 or more drinks (in women) are consumed in one sitting), more than one fifth (23.3%) of persons aged 12 or older participated in binge drinking at least once in the 30 days prior to the survey in 2008. The rate in 2008 is the same as the rate in 2007 (23.3%). Rates of binge alcohol use in 2008 were 1.5% among 12 or 13 year olds, 6.9% among 14 or 15 year olds, 17.2% among 16 or 17 year olds, 33.7% among persons aged 18 to 20, and peaked among those aged 21 to 25 at 46.0%. The 2008 binge drinking rate for 16- or 17-year-olds showed a decrease from 2007, when it was 19.4%.

The 2006 NSDUH report included statewide examination of alcohol use. The 2006 report examined alcohol use estimates for five Georgia regions (see Figure 2). The regional estimates come from the combined data from 2004, 2005, and 2006. It is estimated that in Region 1, 36% of persons 12 or older have used alcohol at least once in their lifetime and 18% have binge drunk. In Region 2, 42% have consumed alcohol and 21% have binge drunk. Region 3 had the highest rates of lifetime alcohol consumption, with 49% of persons 12 or older having consumed alcohol, and 20% having participated in binge drinking. In Region 4, lifetime alcohol

consumption estimates were 44%, and binge drinking estimates were 21%. Finally, Region 5 estimates were 39% for lifetime alcohol use and 19% for binge drinking.

Figure 2. Regional Map of Georgia used in NSDUH Study



The Youth Risk Behavior Surveillance System (YRBSS) includes the Youth Risk Behavior Survey (YRBS) which is a survey that gathers statewide estimates on underage alcohol consumption. The YRBS is a bi-annual random-sample national survey administered in schools by the CDC, in collaboration with local school systems and the State Department of Public Health, that focuses on risky behaviors in high school students. The YRBS's alcohol-related questions include: lifetime alcohol use, which is the consumption of at least one alcoholic beverage at any time,

current alcohol use, which is the consumption of at least one alcoholic beverage in the last 30 days, and episodic heavy drinking, or binge drinking. According to the YRBS, Georgia high school students are at an equal risk with the national average for lifetime alcohol use, with 74% of students having had an alcoholic beverage. Georgia youth have a lower risk for current alcohol use and episodic heavy drinking; however, 38% and 19% of high school students participate in these behaviors respectively. These numbers can be compared to the national averages with 45% of high school students currently using alcohol and 26% reporting episodic heavy drinking.

ALCOHOL USE AMONG GEORGIA YOUTH—GSHSII

The Georgia Department of Education (DOE) oversees public education throughout the state and encompasses 547 school districts. In order to be eligible for funding, all of the Georgia school districts are required to develop drug and violence prevention activities through the collaboration of parents, communities, teachers, staff, students, community-based organizations, and medical, mental health and law enforcement professionals. These programs are created after careful consultation with state and local government representatives, and are coordinated and implemented with federal, state, and community resources and efforts. The purpose of these programs is to foster a safe and drug-free learning environment that supports student academic achievement. The State Board of Education must also comply with the provisions set forth in the Safe and Drug Free Schools and Communities Act. The purpose of the Safe and Drug Free Schools and Communities

Act is to support programs that prevent violence in and around schools; that prevent the illegal use of alcohol, tobacco, and other drugs; that involve parents and communities; and that are coordinated with related federal, state, school, and community efforts and resources to provide a safe and drug-free school environment for children enrolled in all Georgia public schools.

Before a program can be implemented, it is essential that surveys of the target population are taken in order to assess strengths, weaknesses and areas that require attention. The Georgia State Health Surveyⁱⁱ, administered by the Department of Education using a census methodology, obtains information from participating public middle and high school students about the prevalence and age of initiation of various health risk behaviors such as tobacco use, physical activity, eating habits, alcohol and drug use, and behaviors that contribute to unintentional injuries and violence. The goals of the survey are to collect information on age of initiation and prevalence of various health risk behaviors for public middle and high school students in Georgia on a regular basis; to make data reports available to the public, health care professionals, and educators; and to provide youth risk behavior and outcome data to public health programs to assist in developing prevention strategies and evaluating program effectiveness. Results of the GSHSⁱⁱ survey are available on the county level.

There are 159 counties included in the GSHSⁱⁱ survey; however, the outcomes included in this section focused on the ten targeted communities of the GUADPI. An overarching goal of this reassessment is to examine changes in results among the

original ten counties which were identified in a study conducted by Applied Research Services and included in the 2008 Georgia Underage Drinking Prevention Initiative Evaluation Plan. Note that data is not available for all target counties for years 2007-2009. The following results reflect the most up-to-date GSHSii data available.

Spalding and Elbert County Schools are predominantly white with black students making up the largest minority. There are also more female students than male students in both of these counties. Clarke County Schools also have a higher percentage of female students, but in contrast to Spalding and Elbert counties, Clarke County has a large black majority. Fulton County is the largest and most urban of the counties we studied; it has a white majority with blacks making up the largest minority, followed by Asians, with Hispanics making up the smallest minority. The gender distribution of students in Fulton County is almost equal. Rockdale County also has an almost equal number of male and female students, but blacks make up the largest percentage of the overall student body. Sumter County has a relatively small student body with slightly more females than males; the student population is largely black with a very small number of whites and an even smaller number of Hispanics and Asians. Candler County was the smallest county we studied, and its student body is predominantly white with blacks making up the largest minority, a small number of Hispanics and only two Asian students. The male to female ratio is almost even. Ware County was the only county we studied

that had more male students than female students; its schools are predominantly white with blacks making up the largest minority.

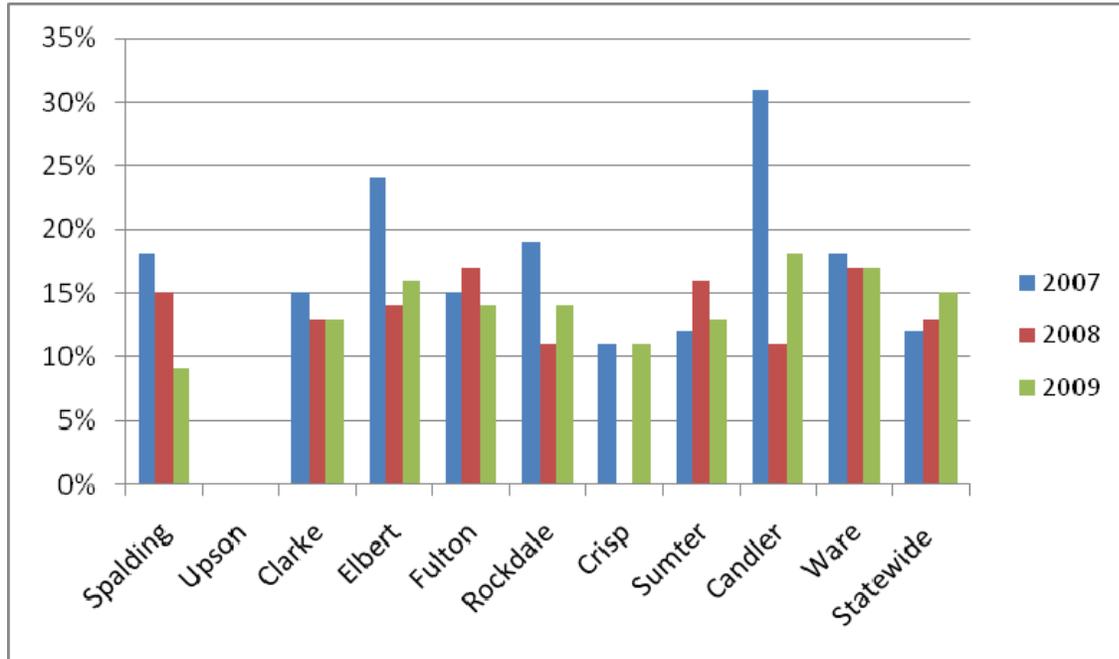
- Spalding and Elbert County—Predominantly white with black students making up the largest minority
- Clarke County—Large black majority
- Crisp County—Nearly 50/50 split between white and black students
- Fulton County—Largest, most urban; white majority with blacks largest minority, followed by Asians, with Hispanics making up the smallest minority; gender equal
- Rockdale County—Equal number of male and female students, black majority
- Sumter County—Black majority; very small number of whites, even smaller number of Hispanics and Asians
- Candler County—Smallest, white with black making largest minority, small number of Hispanics & only two Asian students
- Ware County—More male students than female students; predominantly white with blacks largest minority
- Upson County—Nearly three-quarters of students are white

The variables examined in this assessment included frequency of alcohol use in the 30 days prior to the survey being taken, perceived difficulty in obtaining alcohol, perceived difficulty in obtaining cigarettes, perceived difficulty in obtaining marijuana, perceived difficulty in obtaining other illicit drugs (using cocaine as an

example), individual ratings of how harmful it is to drink regularly, individual ratings of how harmful it is to smoke cigarettes, individual ratings of how harmful it is to smoke marijuana, and individual ratings of how harmful it is to use other illicit drugs.

Reported frequency of alcohol use results among the targeted communities are presented in Figure 3. Statewide, results of the GSHSii indicate that rates of alcohol use remained steady between 2007 and 2008. In the targeted counties, rates of past 30-day use dropped considerably from 2007–2009 in the following: Spalding (18% to 9%), Elbert (24% to 16%), Rockdale (19% to 14%), and Candler (31% to 18%). Rates stayed relatively the same in Clarke, Fulton, Crisp, and Ware, with some downward trending. Rates of past 30-day use rose in Sumter County from 12% to 16% between 2007–2008, but then fell to 13% in 2009, leaving Sumter as the only targeted county to have an overall increase in past 30-day use. There were no available results for Upson County.

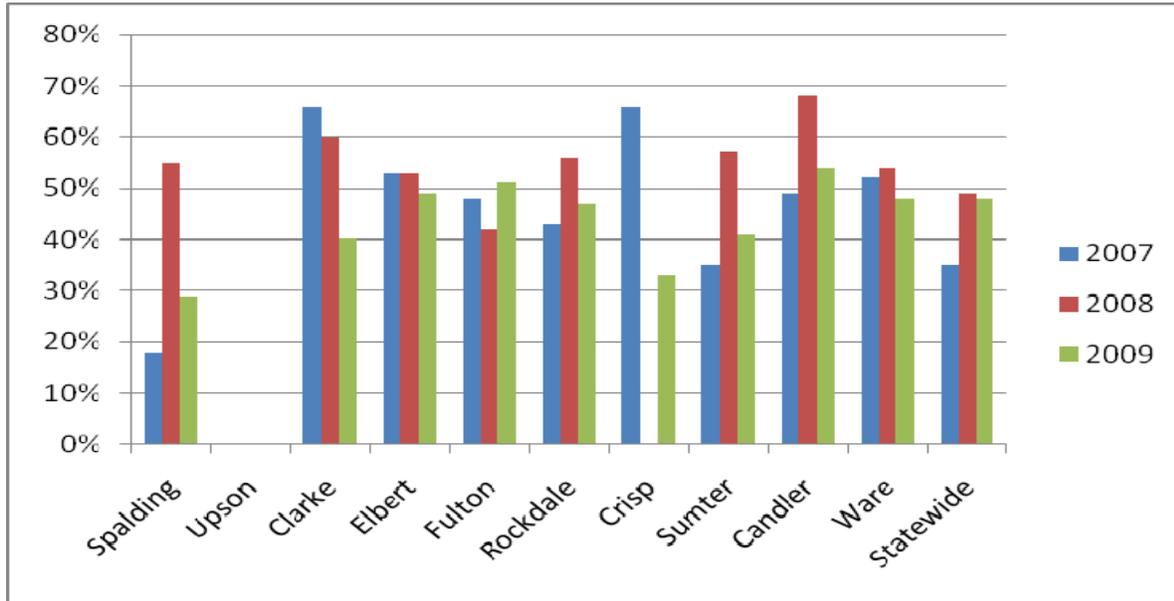
Figure 3. Reported Frequency of Alcohol Use in the Past 30 Days 2007–2009



PERCEIVED DIFFICULTY IN OBTAINING ALCOHOL 2007-2009

Figure 4 presents the perceptions among students in targeted communities for 2007–2009 regarding the difficulty of obtaining alcohol. The perception of the difficulty of obtaining alcohol increased statewide from 35% in 2007 to 48% in 2009. In the targeted counties, there was an overall increase from 2007–2009 in Spalding (18% to 29%), Fulton (48% to 51%), Rockdale (43% to 47%), Sumter (35% to 41%), and Candler (49% to 54%). However, most of these counties experienced even higher rates of perceived difficulty of obtaining alcohol in 2008 than in 2009. There were several counties that showed a considerable decrease in these areas as well. Clark County decreased from 66% in 2007 to 40% in 2009, Elbert decreased from 53% to 49%, Crisp decreased from 66% to 33%, and Ware decreased from 52% to 48%. There were no available results for Upson County.

Figure 4. Perceived Difficulty in Obtaining Alcohol 2007–2009

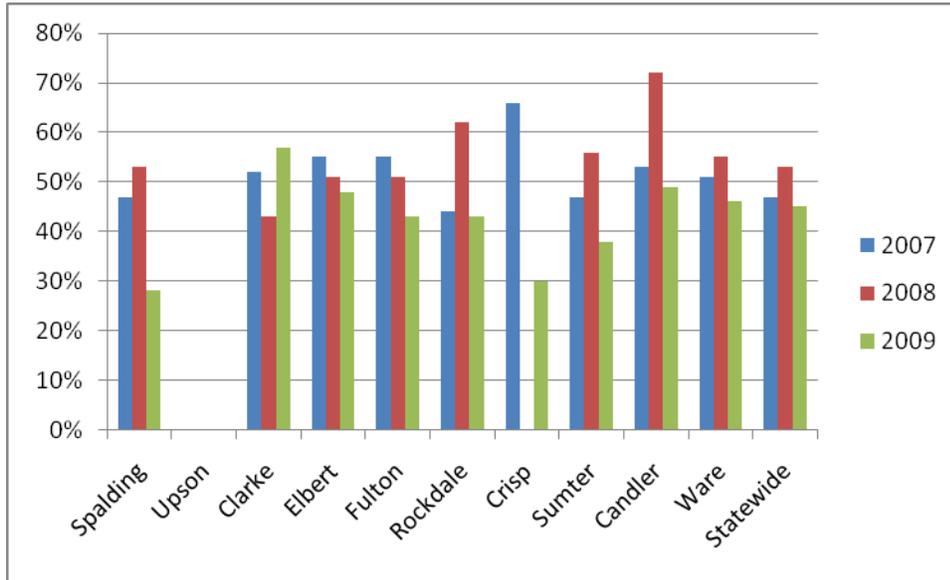


The Social Indicator Study (SIS) described a *Web of Influence* that characterizes underage drinking behavior (Weimer and Graham, 2006). In short, underage drinking has been found to be strongly associated with other risk behaviors, which include the use of cigarettes, marijuana, and other illicit drugs. Hence, results from the GSHSii among targeted counties in light of associated risk behaviors are presented in this section.

PERCEIVED DIFFICULTY IN OBTAINING CIGARETTES, MARIJUANA, AND OTHER ILLICIT DRUGS

Survey responses examining students’ perceptions of obtaining cigarettes, marijuana and other illicit drugs among the 10 target counties were collected. Figures 5–7 present the data for each category for years 2007–2009.

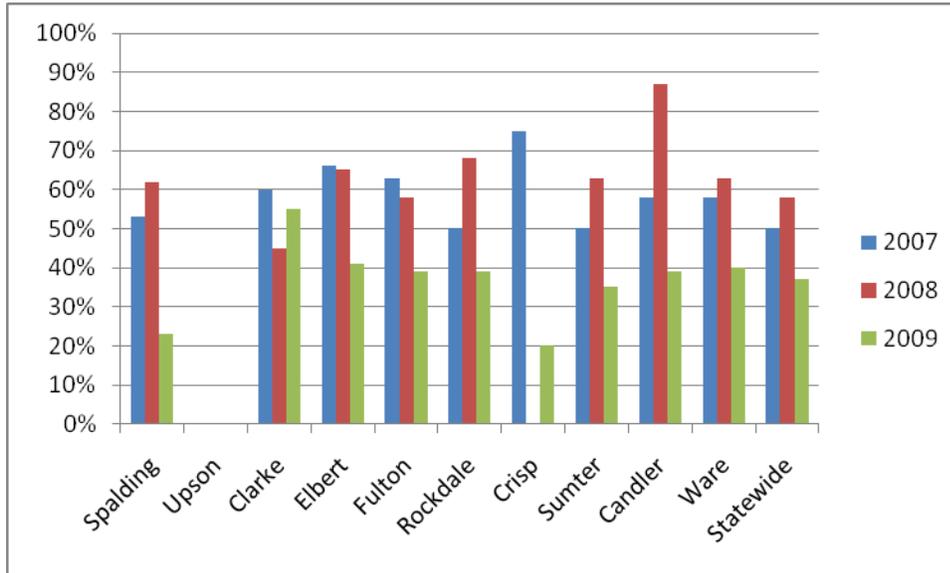
Figure 5. Perceived Difficulty in Obtaining Cigarettes 2007–2009



The perception of the difficulty of obtaining cigarettes remained relatively stable statewide, with decreases in the perceived difficulty of purchasing cigarettes in Spalding, Elbert, Fulton, Crisp, Sumter, Candler, and Ware Counties. There was increased perceived difficulty in Clarke, Rockdale remained relatively stable, and there were no available results for Upson County.

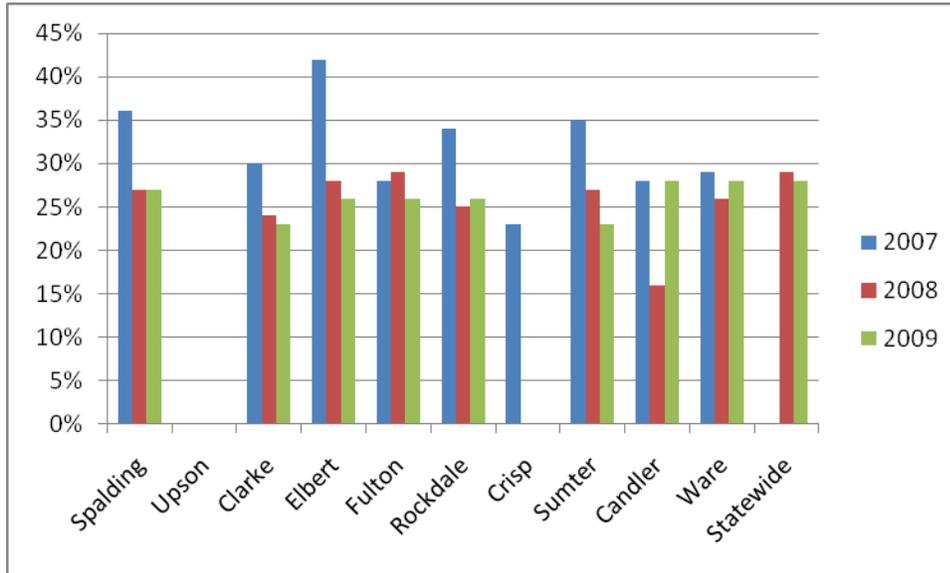
The perception of the difficulty of obtaining marijuana (presented in Figure 6) dropped statewide from 50% to 37% between 2007 and 2009. It decreased correspondingly in all of the target counties with data.

Figure 6. Perceived Difficulty in Obtaining Marijuana 2007–2009



There was no statewide data available in 2007 for the difficulty of obtaining illicit drugs, but the perceived difficulty dropped slightly from 29% in 2008 to 28% in 2007 (Figure 7). Spalding, Clarke, Elbert, Sumter, and Rockdale experienced considerable declines in perception of difficulty from 2007–2009. Fulton, Candler, and Ware remained relatively stable, and there was missing data from Upson and Crisp Counties.

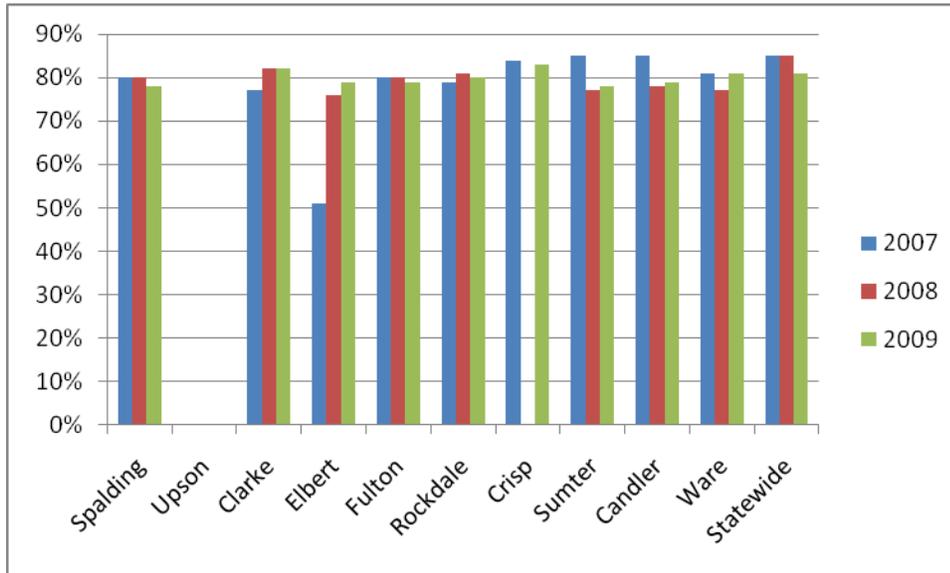
Figure 7. Perceived Difficulty in Obtaining other Illicit Drugs 2007–2009



INDIVIDUAL RATINGS FOR HOW HARMFUL IT IS TO DRINK REGULARLY

Student responses for how harmful it is to drink regularly were also examined from 2007–2009 among targeted counties. Results are presented in Figure 8. Statewide, the perception of the harmful effects of alcohol dropped from 85% in 2007 to 81% in 2009. In the targeted counties, it dropped in Spalding (80% to 78%), Crisp (84% to 83%), Fulton (80% to 79%) Sumter (85% to 78%), and Candler (85% to 79%). It rose in Clarke (77% to 82%), Elbert (51% to 79%), and Rockdale (79% to 80%), and remained stable in Ware (81%). There was no available information for Upson County.

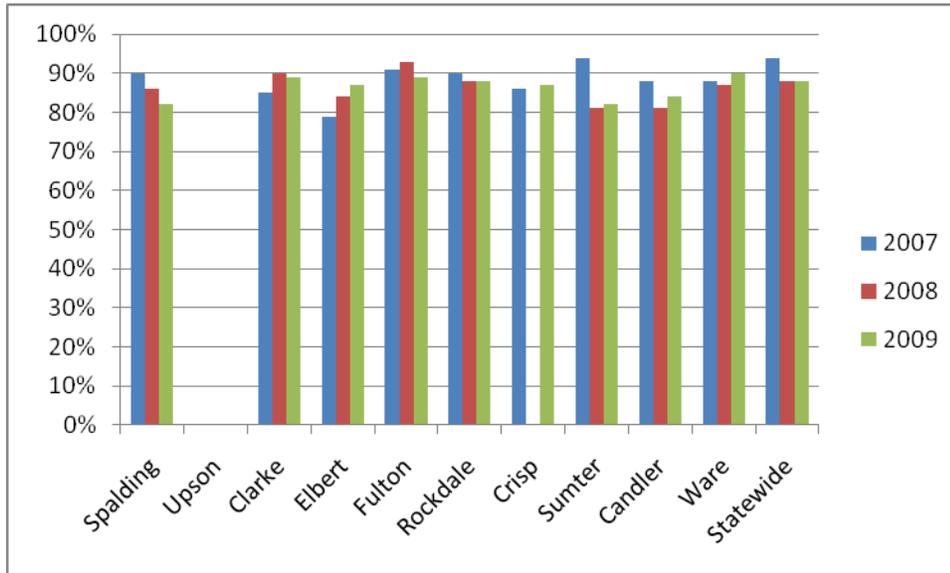
Figure 8. Individual Ratings of How Harmful it is to Drink Regularly 2007–2009



INDIVIDUAL RATINGS FOR HOW HARMFUL IT IS TO SMOKE CIGARETTES

Figure 9 presents GSHSii responses for students within the targeted counties (years 2007–2009) specifically related to individual ratings of how harmful it is to smoke cigarettes. The perception of harm from cigarettes dropped statewide from 94%-88%. It decreased correspondingly in Spalding, Fulton, Rockdale, Sumter, and Candler counties. The perception of the harmful effects of smoking cigarettes rose in Clarke, Elbert, Crisp, and Ware Counties, and no information was available for Upson.

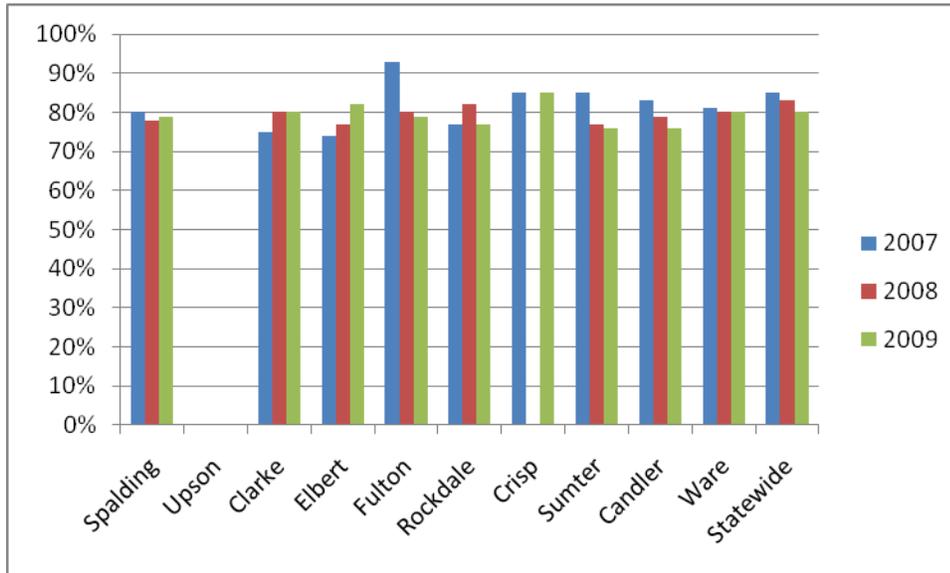
Figure 9. Individual Ratings of How Harmful it is to Smoke Cigarettes 2007–2009



INDIVIDUAL RATINGS FOR HOW HARMFUL IT IS TO SMOKE MARIJUANA

The individual ratings for how harmful it is to smoke marijuana were also compared among target counties of the GUADPI initiative between the years 2007–2009 (see Figure 10). The perception of harm for smoking marijuana also decreased statewide, as well as in Spalding, Fulton, Sumter, Candler, and Ware counties. It increased in Clarke and Elbert and remained the same in the remaining county that had data available.

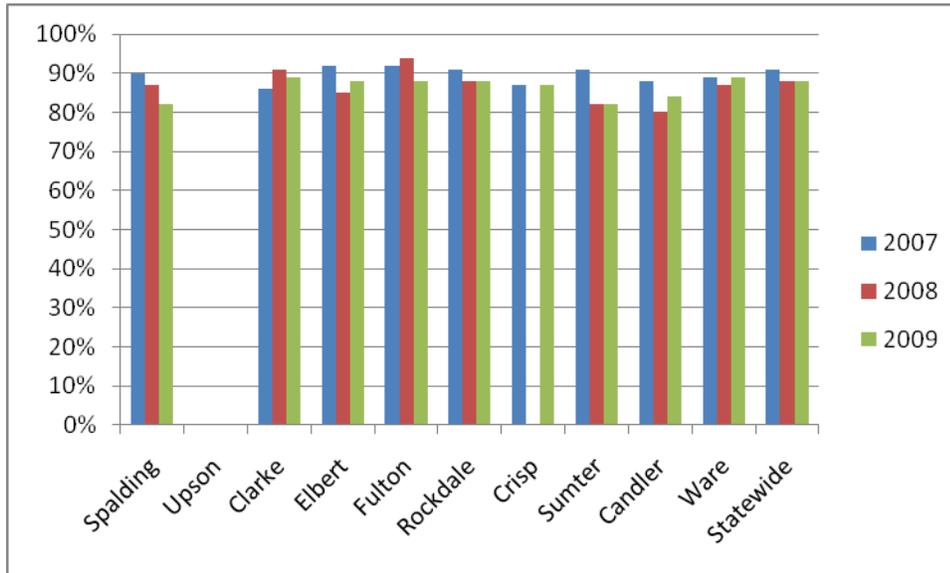
Figure 10. Individual Ratings of How Harmful it is to Smoke Marijuana 2007–2009



INDIVIDUAL RATINGS FOR HOW HARMFUL IT IS TO USE ILLICIT DRUGS

Figure 11 presents individual student ratings for how harmful it is to use illicit drugs among target counties for the years 2007–2009. Statewide, the perception of harm of illicit drugs dropped slightly between 2007 and 2009. Although it remained relatively high in the target counties, it did decrease in Spalding, Elbert, Fulton, Rockdale, Sumter, and Candler. It remained stable in Crisp and Ware, and increased in the remaining county with available data.

Figure 11. Individual Ratings of How Harmful it is to Use Illicit Drugs 2007–2009



SUMMARY

Statewide rates of past 30-day alcohol use have remained steady and the majority of the targeted counties either decreased in past use or remained the same. The overall perception of the difficulty of obtaining alcohol in the State of Georgia increased, with half of the counties also showing an increase in the difficulty of obtaining alcohol. The other half, however, showed marked decreases in the perception of difficulty of obtaining alcohol. The statewide results for perceived difficulty of purchasing cigarettes remained relatively stable; however, the majority of the targeted counties experienced a decrease of perceived difficulty. The perception of the difficulty of availability of marijuana dropped statewide and decreased correspondingly in all of the target counties with data. Half of the targeted counties experienced a drop in the perceived difficulty in obtaining illicit

drugs, and the other half remained relatively stable. The perception of the harmful effects of alcohol declined statewide, and it declined in five of the targeted counties, increased in three, and remained stable in one of the targeted counties. The perception of harm of cigarettes, marijuana, and other illicit drugs, while relatively high, dropped statewide and in a majority of the targeted counties in all three areas.

GEORGIA SOCIAL INDICATOR STUDY (2006 AND 2008)

In 2006, the Governor's Cooperative Agreement State Incentive Planning and Development Grant released the *Social Indicator Study to Assess Substance Use Prevention Needs at the State and County Levels in Georgia* (SIS) (Weimer & Graham, 2006). One unique feature of the SIS is that it examines multiple socio-demographic and behavior variables on the county level. Each of the 159 counties in Georgia was characterized based on 29 risk constructs, which were derived from a larger set of social indicators. The risk constructs reflect a multitude of dimensions of substance abuse and the related problems and outcomes. The counties were ranked, 1–159, for each of the 29 risk constructs. They were then assigned a composite score which indicated the total level of risk for each county (Weimer & Graham, 2006). According to the 2006 SIS needs assessment the following counties had the highest composite risk scores in the State of Georgia: McDuffie, Dooly, Evans, Emanuel, Toombs, Candler, Bibb, Ben Hill, Ware, and Crisp. The counties showing the least amount of risk were: Fayette, Gwinnett, Oconee, Forsyth, Columbia, Harris, Lee, Paulding, Effingham, and Cherokee.

REASSESSMENT OF RISK CONSTRUCT RESULTS

CHANGES ON KEY SOCIAL INDICATORS (2006 SIS REPORT TO 2008 SIS REPORT)

The UAD Initiative selected ten counties (two counties per region pursuant to the Department of Behavioral Health and Developmental Disability regions) to provide targeted prevention services based on a methodology that used 10 social indicators that fell within three domains included in the 2006 Georgia Social Indicator Study (SIS). However, the following analysis examines changes in 19 UAD-related indicators comprising five domains from 2006 to 2008¹ for the 10 target counties. We expanded this number of indicators to provide a broad perspective on the range of factors that contribute to or are impacted by underage drinking. Below we summarize the changes within each target county across the following 5 domains or constructs including: (1) lack of school commitment, (2) family conflict/management, (3) juvenile sexual behavior, (4) juvenile alcohol and drug abuse, and (5) juvenile community crime. Each of these domains is comprised of multiple indicators. Bar charts depicting rates for each indicator are included in Appendix 2.

Later in this section we apply the original selection methodology (three domains using ten indicators) to the 2008 SIS data to identify 10 counties at risk for underage drinking and related consequences among youth.

¹ However, there are instances where the measurement of some indicators changed from 2006 to 2008. In those instances, comparisons are not made.

CANDLER COUNTY

- Lack of School Commitment—There were significant decreases in the percent of students that did not meet achievement test expectations in grades 4, 6, and 8. The percent not meeting expectations decreased from 36.1% in 2008 to 13.7% in 2006. There also was a slight decrease in the dropout rate (9.2% vs. 7.1%) and a slight increase in the percent of eligible students not graduating from high school.
- Family Conflict/Management Problems—There were mixed results across the three indicators measuring this construct. The rate of substantiated child abuse cases decreased, but there was a slight increase in the percent of child abuse cases involving alcohol or drugs. There was little change in the percent of children living in foster care.
- Juvenile Sexual Behavior—There were increases in the rate of pregnancies and births among females age 15–19, but a slight decrease in the rate of repeat births among this same demographic. There also was a slight decrease in the juvenile STD rate from 6.6% to 5.1%.
- Juvenile Alcohol and Drug Abuse—The percent of arrest for liquor law and drug violations increased while the percent of alcohol-related crashes with drivers 10–17 decreased. There also were decreases in alcohol and drug treatment admission rates from 2006 to 2008.
- Juvenile Community Crime—Indicators of juvenile crime increased from 2006 to 2008. Violent crime rates increased slightly, but rates for property

crime and other crimes (non-violent; non-drug) increased significantly (56.4 to 81.4 and 65.3 to 85.3, respectively).

CLARKE COUNTY

- Lack of School Commitment—There were decreases in all five indicators of lack of school commitment. The most significant decreases were among the percent of 8th graders not meeting achievement test expectations (40.4% to 27.3%) and the percent of students not graduating from high school (44.7% to 35.6%).
- Family Conflict/Management Problems—The rate of substantiated child abuse cases decreased from 2006 to 2008, but the percent of cases involving alcohol or drugs increased. There was a small decrease in the rate of children living in foster care.
- Juvenile Sexual Behavior—Indicators of juvenile sexual behavior decreased across all four indicators.
- Juvenile Alcohol and Drug Abuse—The rates for indicators of juvenile alcohol and drug abuse were significantly lower than other counties, but there were slight decreases among all four indicators.
- Juvenile Community Crime—Rates of juvenile violent crime remained essentially unchanged, but there were slight increases of rates of property and other crimes, respectively.

CRISP COUNTY

- Lack of School Commitment—The percent of students not meeting achievement test expectations decreased in grades 4, 6, and 8. There also

was a modest decrease in the dropout rate (14.1 to 8.9) and a significant decrease in the percent of students not graduating high school.

- Family Conflict/Management Problems—The percent of substantiated child abuse cases and the percent of cases involving alcohol or drugs decreased, but the percent of children (17 or younger) living in foster care increased slightly (5.6 to 8.8).
- Juvenile Sexual Behavior—Already high rates of pregnancies, births, and repeat births among females aged 15–19 increased from 2006 to 2008 as well as the juvenile STD rate (16.9% to 22.1%)
- Juvenile Alcohol and Drug Abuse—The rates for indicators of alcohol and drug abuse were low and showed very little change from the 2006 report to the 2008 report.
- Juvenile Community Crime—There were significant decreases in rates of juvenile violent, property, and other non-violent or non-drug related crime.

ELBERT COUNTY

- Lack of School Commitment—Rates of indicators for lack of school commitment decreased including the percent of students not meeting achievement test expectations in grades 4, 6, and 8; as well as the dropout rate. However, the percent of eligible students not graduating from high school increased (33.0% to 38.2%) from 2006 to 2008.

- Family Conflict/Management Problems—There was a slight decrease in the number of substantiated child abuse cases, but a significant increase in the percent of cases involving alcohol or drugs (23.3% to 35.7%). The rate of children in foster care showed a 1% decrease.
- Juvenile Sexual Behavior—Rates of pregnancies and births among females aged 15–19 increased while the rate of repeat birth decreased slightly. There also was a modest decrease in the juvenile STD rate.
- Juvenile Alcohol and Drug Abuse—The rate of juvenile arrest for ATOD violations and the percent of alcohol related crashes decreased. The admission rates for alcohol and drug treatment remained low and essentially unchanged.
- Juvenile Community Crime—Rates of juvenile crime decreased across all three indicators with the most significant decrease among arrest rates for property crime.

FULTON COUNTY

- Lack of School Commitment—The percent of 4th and 6th graders not meeting achievement test expectations increased significantly from 2006 to 2008, but the percent of 8th graders not meeting expectations decreased significantly (31.8% to 17.0%). There also were modest decreases in the dropout rate and the percent of students not graduating from high school.
- Family Conflict/Management Problems—The rate of substantiated child abuse cases decreased, but the percent of cases involving alcohol and

drugs increased. There also was a slight decrease in the rate of children living in foster care.

- Juvenile Sexual Behavior—There were significant decreases in rates of pregnancies, births, and repeat births among females aged 15–19. There also was a decrease in the juvenile STD rate.
- Juvenile Alcohol and Drug Abuse – The rates for indicators of juvenile alcohol and drug abuse were low and essentially unchanged from 2006 to 2008.
- Juvenile Community Crime—Rates for juvenile crime indicators remained largely unchanged from 2006 to 2008.

ROCKDALE COUNTY

- Lack of School Commitment—There were modest decreases in the percent of 4th-, 6th-, and 8th-grade students not meeting achievement test expectations. The dropout rate was essentially unchanged, but the percent of students not graduating from high school increased from 13.1% to 22.6%.
- Family Conflict/Management Problems—The rates of substantiated child abuse case and children living in foster care decreased slightly, while the percent of cases involving alcohol or drugs increased significantly.
- Juvenile Sexual Behavior—There were non-significant decreases in the rates of pregnancies, births, and repeat births among females aged 15–19.

However, there was a significant decrease in the juvenile STD rate from 13.9% to 5.6%.

- Juvenile Alcohol and Drug Abuse—Arrests rates for liquor law and drug violations and admission rates for alcohol or drugs remained essentially unchanged while the percent of alcohol-related crashes among 10–17 years olds decreased slightly from 2006 to 2008.
- Juvenile Community Crime—Violent crime rates increased slightly, but property and other crime rates decreased slightly.

SPALDING COUNTY

- Lack of School Commitment—There were significant decreases in the percent of students not meeting achievement test expectations in grades 4, 6, and 8; the percent of students not graduating high schools; and the dropout rate (14.6% to 7.8%).
- Family Conflict/Management Problems—The rate of substantiated child abuse cases decreased and the percent of cases involving alcohol or drugs increased (31.9% to 40.0%).
- Juvenile Sexual Behavior—There was a significant decrease in the rate of pregnancies and a non-significant decrease on the rate of births. Contrarily, there was an increase in repeat births as well as the STD rate.
- Juvenile Alcohol and Drug Abuse—The overall rates for indicators of alcohol and drug abuse were low and show non-significant change from 2006 to 2008.

- Juvenile Community Crime—The rates for violent crime remained unchanged, while the rates for property and other crimes decreased from 2006 to 2008.

SUMTER COUNTY

- Lack of School Commitment—There were significant decreases across all five indicators of lack of school commitment.
- Family Conflict/Management Problems—There were decreases in the rate of substantiated child abuse cases, the percent of cases involving alcohol or drugs, and the rate of children living in foster care.
- Juvenile Sexual Behavior—There was a slight decrease in the pregnancy rate, but a slight increase in the rate of births among females aged 15–19. The number of repeat births remained unchanged at 15.1/1,000, while the juvenile STD rate increased slightly.
- Juvenile Alcohol and Drug Abuse—The treatment admission rates and the percent of alcohol related crashes among 10–17 year olds are extremely low; and there was a non-significant increase in the juvenile arrest rate for liquor law and drug violations.
- Juvenile Community Crime—Indicators of juvenile crime increased for violent crime (13.8 to 20.2) and property crime (70.0 to 75.3) and slightly decreased for other crime.

UPSON COUNTY

- Lack of School Commitment—There were significant decreases in the percent of students not meeting achievement test expectations and the

dropout rate (13.1% to 5.8%). However, the percent of students not graduating high school remained relatively unchanged (35.5% to 35.0%).

- Family Conflict/Management Problems—There were increases in the rate of substantiated child abuse cases; the percent of cases involving alcohol or drugs (25.2% to 38.1%); and the rate of children living in foster care (6.0% to 8.3%).
- Juvenile Sexual Behavior—High rates of pregnancies among females remained high with a slight decrease from 2006 to 2008; a slight increase in the rates of births and juvenile STDs. However, there was a significant decrease in the rate of repeat births (20.3 to 16.5).
- Juvenile Alcohol and Drug Abuse—The rate of alcohol-related crashes among drivers aged 10–17 reduced by almost 50% (4.2 to 2.2).
- Juvenile Community Crime—Rates of violent, property, and other crime decreased from 2006 to 2008, but only significantly for property (26.3 to 17.4) and other crimes (29.8 to 20.7).

WARE COUNTY

- Lack of School Commitment—There were significant decreases in the percent of students not meeting achievement test expectations and the dropout rate (9.0% to 6.6%). However, the percent of students not graduating high school increased slightly (35.6% to 37.4%).
- Family Conflict/Management Problems—There was little change in the rates of substantiated child abuse cases and children living in foster care.

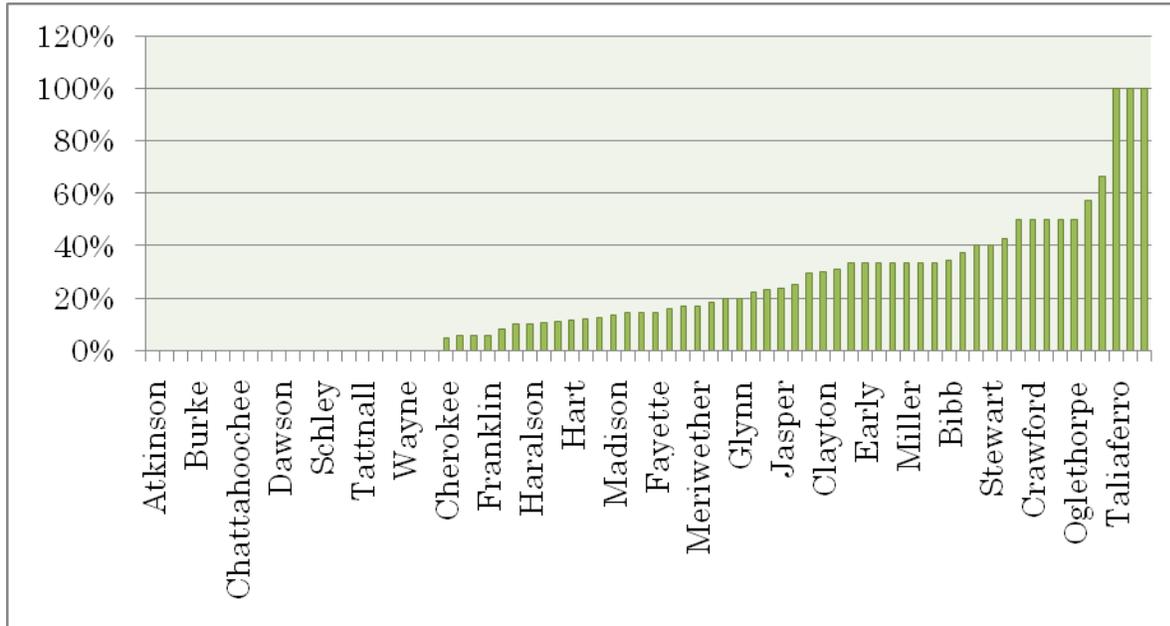
However, there was an increase in the percent of child abuse cases involving alcohol and drugs.

- Juvenile Sexual Behavior—There were significant increases in the rates of pregnancies (88.1 to 102.6) and births (79.8 to 91.7) among females aged 15–19. The rate for repeat births remained unchanged and the rate of juvenile STDs increased slightly from 15.3% to 18.5%.
- Juvenile Alcohol and Drug Abuse—There were decreases in all four indicators including a decrease in the juvenile arrest rate for liquor law and drug violations.
- Juvenile Community Crime—Rates of juvenile crime decreased for violent, property, and other crimes from 2006 to 2008.

DoR COMPLIANCE CHECKS: INDICATORS OF YOUTH ACCESS

Annually, the Georgia Department of Revenue (DoR) performs a random sample of compliance checks for sales of alcohol to persons under age 21. In 2009, investigations were performed in 66 of Georgia’s 159 counties. Overall, 19.7%, or 184, of the 2009 investigations ended in a compliance violation. The range of number of investigations per county, citations per county, and percentage of violations per county was quite diverse. The number of investigations per county ranged from 0 to 61 and the numbers of citations ranged from 0 to 16 (see Figure 12 for citations by county). The percentage of violations per investigation ranged from

Figure 12. Percentage of Violations Per DoR Investigation in 2009



0% to 100%. While the percentage of investigations that end in violations can provide an interesting picture of underage alcohol sales in a county, it can also be misleading because of the large variation in the number of investigations per county. Please see Figure 12 for percentage of violations per investigations in 2009 and Figure 13 for summary alcohol violations by county in 2009.

Data from 2004–2008 regarding specific alcohol sale-related violations and excise tax revenues are presented in Figures 14–19.

Figure 13. Alcohol Sales Violations By County 2009

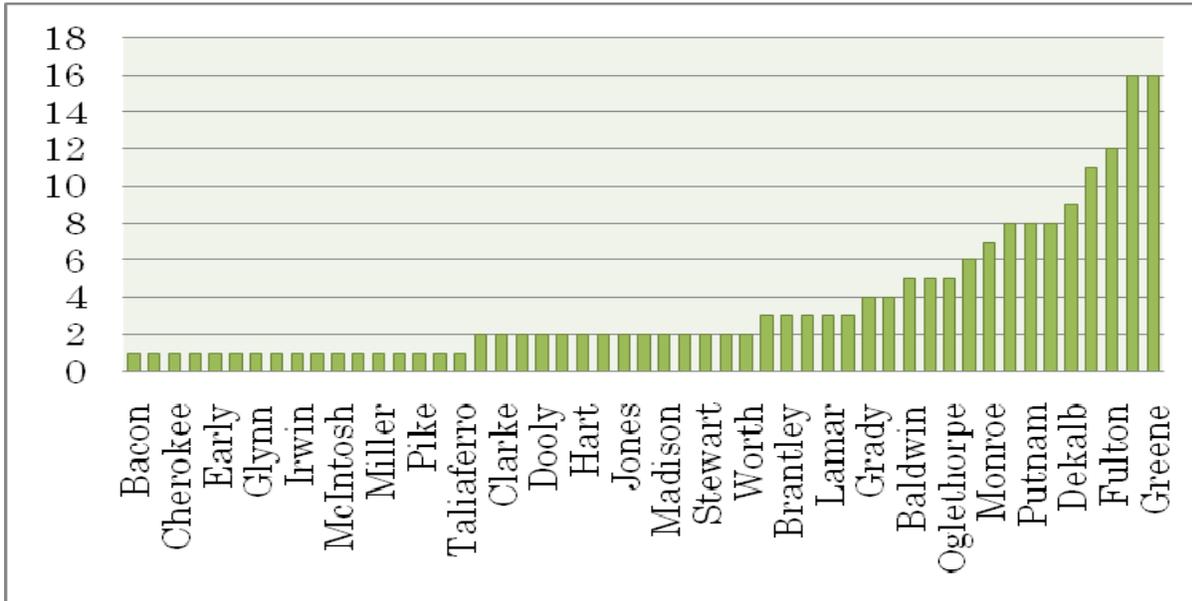


Figure 14. Number of Investigations of Illegal Alcohol Sales to Underage Persons That Led to a Sanction of Some Kind

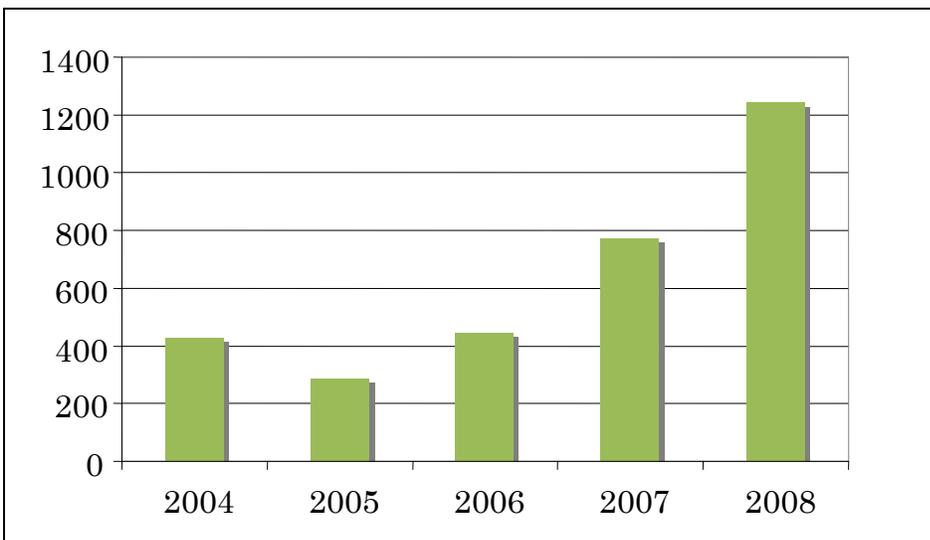


Figure 15. Number of Underage Alcohol Investigations

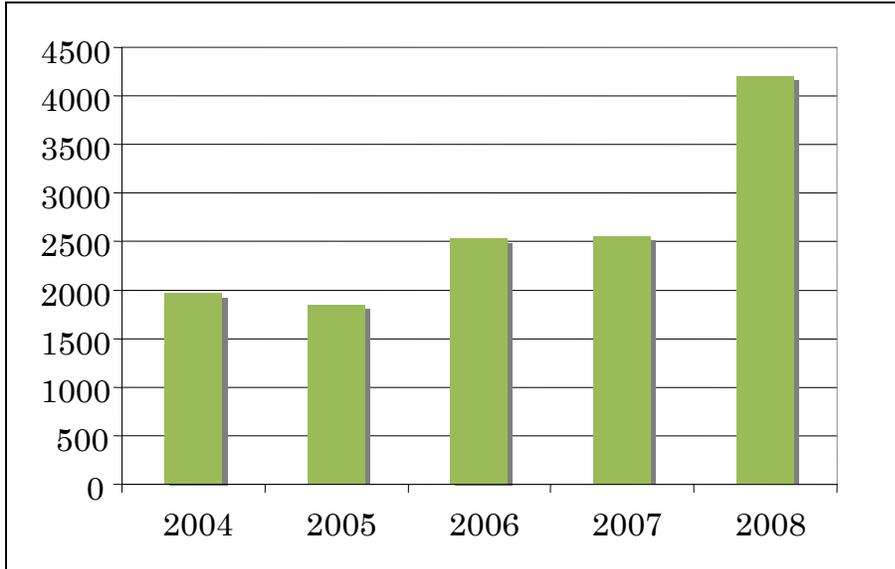


Figure 16. Number of Underage Alcohol Citations

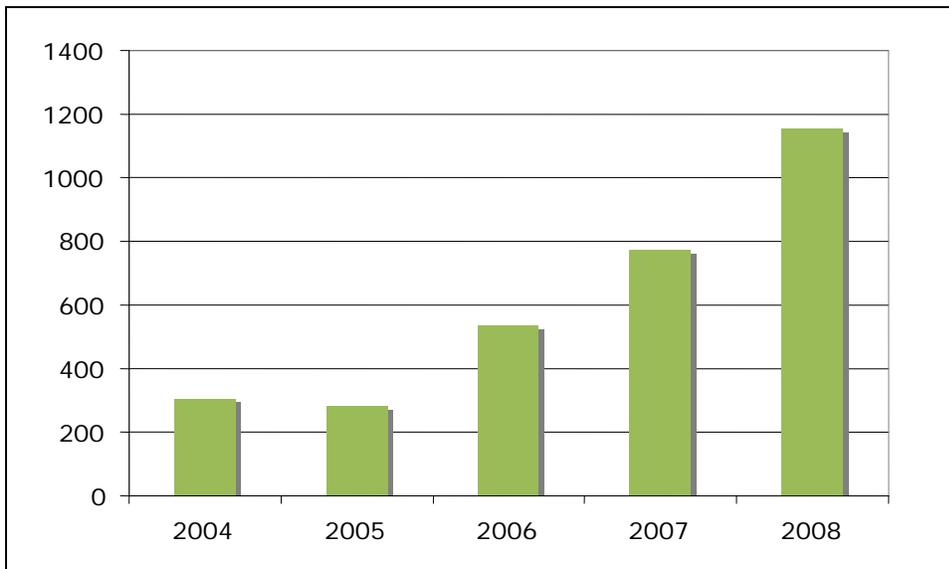


Figure 17. Revenue from Excise Taxes (Beer)

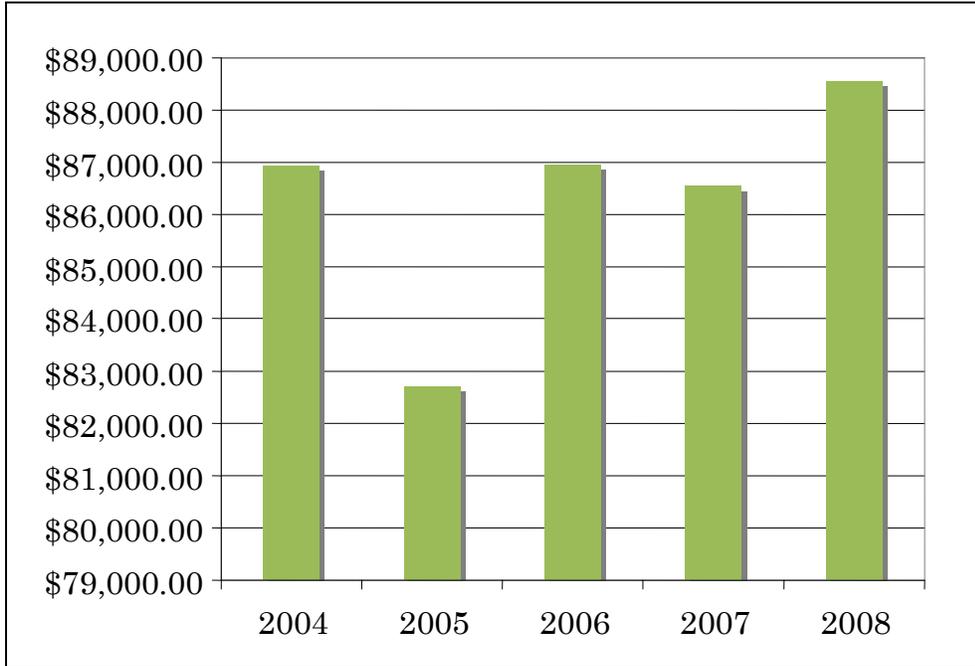


Figure 18. Revenue from Excise Taxes (Liquor)

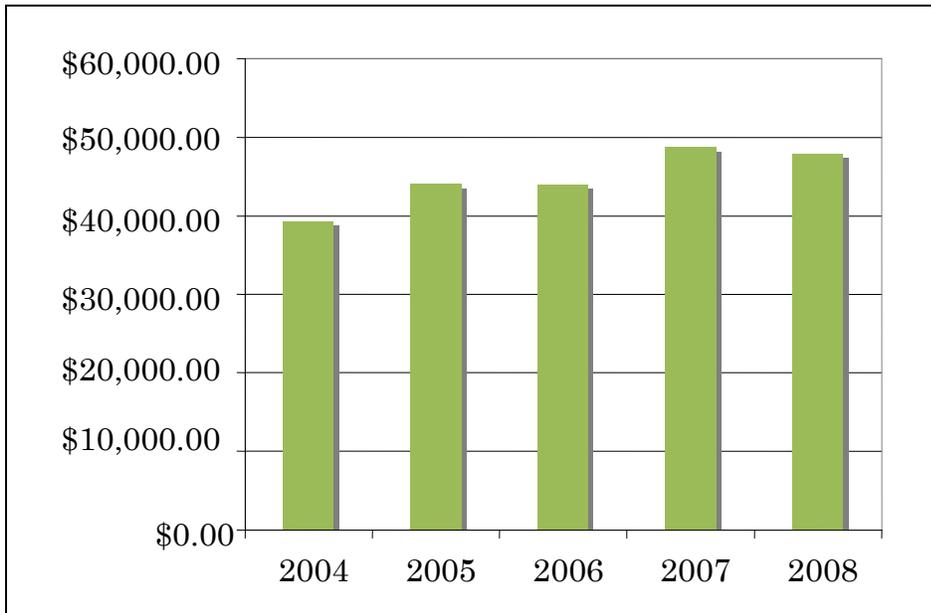
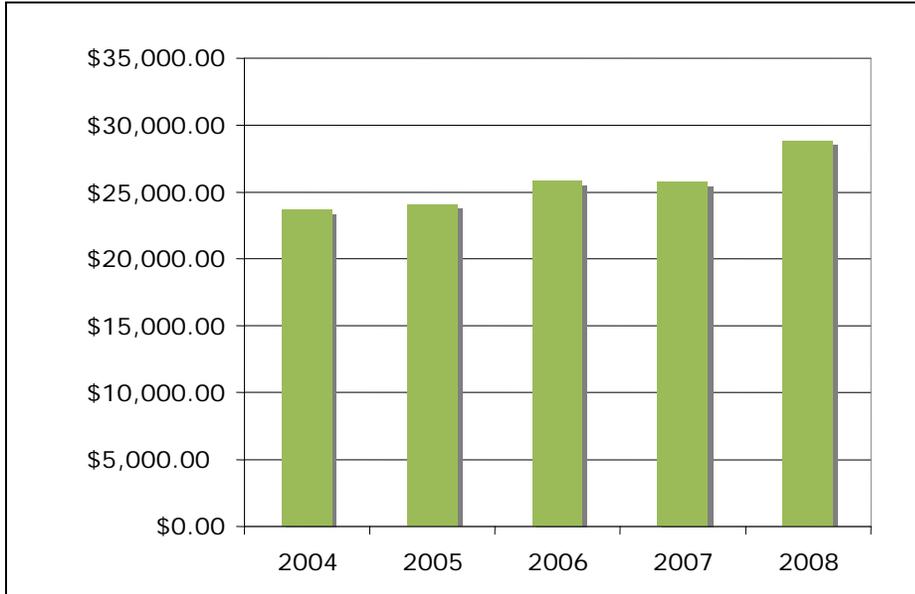


Figure 19. Revenue from Excise Taxes (Wine)



REASSESSING COMMUNITIES OF HIGH NEED

As stated earlier, the current 10 counties participating in the “target” community component of GUADPI were selected using a methodology developed by Applied Research Services (ARS). In addition to replicating this methodology, we include alternate methods to use to select communities (i.e., counties) for future efforts. The ARS strategy was comprehensive in nature and included domains that were both directly and indirectly related to juvenile alcohol and substance use. If we reapply the ARS selection strategy using data from the 2008 SIS report we get similar, but slightly different results. Table 6 shows the counties selected by region using the 2006 data report compared to counties selected using the 2008 data.

Table 6. Selected Communities Using 2006 and 2008 SIS Report

Target Counties—2006 Report	Target Counties—2008 Report
<i>Region 1</i>	
Spalding	Polk
Upson	Walker
<i>Region 2</i>	
Clark	Clark
Elbert	Elbert
<i>Region 3</i>	
Rockdale	Rockdale
Fulton	Cherokee
<i>Region 4</i>	
Crisp	Crisp
Sumter	Grady
<i>Region 5</i>	
Candler	Ben Hill
Ware	Tift

If the GUADPI were to employ the same methodology that was used by ARS, but using data from the 2008 SIS report, target counties would change in all regions except Region 2. Regions 1 and 5 would have entirely different counties using the 2008 data and Regions 3 and 4 would each retain one county and replace another. However, in all regions except Region 1, counties that were selected using the 2006 data but not selected using the 2008 data ranked in the top five (i.e., highest need) within their respective regions.

However, if the GUADPI selected the top 10 highest need communities using this methodology regardless of region, the following counties would be identified as presented in Table 7.

Table 7. Top 10 Highest Risk Ranks Overall (2009)

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Ben Hill	5	159	17,567	65
Tift	5	158	42,959	113
Candler	5	157	10,680	37
Crisp	4	156	22,210	78
Lowndes	5	155	106,814	139
Wilcox	5	154	8,895	24
McIntosh	5	153	11,378	40
Cook	5	152	16,603	60
Grady	4	151	25,187	88
Worth	4	150	21,214	74

We also suggest that counties could be selected using a single domain or fewer indicators that are more proximal to underage drinking. The current methodology uses three domains: (1) juvenile specific alcohol indicators, (2) community alcohol prevalence, and (3) high risk youth correlates. We have included in Appendix 3 results that allow for the selection of communities based on a single domain. For example, Table 8 shows the top 10 county rankings (regardless of region) using the juvenile specific alcohol indicator domains compared to the 10

rankings using all three weighted domains. Complete county listings of each respective domain are included in Appendices 3–5. Appendices 6–9 present two versions of weighted domain rankings and the top ranks by region and overall state.

Table 8. Domain 1 Only (Juvenile Specific Indicators) vs. Combination of Three Domains

County	Overall Average Rank Domain 1	County	Overall Average Rank Three Domains
Candler	135	Ben Hill	159
Bulloch	133	Tift	158
Walker	132	Candler	157
Wilcox	128	Crisp	156
Catoosa	127	Lowndes	155
Fannin	124	Wilcox	154
Worth	123	McIntosh	153
Ben Hill	120	Cook	152
Lanier	118	Grady	151
Lowndes	118	Worth	150

DISCUSSION AND RECOMMENDATIONS

The discussion section synthesizes results from multiple sources to present a broad overview of alcohol use within the context of substance use among Georgia youth. Similar to the 2007 report, this section provides recommendations that impact state-level activities and community-level capacity to implement evidence-based prevention strategies.

The data used in this report was archival and thus could not provide the level of detailed information needed. However, available substance abuse-related data in

the state of Georgia have improved significantly and provide a solid picture of substance abuse in the state. Although findings from NSDUH and YRBS suggest Georgia rates of alcohol and other substance use are lower than the national average, rates of consumption and related consequences are still above the recommend targets for Healthy People.

Analysis of school-level and social indicator data among the ten (10) target counties showed variation in key substance abuse-related indicators. There was also significant variation within counties among risk factors and consequences associated with substance abuse. This variation is significant, because it suggests that the GUADPI identify a specific number of indicators to target to better focus its prevention efforts. Although the GUADPI is comprehensive in nature, resources are not available to address each of the indicators included in this report.

RECOMMENDATIONS FOR THE GEORGIA UNDERAGE DRINKING PREVENTION INITIATIVE

The following recommendations are based on findings included in this report and preliminary findings from the GUADPI evaluation 2009–2010. These recommendations focus on how the GUADPI can most effectively achieve its stated goals and objectives.

I. Continued Focus on Target counties

Although the Needs Reassessment Report was designed to examine the progress of target counties on key outcome indicators and identify potential new target counties, we recommend that the GUADPI continue to provide targeted services to the original targeted communities. Findings from this

assessment and preliminary findings from the GUADPI evaluation suggest that continued efforts are needed to achieve project-related goals. However, The Council on Alcohol and Drugs (TCAD) should use the updated ranking data to strategically plan the next 5 year cycle of activities that would include integrating potential new target counties.

II. Increase Awareness on Current UAD Laws

As stated above, Georgia does not have some alcohol-related laws specifically targeting underage youth that other states do. The GUADPI should incorporate discussions of UAD laws into all training and technical assistance provided to the ten target counties. Additional provisions could be made to existing alcohol-related laws in an effort to prevent or reduce underage drinking. For example, provisions that target drivers under 21 years of age might include “Use/Lose” laws. Alcohol violations committed by underage drinkers would result in the complete loss of driving privileges (NIAAA/APIS, n.d.).

III. Greater Emphasis on Policy and Practice Changes

Changes to alcohol-related community-level policies and practices can have long lasting impact on substance abuse related consumption and consequences. The GUADPI should continue its current efforts, but also identify opportunities to incorporate a more visible emphasis on the need to promote policies and practices that reduce access.

IV. Increase Understanding of College-Age Substance Use

This report could not provide an in-depth assessment of college age drinking for the state of Georgia because there was limited data available. Administration of surveys or accessing raw survey data from college-age and college-attending young adults is a critical component for developing a comprehensive UAD prevention effort.

V. Include community readiness assessment in future reports

Although not explicitly assessed in this report, an underlying theme of community unreadiness exists for some target counties that will impact the success of the Initiative. Therefore, it is extremely important that similar initiatives gather the appropriate data to determine if a community or sub-community is prepared to participate.

VI. Address Healthy People underage drinking objectives more fully

The GUADPI should consider incorporating specific objectives from the Healthy People 2010 objectives to assess their effectiveness in future projects. Selecting national targets should focus strategy selection and programmatic direction.

VII. Utilize multiple indicators to inform interventional strategies

State, regional and county underage drinking planners should use multiple indicators to determine how best to target resources to address underage drinking and related consequences.

VIII. Obtain stakeholder buy-in regarding target county selection

Several variations of methods to select/determine target counties have been described above. Ultimately, the target county identification methodology should align with stakeholders' priorities, feasibility, and resource considerations.

REFERENCES

- Applied Research Services (2006). Georgia Alliance for Drug Endangered Children: Needs Assessment. Available at: http://www.ars-corp.com/view/PDF_Files/GeorgiaAllianceforDrugEndangeredChildrenNeedsAssessment2006.pdf www.ars-corp.com
- Centers for Disease Control and Prevention (2009). MMWR: Alcohol use among high school students in Georgia-2007. *CDC*. 58(32): 885-890.
- Centers for Disease Control and Prevention (2010). YRBSS: Youth Risk Behavior Surveillance System. *CDC*. Retrieved January 3, 2010, from: <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>
- Chen, M., Gruenewald, P. J., & Remer, L. G. (2009). Does alcohol outlet density affect youth access to alcohol? *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*. 44(6): 582-589. doi: 10.1016/j.jadohealth.2008.10.136.
- Coleman, K. (1991). *A History of Georgia*. Athens: University of Georgia Press.
- Council on Alcohol and Drugs. (2007). Underage Drinking Needs Assessment Report. Available at: http://www.livedrugfree.org/fileadmin/files/PDFs/UAD_NA_Report_07.pdf
- Dawson, D.A., Goldstein, R.B., Chou, S.P., Ruan, W.J., & Grant, B.F. (2008). Age at first drink and the first incidence of adult-onset DSM-IV alcohol use disorders. *Alcoholism: Clinical and Experimental Research*. 32(12): 2149-2160.

Eaton, D.K., Kann, L., Kinchen, S., Shanklin, S., Ross, J., Hawkins, J., Harris, W.A., Lowry, R., McManus, T., Chyen, D., Lim, C., Breener, N.D., & Wechsler, H. (2008). MMWR- Youth Risk Behavior Surveillance-United States, 2007. *CDC*. 57(SS-4): 1-131.

Fiscal Research Center, Georgia State University, Andrew Young School of Policy Studies. (2009). Comparison of Georgia's Tobacco and Alcoholic Beverage Excise Tax Rates Report.

Georgia Department of Education. GSHSii Survey. Available at:

http://www.doe.k12.ga.us/sia_titleiv.aspx

Georgia Department of Revenue. General Investigative and Underage Compliance Operations. Available at:

https://etax.dor.ga.gov/alcohol/underage_alcohol_investigative.aspx

Governor's Office of Highway Safety. Drivers License Information. Available at:

<http://www.dds.ga.gov/drivers/index.aspx>

Hearst, M.O., Fulkerson, J.A., Maldonado-Molina, M.M., Perry, C.L., & Komro, K.A. (2007). Who needs liquor stores when parents will do? The importance of social sources of alcohol among young urban teens. *Preventive Medicine*. 44: 471-478.

Hingson, R. W., Heeren, T., & Winter, M. R. (2006). Age of alcohol-dependence onset: associations with severity of dependence and seeking treatment. *Pediatrics*, 118(3), e755-763.

- Hingson, R.W., & Wenxing, Z. (2009). Age of drinking onset, alcohol use disorders, and unintentionally injuring oneself and others after drinking. *Pediatrics*. 123: 1477-1484.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). Monitoring the Future national survey results on drug use, 1975-2008. Volume I: Secondary school students (NIH Publication No. 09-7402). Bethesda, MD: National Institute on Drug Abuse, 721 pp.
- Kanny, D, Horan, J, & Melstrom, P. (2009). Alcohol use among high school students—Georgia, 2007. *JAMA*. 303(1).
- Komro, K.A., Maldonado-Molina, M.M., Tobler, A.L., Bonds, J.R., & Muller, K.E. (2007). Effects of home access and availability of alcohol on young adolescents' alcohol use. *Addiction*. 102: 1597-1608.
- Mothers Against Drunk Driving. State Laws. Available at:
<http://www.madd.org/Drunk-Driving/Drunk-Driving/Laws.aspx>
- National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2010). State profiles of underage drinking laws: Georgia. *Alcohol Policy Information System*. Retrieved online January 4, 2010 from:
<http://www.alcoholpolicy.niaaa.nih.gov/stateprofiles/StateProfile.asp>
- National Survey on Drug Use and Health Report: State Estimates of Underage Drinking. (2006). Office of Applied Studies, Substance Abuse and Mental Health Services Administration.

Pacific Institute for Research and Evaluation. (2009). Underage drinking in Georgia: the facts. (2009). Available at:
http://www.livedrugfree.org/fileadmin/files/Underage_Drinking_Initiative/Underage_Drinking_Info/Georgia_2007.pdf

Paschall, M.J., Grube, J.W., Black, C., Flewelling, R.L., Ringwalt, C.L., & Biglan, A. (2007). Alcohol outlet characteristics and alcohol sales to youth: Results of alcohol purchase surveys in 45 Oregon communities. *Prev Sci.* 8: 153-159.

Peleg-Oren, N., Saint-Jean, G., Cardenas, G.A., Tammara, H., & Pierre, C. (2009). Drinking alcohol before age 13 and negative outcomes in late adolescence. *Alcoholism: Clinical and Experimental Research.* 23(11): 1966-1972.

Substance Abuse and Mental Health Services Administration. (2009). *Results from the 2008 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-36, HHS Publication No. SMA 09-4434).

Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies. (2010). National Survey on Drug Use and Health. *SAMHSA*. Retrieved online January 4, 2010 from: <http://oas.samhsa.gov/nsduh.htm>

Surgeon General's Call to Action To Prevent and Reduce Underage Drinking," U.S. Department of Health and Human Services, Office of the Surgeon General, 2007, Available at:
<http://www.surgeongeneral.gov/topics/underagedrinking/calltoaction.pdf>

- Swahn, M.H., Bossarte, R.M., & Sullivent, E.E. (2008). Victimization and perpetration among high-risk, seventh-grade adolescents: age of alcohol use initiation, suicidal behavior, and peer and dating violence. *Pediatrics*. 121: 297-305.
- Tobler, A.L., Komro, K.A., & Maldonado-Molina, M.M. (2009). Relationships between neighborhood context, family management practices and alcohol use among urban, multi-ethnic, young adolescents. *Prev Sci*. 10: 313-324.
- Treno, A.J., Ponicki, W.R., Remer, L.G., & Gruenewald, P.J. (2008). Alcohol outlets, youth drinking, and self-reported ease of access to alcohol: a constraints and opportunities approach. *Alcoholism: Clinical and Experimental Research*. 32(8): 1372-1379.
- Turner, S., & Wallace, S. (2009). Comparison of Georgia's tobacco and alcoholic beverage excise tax rates. Fiscal Research Center, Andrew Young School of Policy Studies, (192), Retrieved from <http://aysps.gsu.edu/frc/3007.html>
- U.S. Department of Health and Human Services (HHS). *Healthy People 2010: With Understanding and Improving Health and Objectives for Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. Available at: www.healthypeople.gov.
- Wechsler, H., & Nelson T.F. (2008). What We Have Learned From the Harvard School of Public Health College Alcohol Study: Focusing Attention on College Student Consumption and the Environmental Conditions That Promote It. *Journal of Studies on Alcohol and Drugs*. 69(4): 481-490.

Weimer, B.J., & Graham, P.W. 2006. Governor's Cooperative Agreement State Incentive Planning and Development Grant: Social Indicator Study to Assess Substance Use Prevention Needs at the State and County Levels in Georgia. Report prepared for the Georgia Department of Human Resources. Research Triangle Park, NC: RTI International.

APPENDICES

APPENDIX 1. HEALTHY PEOPLE 2010—GOALS AND OBJECTIVES FOR UNDERAGE DRINKING

Objective 7-2	Increase the proportion of middle, junior high, and senior high schools that provide school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD infection; unhealthy dietary patterns; inadequate physical activity; and environmental health
---------------	---

Target and baseline:

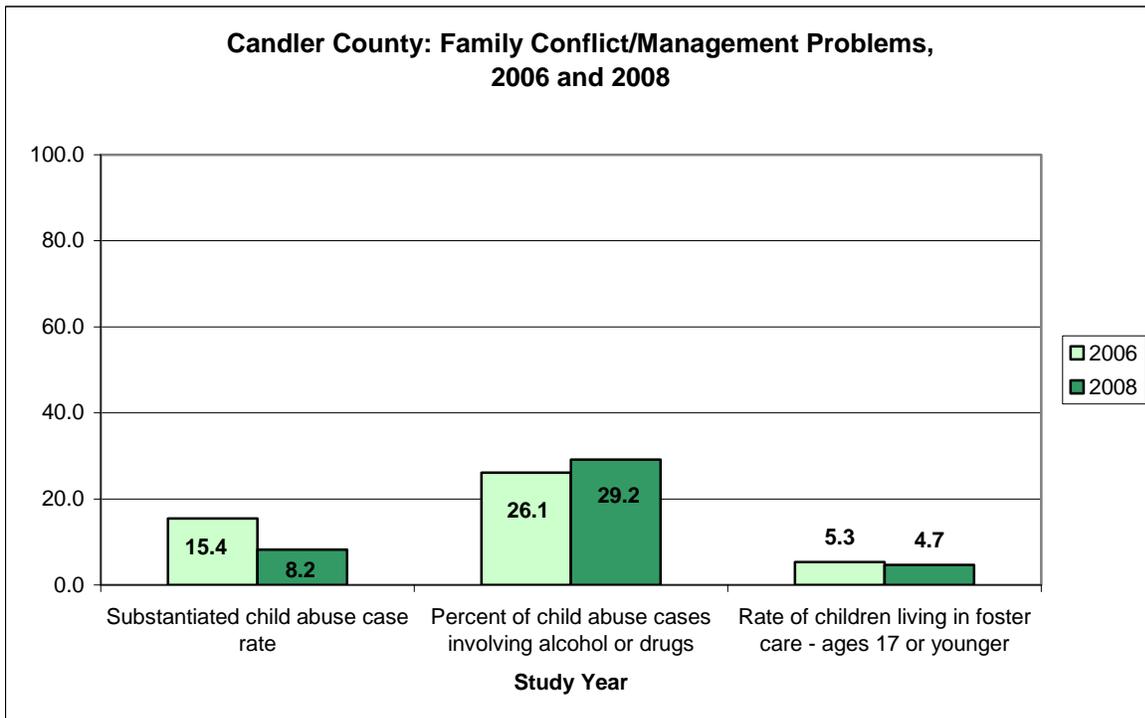
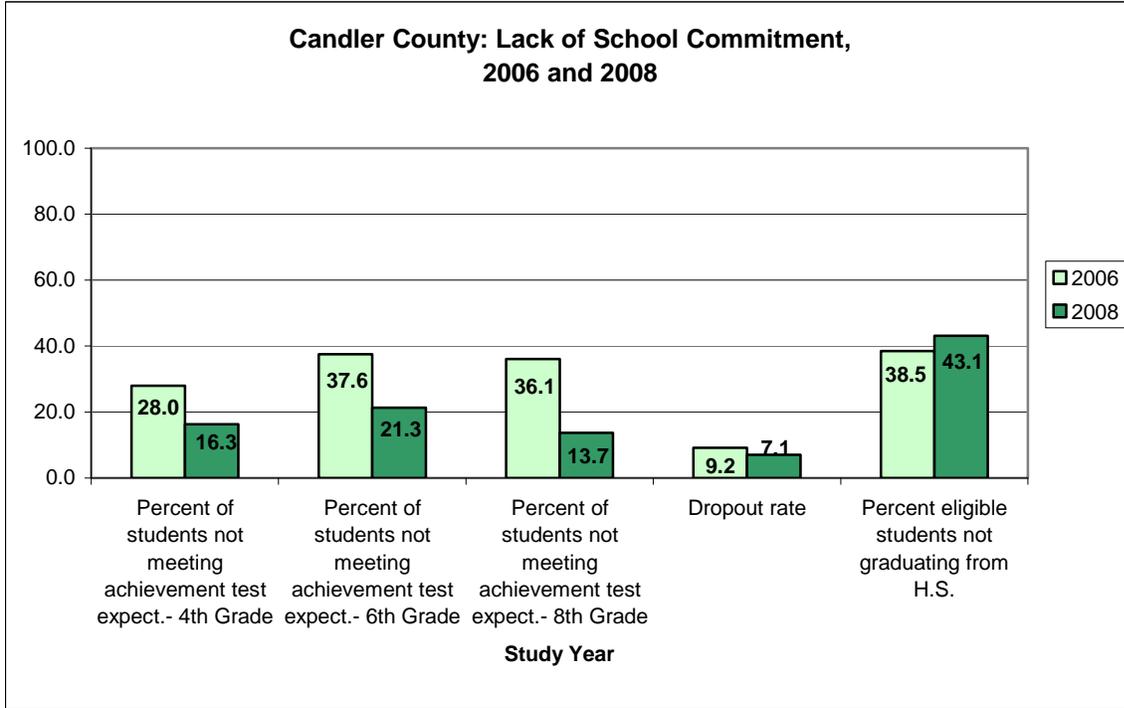
Objective	Schools Providing School Health Education in Priority Areas	1994 Baseline	2010 Target
		<i>Percent</i>	
7-2a.	All components	28	70
Individual components to prevent health problems in the following areas:			
7-2b.	Unintentional Injury	66	90
7-2c.	Violence	58	80
7-2d.	Suicide	58	80
7-2e.	Tobacco use and addiction	86	95
7-2f.	Alcohol and other drug use	90	95
7-2g.	Unintended pregnancy, HIV/AIDS, and STD infection	65	90
7-2h.	Unhealthy dietary patterns	84	95
7-2i.	Inadequate physical activity	78	90
7-2j.	Environmental health	60	80

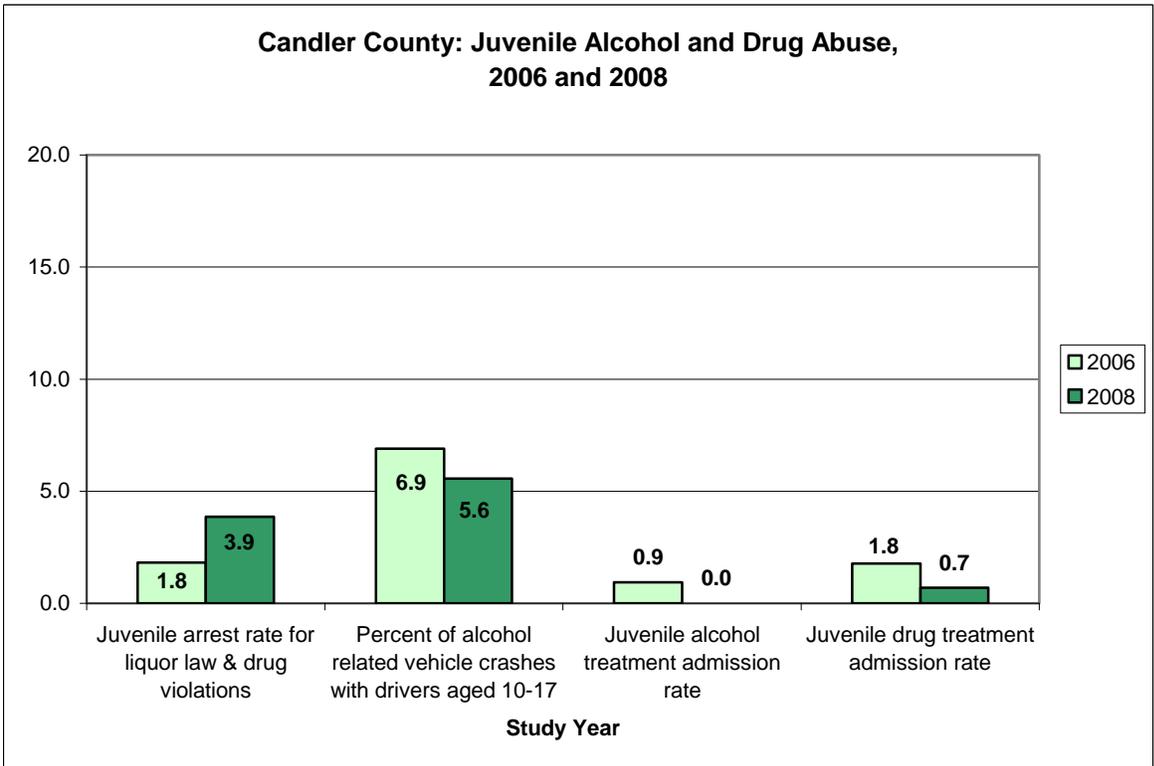
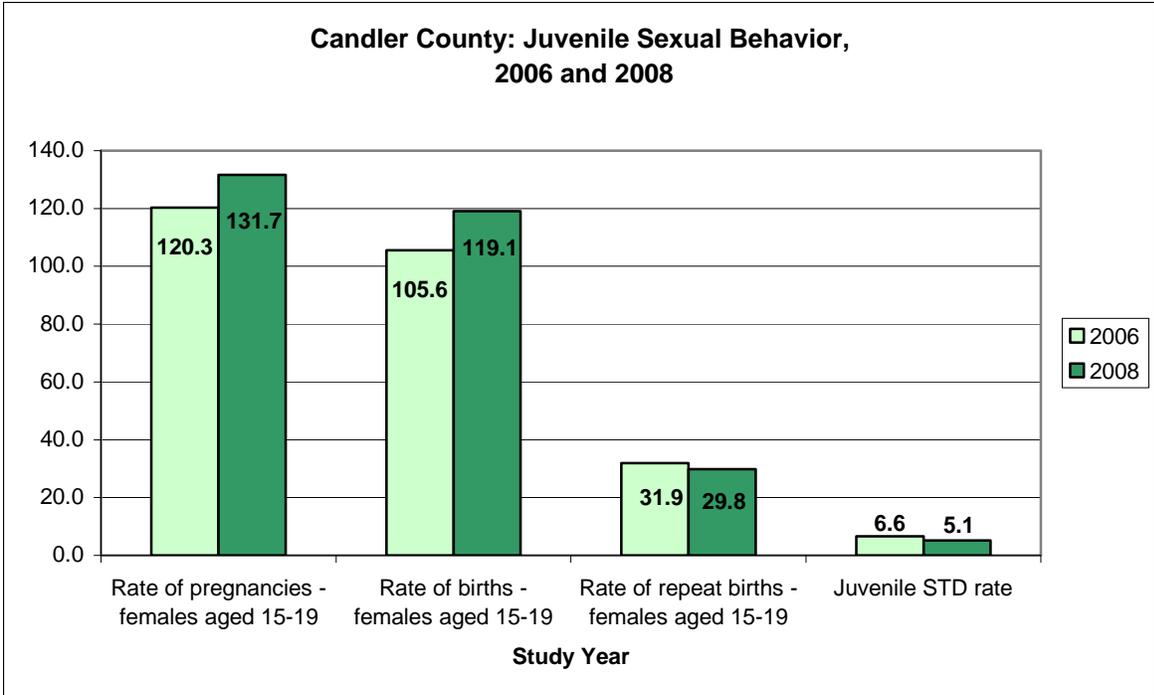
1. **Target setting method:** 150% improvement for 7-2a; percentage improvement varies for individual components 7-2b through 7-2j.
2. **Data source:** School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

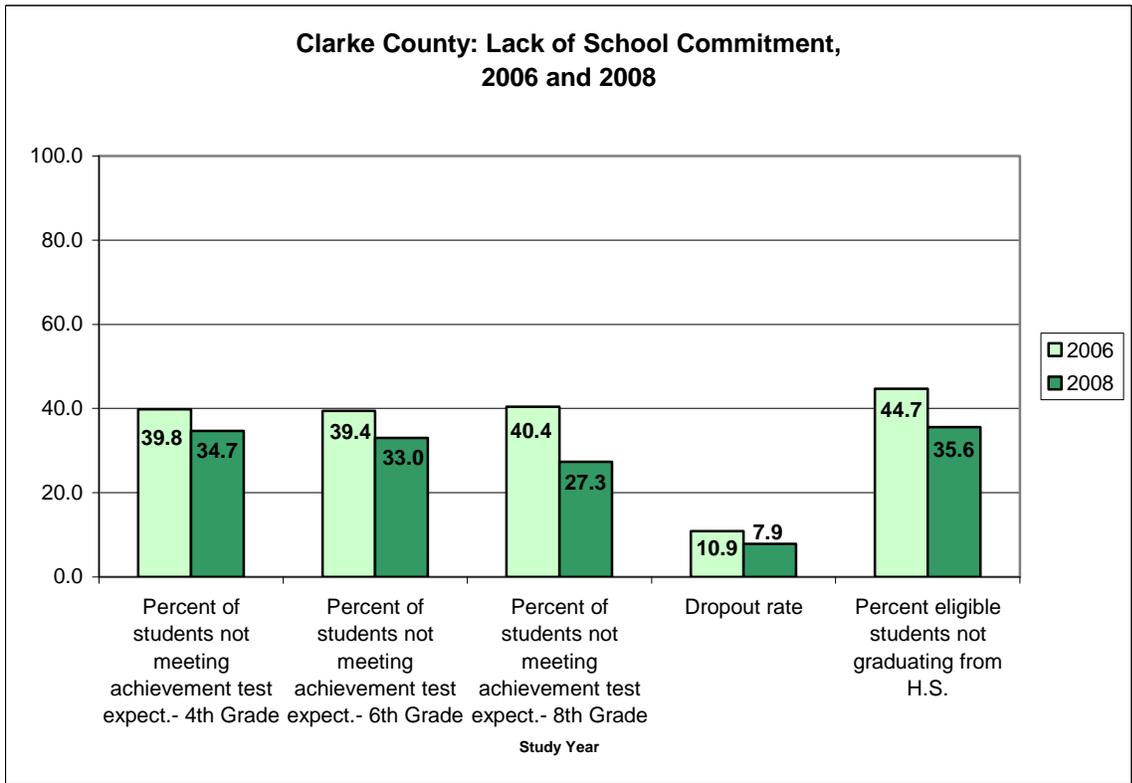
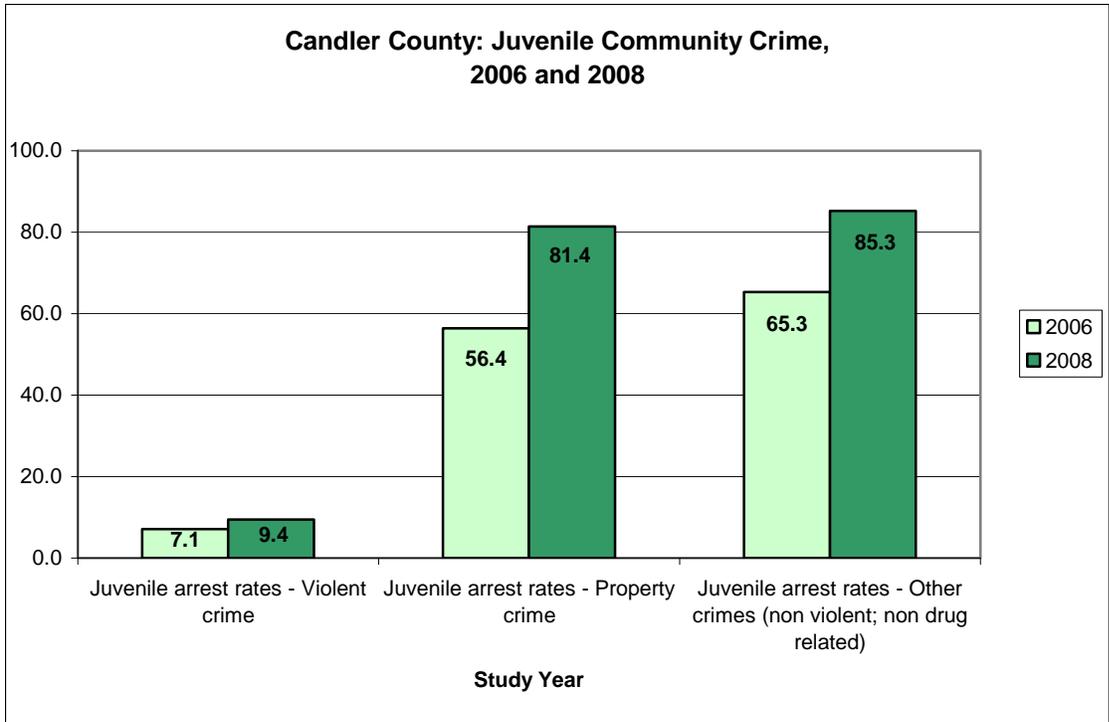
<http://www.healthypeople.gov/HP2020/>

SA HP2020-4	Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol
SA HP2020-5	Increase the age and proportion of adolescents who remain alcohol and drug free
SA HP2020-11	Increase the proportion of adolescents who disapprove of substance abuse
SA HP2020-12	Increase the proportion of adolescents who perceive great risk associated with substance abuse

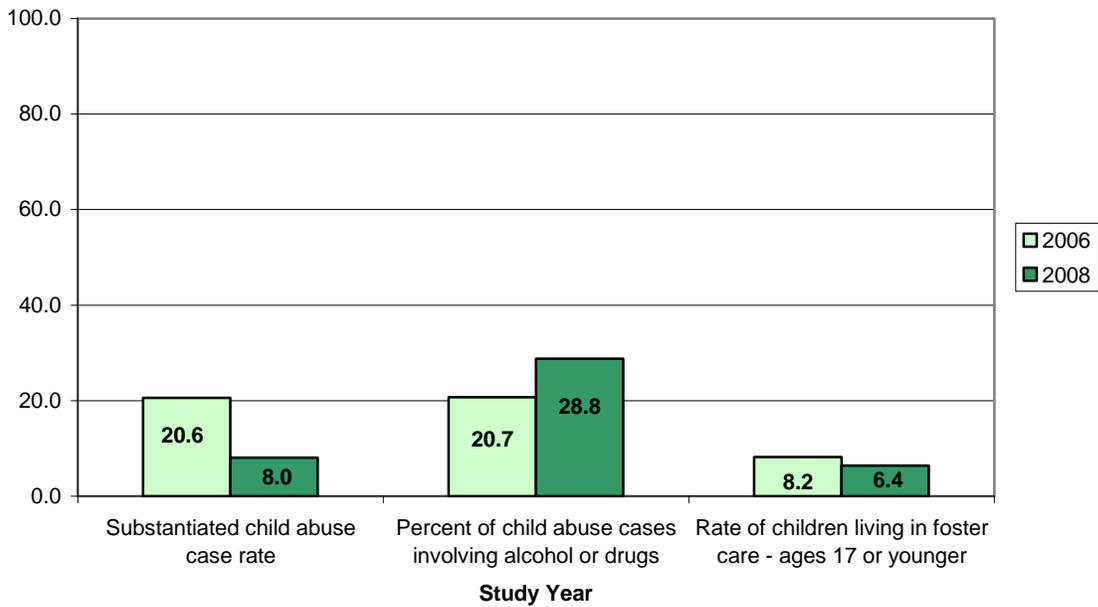
APPENDIX 2. TARGET COUNTY RISK INDICATORS 2006 AND 2008



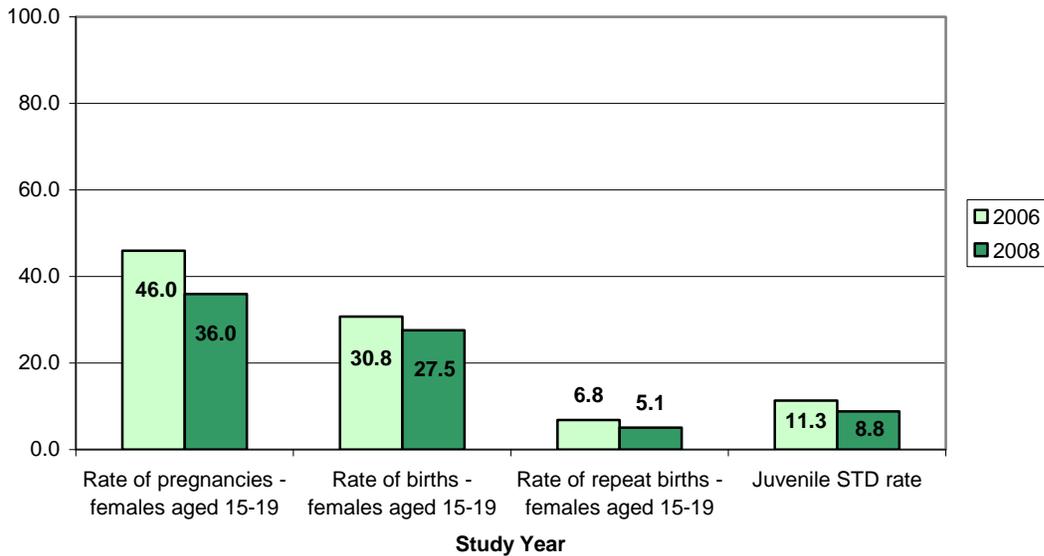




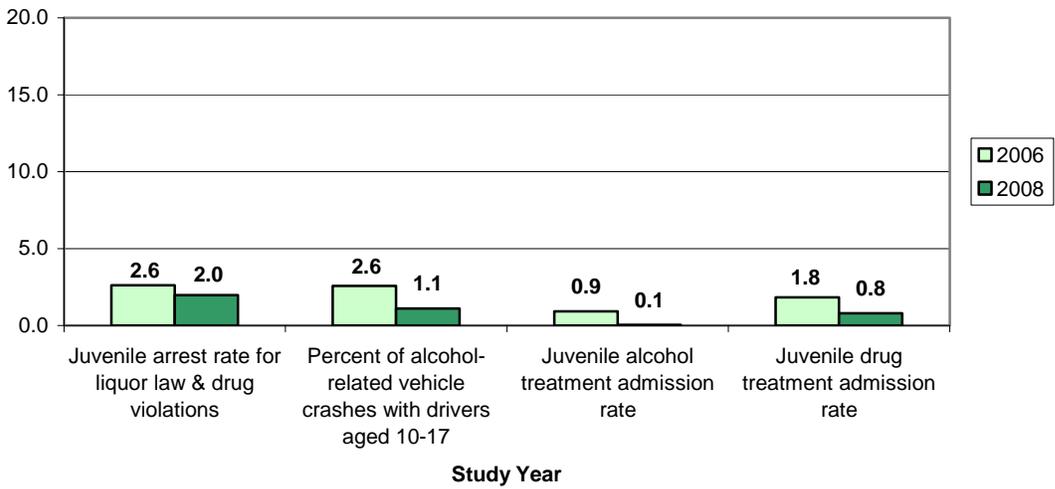
**Clarke County: Family Conflict/Management Problems,
2006 and 2008**



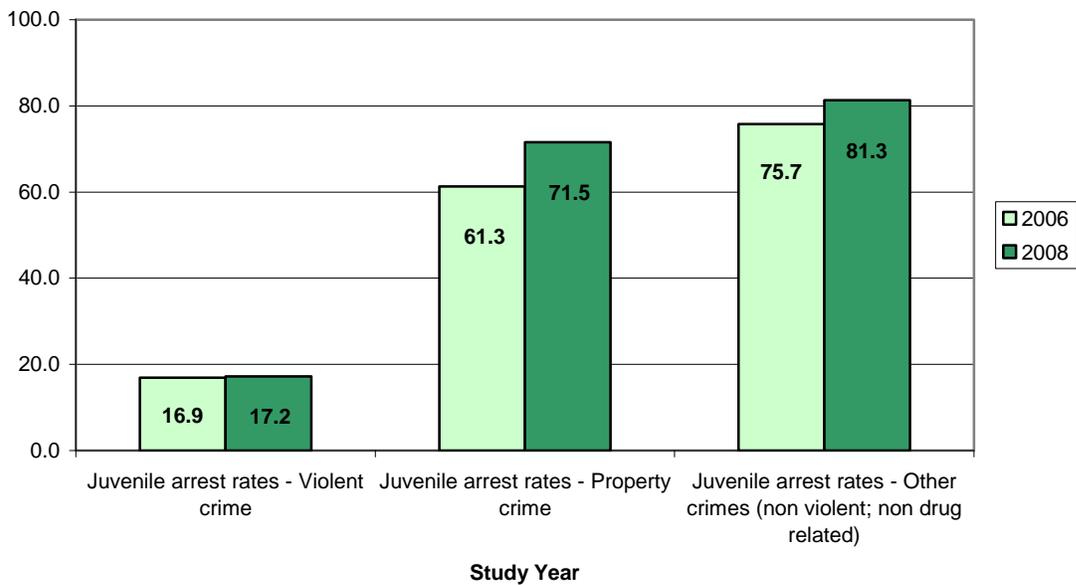
**Clarke County: Juvenile Sexual Behavior,
2006 and 2008**



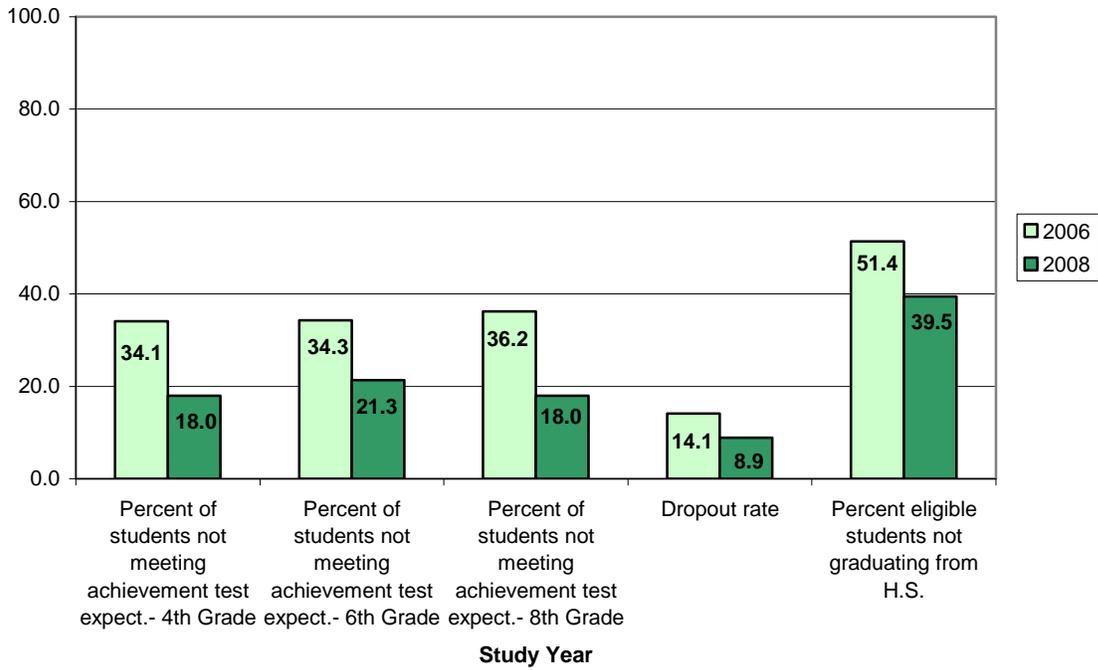
**Clarke County: Juvenile Alcohol and Drug Abuse,
2006 and 2008**



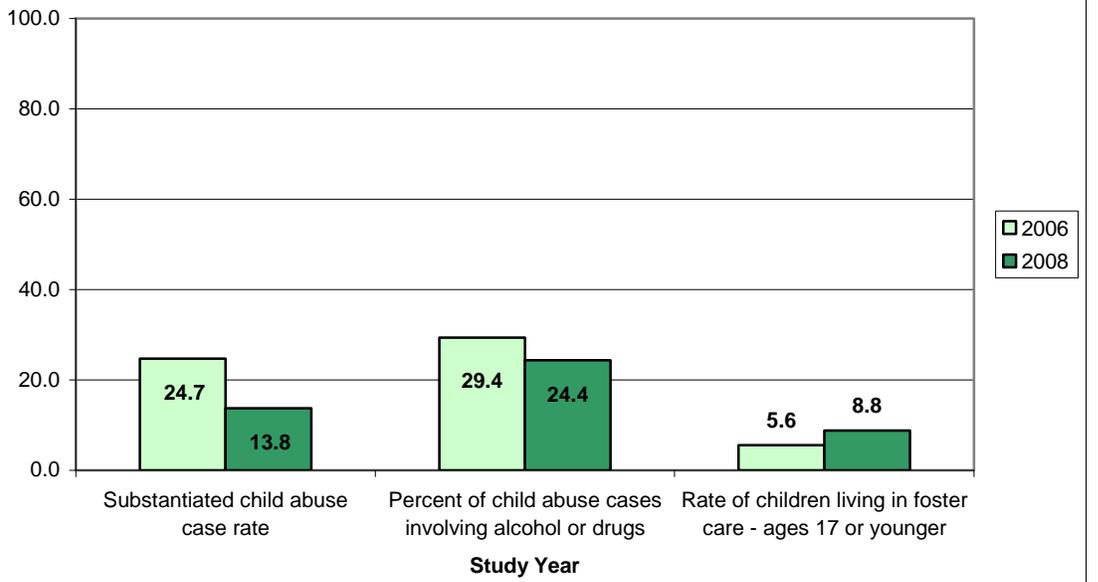
**Clarke County: Juvenile Community Crime,
2006 and 2008**

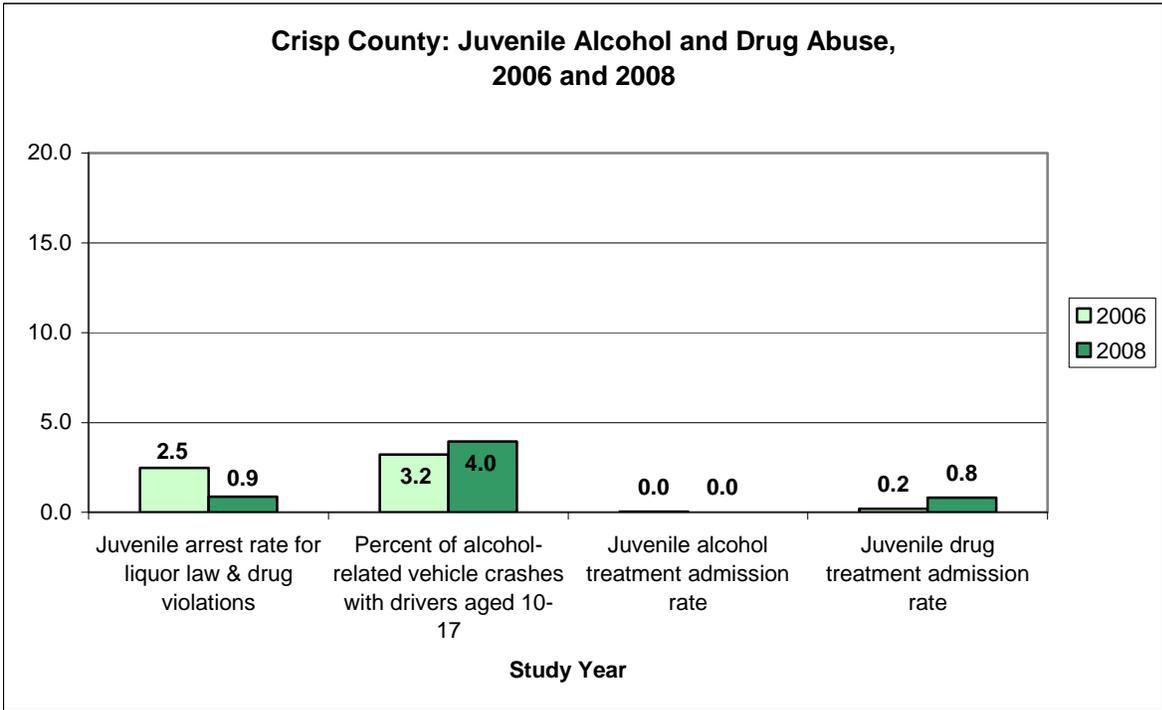
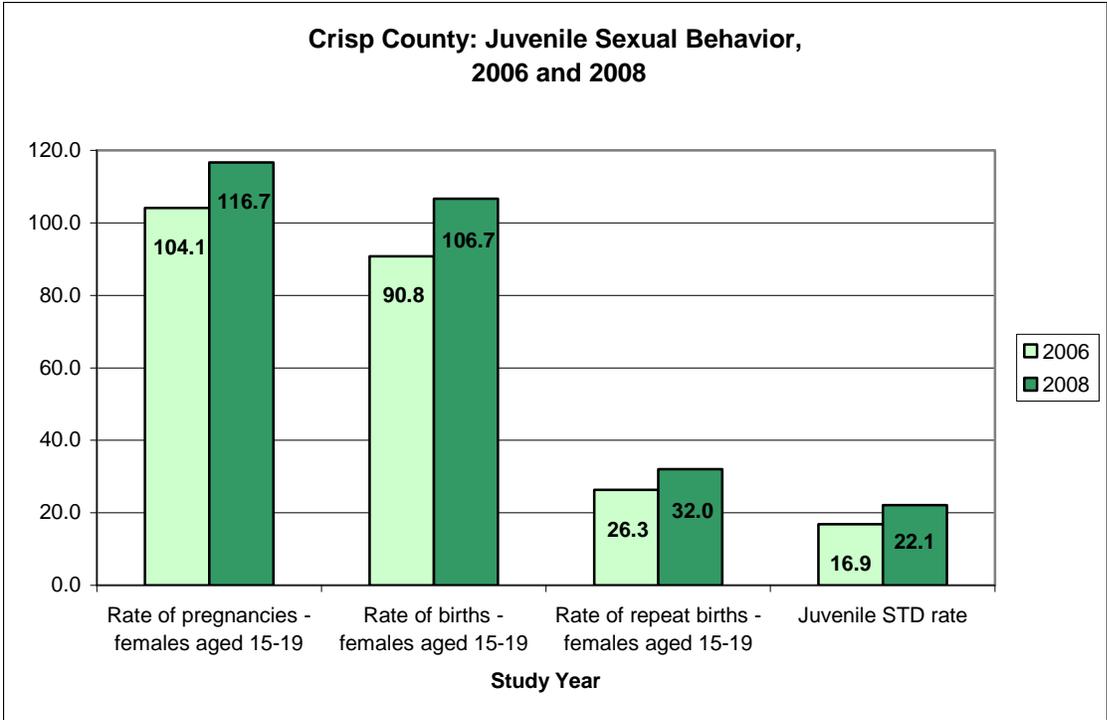


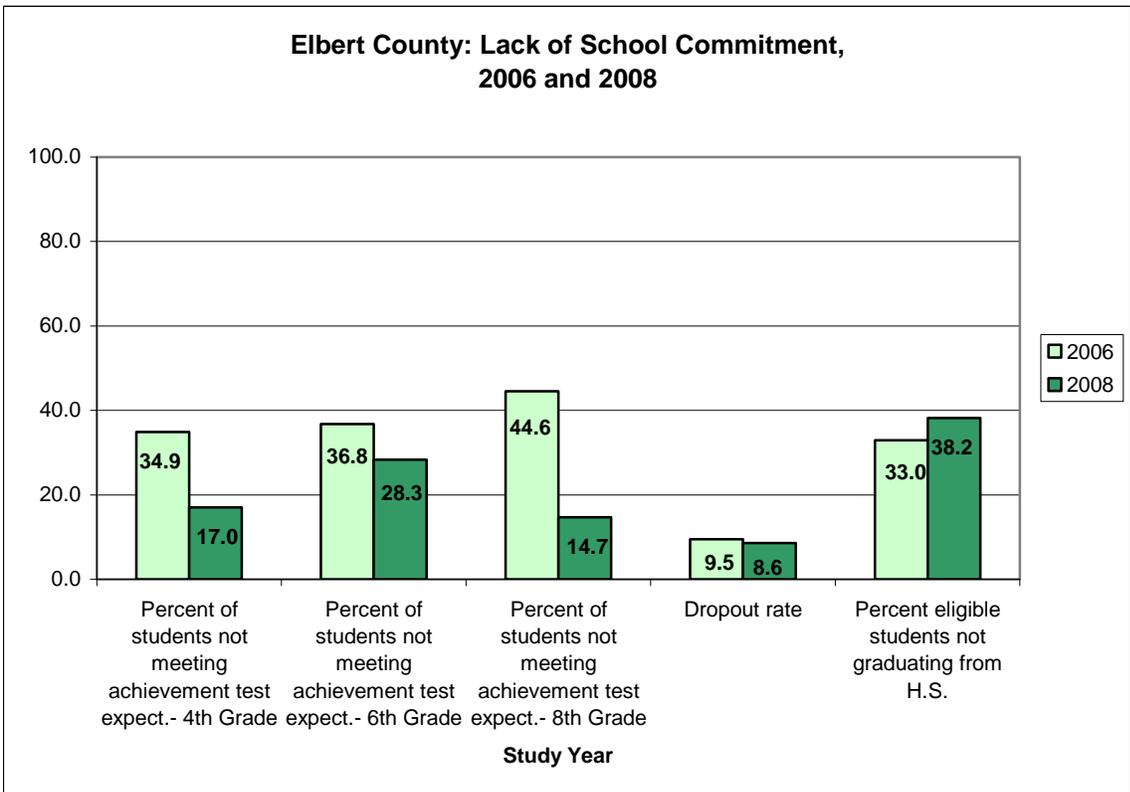
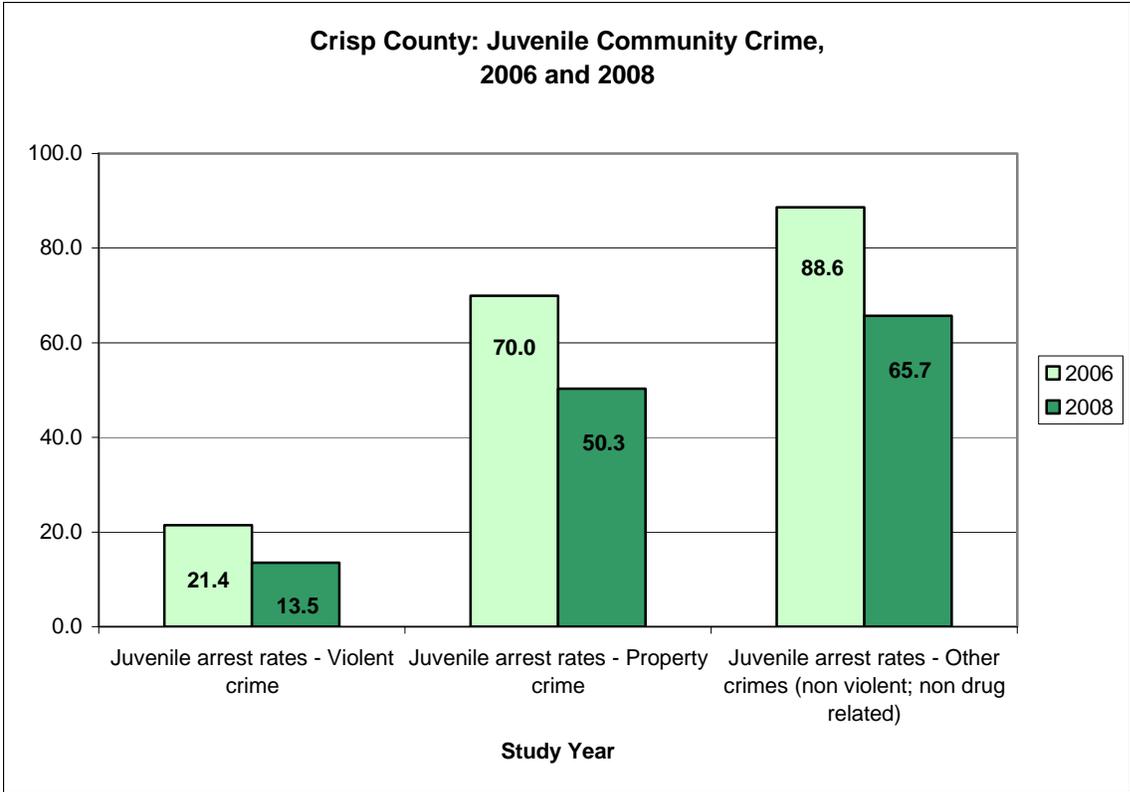
**Crisp County: Lack of School Commitment,
2006 and 2008**



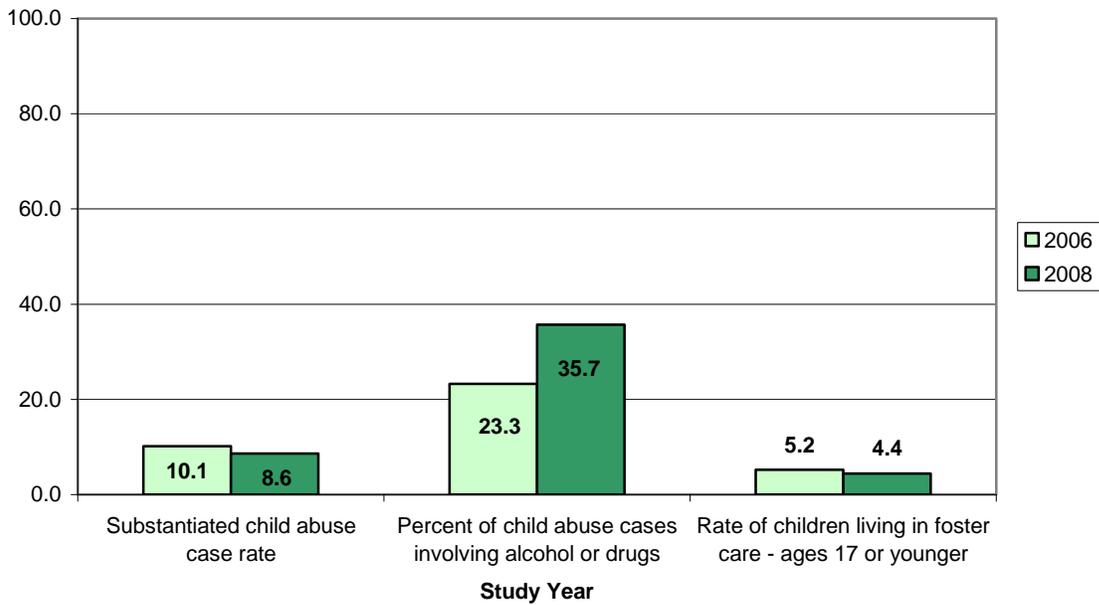
**Crisp County: Family Conflict/Management Problems,
2006 and 2008**



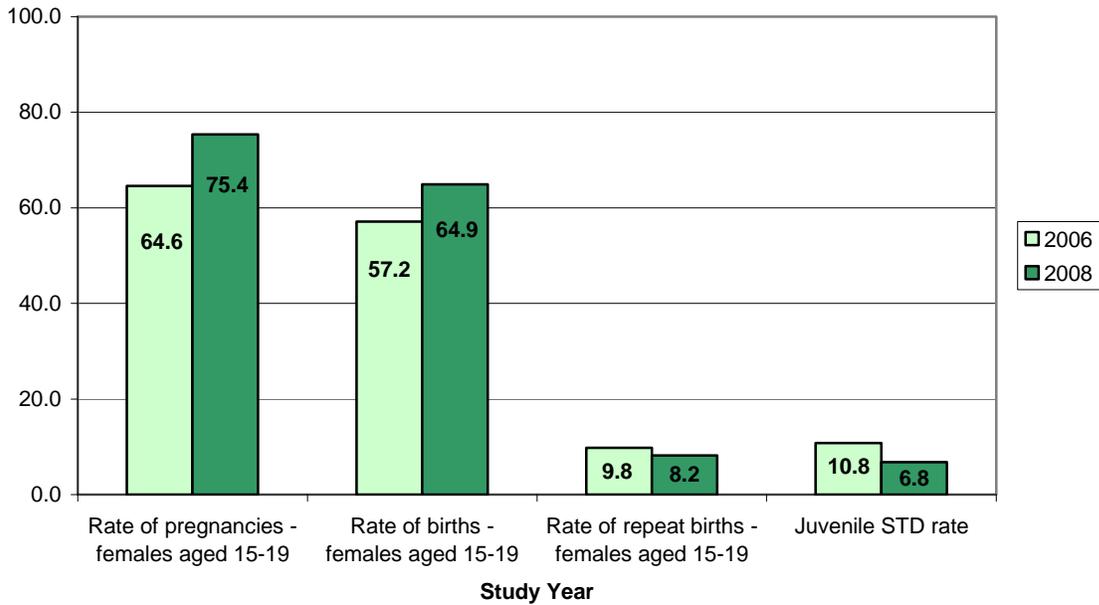




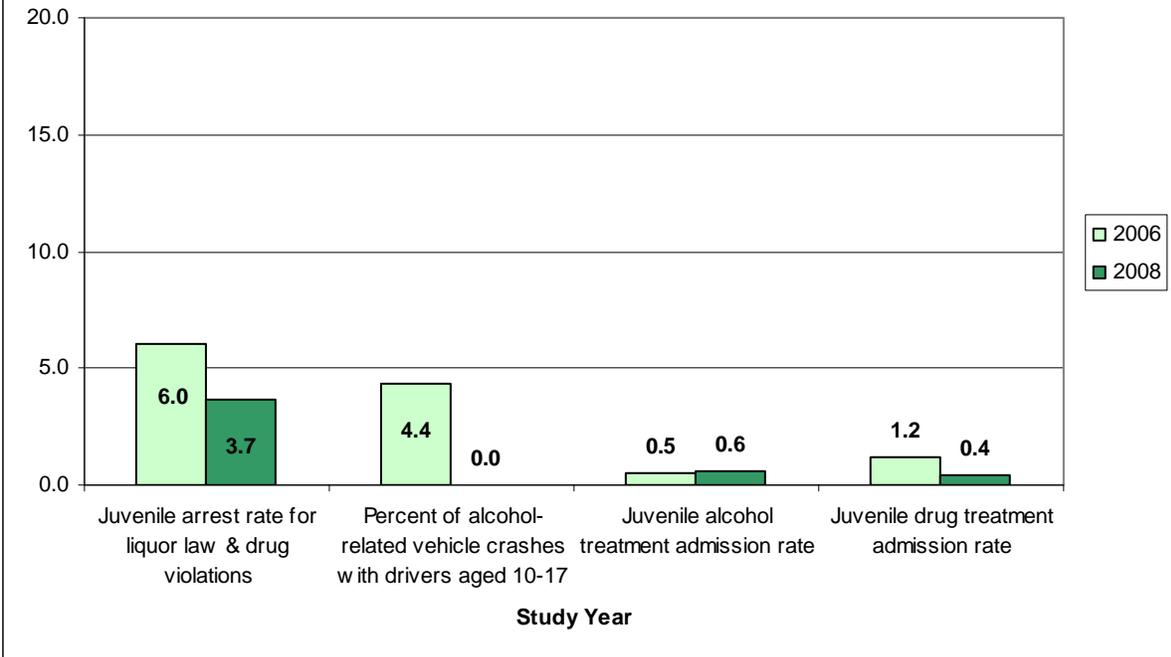
**Elbert County: Family Conflict/Management Problems,
2006 and 2008**



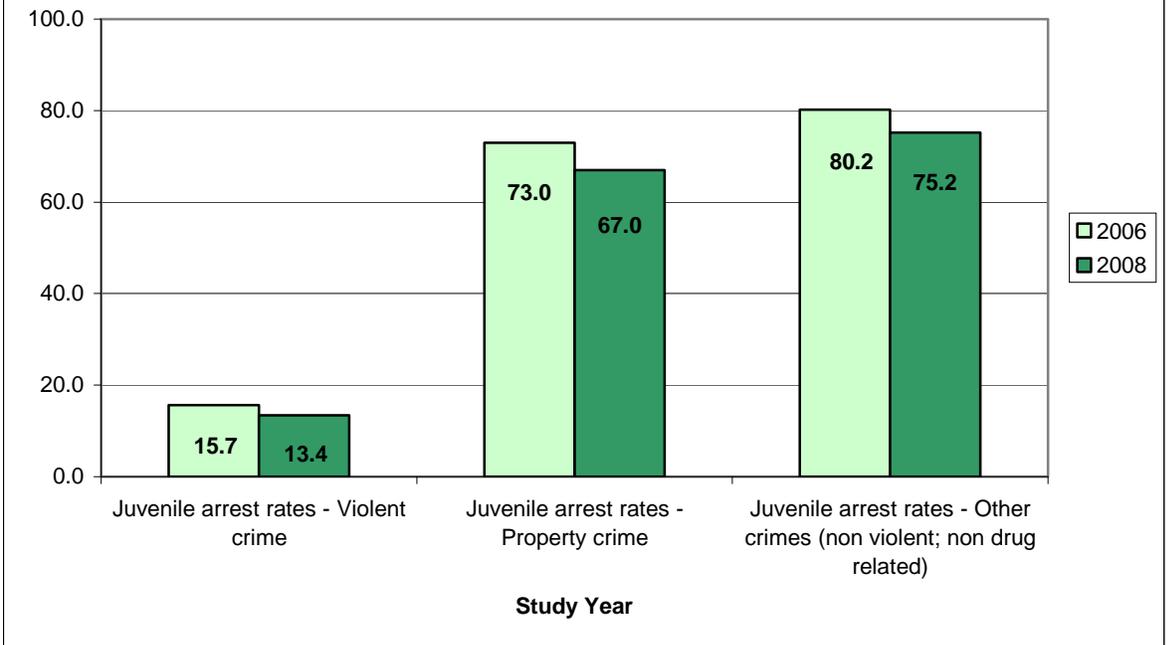
**Elbert County: Juvenile Sexual Behavior,
2006 and 2008**



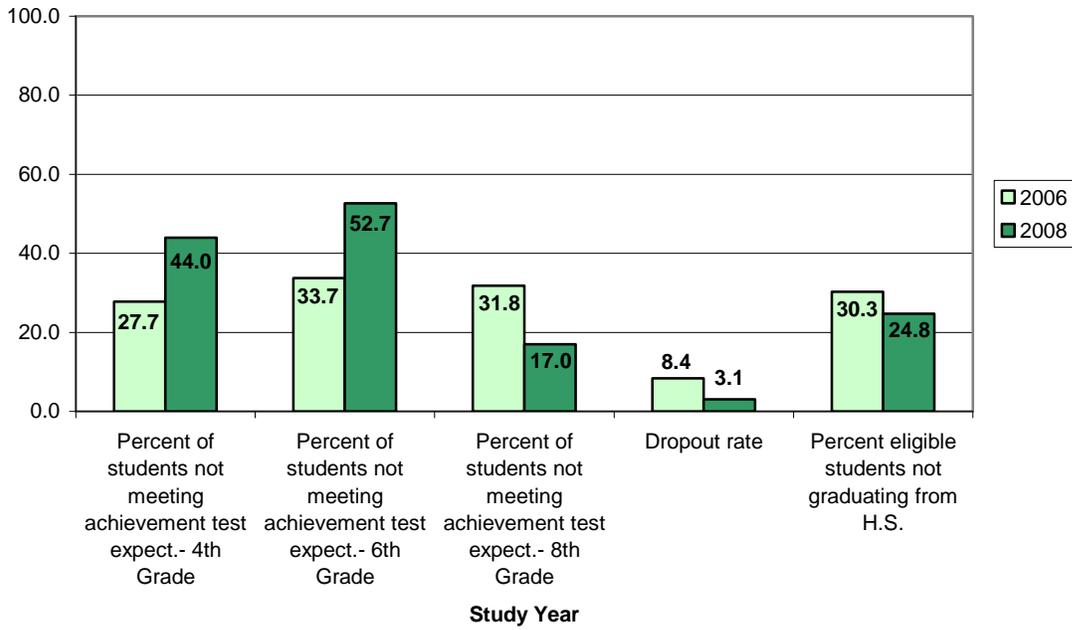
Elbert County: Juvenile Alcohol and Drug Abuse, 2006 and 2008



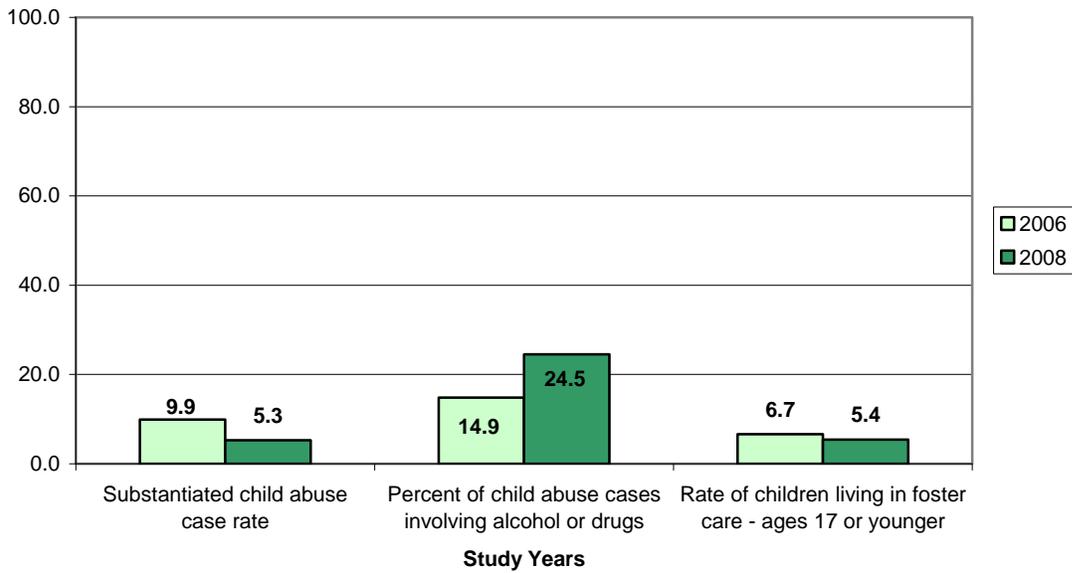
Elbert County: Juvenile Community Crime, 2006 and 2008

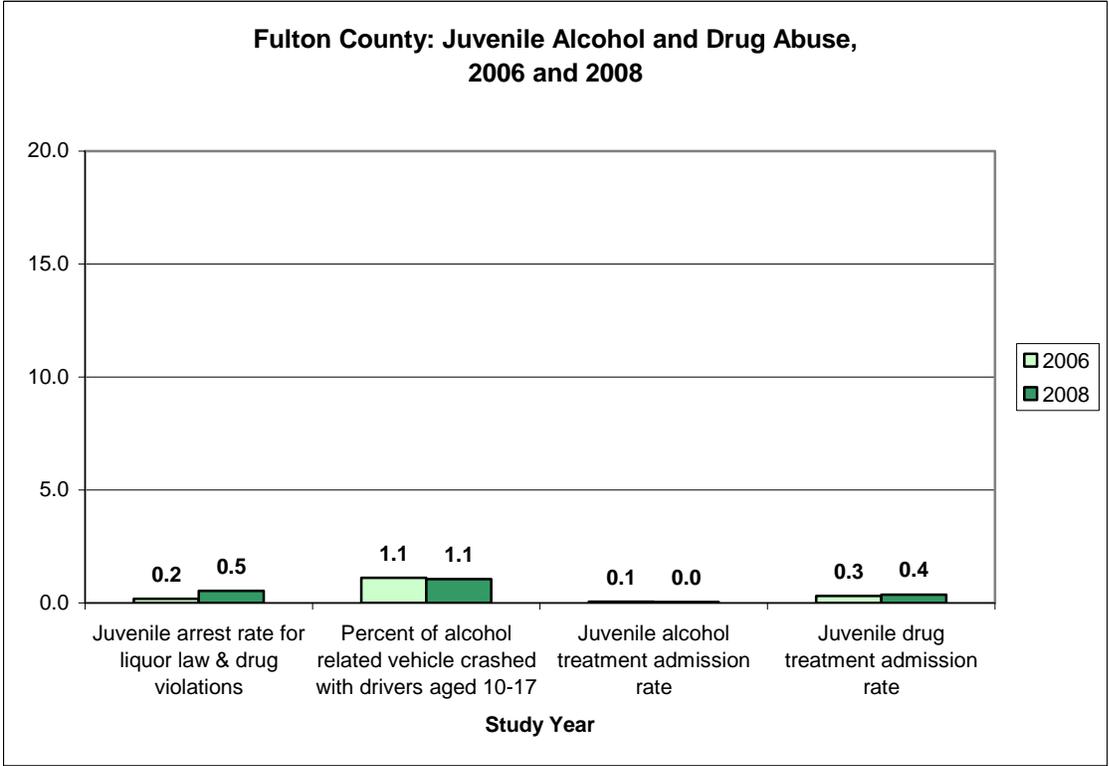
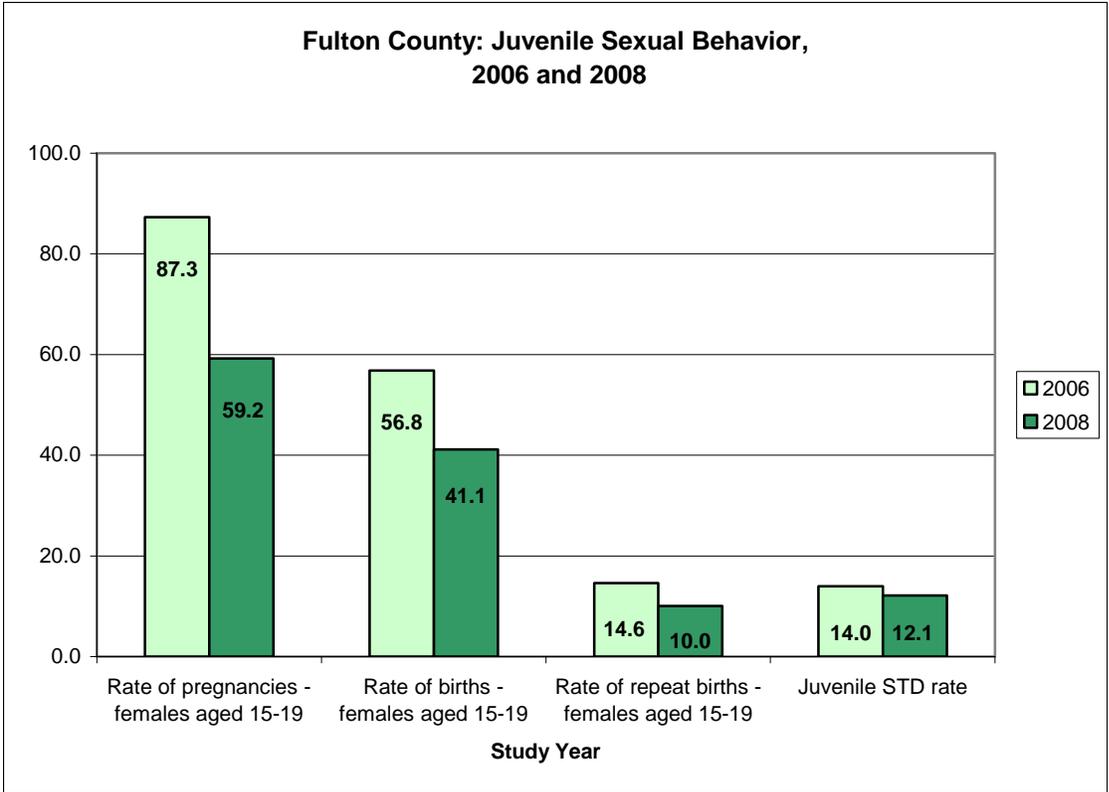


**Fulton County: Lack of School Commitment,
2006 and 2008**

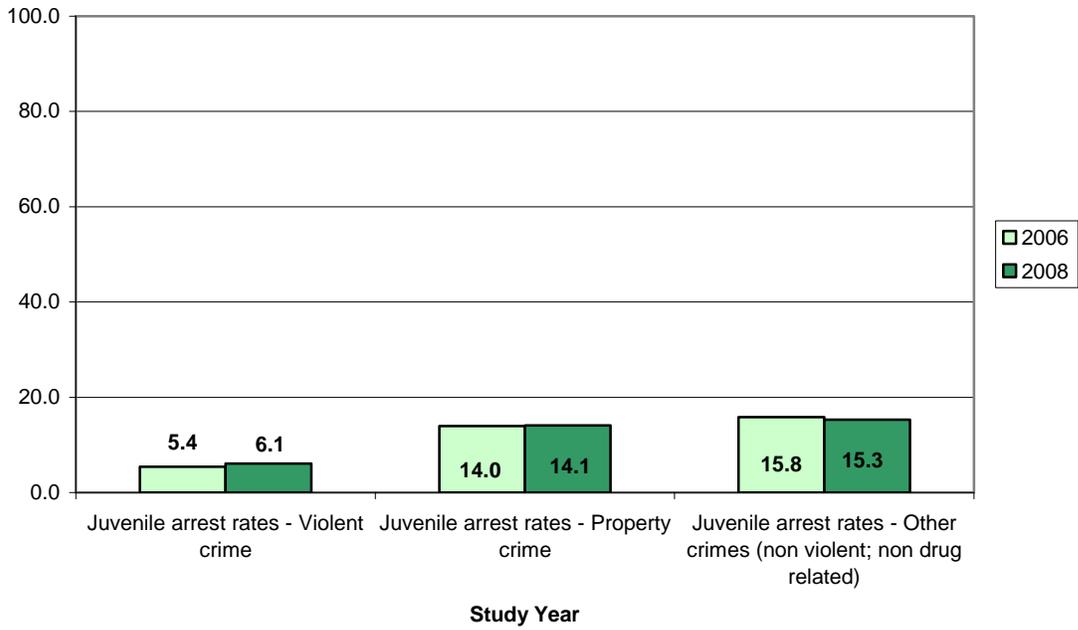


**Fulton County: Family Conflict/Management Problems,
2006 and 2008**

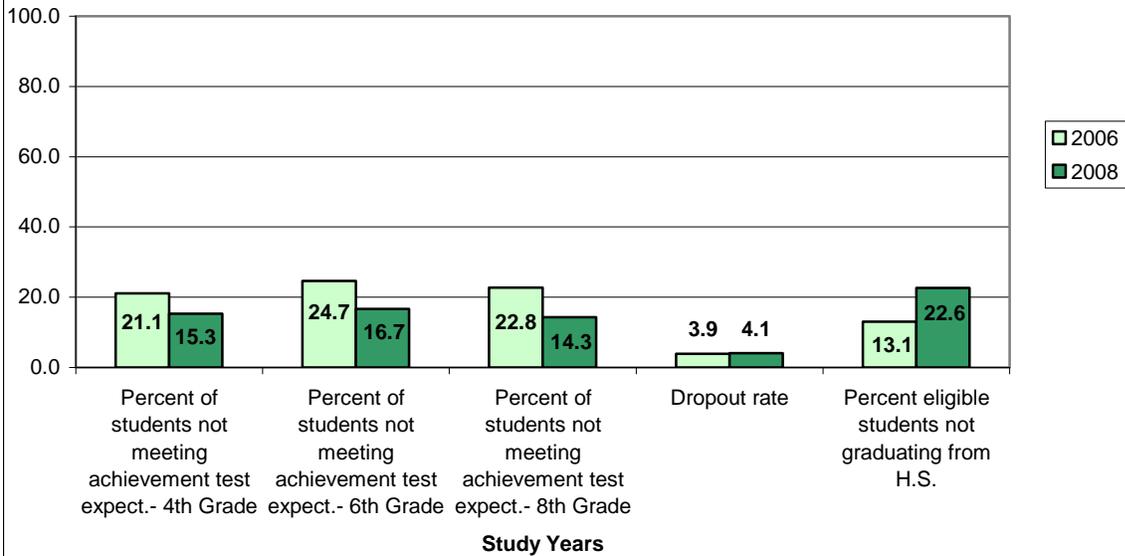




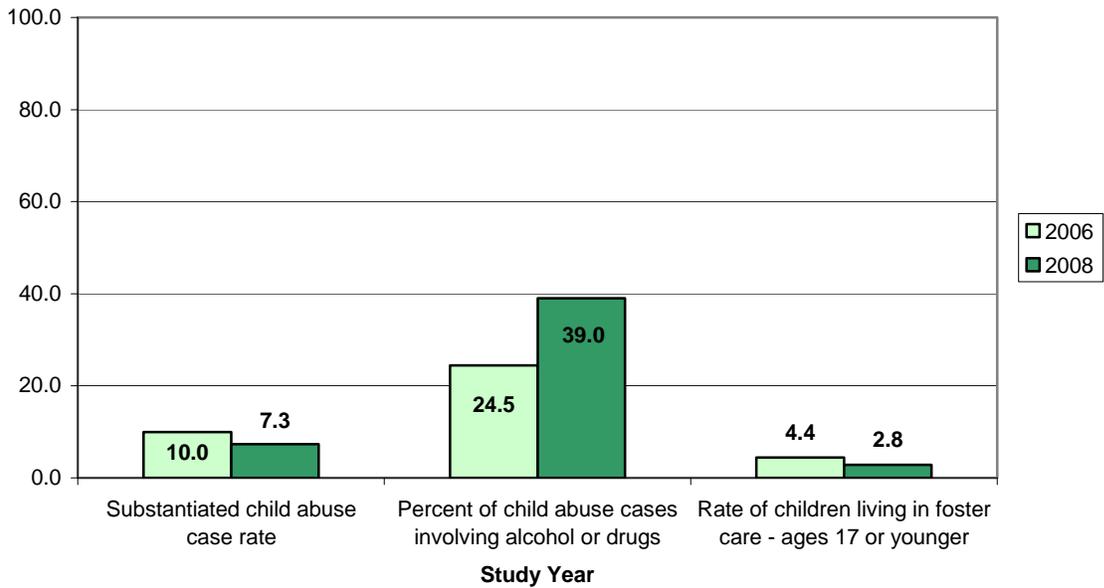
**Fulton County: Juvenile Community Crime,
2006 and 2008**

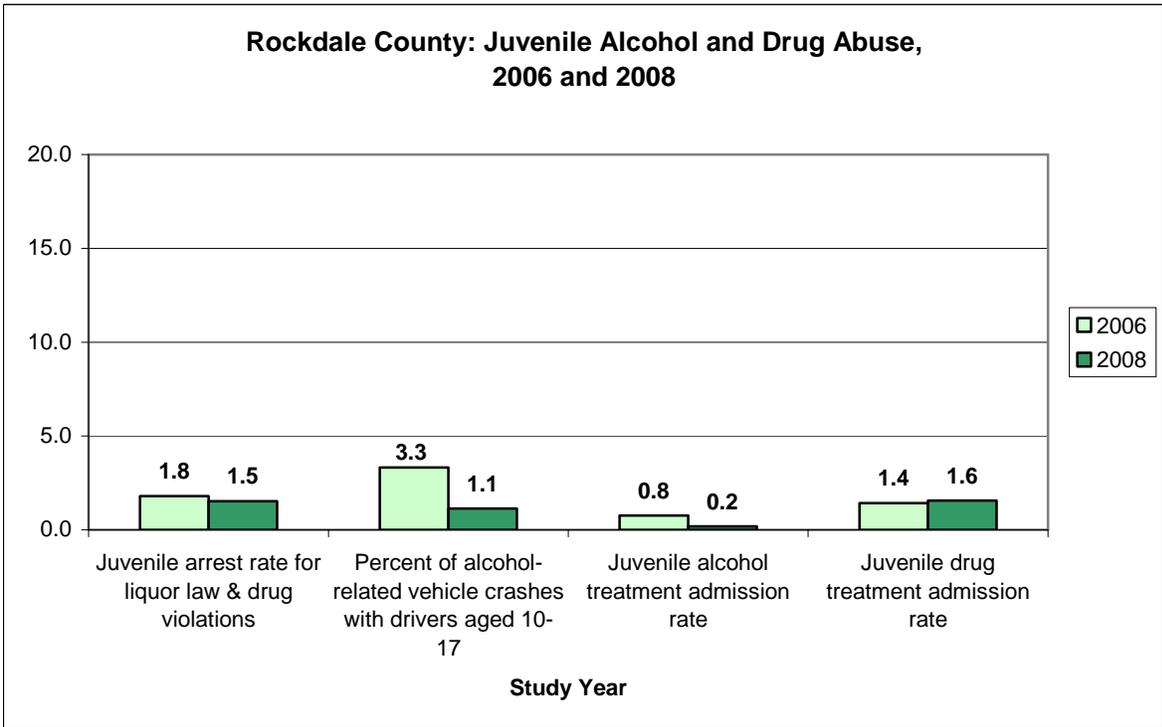
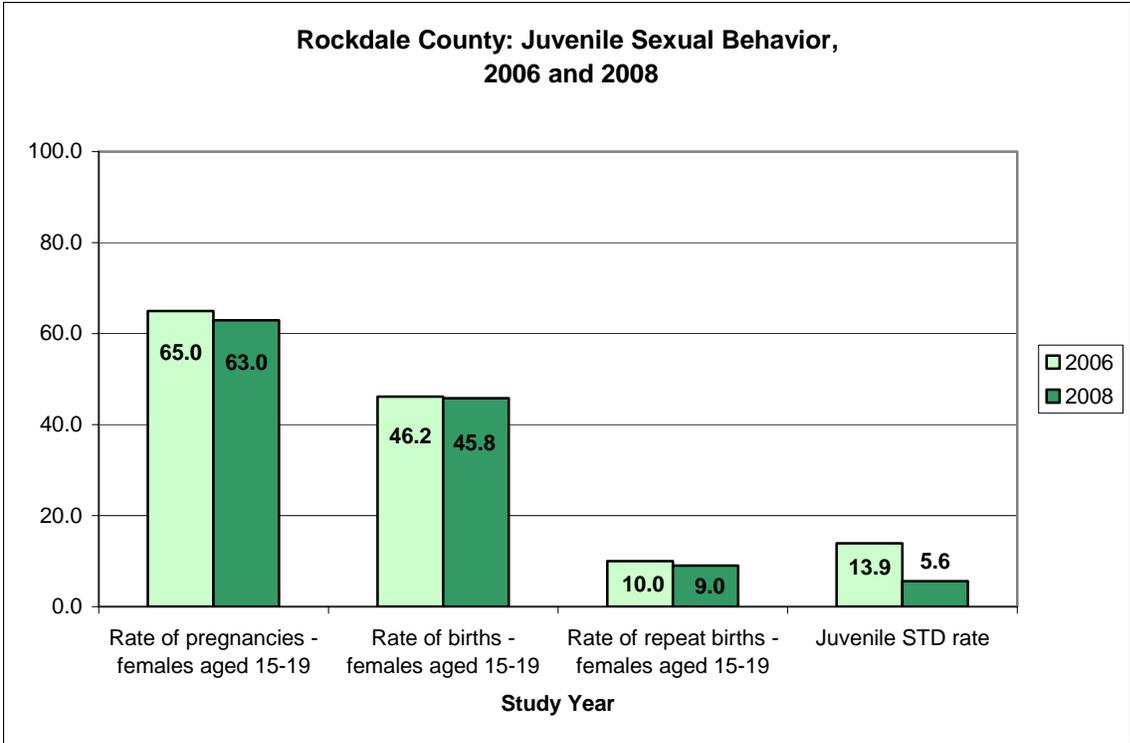


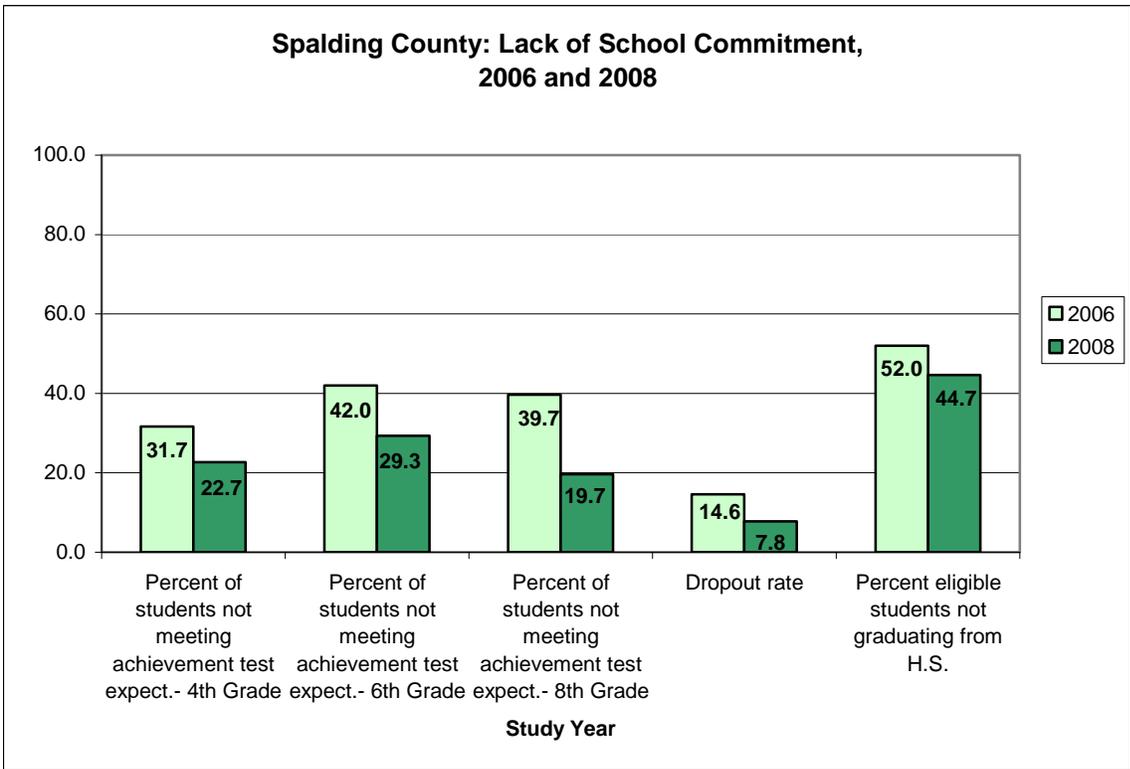
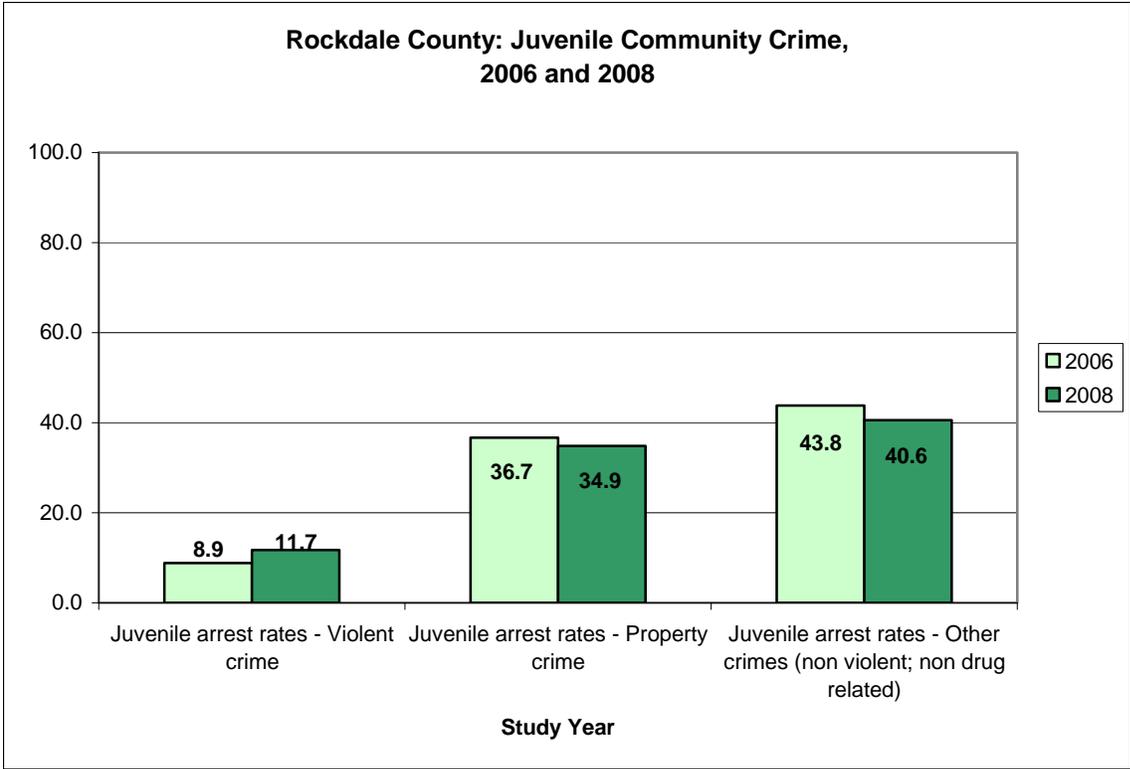
**Rockdale County: Lack of School Commitment,
2006 and 2008**



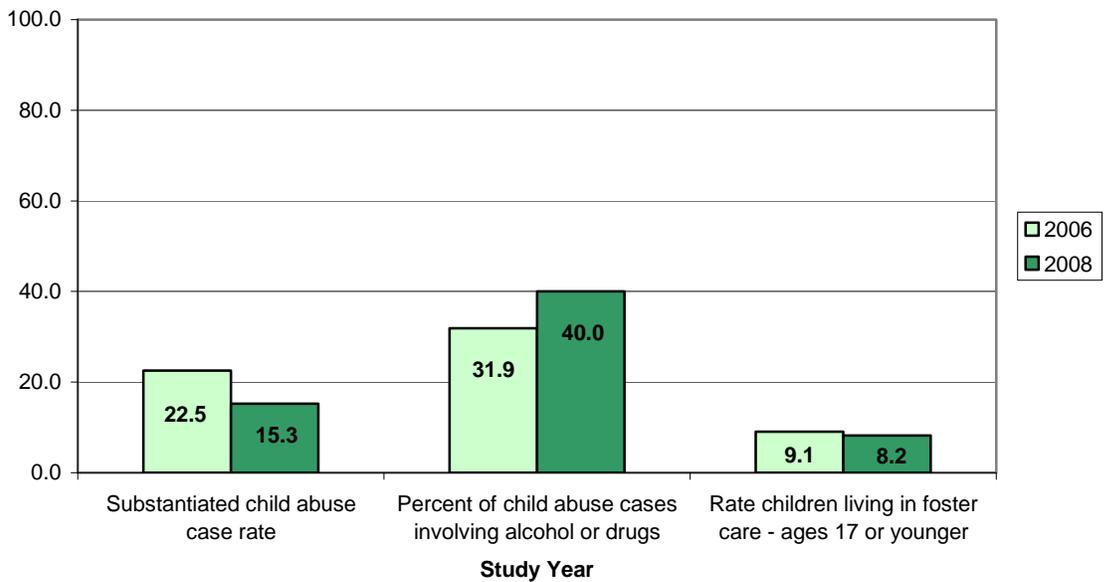
**Rockdale County: Family Conflict/Management Problems,
2006 and 2008**



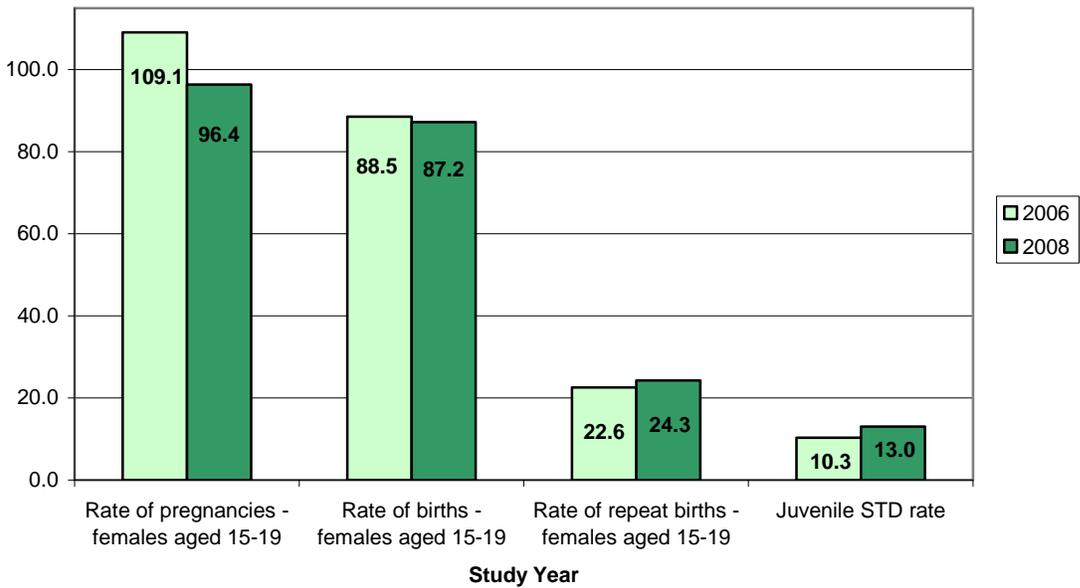




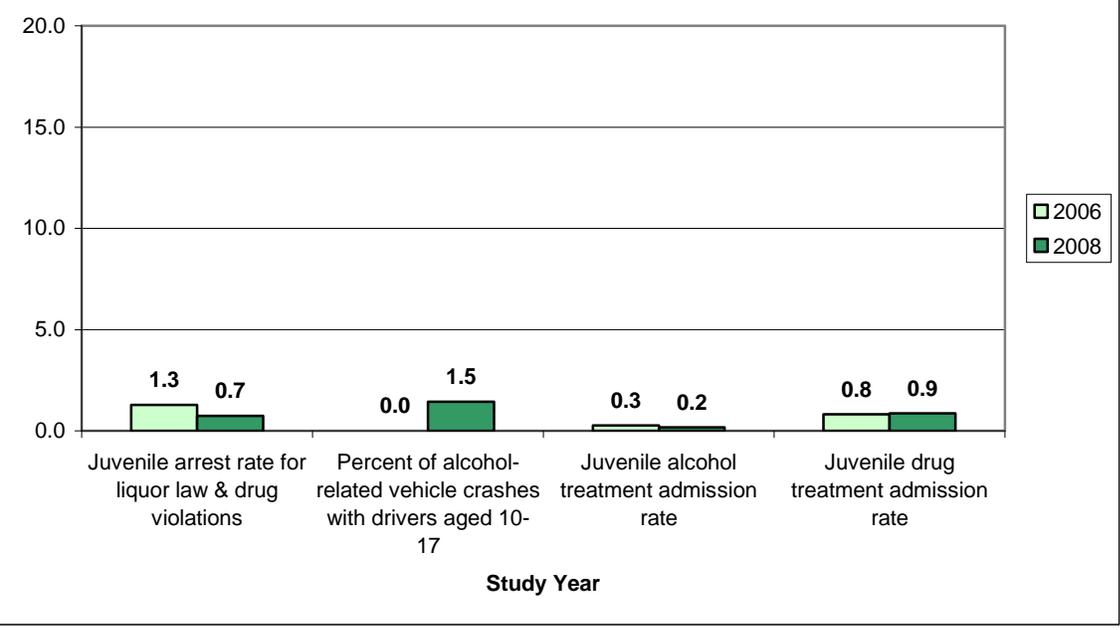
**Spalding County: Family Conflict/Management Problems,
2006 and 2008**



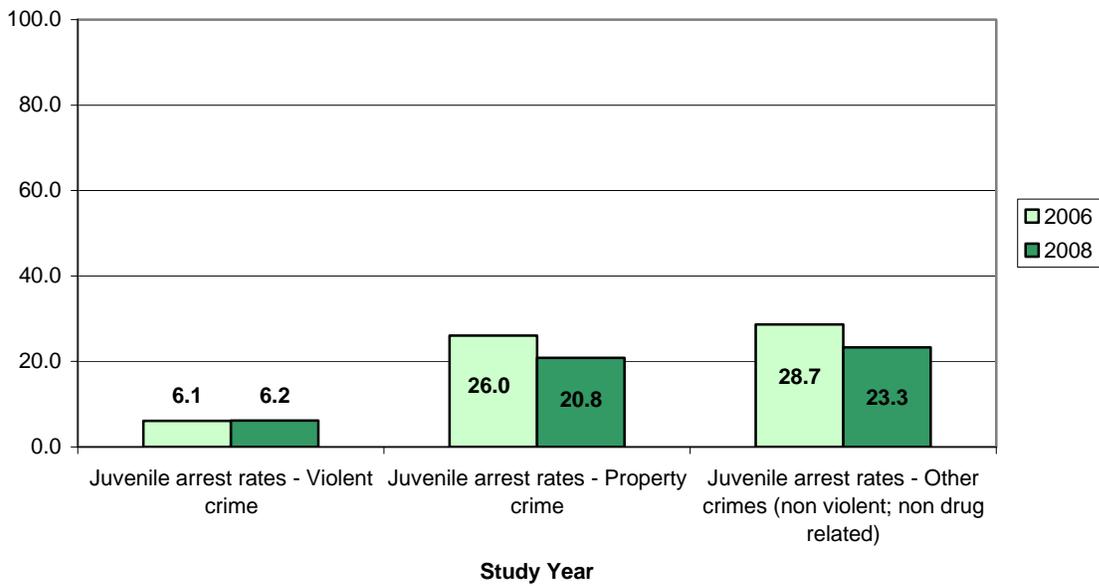
**Spalding County: Juvenile Sexual Behavior,
2006 and 2008**



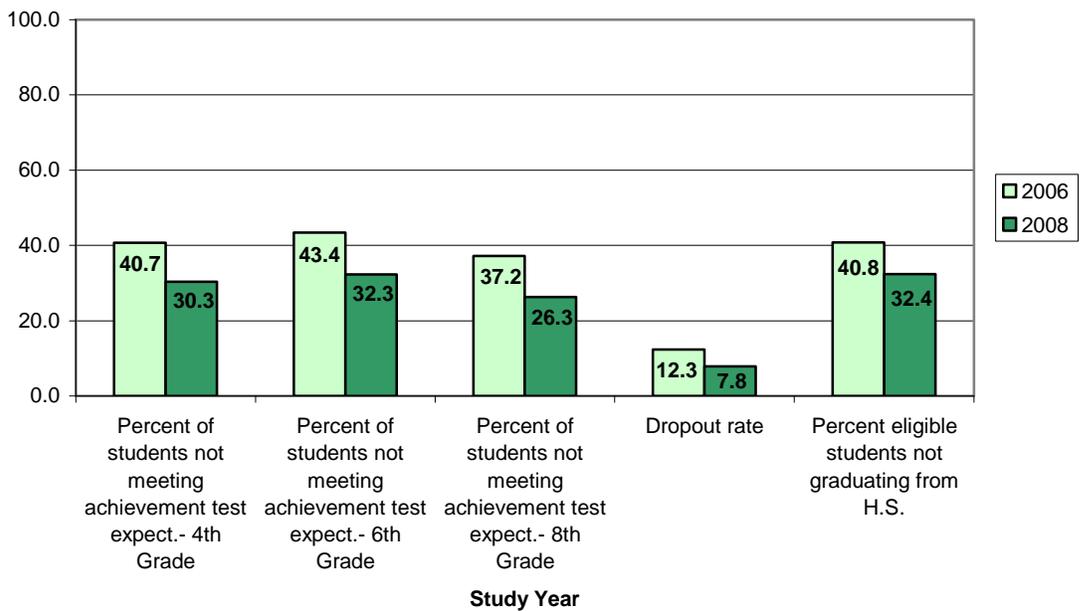
**Spalding County: Juvenile Alcohol and Drug Abuse,
2006 and 2008**



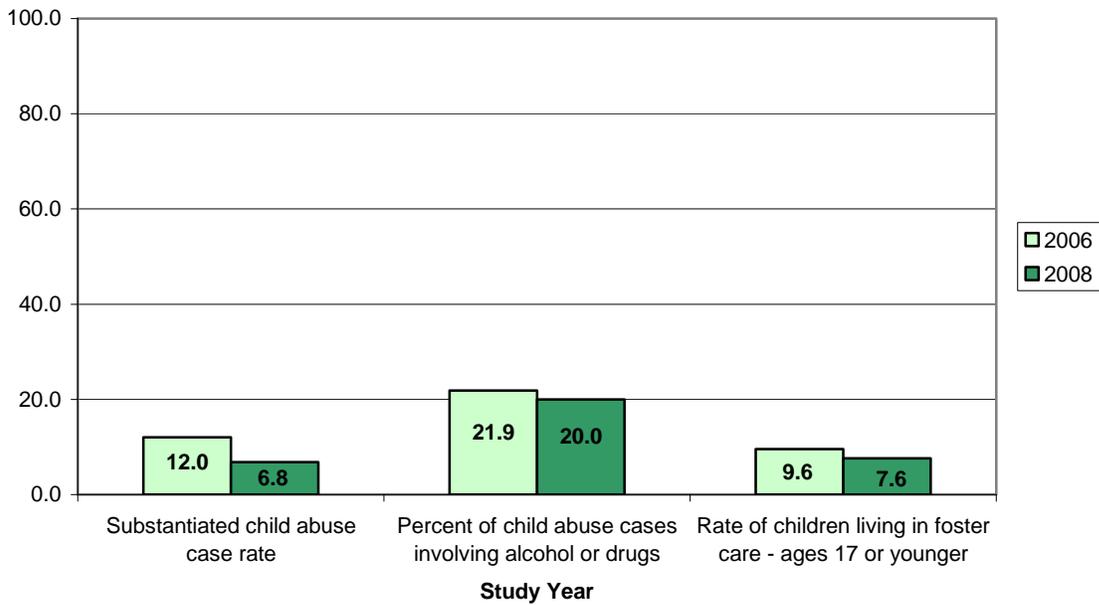
**Spalding County: Juvenile Community Crime,
2006 and 2008**



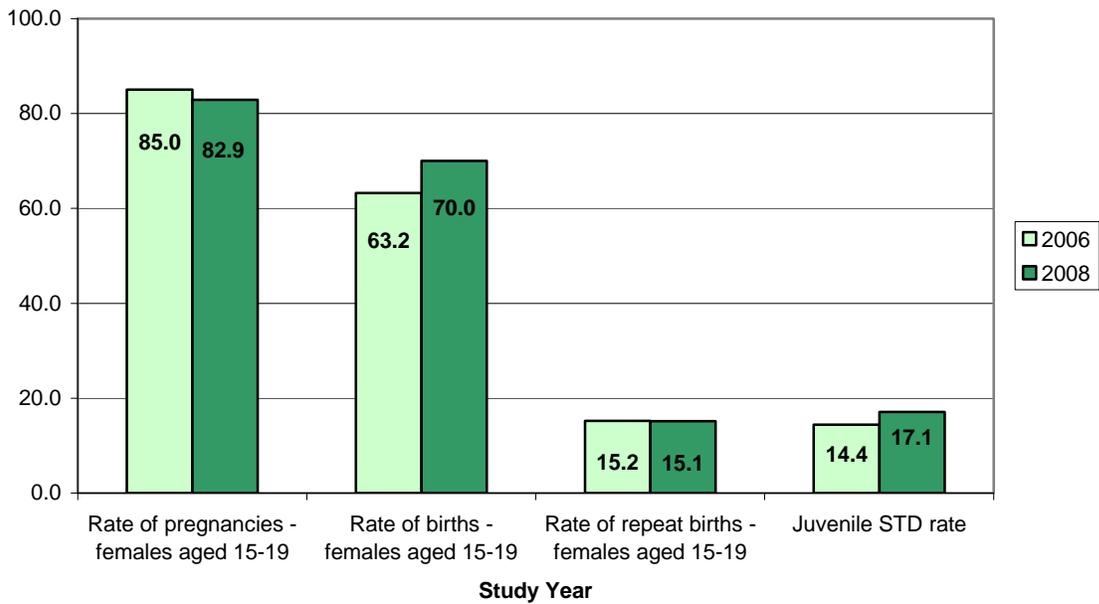
**Sumter County: Lack of School Commitment,
2006 and 2008**



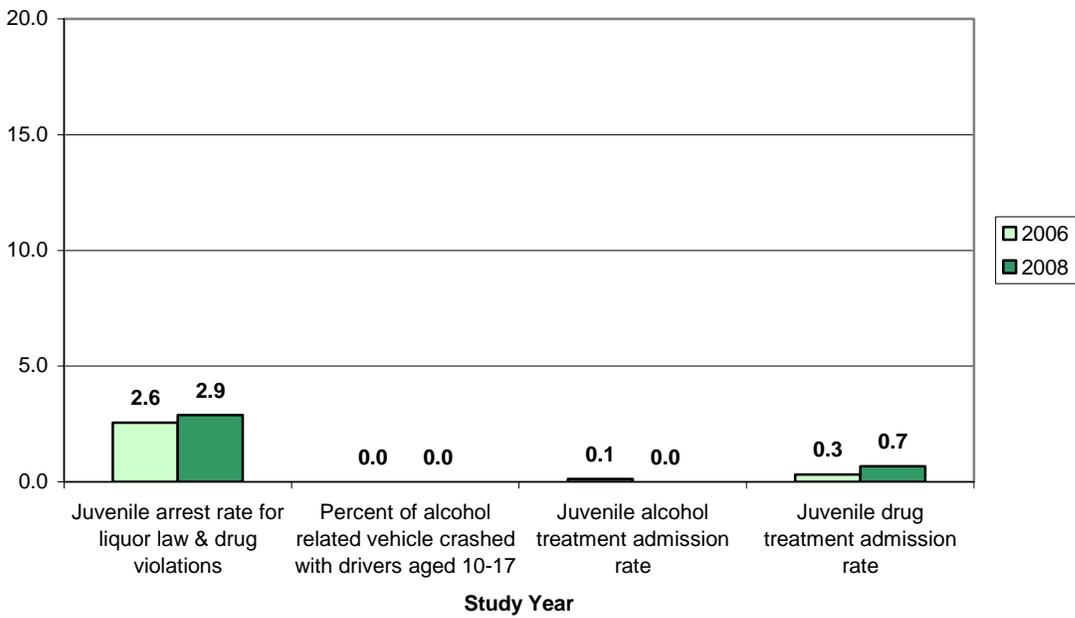
**Sumter County: Family Conflict/Management Problems,
2006 and 2008**



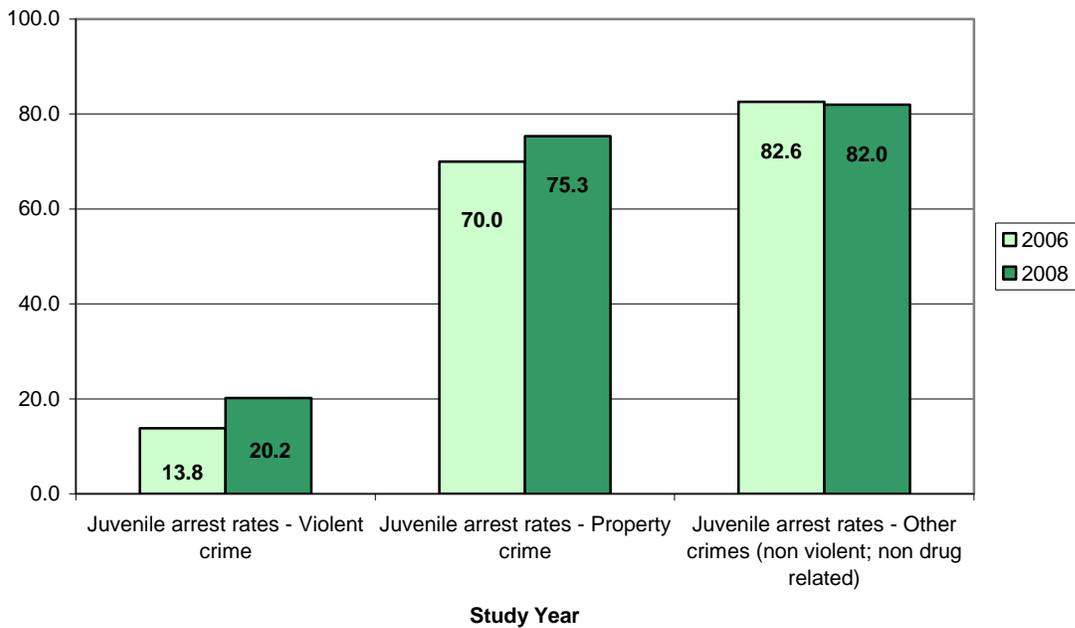
**Sumter County: Juvenile Sexual Behavior,
2006 and 2008**



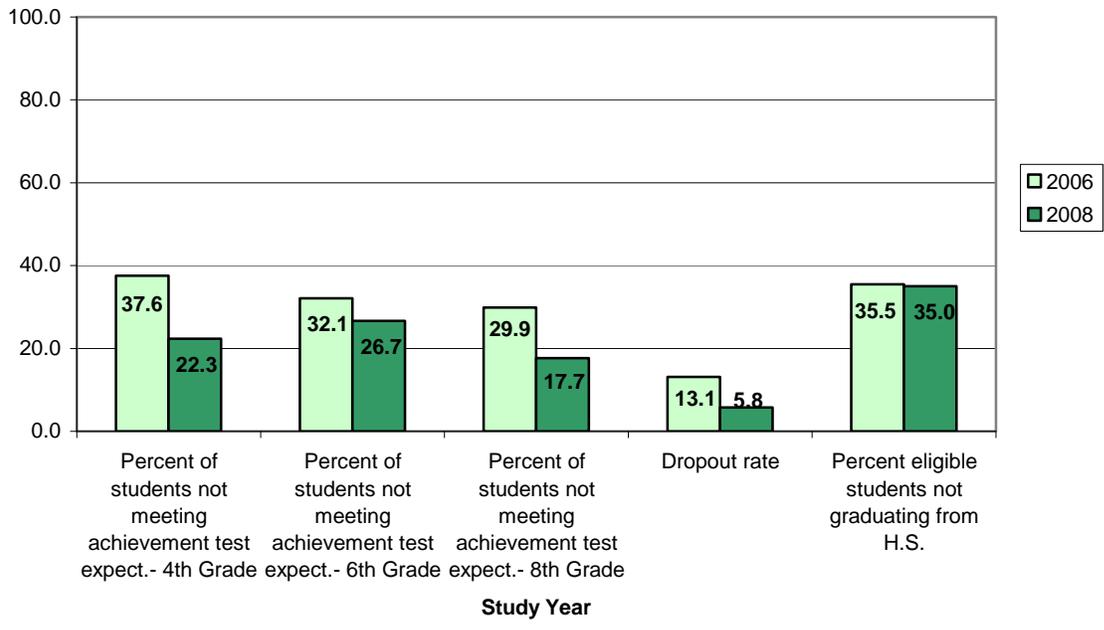
**Sumter County: Juvenile Alcohol and Drug Abuse,
2006 and 2008**



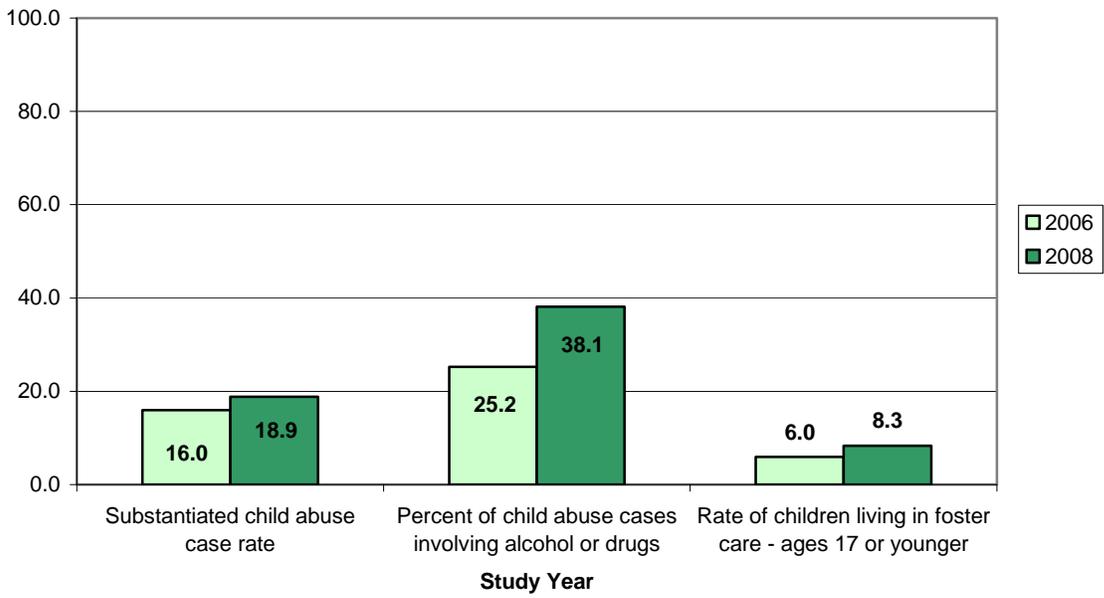
**Sumter County: Juvenile Community Crime,
2006 and 2008**



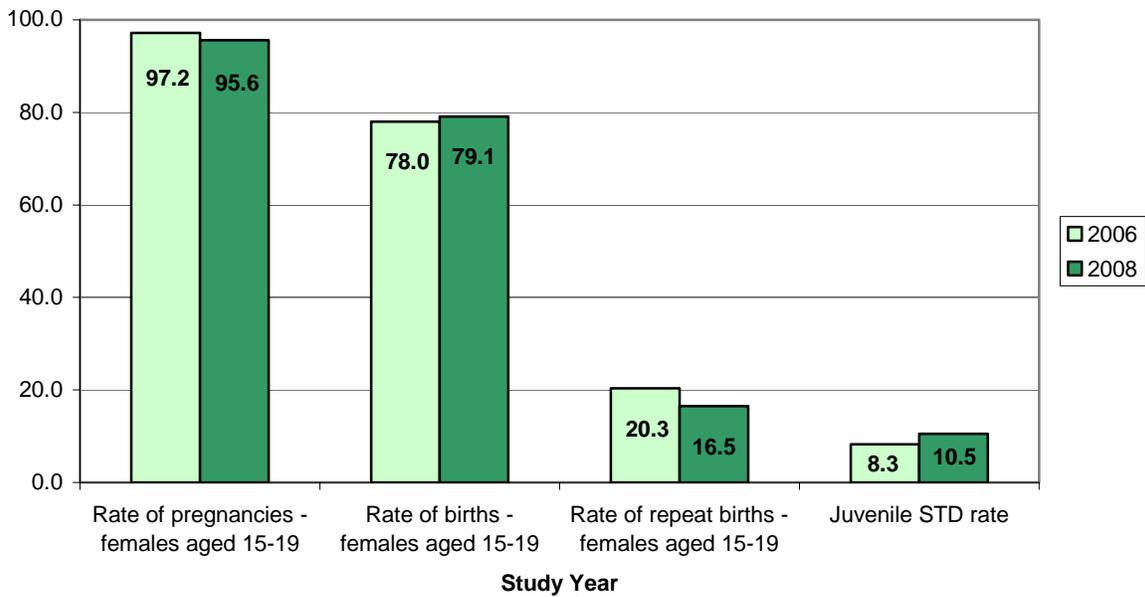
**Upson County: Lack of School Commitment,
2006 and 2008**



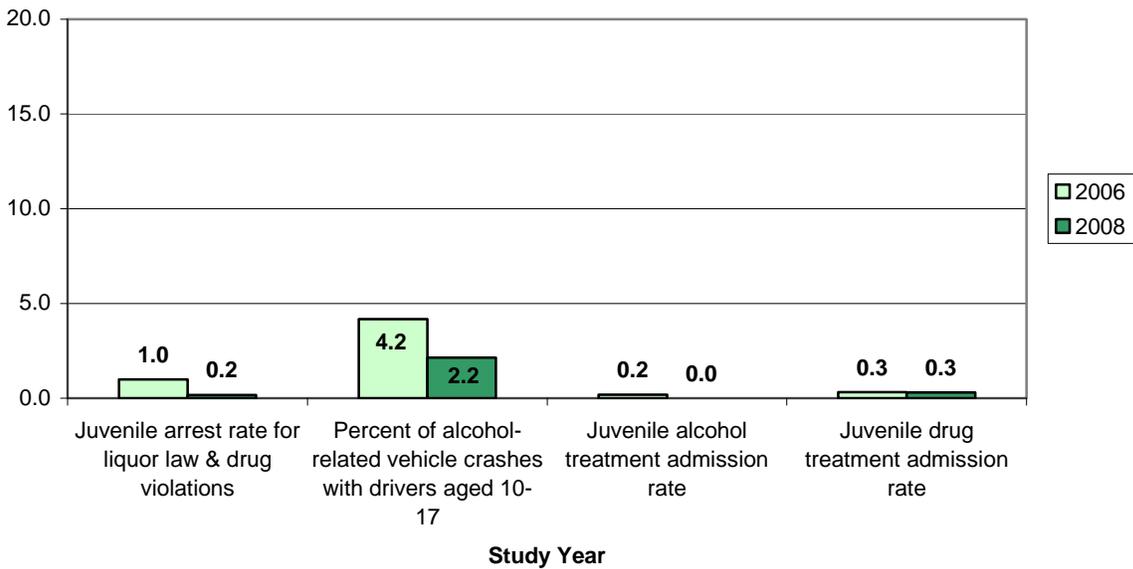
**Upson County: Family Conflict/Management Problems,
2006 and 2008**

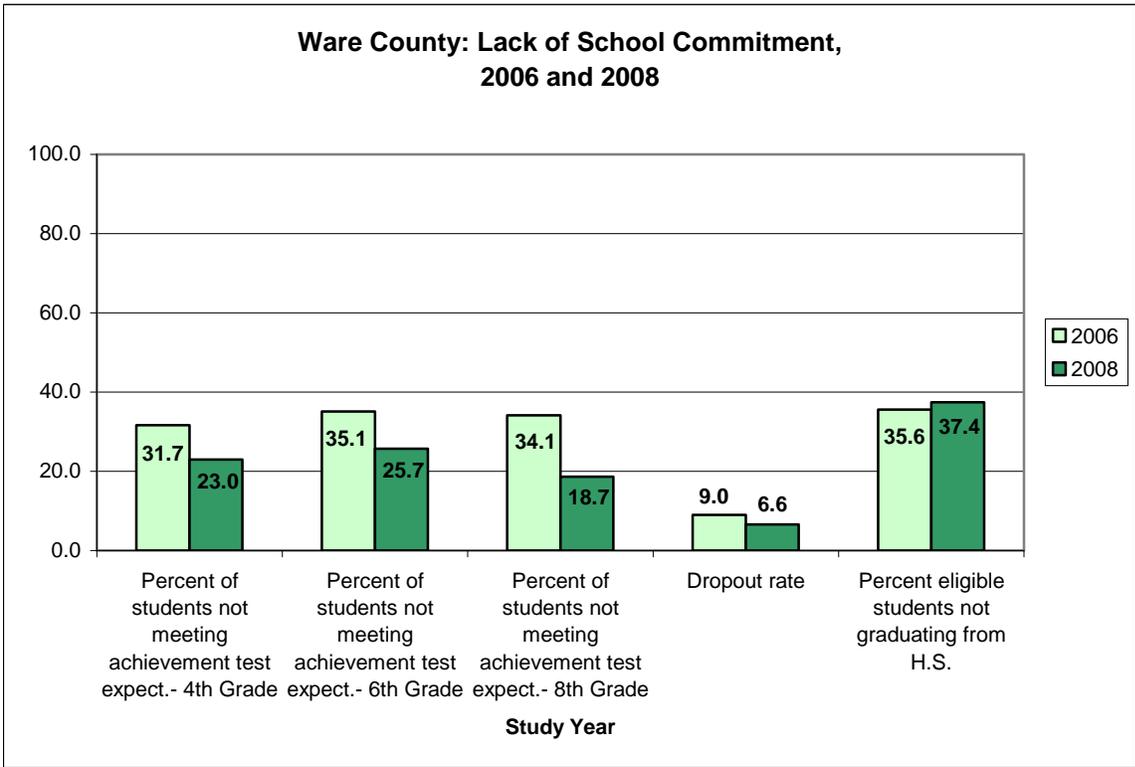
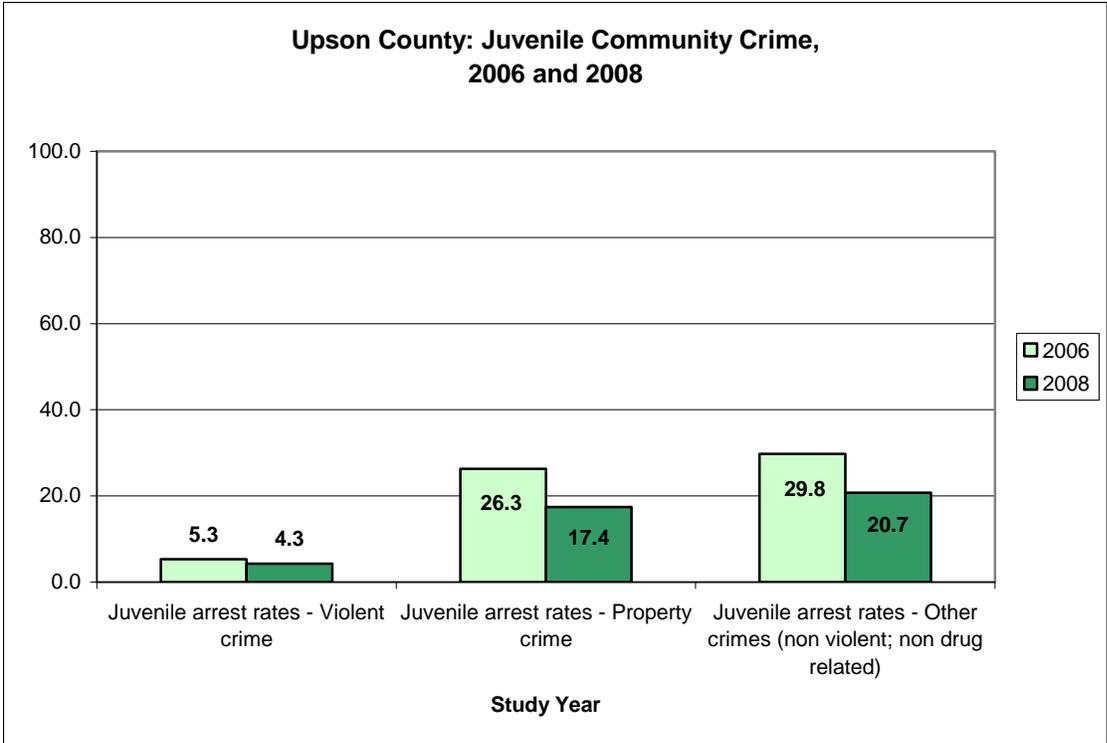


**Upson County: Juvenile Sexual Behavior,
2006 and 2008**

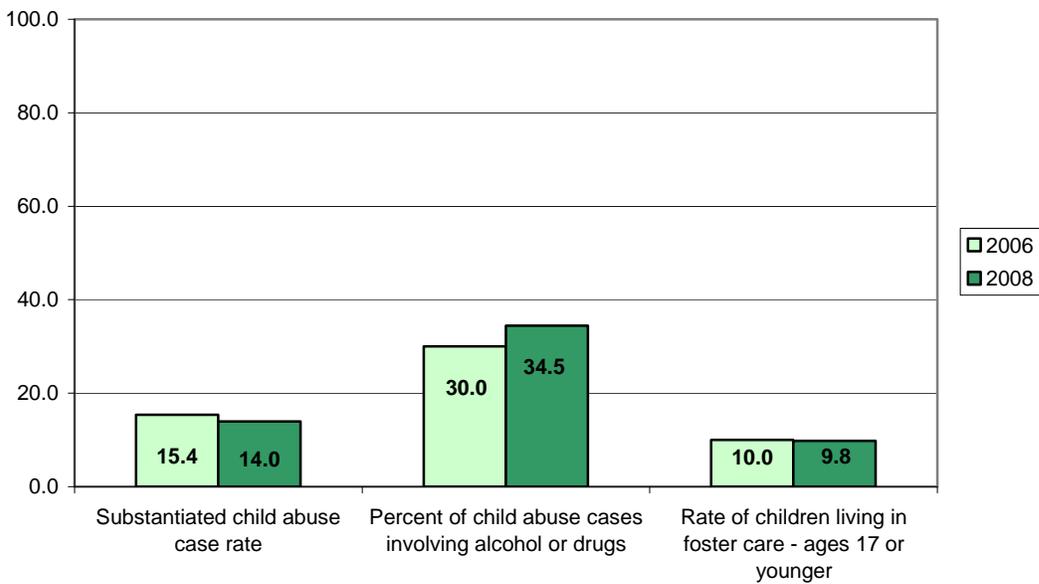


**Upson County: Juvenile Alcohol and Drug Abuse,
2006 and 2008**

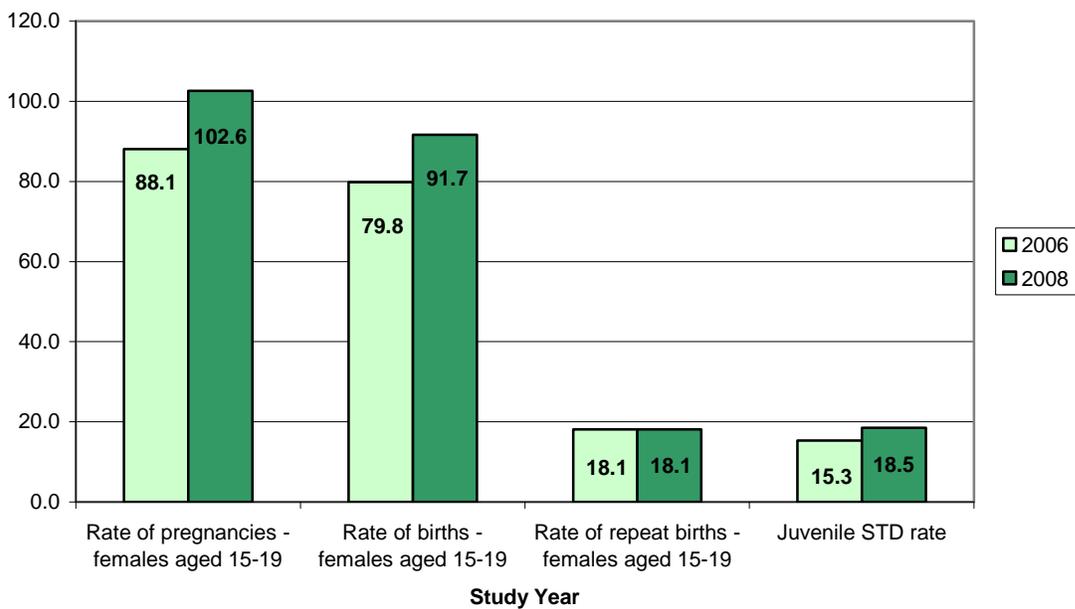




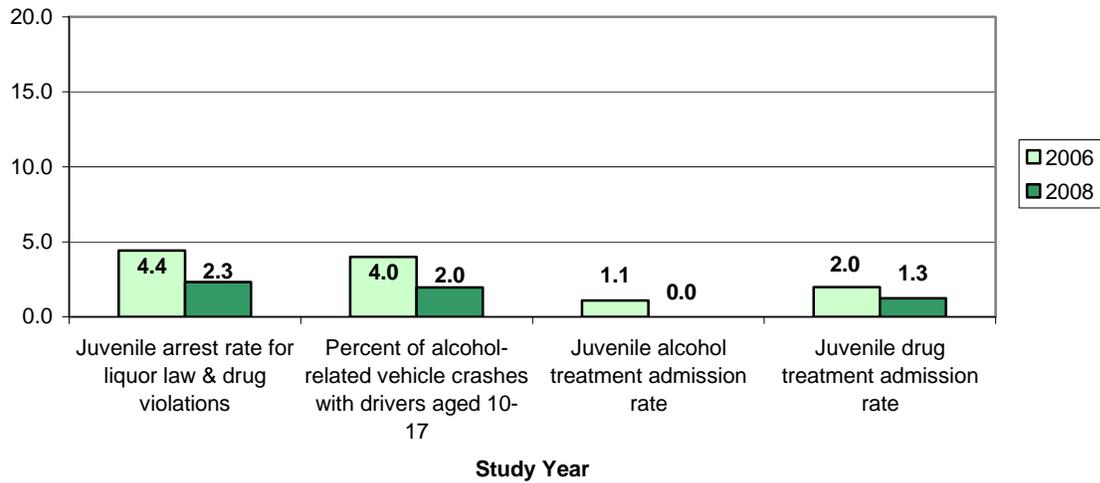
**Ware County: Family Conflict/Management Problems,
2006 and 2008**



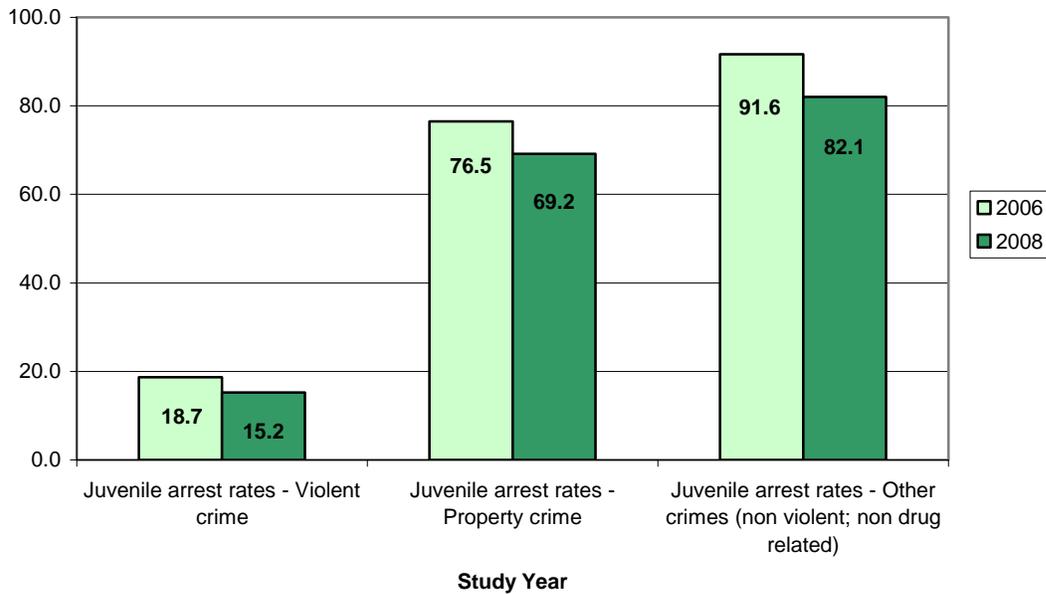
**Ware County: Juvenile Sexual Behavior,
2006 and 2008**



**Ware County: Juvenile Alcohol and Drug Abuse,
2006 and 2008**



**Ware County: Juvenile Community Crime,
2006 and 2008**



APPENDIX 3. RISK DOMAIN 1 RANKINGS—JUVENILE-SPECIFIC ALCOHOL INDICATORS BY COUNTY

County	DOMAIN 1: JUVENILE-SPECIFIC ALCOHOL INDICATORS				
	Juvenile Liquor Arrest Rate	Percent Alcohol-Related Crashes with Drivers Aged 10–17	Percent Alcohol-Related Crashes with Drivers Aged 18–21	Juvenile Treatment Admission Rate	Overall Average Rank Domain 1
Appling	156	1	119	143	105
Atkinson	62	1	106	72	60
Bacon	101	1	81	134	79
Baker	1	1	27	1	8
Baldwin	44	63	137	142	97
Banks	95	1	7	89	48
Barrow	60	131	100	85	94
Bartow	116	112	94	59	95
Ben Hill	146	155	81	99	120
Berrien	119	1	141	124	96
Bibb	26	75	36	97	59
Bleckley	144	1	68	1	54
Brantley	96	115	67	1	70
Brooks	94	1	86	111	73
Bryan	81	1	83	86	63
Bulloch	107	120	147	156	133
Burke	32	1	53	1	22
Butts	73	135	110	67	96
Calhoun	87	1	81	1	43
Camden	125	86	130	64	101
Candler	139	153	141	106	135
Carroll	67	102	102	49	80
Catoosa	154	96	134	125	127
Charlton	83	148	149	73	113
Chatham	17	65	84	127	73
Chattahoochee	16	1	1	52	18
Chattooga	90	128	28	1	62
Cherokee	133	80	112	60	96
Clarke	88	76	150	121	109
Clay	151	1	1	1	39
Clayton	14	60	24	82	45
Clinch	30	1	158	93	71
Cobb	23	99	96	56	69

DOMAIN 1: JUVENILE-SPECIFIC ALCOHOL INDICATORS					
County	Juvenile Liquor Arrest Rate	Percent Alcohol-Related Crashes with Drivers Aged 10–17	Percent Alcohol-Related Crashes with Drivers Aged 18–21	Juvenile Treatment Admission Rate	Overall Average Rank Domain 1
Coffee	100	143	50	31	81
Colquitt	64	106	136	90	99
Columbia	15	110	133	30	72
Cook	159	90	66	43	90
Coweta	29	126	126	46	82
Crawford	1	148	149	63	90
Crisp	43	144	70	117	94
Dade	157	152	19	119	112
Dawson	150	95	46	69	90
Decatur	51	70	82	34	59
Dekalb	10	81	37	109	59
Dodge	57	1	92	129	70
Dooly	98	123	15	68	76
Dougherty	21	61	21	132	59
Douglas	92	82	65	120	90
Early	108	1	27	147	71
Echols	47	159	99	126	108
Effingham	120	132	142	66	115
Elbert	142	1	48	130	80
Emanuel	53	78	81	154	92
Evans	134	1	152	62	87
Fannin	127	92	119	157	124
Fayette	122	107	107	87	106
Floyd	20	108	76	146	88
Forsyth	115	125	117	32	97
Franklin	56	117	25	1	50
Fulton	22	72	30	74	50
Gilmer	86	90	47	153	94
Glascocock	1	1	159	1	41
Glynn	18	103	73	88	71
Gordon	29	130	99	77	84
Grady	130	119	127	36	103
Greene	136	1	18	51	52
Gwinnett	13	83	95	55	62
Habersham	105	66	138	41	88
Hall	25	93	103	118	85
Hancock	1	1	33	1	9

DOMAIN 1: JUVENILE-SPECIFIC ALCOHOL INDICATORS					
County	Juvenile Liquor Arrest Rate	Percent Alcohol-Related Crashes with Drivers Aged 10–17	Percent Alcohol-Related Crashes with Drivers Aged 18–21	Juvenile Treatment Admission Rate	Overall Average Rank Domain 1
Haralson	117	137	49	50	88
Harris	40	125	139	53	89
Hart	63	151	53	40	77
Heard	48	1	155	102	77
Henry	34	116	75	95	80
Houston	75	84	69	145	93
Irwin	76	1	74	136	72
Jackson	93	67	87	70	79
Jasper	1	1	12	135	37
Jeff Davis	112	1	156	133	101
Jefferson	38	1	17	45	25
Jenkins	65	1	104	80	63
Johnson	27	1	125	1	39
Jones	155	123	131	35	111
Lamar	50	1	110	155	79
Lanier	78	138	128	128	118
Laurens	128	134	51	137	113
Lee	110	1	125	33	67
Liberty	89	68	88	94	85
Lincoln	91	133	106	1	83
Long	103	127	125	54	102
Lowndes	80	105	143	144	118
Lumpkin	153	69	62	61	86
Macon	33	1	110	58	51
Madison	102	79	120	78	95
Marion	82	140	151	1	94
McDuffie	52	73	13	1	35
McIntosh	126	148	116	65	114
Meriwether	111	85	62	108	92
Miller	37	1	136	1	44
Mitchell	103	101	11	38	63
Monroe	58	113	114	92	94
Montgomery	124	1	153	83	90
Morgan	79	1	9	42	33
Murray	109	1	125	81	79
Muscogee	41	91	58	98	72
Newton	31	97	43	140	78

DOMAIN 1: JUVENILE-SPECIFIC ALCOHOL INDICATORS					
County	Juvenile Liquor Arrest Rate	Percent Alcohol-Related Crashes with Drivers Aged 10–17	Percent Alcohol-Related Crashes with Drivers Aged 18–21	Juvenile Treatment Admission Rate	Overall Average Rank Domain 1
Oconee	66	148	154	48	104
Oglethorpe	55	121	14	1	48
Paulding	121	136	111	44	103
Peach	12	1	35	37	21
Pickens	138	74	33	152	99
Pierce	97	1	29	101	57
Pike	70	1	39	84	49
Polk	77	64	91	151	96
Pulaski	113	1	56	1	43
Putnam	118	90	85	123	104
Quitman	1	1	145	1	37
Rabun	158	150	99	1	102
Randolph	1	1	125	1	32
Richmond	24	62	54	91	58
Rockdale	72	77	63	150	91
Schley	145	158	46	122	118
Screven	152	1	34	159	87
Seminole	45	1	56	1	26
Spalding	36	90	23	131	70
Stephens	132	1	90	103	82
Stewart	99	1	1	1	26
Sumter	123	1	132	104	90
Talbot	35	1	11	1	12
Taliaferro	1	1	1	1	1
Tattnall	69	142	42	139	98
Taylor	46	1	146	1	49
Telfair	61	140	20	114	84
Terrell	54	1	33	110	50
Thomas	85	94	101	107	97
Tift	68	149	77	149	111
Toombs	59	71	62	141	83
Towns	149	1	1	148	75
Treutlen	147	141	22	1	78
Troup	42	98	40	39	55
Turner	19	1	46	71	34
Twiggs	114	1	64	76	64
Union	141	1	9	47	50

DOMAIN 1: JUVENILE-SPECIFIC ALCOHOL INDICATORS					
County	Juvenile Liquor Arrest Rate	Percent Alcohol- Related Crashes with Drivers Aged 10–17	Percent Alcohol- Related Crashes with Drivers Aged 18–21	Juvenile Treatment Admission Rate	Overall Average Rank Domain 1
Upson	11	110	41	57	55
Walker	143	114	113	158	132
Walton	74	129	93	79	94
Ware	106	104	71	138	105
Warren	39	1	16	1	14
Washington	49	118	72	116	89
Wayne	148	1	38	75	66
Webster	1	1	157	1	40
Wheeler	137	1	144	115	99
White	140	100	59	105	101
Whitfield	71	111	57	100	85
Wilcox	129	156	129	96	128
Wilkes	135	154	1	1	73
Wilkinson	84	1	116	113	79
Worth	131	158	89	112	123

APPENDIX 4. RISK DOMAIN 2 RANKINGS—COMMUNITY ALCOHOL PREVALENCE BY COUNTY

DOMAIN 2: COMMUNITY ALCOHOL PREVALENCE				
County	Alcohol-Related Death Rate	Alcohol-Related Discharge Rate	Alcohol Licenses/Permits	Overall Average Rank Domain 2
Appling	110	20	35	55
Atkinson	141	8	74	74
Bacon	133	101	100	111
Baker	1	33	72	35
Baldwin	68	70	126	88
Banks	1	117	57	58
Barrow	102	96	40	79
Bartow	52	133	91	92
Ben Hill	112	153	129	131
Berrien	152	157	106	138
Bibb	79	140	133	117
Bleckley	146	78	59	94
Brantley	142	24	50	72
Brooks	1	158	32	64
Bryan	1	26	124	50
Bulloch	1	25	90	39
Burke	1	88	114	68
Butts	1	74	82	52
Calhoun	155	72	131	119
Camden	96	7	117	73
Candler	1	122	150	91
Carroll	64	34	85	61
Catoosa	86	4	24	38
Charlton	1	19	21	14
Chatham	63	62	148	91
Chattahoochee	148	14	75	79
Chattooga	123	112	25	87
Cherokee	77	115	30	74
Clarke	108	83	137	109
Clay	1	48	156	68
Clayton	69	39	36	48
Clinch	1	54	92	49
Cobb	57	121	52	77
Coffee	74	67	97	79

DOMAIN 2: COMMUNITY ALCOHOL PREVALENCE				
County	Alcohol-Related Death Rate	Alcohol-Related Discharge Rate	Alcohol Licenses/Permits	Overall Average Rank Domain 2
Colquitt	99	109	46	85
Columbia	65	31	22	39
Cook	114	156	108	126
Coweta	75	53	49	59
Crawford	126	106	11	81
Crisp	100	92	153	115
Dade	116	3	86	68
Dawson	1	144	113	86
Decatur	135	145	127	136
Dekalb	55	82	62	66
Dodge	109	87	45	80
Dooly	147	58	145	117
Dougherty	117	146	130	131
Douglas	61	89	39	63
Early	128	119	144	130
Echols	1	95	6	34
Effingham	1	17	3	7
Elbert	103	143	89	112
Emanuel	1	159	152	104
Evans	130	50	128	103
Fannin	132	49	2	61
Fayette	66	59	55	60
Floyd	83	142	96	107
Forsyth	56	135	42	78
Franklin	158	129	61	116
Fulton	59	111	122	97
Gilmer	119	93	41	84
Glascok	1	29	5	12
Glynn	76	47	155	93
Gordon	92	97	33	74
Grady	149	136	83	123
Greene	1	36	157	65
Gwinnett	54	52	53	53
Habersham	106	114	29	83
Hall	78	124	64	89
Hancock	1	110	138	83
Haralson	89	63	48	67
Harris	118	55	69	81

DOMAIN 2: COMMUNITY ALCOHOL PREVALENCE				
County	Alcohol-Related Death Rate	Alcohol-Related Discharge Rate	Alcohol Licenses/Permits	Overall Average Rank Domain 2
Hart	127	130	47	101
Heard	1	120	15	45
Henry	50	69	44	54
Houston	70	128	78	92
Irwin	1	149	20	57
Jackson	62	84	18	55
Jasper	151	79	87	106
Jeff Davis	1	21	54	25
Jefferson	113	37	125	92
Jenkins	139	137	26	101
Johnson	136	40	110	95
Jones	122	132	34	96
Lamar	140	126	63	110
Lanier	1	147	38	62
Laurens	67	57	104	76
Lee	115	71	9	65
Liberty	58	6	66	43
Lincoln	1	18	80	33
Long	1	2	19	7
Lowndes	88	154	123	122
Lumpkin	124	100	101	108
Macon	144	91	79	105
Madison	90	51	7	49
Marion	1	23	113	46
McDuffie	1	73	109	61
McIntosh	131	46	159	112
Meriwether	97	66	120	94
Miller	1	127	121	83
Mitchell	1	123	98	74
Monroe	95	85	99	93
Montgomery	1	5	71	26
Morgan	137	64	118	106
Murray	72	41	23	45
Muscogee	84	61	107	84
Newton	87	77	17	60
Oconee	134	35	4	58
Oglethorpe	121	139	12	91
Paulding	60	76	8	48

DOMAIN 2: COMMUNITY ALCOHOL PREVALENCE				
County	Alcohol-Related Death Rate	Alcohol-Related Discharge Rate	Alcohol Licenses/Permits	Overall Average Rank Domain 2
Peach	93	104	102	100
Pickens	1	107	51	53
Pierce	111	27	43	60
Pike	1	116	10	42
Polk	105	141	70	105
Pulaski	1	98	136	78
Putnam	1	102	143	82
Quitman	1	32	139	57
Rabun	1	131	158	97
Randolph	157	105	132	131
Richmond	80	80	119	93
Rockdale	73	75	81	76
Schley	153	30	95	93
Screven	143	38	56	79
Seminole	1	28	147	59
Spalding	1	125	73	66
Stephens	125	152	58	112
Stewart	1	22	154	59
Sumter	81	60	105	82
Talbot	145	11	88	81
Taliaferro	1	1	111	38
Tattnall	129	12	68	70
Taylor	1	44	65	37
Telfair	1	90	84	58
Terrell	150	99	115	121
Thomas	98	148	103	116
Tift	71	155	135	120
Toombs	91	56	151	99
Towns	1	150	149	100
Treutlen	1	9	94	35
Troup	85	68	140	98
Turner	1	118	134	84
Twiggs	1	138	27	55
Union	107	103	1	70
Upson	120	94	93	102
Walker	82	15	13	37
Walton	53	86	16	52
Ware	1	42	116	53

DOMAIN 2: COMMUNITY ALCOHOL PREVALENCE				
County	Alcohol-Related Death Rate	Alcohol-Related Discharge Rate	Alcohol Licenses/Permits	Overall Average Rank Domain 2
Warren	156	13	142	104
Washington	104	113	60	92
Wayne	1	81	28	37
Webster	159	43	141	114
Wheeler	154	10	14	59
White	94	151	67	104
Whitfield	51	108	76	78
Wilcox	138	45	31	71
Wilkes	1	65	146	71
Wilkinson	1	16	77	31
Worth	101	134	37	91

APPENDIX 5. RISK DOMAIN 3 RANKINGS—YOUTH RISK CORRELATES BY COUNTY

County	DOMAIN 3: HIGH-RISK YOUTH CORRELATES			
	HS Dropout Rate	Teen Pregnancy Rate	Juvenile STD Rate	Overall Average Rank Domain 3
Appling	89	99	40	76
Atkinson	44	141	87	91
Bacon	127	134	98	120
Baker		9	64	37
Baldwin	154	43	120	106
Banks	98	66	18	61
Barrow	54	74	38	55
Bartow	101	113	32	82
Ben Hill	145	155	137	146
Berrien	69	132	33	78
Bibb	138	73	156	122
Bleckley	57	11	102	57
Brantley	104	34	31	56
Brooks	142	111	106	120
Bryan	33	15	29	26
Bulloch	58	16	131	68
Burke	135	156	100	130
Butts	147	109	117	124
Calhoun	113	110	138	120
Camden	92	28	52	57
Candler	128	158	61	116
Carroll	71	53	66	63
Catoosa	72	35	11	39
Charlton	124	17	132	91
Chatham	130	79	103	104
Chattahoochee	23	2	22	16
Chattooga	6	112	48	55
Cherokee	77	20	14	37
Clarke	144	7	97	83
Clay		98	146	122
Clayton	7	106	127	80
Clinch	79	100	142	107
Cobb	31	26	46	34
Coffee	114	150	123	129
Colquitt	112	116	56	95
Columbia	38	13	36	29
Cook	120	129	104	118

DOMAIN 3: HIGH-RISK YOUTH CORRELATES				
County	HS Dropout Rate	Teen Pregnancy Rate	Juvenile STD Rate	Overall Average Rank Domain 3
Coweta	30	42	74	49
Crawford	115	6	63	61
Crisp	152	154	159	155
Dade	39	12	3	18
Dawson	82	32	8	41
Decatur	90	101	128	106
Dekalb	15	59	139	71
Dodge	14	97	119	77
Dooly	132	144	113	130
Dougherty	134	115	154	134
Douglas	47	37	75	53
Early	73	78	136	96
Echols	42	89	20	50
Effingham	64	30	19	38
Elbert	151	77	82	103
Emanuel	63	135	108	102
Evans	93	145	141	126
Fannin	26	87	13	42
Fayette	4	3	39	15
Floyd	20	85	69	58
Forsyth	27	19	2	16
Franklin	116	72	59	82
Fulton	16	40	134	63
Gilmer	9	143	23	58
Glascok	61	4	1	22
Glynn	125	84	93	101
Gordon	83	147	25	85
Grady	51	148	71	90
Greene	106	81	86	91
Gwinnett	40	47	34	40
Habersham	45	64	12	40
Hall	109	102	35	82
Hancock	36	124	125	95
Haralson	65	61	28	51
Harris	22	18	58	33
Hart	37	21	60	39
Heard	53	71	45	56
Henry	80	36	50	55
Houston	29	55	76	53
Irwin	13	54	81	49
Jackson	52	60	30	47

DOMAIN 3: HIGH-RISK YOUTH CORRELATES				
County	HS Dropout Rate	Teen Pregnancy Rate	Juvenile STD Rate	Overall Average Rank Domain 3
Jasper	62	82	85	76
Jeff Davis	110	136	49	98
Jefferson	68	121	118	102
Jenkins	88	130	96	105
Johnson	123	41	114	93
Jones	87	29	17	44
Lamar	11	33	91	45
Lanier	75	88	78	80
Laurens	67	90	105	87
Lee	46	10	21	26
Liberty	59	93	55	69
Lincoln	17	25	77	40
Long	150	51	24	75
Lowndes	56	46	150	84
Lumpkin	2	8	10	7
Macon	111	86	95	97
Madison	129	70	44	81
Marion	136	117	107	120
McDuffie	76	142	149	122
McIntosh	95	67	89	84
Meriwether	119	91	111	107
Miller	48	58	94	67
Mitchell	103	123	92	106
Monroe	74	27	57	53
Montgomery	24	14	79	39
Morgan	8	24	70	34
Murray	149	157	16	107
Muscogee	78	108	147	111
Newton	12	62	90	55
Oconee	5	1	6	4
Oglethorpe	70	63	42	58
Paulding	81	23	15	40
Peach	85	75	133	98
Pickens	60	68	7	45
Pierce	139	126	37	101
Pike	28	22	43	31
Polk	131	118	53	101
Pulaski	19	48	144	70
Putnam	94	140	88	107
Quitman		151	130	141
Rabun	34	38	4	25

DOMAIN 3: HIGH-RISK YOUTH CORRELATES				
County	HS Dropout Rate	Teen Pregnancy Rate	Juvenile STD Rate	Overall Average Rank Domain 3
Randolph	32	83	84	66
Richmond	84	114	152	117
Rockdale	43	50	67	53
Schley	10	107	65	61
Screven	86	57	72	72
Seminole	126	103	112	114
Spalding	141	128	140	136
Stephens	108	49	47	68
Stewart	146	120	129	132
Sumter	143	96	153	131
Talbot	117	76	116	103
Taliaferro	35	80	151	89
Tattnall	66	133	68	89
Taylor	118	44	83	82
Telfair	121	153	143	139
Terrell	133	149	157	146
Thomas	21	69	155	82
Tift	153	119	135	136
Toombs	55	137	124	105
Towns	155	5	9	56
Treutlen	41	39	80	53
Troup	107	105	145	119
Turner	102	95	73	90
Twiggs	91	127	99	106
Union	3	52	5	20
Upson	96	125	121	114
Walker	137	94	26	86
Walton	49	65	51	55
Ware	122	138	158	139
Warren	148	159	148	152
Washington	50	56	126	77
Wayne	97	146	54	99
Webster		131	109	120
Wheeler	99	139	122	120
White	25	45	27	32
Whitfield	105	152	41	99
Wilcox	100	122	110	111
Wilkes	1	104	115	73
Wilkinson	18	92	101	70
Worth	140	31	62	78

APPENDIX 6. WEIGHTED RANK VERSION 1 OF RISK DOMAINS

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Appling	105	55	76	52	14	19	28.38	109
Atkinson	60	74	91	30	19	23	23.79	56
Bacon	79	111	120	40	28	30	32.46	140
Baker	8	35	37	4	9	9	7.24	1
Baldwin	97	88	106	48	22	26	32.22	136
Banks	48	58	61	24	15	15	17.92	12
Barrow	94	79	55	47	20	14	26.89	86
Bartow	95	92	82	48	23	21	30.38	121
Ben Hill	120	131	146	60	33	36	43.13	159
Berrien	96	138	78	48	35	20	34.07	148
Bibb	59	117	122	29	29	31	29.72	118
Bleckley	54	94	57	27	24	14	21.50	35
Brantley	70	72	56	35	18	14	22.32	45
Brooks	73	64	120	37	16	30	27.44	96
Bryan	63	50	26	31	13	6	16.79	8
Bulloch	133	39	68	66	10	17	31.00	128
Burke	22	68	130	11	17	33	20.13	22
Butts	96	52	124	48	13	31	30.76	125
Calhoun	43	119	120	21	30	30	27.06	90
Camden	101	73	57	51	18	14	27.76	102
Candler	135	91	116	67	23	29	39.68	157
Carroll	80	61	63	40	15	16	23.69	55

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Catoosa	127	38	39	64	10	10	27.65	101
Charlton	113	14	91	57	3	23	27.60	99
Chatham	73	91	104	37	23	26	28.46	110
Chattahoochee	18	79	16	9	20	4	10.81	4
Chattooga	62	87	55	31	22	14	22.13	42
Cherokee	96	74	37	48	19	9	25.29	76
Clarke	109	109	83	54	27	21	34.13	149
Clay	39	68	122	19	17	31	22.28	44
Clayton	45	48	80	23	12	20	18.17	15
Clinch	71	49	107	35	12	27	24.75	71
Cobb	69	77	34	34	19	9	20.67	29
Coffee	81	79	129	41	20	32	30.86	126
Colquitt	99	85	95	50	21	24	31.44	130
Columbia	72	39	29	36	10	7	17.69	11
Cook	90	126	118	45	32	29	35.22	152
Coweta	82	59	49	41	15	12	22.60	49
Crawford	90	81	61	45	20	15	26.90	87
Crisp	94	115	155	47	29	39	38.08	156
Dade	112	68	18	56	17	5	25.82	80
Dawson	90	86	41	45	22	10	25.56	79
Decatur	59	136	106	30	34	27	30.04	119
Dekalb	59	66	71	30	17	18	21.32	33
Dodge	70	80	77	35	20	19	24.71	70
Dooly	76	117	130	38	29	32	33.19	145
Dougherty	59	131	134	29	33	34	31.90	133

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Douglas	90	63	53	45	16	13	24.63	68
Early	71	130	96	35	33	24	30.63	124
Echols	108	34	50	54	9	13	24.99	74
Effingham	115	7	38	58	2	9	22.89	51
Elbert	80	112	103	40	28	26	31.29	129
Emanuel	92	104	102	46	26	26	32.42	139
Evans	87	103	126	44	26	32	33.63	147
Fannin	124	61	42	62	15	11	29.21	115
Fayette	106	60	15	53	15	4	23.90	58
Floyd	88	107	58	44	27	15	28.33	107
Forsyth	97	78	16	49	19	4	24.01	60
Franklin	50	116	82	25	29	21	24.82	72
Fulton	50	97	63	25	24	16	21.64	38
Gilmer	94	84	58	47	21	15	27.56	98
Glascocock	41	12	22	20	3	6	9.56	2
Glynn	71	93	101	35	23	25	27.86	104
Gordon	84	74	85	42	19	21	27.21	95
Grady	103	123	90	52	31	23	34.89	151
Greene	52	65	91	26	16	23	21.56	37
Gwinnett	62	53	40	31	13	10	18.03	14
Habersham	88	83	40	44	21	10	24.86	73
Hall	85	89	82	42	22	21	28.35	108
Hancock	9	83	95	5	21	24	16.33	7
Haralson	88	67	51	44	17	13	24.54	67
Harris	89	81	33	45	20	8	24.32	63

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Hart	77	101	39	38	25	10	24.51	66
Heard	77	45	56	38	11	14	21.22	32
Henry	80	54	55	40	14	14	22.47	47
Houston	93	92	53	47	23	13	27.65	101
Irwin	72	57	49	36	14	12	20.79	30
Jackson	79	55	47	40	14	12	21.71	39
Jasper	37	106	76	19	26	19	21.38	34
Jeff Davis	101	25	98	50	6	25	27.06	90
Jefferson	25	92	102	13	23	26	20.38	27
Jenkins	63	101	105	31	25	26	27.53	97
Johnson	39	95	93	19	24	23	22.08	41
Jones	111	96	44	56	24	11	30.19	120
Lamar	79	110	45	40	27	11	26.06	83
Lanier	118	62	80	59	16	20	31.53	132
Laurens	113	76	87	56	19	22	32.36	137
Lee	67	65	26	34	16	6	18.76	17
Liberty	85	43	69	42	11	17	23.49	53
Lincoln	83	33	40	41	8	10	19.85	20
Long	102	7	75	51	2	19	23.90	58
Lowndes	118	122	84	59	30	21	36.81	155
Lumpkin	86	108	7	43	27	2	23.96	59
Macon	51	105	97	25	26	24	25.25	75
Madison	95	49	81	47	12	20	26.65	85
Marion	94	46	120	47	11	30	29.39	116
McDuffie	35	61	122	17	15	31	21.07	31

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
McIntosh	114	112	84	57	28	21	35.26	153
Meriwether	92	94	107	46	24	27	32.03	134
Miller	44	83	67	22	21	17	19.76	19
Mitchell	63	74	106	32	19	27	25.54	78
Monroe	94	93	53	47	23	13	27.85	103
Montgomery	90	26	39	45	6	10	20.43	28
Morgan	33	106	34	16	27	9	17.15	9
Murray	79	45	107	40	11	27	25.89	82
Muscogee	72	84	111	36	21	28	28.25	106
Newton	78	60	55	39	15	14	22.54	48
Oconee	104	58	4	52	14	1	22.47	47
Oglethorpe	48	91	58	24	23	15	20.38	27
Paulding	103	48	40	52	12	10	24.47	64
Peach	21	100	98	11	25	24	19.99	21
Pickens	99	53	45	50	13	11	24.71	70
Pierce	57	60	101	29	15	25	22.92	52
Pike	49	42	31	24	11	8	14.19	5
Polk	96	105	101	48	26	25	33.13	144
Pulaski	43	78	70	21	20	18	19.51	18
Putnam	104	82	107	52	21	27	33.11	143
Quitman	37	57	141	19	14	35	22.65	50
Rabun	102	97	25	51	24	6	27.17	93
Randolph	32	131	66	16	33	17	21.81	40
Richmond	58	93	117	29	23	29	27.10	91
Rockdale	91	76	53	45	19	13	25.89	82

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Schley	118	93	61	59	23	15	32.40	138
Screven	87	79	72	43	20	18	26.97	88
Seminole	26	59	114	13	15	28	18.65	16
Spalding	70	66	136	35	17	34	28.56	112
Stephens	82	112	68	41	28	17	28.56	112
Stewart	26	59	132	13	15	33	20.14	23
Sumter	90	82	131	45	21	33	32.72	142
Talbot	12	81	103	6	20	26	17.36	10
Taliaferro	1	38	89	1	9	22	10.69	3
Tattnall	98	70	89	49	17	22	29.56	117
Taylor	49	37	82	24	9	20	17.94	13
Telfair	84	58	139	42	15	35	30.40	122
Terrell	50	121	146	25	30	37	30.56	123
Thomas	97	116	82	48	29	20	32.63	141
Tift	111	120	136	55	30	34	39.79	158
Toombs	83	99	105	42	25	26	30.93	127
Towns	75	100	56	37	25	14	25.49	77
Treutlen	78	35	53	39	9	13	20.29	25
Troup	55	98	119	27	24	30	27.18	94
Turner	34	84	90	17	21	23	20.24	24
Twiggs	64	55	106	32	14	26	24.04	61
Union	50	70	20	25	18	5	15.78	6
Upson	55	102	114	27	26	29	27.15	92
Walker	132	37	86	66	9	21	32.19	135
Walton	94	52	55	47	13	14	24.51	66

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 1				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Ware	105	53	139	52	13	35	33.49	146
Warren	14	104	152	7	26	38	23.65	54
Washington	89	92	77	44	23	19	28.93	114
Wayne	66	37	99	33	9	25	22.22	43
Webster	40	114	120	20	29	30	26.19	84
Wheeler	99	59	120	50	15	30	31.49	131
White	101	104	32	51	26	8	28.19	105
Whitfield	85	78	99	42	20	25	28.93	114
Wilcox	128	71	111	64	18	28	36.42	154
Wilkes	73	71	73	36	18	18	24.13	62
Wilkinson	79	31	70	39	8	18	21.56	37
Worth	123	91	78	61	23	19	34.44	150

*Version 1: Multiplied Domain 1 by .5, Domain 2 by .25, and Domain 3 by .25.

APPENDIX 7. WEIGHTED RANK VERSION 2 OF RISK DOMAINS

County	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	WEIGHTED RANK—VERSION 2				
				Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Appling	105	55	76	209.5	55	76	113.50	109
Atkinson	60	74	91	120.5	74	91	95.17	56
Bacon	79	111	120	158.5	111	120	129.83	140
Baker	8	35	37	15	35	37	28.94	1
Baldwin	97	88	106	193	88	106	128.89	136
Banks	48	58	61	96	58	61	71.67	12
Barrow	94	79	55	188	79	55	107.56	86
Bartow	95	92	82	190.5	92	82	121.50	121
Ben Hill	120	131	146	240.5	131	146	172.50	159
Berrien	96	138	78	192.5	138	78	136.28	148
Bibb	59	117	122	117	117	122	118.89	118
Bleckley	54	94	57	107	94	57	86.00	35
Brantley	70	72	56	139.5	72	56	89.28	45
Brooks	73	64	120	146	64	120	109.78	96
Bryan	63	50	26	125.5	50	26	67.17	8
Bulloch	133	39	68	265	39	68	124.00	128
Burke	22	68	130	43.5	68	130	80.50	22
Butts	96	52	124	192.5	52	124	123.06	125
Calhoun	43	119	120	85	119	120	108.22	90
Camden	101	73	57	202.5	73	57	111.06	102
Candler	135	91	116	269.5	91	116	158.72	157
Carroll	80	61	63	160	61	63	94.78	55

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Catoosa	127	38	39	254.5	38	39	110.61	101
Charlton	113	14	91	226.5	14	91	110.39	99
Chatham	73	91	104	146.5	91	104	113.83	110
Chattahoochee	18	79	16	35	79	16	43.22	4
Chattooga	62	87	55	123.5	87	55	88.50	42
Cherokee	96	74	37	192.5	74	37	101.17	76
Clarke	109	109	83	217.5	109	83	136.50	149
Clay	39	68	122	77	68	122	89.11	44
Clayton	45	48	80	90	48	80	72.67	15
Clinch	71	49	107	141	49	107	99.00	71
Cobb	69	77	34	137	77	34	82.67	29
Coffee	81	79	129	162	79	129	123.44	126
Colquitt	99	85	95	198	85	95	125.78	130
Columbia	72	39	29	144	39	29	70.78	11
Cook	90	126	118	179	126	118	140.89	152
Coweta	82	59	49	163.5	59	49	90.39	49
Crawford	90	81	61	180.5	81	61	107.61	87
Crisp	94	115	155	187	115	155	152.33	156
Dade	112	68	18	223.5	68	18	103.28	80
Dawson	90	86	41	180	86	41	102.22	79
Decatur	59	136	106	118.5	136	106	120.17	119
Dekalb	59	66	71	118.5	66	71	85.28	33
Dodge	70	80	77	139.5	80	77	98.83	70
Dooly	76	117	130	152	117	130	132.78	145

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Dougherty	59	131	134	117.5	131	134	127.61	133
Douglas	90	63	53	179.5	63	53	98.50	68
Early	71	130	96	141.5	130	96	122.50	124
Echols	108	34	50	215.5	34	50	99.94	74
Effingham	115	7	38	230	7	38	91.56	51
Elbert	80	112	103	160.5	112	103	125.17	129
Emanuel	92	104	102	183	104	102	129.67	139
Evans	87	103	126	174.5	103	126	134.50	147
Fannin	124	61	42	247.5	61	42	116.83	115
Fayette	106	60	15	211.5	60	15	95.61	58
Floyd	88	107	58	175	107	58	113.33	107
Forsyth	97	78	16	194.5	78	16	96.06	60
Franklin	50	116	82	99.5	116	82	99.28	72
Fulton	50	97	63	99	97	63	86.56	38
Gilmer	94	84	58	188	84	58	110.22	98
Glascocock	41	12	22	81	12	22	38.22	2
Glynn	71	93	101	141	93	101	111.44	104
Gordon	84	74	85	167.5	74	85	108.83	95
Grady	103	123	90	206	123	90	139.56	151
Greene	52	65	91	103	65	91	86.22	37
Gwinnett	62	53	40	123	53	40	72.11	14
Habersham	88	83	40	175	83	40	99.44	73
Hall	85	89	82	169.5	89	82	113.39	108
Hancock	9	83	95	18	83	95	65.33	7

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Haralson	88	67	51	176.5	67	51	98.17	67
Harris	89	81	33	178.5	81	33	97.28	63
Hart	77	101	39	153.5	101	39	98.06	66
Heard	77	45	56	153	45	56	84.89	32
Henry	80	54	55	160	54	55	89.89	47
Houston	93	92	53	186.5	92	53	110.61	101
Irwin	72	57	49	143.5	57	49	83.17	30
Jackson	79	55	47	158.5	55	47	86.83	39
Jasper	37	106	76	74.5	106	76	85.50	34
Jeff Davis	101	25	98	201	25	98	108.22	90
Jefferson	25	92	102	50.5	92	102	81.50	27
Jenkins	63	101	105	125	101	105	110.11	97
Johnson	39	95	93	77	95	93	88.33	41
Jones	111	96	44	222	96	44	120.78	120
Lamar	79	110	45	158	110	45	104.22	83
Lanier	118	62	80	236	62	80	126.11	132
Laurens	113	76	87	225	76	87	129.44	137
Lee	67	65	26	134.5	65	26	75.06	17
Liberty	85	43	69	169.5	43	69	93.94	53
Lincoln	83	33	40	165.5	33	40	79.39	20
Long	102	7	75	204.5	7	75	95.61	58
Lowndes	118	122	84	236	122	84	147.22	155
Lumpkin	86	108	7	172.5	108	7	95.83	59
Macon	51	105	97	101	105	97	101.00	75

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Madison	95	49	81	189.5	49	81	106.61	85
Marion	94	46	120	187	46	120	117.56	116
McDuffie	35	61	122	69.5	61	122	84.28	31
McIntosh	114	112	84	227.5	112	84	141.06	153
Meriwether	92	94	107	183	94	107	128.11	134
Miller	44	83	67	87.5	83	67	79.06	19
Mitchell	63	74	106	126.5	74	106	102.17	78
Monroe	94	93	53	188.5	93	53	111.39	103
Montgomery	90	26	39	180.5	26	39	81.72	28
Morgan	33	106	34	65.5	106	34	68.61	9
Murray	79	45	107	158	45	107	103.56	82
Muscogee	72	84	111	144	84	111	113.00	106
Newton	78	60	55	155.5	60	55	90.17	48
Oconee	104	58	4	208	58	4	89.89	47
Oglethorpe	48	91	58	95.5	91	58	81.50	27
Paulding	103	48	40	206	48	40	97.89	64
Peach	21	100	98	42.5	100	98	79.94	21
Pickens	99	53	45	198.5	53	45	98.83	70
Pierce	57	60	101	114	60	101	91.67	52
Pike	49	42	31	97	42	31	56.78	5
Polk	96	105	101	191.5	105	101	132.50	144
Pulaski	43	78	70	85.5	78	70	78.06	18
Putnam	104	82	107	208	82	107	132.44	143
Quitman	37	57	141	74	57	141	90.61	50

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Rabun	102	97	25	204	97	25	108.67	93
Randolph	32	131	66	64	131	66	87.22	40
Richmond	58	93	117	115.5	93	117	108.39	91
Rockdale	91	76	53	181	76	53	103.56	82
Schley	118	93	61	235.5	93	61	129.61	138
Screven	87	79	72	173	79	72	107.89	88
Seminole	26	59	114	51.5	59	114	74.61	16
Spalding	70	66	136	140	66	136	114.22	112
Stephens	82	112	68	163	112	68	114.22	112
Stewart	26	59	132	51	59	132	80.56	23
Sumter	90	82	131	180	82	131	130.89	142
Talbot	12	81	103	24	81	103	69.44	10
Taliaferro	1	38	89	2	38	89	42.78	3
Tattnall	98	70	89	196	70	89	118.22	117
Taylor	49	37	82	97	37	82	71.78	13
Telfair	84	58	139	167.5	58	139	121.61	122
Terrell	50	121	146	99	121	146	122.22	123
Thomas	97	116	82	193.5	116	82	130.50	141
Tift	111	120	136	221.5	120	136	159.17	158
Toombs	83	99	105	166.5	99	105	123.72	127
Towns	75	100	56	149.5	100	56	101.94	77
Treutlen	78	35	53	155.5	35	53	81.17	25
Troup	55	98	119	109.5	98	119	108.72	94
Turner	34	84	90	68.5	84	90	80.94	24

County	WEIGHTED RANK—VERSION 2							
	Overall Average Rank Domain 1	Overall Average Rank Domain 2	Overall Average Rank Domain 3	Weighted Domain 1	Weighted Domain 2	Weighted Domain 3	Weighted Rank	Overall Weighted Rank
Twiggs	64	55	106	127.5	55	106	96.17	61
Union	50	70	20	99	70	20	63.11	6
Upson	55	102	114	109.5	102	114	108.61	92
Walker	132	37	86	264	37	86	128.78	135
Walton	94	52	55	187.5	52	55	98.06	66
Ware	105	53	139	209.5	53	139	133.94	146
Warren	14	104	152	28.5	104	152	94.61	54
Washington	89	92	77	177.5	92	77	115.72	114
Wayne	66	37	99	131	37	99	88.89	43
Webster	40	114	120	80	114	120	104.78	84
Wheeler	99	59	120	198.5	59	120	125.94	131
White	101	104	32	202	104	32	112.78	105
Whitfield	85	78	99	169.5	78	99	115.72	114
Wilcox	128	71	111	255	71	111	145.67	154
Wilkes	73	71	73	145.5	71	73	96.50	62
Wilkinson	79	31	70	157	31	70	86.22	37
Worth	123	91	78	245	91	78	137.78	150

** Calculated weighted rank differently as a check. Multiplied domain 1 by 2 and domains 2 and 3 by 1.

APPENDIX 8. TOP 2 AND 5 HIGHEST RISK RANKS BY REGION

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Polk	1	144	42,298	112
Walker	1	135	64,983	127
Meriwether	1	134	22,783	80
Butts	1	125	24,392	86
Bartow	1	121	96,217	135
Fannin	1	115	22,945	82
Whitfield	1	114	93,698	133
Spalding	1	112	64,708	126
Floyd	1	107	96,250	136
Catoosa	1	101	64,035	124
Gilmer	1	98	29,021	101
Gordon	1	95	53,292	120
Troup	1	94	64,653	125
Upson	1	92	27,551	95
Lamar	1	83	17,550	64
Murray	1	82	40,621	110
Dade	1	80	16,127	57
Pickens	1	70	31,264	104
Haralson	1	67	28,890	100
Paulding	1	64	136,655	146
Carroll	1	55	114,778	141
Coweta	1	49	127,111	143
Chattooga	1	42	26,619	92
Heard	1	32	11,528	41
Pike	1	5	17,721	66
Clarke	2	149	116,342	142
Elbert	2	129	20,372	71

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Washington	2	114	20,879	73
Stephens	2	112	25,700	91
Hall	2	108	187,743	149
White	2	105	25,294	89
Jenkins	2	97	8,450	22
Rabun	2	93	16,611	61
Richmond	2	91	199,768	152
Screven	2	88	15,054	54
Barrow	2	86	72,158	129
Madison	2	85	28,232	98
Dawson	2	79	22,555	79
Towns	2	77	11,010	39
Habersham	2	73	43,613	114
Franklin	2	72	21,748	76
Hart	2	66	24,067	85
Walton	2	66	87,311	132
Wilkes	2	62	10,268	34
Forsyth	2	60	174,520	148
Lumpkin	2	59	27,528	94
Warren	2	54	5,755	10
Newton	2	48	99,944	137
Oconee	2	47	33,320	107
Jackson	2	39	63,544	123
Greene	2	37	15,743	56
Jasper	2	34	13,953	51
McDuffie	2	31	21,862	77
Oglethorpe	2	27	14,328	52
Jefferson	2	27	16,478	59
Burke	2	22	22,797	81

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Lincoln	2	20	7,913	19
Banks	2	12	16,799	62
Columbia	2	11	112,958	140
Morgan	2	9	18,761	69
Hancock	2	7	9,219	27
Union	2	6	21,252	75
Taliaferro	2	3	1,812	1
Glascocock	2	2	2,801	4
Rockdale	3	82	84,569	131
Cherokee	3	76	215,084	153
Douglas	3	68	129,703	144
Fayette	3	58	106,788	138
Henry	3	47	195,370	151
Fulton	3	38	1,033,756	159
DeKalb	3	33	747,274	157
Cobb	3	29	714,692	156
Clayton	3	15	275,772	155
Gwinnett	3	14	808,167	158
Crisp	4	156	22,210	78
Grady	4	151	25,187	88
Worth	4	150	21,214	74
Dooly	4	145	11,819	44
Putnam	4	143	20,495	72
Sumter	4	142	32,084	105
Thomas	4	141	46,188	116
Schley	4	138	4,325	8
Baldwin	4	136	46,337	117
Dougherty	4	133	95,859	134
Colquitt	4	130	45,596	115

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Early	4	124	11,568	42
Terrell	4	123	10,320	35
Jones	4	120	27,740	96
Decatur	4	119	28,838	99
Bibb	4	118	156,060	147
Marion	4	116	6,995	15
Muscogee	4	106	190,414	150
Monroe	4	103	25,425	90
Houston	4	101	135,715	145
Calhoun	4	90	6,306	12
Crawford	4	87	12,240	46
Webster	4	84	2,192	2
Mitchell	4	78	23,800	84
Macon	4	75	13,336	49
Harris	4	63	30,138	103
Twiggs	4	61	10,111	33
Quitman	4	50	2,659	3
Clay	4	44	3,113	5
Randolph	4	40	7,180	18
Wilkinson	4	37	10,076	31
Stewart	4	23	4,558	9
Peach	4	21	27,247	93
Miller	4	19	6,228	11
Pulaski	4	18	9,897	30
Lee	4	17	34,410	108
Seminole	4	16	9,094	26
Taylor	4	13	8,587	23
Talbot	4	10	6,355	13
Chattahoochee	4	4	14,402	53

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Baker	4	1	3,637	6
Ben Hill	5	159	17,567	65
Tift	5	158	42,959	113
Candler	5	157	10,680	37
Lowndes	5	155	106,814	139
Wilcox	5	154	8,895	24
McIntosh	5	153	11,378	40
Cook	5	152	16,603	60
Berrien	5	148	17,044	63
Evans	5	147	11,695	43
Ware	5	146	35,914	109
Bacon	5	140	10,601	36
Emanuel	5	139	23,075	83
Laurens	5	137	48,295	119
Lanier	5	132	8,423	21
Wheeler	5	131	7,010	16
Bulloch	5	128	69,213	128
Toombs	5	127	27,959	97
Coffee	5	126	40,868	111
Telfair	5	122	12,792	47
Tattnall	5	117	24,493	87
Chatham	5	110	256,992	154
Appling	5	109	18,011	67
Glynn	5	104	76,820	130
Camden	5	102	48,277	118
Charlton	5	99	10,725	38
Brooks	5	96	16,354	58
Jeff Davis	5	90	13,659	50
Echols	5	74	4,213	7

TOP 2 AND 5 HIGHEST RISK RANKS BY REGION				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Clinch	5	71	6,988	14
Dodge	5	70	19,749	70
Long	5	58	12,234	45
Atkinson	5	56	8,230	20
Liberty	5	53	62,186	122
Pierce	5	52	18,580	68
Effingham	5	51	53,541	121
Brantley	5	45	15,643	55
Wayne	5	43	29,407	102
Johnson	5	41	9,300	29
Bleckley	5	35	12,855	48
Irwin	5	30	10,086	32
Montgomery	5	28	8,930	25
Treutlen	5	25	7,058	17
Turner	5	24	9,254	28
Bryan	5	8	32,559	106

APPENDIX 9. TOP 10 HIGHEST RISK RANKS OVERALL

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Ben Hill	5	159	17,567	65
Tift	5	158	42,959	113
Candler	5	157	10,680	37
Crisp	4	156	22,210	78
Lowndes	5	155	106,814	139
Wilcox	5	154	8,895	24
McIntosh	5	153	11,378	40
Cook	5	152	16,603	60
Grady	4	151	25,187	88
Worth	4	150	21,214	74
Clarke	2	149	116,342	142
Berrien	5	148	17,044	63
Evans	5	147	11,695	43
Ware	5	146	35,914	109
Dooly	4	145	11,819	44
Polk	1	144	42,298	112
Putnam	4	143	20,495	72
Sumter	4	142	32,084	105
Thomas	4	141	46,188	116
Bacon	5	140	10,601	36
Emanuel	5	139	23,075	83
Schley	4	138	4,325	8
Laurens	5	137	48,295	119
Baldwin	4	136	46,337	117
Walker	1	135	64,983	127
Meriwether	1	134	22,783	80
Dougherty	4	133	95,859	134
Lanier	5	132	8,423	21

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Wheeler	5	131	7,010	16
Colquitt	4	130	45,596	115
Elbert	2	129	20,372	71
Bulloch	5	128	69,213	128
Toombs	5	127	27,959	97
Coffee	5	126	40,868	111
Butts	1	125	24,392	86
Early	4	124	11,568	42
Terrell	4	123	10,320	35
Telfair	5	122	12,792	47
Bartow	1	121	96,217	135
Jones	4	120	27,740	96
Decatur	4	119	28,838	99
Bibb	4	118	156,060	147
Tattnall	5	117	24,493	87
Marion	4	116	6,995	15
Fannin	1	115	22,945	82
Whitfield	1	114	93,698	133
Washington	2	114	20,879	73
Spalding	1	112	64,708	126
Stephens	2	112	25,700	91
Chatham	5	110	256,992	154
Appling	5	109	18,011	67
Hall	2	108	187,743	149
Floyd	1	107	96,250	136
Muscogee	4	106	190,414	150
White	2	105	25,294	89
Glynn	5	104	76,820	130
Monroe	4	103	25,425	90

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Camden	5	102	48,277	118
Catoosa	1	101	64,035	124
Houston	4	101	135,715	145
Charlton	5	99	10,725	38
Gilmer	1	98	29,021	101
Jenkins	2	97	8,450	22
Brooks	5	96	16,354	58
Gordon	1	95	53,292	120
Troup	1	94	64,653	125
Rabun	2	93	16,611	61
Upson	1	92	27,551	95
Richmond	2	91	199,768	152
Calhoun	4	90	6,306	12
Jeff Davis	5	90	13,659	50
Screven	2	88	15,054	54
Crawford	4	87	12,240	46
Barrow	2	86	72,158	129
Madison	2	85	28,232	98
Webster	4	84	2,192	2
Lamar	1	83	17,550	64
Murray	1	82	40,621	110
Rockdale	3	82	84,569	131
Dade	1	80	16,127	57
Dawson	2	79	22,555	79
Mitchell	4	78	23,800	84
Towns	2	77	11,010	39
Cherokee	3	76	215,084	153
Macon	4	75	13,336	49
Echols	5	74	4,213	7

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Habersham	2	73	43,613	114
Franklin	2	72	21,748	76
Clinch	5	71	6,988	14
Pickens	1	70	31,264	104
Dodge	5	70	19,749	70
Douglas	3	68	129,703	144
Haralson	1	67	28,890	100
Hart	2	66	24,067	85
Walton	2	66	87,311	132
Paulding	1	64	136,655	146
Harris	4	63	30,138	103
Wilkes	2	62	10,268	34
Twiggs	4	61	10,111	33
Forsyth	2	60	174,520	148
Lumpkin	2	59	27,528	94
Fayette	3	58	106,788	138
Long	5	58	12,234	45
Atkinson	5	56	8,230	20
Carroll	1	55	114,778	141
Warren	2	54	5,755	10
Liberty	5	53	62,186	122
Pierce	5	52	18,580	68
Effingham	5	51	53,541	121
Quitman	4	50	2,659	3
Coweta	1	49	127,111	143
Newton	2	48	99,944	137
Oconee	2	47	33,320	107
Henry	3	47	195,370	151
Brantley	5	45	15,643	55

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Clay	4	44	3,113	5
Wayne	5	43	29,407	102
Chattooga	1	42	26,619	92
Johnson	5	41	9,300	29
Randolph	4	40	7,180	18
Jackson	2	39	63,544	123
Fulton	3	38	1,033,756	159
Greene	2	37	15,743	56
Wilkinson	4	37	10,076	31
Bleckley	5	35	12,855	48
Jasper	2	34	13,953	51
DeKalb	3	33	747,274	157
Heard	1	32	11,528	41
McDuffie	2	31	21,862	77
Irwin	5	30	10,086	32
Cobb	3	29	714,692	156
Montgomery	5	28	8,930	25
Oglethorpe	2	27	14,328	52
Jefferson	2	27	16,478	59
Treutlen	5	25	7,058	17
Turner	5	24	9,254	28
Stewart	4	23	4,558	9
Burke	2	22	22,797	81
Peach	4	21	27,247	93
Lincoln	2	20	7,913	19
Miller	4	19	6,228	11
Pulaski	4	18	9,897	30
Lee	4	17	34,410	108
Seminole	4	16	9,094	26

Top 10 Highest Risk Ranks Overall				
County	Region	Overall Weighted Rank	2009 Population	2009 Population Rank
Clayton	3	15	275,772	155
Gwinnett	3	14	808,167	158
Taylor	4	13	8,587	23
Banks	2	12	16,799	62
Columbia	2	11	112,958	140
Talbot	4	10	6,355	13
Morgan	2	9	18,761	69
Bryan	5	8	32,559	106
Hancock	2	7	9,219	27
Union	2	6	21,252	75
Pike	1	5	17,721	66
Chattahoochee	4	4	14,402	53
Taliaferro	2	3	1,812	1
Glascock	2	2	2,801	4
Baker	4	1	3,637	6