



# Power of Putnam

Uniting for a Drug-free Community

## **Putnam County**

### **2007**

### **Community**

### **[Alcohol and Drug Abuse]**

### **Needs Assessment**

Issued May 7, 2007

Developed as part of a  
Strategic Prevention Framework  
State Incentive Grant  
from the  
Tennessee Department of Health,  
Bureau of Alcohol and Drug Abuse Services



## **CAUTION IN INTERPRETING THE RESULTS**

When reading this document it is important to remember this document is but one source for assisting the Putnam County in making the best possible informed decisions when planning prevention services.

- Many individuals who use substances do not report their use or perceive it to be a problem and are therefore underrepresented in the profile and potentially have limited access to services
- All of the data presented only represents the information provided by various subsets of individuals and agencies, and do not represent all residents of the county or all at risk youth
- Several data sources rely on the perceptions of the respondent or respondents and as such only represent that individual(s) perceptions
- All of the data presented is time limited; the data reported in this report only provides information at a single point in time, which has passed.
- All assumptions based on the data are at best still just assumptions



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## **A. COMPOSITION OF THE NEEDS ASSESSMENT WORK GROUP**

The Power of Putnam Board of Directors expresses appreciation to the following organizations and numerous individuals that participated in this project. (The list is organized according to the sector represented.)

### Government

Putnam County government – Kim Blaylock, Marcia Borys  
Tennessee Senate – Charlotte Burks  
Cookeville City Government – Jean Davis

### Social Service

Putnam County Department of Health – Jared Wright  
Upper Cumberland Regional Health Office – Ann Marie Vinson, Shannon Railling, Beverly Madewell  
TenderCare – Pat Smith, Kristi Sweat  
UCCSA – Tammy Holmes, Summer Kinnaird, Larry Evitts  
Volunteer Behavioral Health Care – Amy Key, Shelba Hodges  
CASA – Jennifer Maulding  
Lazarus House – Patty Dickens  
Tennessee Commission on Children and Youth – Kathy Daniels  
Genesis House – Jannell Clark  
Bradford Health Care Services – Heather Kuley, Melissa Martin  
Coordinated School Health – Barbara Sims  
Department of Children’s Services- Betsy Dunn, Cherie Richards

### Education

Putnam County Board of Education – Paula King, Beverly Dronebarger  
Tennessee Technological University – Gloria Bell, Marc Burnett, Lisa Macke  
The University of Tennessee College of Social Work- Sam MacMaster, Rod Ellis

### Community Volunteers

Volunteers – Carol Raschke, Patty Dickson

### Law Enforcement

Cookeville Police – Sgt. Ken Sircy, Lt. Bob Terry

### Courts

District Attorney – Bill Gibson  
Judicial – John Hudson

### Business

Color Magic/Porter Paint – Jim King

### Military

National Guard – Tommie Donohue

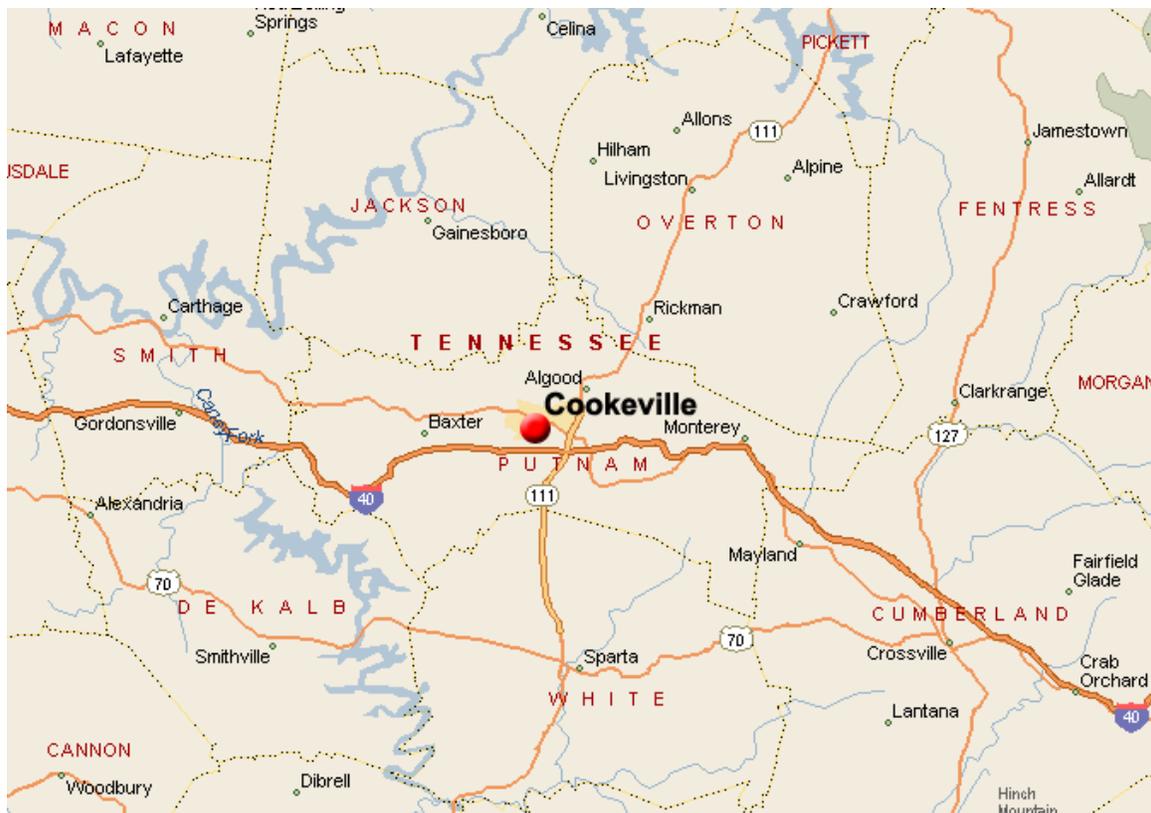
### Faith community

First United Methodist Church – Carrie Hutchins  
Miracle Mountain – Kim Williams, Roger Payne

## B. COUNTY DEMOGRAPHIC PROFILE

### Location

Putnam County is located in the Upper Cumberland Plateau region of the state; see map below Putnam County is in red. The county has a total land area of 403 square miles and contains the growing city of Cookeville and three small towns: Baxter, Monterey and Algood. The county is fairly accessible as Interstate 40, which runs east west, and State Route 111, which runs north south intersect the county.



### Population size:

Putnam County has a total estimated population of 62,824 for the year 2006 (U.S. Census, 2007). The county is the eighteenth most populated county out of the ninety-five counties in state of Tennessee. Cookeville is the county seat and the largest municipality in county. The most recently estimated population (2005) for Cookeville was 27,743. Nearly half (44.2%) of the population of the county resides within the city limits of Cookeville. Smaller communities with significant populations include Baxter, Allgood and Monterey.

Putnam County has experienced significant population growth over the last two decades. The county's population grew nearly ten percent (9.6%) from its population in 2000 and by nearly a third (32.9%) from the population in 1990. There are 170 people per square mile in Putnam County, which is just slightly higher than the state average of 147.

## Economics

Putnam County is part of the Cookeville Micropolitan Area. Similar to Metropolitan Areas or MSAs, Micropolitan areas are geographic designations designed to measure economic activity outside of major cities. The US Census Bureau and the Office of Management and Budget define Micropolitan Areas, as smaller cities of populations of 10-50,000 and the surrounding areas that serve as economic hubs for the area.

There are 578 Micropolitan Areas in the country and 20 in the state of Tennessee. The Cookeville Micropolitan Area, which includes Putnam, Overton and Jackson counties, is ranked first in the state, and twenty-second in the nation in terms of economic growth.

The Tennessee Department of Labor reports the following about the current economics in the Cookeville Micropolitan Area:

Manufacturing is the largest sector in the economy with over 100 plants and 8,000 employees. Retail trade employs about 4,200 people and is the second largest sector in the Cookeville economy. This is followed by Health care workers comprise about 3,840 employees and education, which employs approximately 2,000 workers.

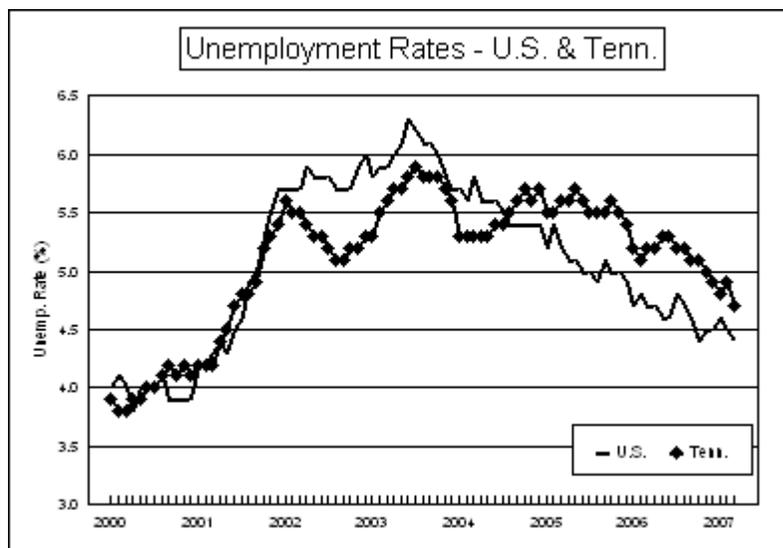
There are signs of economic strength for the area. Cookeville's 2005 retail sales total of \$1.16 billion was a 12.4 % increase from the 2004 retail sales total. By comparison the state of Tennessee increase was 7.86 %. In June 2006 Cookeville banks had \$1.215 billion in deposits, an increase of 10.2 percent over June 2005. In June 2006 there were 30 bank branches in Cookeville, an increase of three branches over June 2005.

Although there is overall economic strength in Putnam County there have two recent significant layoffs in manufacturing within Putnam County. TRW is relocating out of state, and 400 employees were laid off in December of 2006. Earlier in 2006 Russell Stover's laid off 900 employees from its candy making factory. Even with the loss of these manufacturing jobs, overall employment increased by over 900 between August 2006 and December 2006.

## Unemployment rate

The most recently available unemployment rate for Putnam County, March of 2007 places unemployment at 4.5% and for the overall Cookeville Micropolitan Area at 5.5%, both are improvements over the past month. Trend data is not available for the county, but is reported to be similar to that of the state and nation as a whole.

Current unemployment rates are comparable with the rates for both the state (4.7%) and the nation (4.4%) for March of 2007. Trends in unemployment for the state and nation can be seen in the graph below. In terms of trends, the lowest rate in the state was 3.7% in February of 2000 and the highest was 5.9% in June of 2003. The national rate also spiked in June of 2003 at 6.3% and experienced the lowest rates of 3.9% in the winter of 2000.



## Poverty rate (population and youth rates)

Putnam County residents fall below both state and national averages for measures of poverty. The most recently available data from the Census Bureau's American Community Survey of 2005 suggests that nearly a fifth (18.8%) of all residents and nearly a quarter of youth (24.7%) live in poverty in Putnam County. Nationally the same survey found that 13.3% of all Americans and 18.5% of all youth lived in poverty. In Tennessee 15.5% of all state residents and 21.4% of all youth lived in poverty.

### Summary of Percentage of Residents Living in Poverty

	Adults in Poverty	Youth in Poverty
<b>Putnam County</b>	18.8%	24.7%
<b>State of Tennessee</b>	15.5%	21.4%
<b>USA</b>	13.3%	18.5%

Another measure of poverty found in the same survey, Household Income, is also lower in Putnam County than the rest of the state and nation. The median household income of \$30,864 in Putnam County is lower than the median income in both the state of Tennessee (\$38,874) and the nation as a whole (\$46,242).

## Race/Ethnicity

Data for Race and Ethnicity is most recently available from 2005 population estimates. In terms of race, the vast majority of individuals in Putnam County are Caucasian (95.4%). Smaller proportions of African Americans (1.9%), Asians (1.1%), Native Americans (0.6%), and Pacific Islanders (0.1%) make up the rest of the county's population.

In terms of Ethnicity, there is a small, but growing population of Hispanics/Latinos in the county. The 2005 Census estimate places this number at 1,891 or 3.0% of the population. This number may be much larger as there is a growing and often undocumented population within county that may be underestimated by the Census Bureau's counting procedures. Among the estimated population the majority of Hispanics/Latinos originated from Mexico (55.5%) or Guatemala (23.9%), with smaller populations originating from Cuba (2.0%) and Puerto Rico (2.8%). No other country of origin made up more than one percent.

## Education level

Educational attainment is provided in the table below. Data is divided between individuals under twenty-five and those over twenty-five as many individuals in the 18-24 age group are still completing their education either in higher education or through the completion of a GED.

Despite the existence of Tennessee Tech in Cookeville, Putnam County lags significantly behind the rest of the state and nation in educational attainment. The county has significantly higher rates of high school dropouts, nearly twice the state and national average for all adults. Similarly, the county has nearly half the number of college graduates. It is important to note that disparities are more pronounced in the adult population (over 25) suggesting that the gap may be improving.

### Educational Attainment

	18-24			25+		
	Putnam	Tenn	USA	Putnam	Tenn	USA
<b>Less than High School</b>	25.5%	19.5%	19.6%	37.9%	18.9%	16.7%
<b>High School (Including GED)</b>	28.9%	40.0%	34.0%	22.4%	34.5%	29.6%
<b>Some College</b>	40.8%	32.5%	37.1%	21.5%	24.8%	27.5%
<b>College Grad</b>	4.8%	8.0%	9.3%		21.8%	27.2%

## Institutions of higher learning

Putnam County is home to Tennessee Technological University and its 9,500 students which make up nearly a third of the population of Cookeville. Tennessee Tech is ranked among the Top Public Schools in the South and among the top 40 Best Universities-Master's in U.S. News & World Report's 2005 edition of "America's Best Colleges." This year, The Princeton Review also listed TTU as "Best Southeastern College."

Putnam County is also home to the Cookeville branch of the Nashville Community College and the Medvance Institute, which provides training in health care.

## Number of public and private school students

The American Community Survey of 2005 completed by the US Census Bureau found 10,142 total students in grades K through 12. Almost all 9,782 (96.5%) are enrolled in public schools; the rest 360 (3.5%) are enrolled in private schools. Data for students by grade level are captured in the table below.

**Number and Percentage of Public and Private School Students**

	<b>Total Students</b>	<b>Total in Public Schools</b>	<b>Percentage in Public Schools</b>	<b>Total in Private Schools</b>	<b>Percentage in Private Schools</b>
<b>Kindergarten</b>	786	707	89.9%	79	10.1%
<b>Elementary: (1 to 4)</b>	2,702	2602	96.3%	100	3.7%
<b>Elementary: (5 to 8)</b>	2,952	2893	98.0%	59	2.0%
<b>High school: (9 to 12)</b>	3,702	3580	96.7%	122	3.3%
<b>Total</b>	10,142	9782	96.4%	360	3.5%

The State Department of Education reported slightly higher numbers that year (2005) for public school students, 9,918. The racial breakdown of public school students generally mirrors the community. Caucasians made up the majority of students (90.8%), but slightly less of the general population. African Americans made up about the same percentage (2.1%), and Hispanic/Latinos were more represented in the school system (5.8%) than the general population.

## Number of students on free or reduced lunch

Approximately a third (36.3%) of Putnam County students receive a free or reduced lunch. This is slightly lower than the rate of the rest of the state (41.5%).

## C. REVIEW OF YOUTH SURVEY RESULTS

### Description of Participants

A total of 2,260 students completed the Youth Survey in Putnam County. Students were fairly evenly divided between the four grades 6<sup>th</sup> (28%), 8<sup>th</sup> (26%), 10<sup>th</sup> (24%), and 12<sup>th</sup> (21%), with higher representation among the lower grades. Students generally matched up with the demographics of the county and school populations. Respondents were primarily male (51%) and Caucasian (93%), lived in two parent homes (76%) usually with both biological parents (59%). Respondents primarily reported living in small towns (52%), however nearly a third (31%) reported living in a rural area (on a farm or in the country).

## Reported Substance Use

Students reported substance use both over their lifetime and within the past month. Data provided in the tables below is for all students and 12<sup>th</sup> graders. This provides a snapshot of all students as well as a measure of what substances students are likely to have used by the end of high school. Data is provided at the aggregate level for Putnam and all of the thirty SIG counties. This is intended to provide a comparison for Putnam versus the state.

Lifetime substance use: By the end of high school the majority of Putnam County students report experimenting with alcohol (74%), and cigarettes (56%); and significant proportions of students report trying marijuana (42%), smokeless tobacco (29%), inhalants (15%), cocaine (14%), and methamphetamines (3%).

In comparison to students in the other thirty SIG counties, Putnam County students report use at the same level or within one percentage point (which could easily be attributed to rounding error). The lone exception is cocaine use. As compared to the other counties two percent more of all Putnam county students reported trying cocaine, and four percent more of high school seniors reported trying cocaine than their peers in other counties. One in seven high school seniors in Putnam County have tried cocaine as compared to one in ten in the rest of the state.

### Lifetime Use

	All Students		12 <sup>th</sup> Grade Students	
	Putnam	30 SIG Counties	Putnam	30 SIG Counties
<b>Smokeless tobacco</b>	18	19	29	28
<b>Cigarettes</b>	37	38	56	55
<b>Alcohol</b>	51	52	74	74
<b>Marijuana</b>	23	23	42	43
<b>Inhalants</b>	17	16	15	14
<b>Cocaine**</b>	7	5	14	10
<b>Methamphetamines</b>	2	3	3	4

Past month use: Within the past month, nearly a quarter (22%) of all high school students in Putnam County had used alcohol, followed in frequency by cigarettes (16%), marijuana (11%), smokeless tobacco (8%), inhalants (5%), cocaine (3%), and methamphetamines (1%). For high school seniors, more than a third (37%) had used alcohol, followed by cigarettes (28%), marijuana (19%), smokeless tobacco (14%), cocaine (5%), inhalants (2%), and methamphetamines (1%).

In comparison to students in the other thirty counties Putnam County students used substances at the same rate (cigarettes, marijuana), or less (smokeless tobacco, alcohol, marijuana, inhalants and methamphetamines). The lone exception is a slightly higher rate of cocaine use among high school seniors. Alcohol use by high school seniors was five percent less than that of the other counties.

### Use in the Last 30 Days

	All Students		12 <sup>th</sup> Grade Students	
	Putnam	30 SIG Counties	Putnam	30 SIG Counties
<b>Smokeless tobacco</b>	8	10	14	16
<b>Cigarettes</b>	16	16	28	28
<b>Alcohol**</b>	22	24	37	42
<b>Marijuana**</b>	11	11	19	21
<b>Inhalants**</b>	5	6	2	4
<b>Cocaine</b>	3	3	5	4
<b>Methamphetamines</b>	1	2	1	2

**Age of first use:** Delaying the first use of a substance is a known protective factor. In the table below are the percentages of 12<sup>th</sup> graders reporting using a given substance before age 15. More than a third (36%) had used cigarettes prior to this age, and nearly a third (30%) had used alcohol before this age. Marijuana (18%), smokeless tobacco (12%), and beginning alcohol use “regularly” were all initiated by significant minorities of students prior to age 15. These rates are generally comparable to the other thirty counties, as they are all equal to or slightly less than the reported rates for the rest of the state.

**Percentage of 12<sup>th</sup> Graders who began using a substance before age 15**

	All Students	
	Putnam	30 SIG Counties
<b>Smokeless tobacco</b>	12	12
<b>Cigarettes</b>	36	36
<b>Alcohol</b>	30	34
<b>Marijuana</b>	18	20
<b>Alcohol “regularly”</b>	8	9

**Perceived risk./harm of use:** Students were asked to report their perceived risk of substance use behaviors. Nearly two-thirds of students reported great risk in smoking marijuana regularly (68%) slightly more than smoking cigarettes regularly (63%), and much more than drinking regularly (46%) or trying marijuana (38%). Putnam County students generally matched up with their peers, but were more likely to perceive regular marijuana use as a great risk.

**Percentage of all students who perceive great risk for the following:**

	All Students	
	Putnam	30 SIG Counties
<b>Smoking one or more packs of cigarettes a day</b>	63	62
<b>Trying marijuana</b>	38	38
<b>Smoking marijuana regularly</b>	68	66
<b>Drink one or two drinks a day</b>	46	45

**Disapproval of substance use (attitude):** Students were asked to respond to how much they disapproved of someone their age using various substances. The majority of Putnam County students disapproved of all of substance use. The highest level of disapproval was for hard drugs (92%), followed by marijuana (72%), alcohol (56%), and tobacco (51%). By comparison students were much more likely to disapprove of substance use than picking a fight with someone (38%), and drug use was more disapproved of than attacking someone to hurt them (73%), stealing (64%), or skipping school (52%). Only bringing a handgun to school was perceived as being more wrong than hard drug use. Responses were very similar to those in the other 30 counties.

**Percentage of all students who think it is “very wrong” for a student their age to:**

	All Students	
	Putnam	30 SIG Counties
<b>Smoke tobacco</b>	51	50
<b>Drink alcohol</b>	56	55
<b>Smoke marijuana</b>	72	71
<b>Use an illegal drug</b>	89	88
<b>Bring a handgun to school</b>	92	92
<b>Steal</b>	64	64
<b>Pick a fight</b>	38	38
<b>Attack someone to hurt them</b>	73	73
<b>Skip School</b>	52	55

Parental Disapproval of substance use (attitude): Students were asked to respond to how much they believed their parents disapproved of someone their age using various substances. The majority of Putnam County students disapproved of all of the substances. The highest level of disapproval was for hard drugs (97%), followed by marijuana (89%), alcohol (76%), and tobacco (79%). Responses were very similar to those in the other 30 counties.

**Percentage of all students who report their parents feel it is “very wrong” for a student their age to use:**

	All Students	
	Putnam	30 SIG Counties
<b>Cigarettes</b>	79	79
<b>Alcohol</b>	76	75
<b>Marijuana</b>	89	89
<b>Hard drugs</b>	97	97

Parental Involvement: Students were asked to respond to how much their parents were involved in various aspects of parenting. Putnam county parents were generally reported to be involved in their children’s lives at rates comparable and slightly higher than the rest of the state. Putnam County parents were less likely to ask about homework, but were more likely to know whether their child came home on time and set clear rules about drugs and alcohol.

**Percentage of all students who report strong agreement that their parents :**

	All Students	
	Putnam	30 SIG Counties
<b>Ask if homework is done</b>	41	43
<b>Know if they did not come home on time</b>	55	53
<b>Know where they are and who they are with, if they are not at home</b>	53	53
<b>Set clear rules</b>	50	49
<b>Set clear rules about drugs and alcohol</b>	64	62
<b>Catch them if they drank</b>	43	42
<b>Catch them if they skipped school</b>	51	51
<b>Catch them if they carried a handgun</b>	68	67

**D. REVIEW OF ARCHIVAL DATABASE RESULTS**

**Alcohol and drug related arrests for youth:**

Three databases were reviewed for archival data regarding alcohol and drug related arrests for youth.

Referrals to Juvenile Court: The first database, the Tennessee Council of Juvenile & Family Court Judges: Alcohol/Drug Related Court Referrals annually records referrals to juvenile court for sale of controlled substances, other drug offenses, possession of controlled substances, carrying weapons on school property, driving under influence, and possession / consumption of alcohol for youth (18 & under) per 100,000 population. The latest available data is from 2004.

The table below compares Putnam County arrest rates and referral rates with the rest of the state. Putnam County has significantly higher incidence rates of all referrals with the exception of carrying weapons on school property and other drug offenses.

**Alcohol/Drug Related Court Referrals per 100,000 of population**

	<b>Putnam County</b>	<b>Tennessee</b>
<b>Drug Related Referrals</b>	12837.9	11551.6
<b>Sale of Controlled Substance</b>	62.5	41.0
<b>Possession of Controlled Substance</b>	576.9	293.1
<b>Carrying Weapon on School Property</b>	0	31.8
<b>DUI</b>	48.6	22.6
<b>Possession/Consumption of Alcohol</b>	305.8	205.5
<b>Other Drug Offense</b>	97.3	117.3

Crime on Campus: The next table below provides data drawn from the Crime on Campus database and compares Putnam County arrest rates with the rest of the state for young adults. Putnam County has significantly higher incidence rates of drug violations and public drunkenness, but lower rates of DUI and drug equipment charges.

**Alcohol/Drug Related Arrests on Campus per 100,000 of population**

	<b>Putnam County</b>	<b>Tennessee</b>
<b>Drug Related Violations Total</b>	229.7	543.8
<b>Drug Violations</b>	172.2	140.5
<b>Drug Equipment</b>	57.4	80.1
<b>DUI</b>	9.5	55.3
<b>Public Drunkenness</b>	95.7	78.8

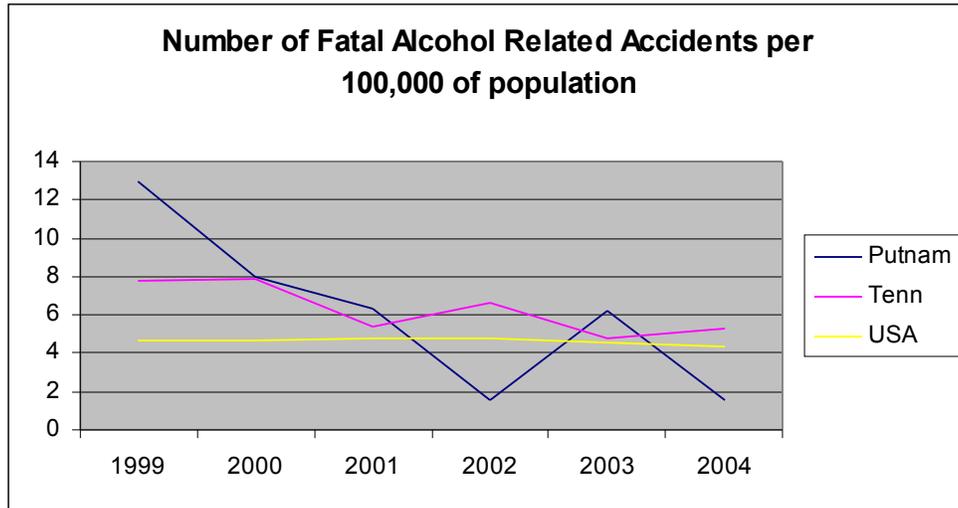
Juvenile Arrest Rates: The next table below provides data drawn from the Tennessee Bureau of Investigation, Crime Statistics Unit (May, 2006). Crime in Tennessee, 2005. Alcohol arrests are made up of juvenile arrests reported for DUI, Drunkenness, Liquor law violations. Drug related arrests are made up of Drug/narcotic violations & Drug equipment violations. Violent crimes are made up of juvenile arrests reported for Assault offenses (aggravated, simple, intimidation, stalking), Kidnapping/abduction, Robbery, Forcible sex offenses (forcible rape, forcible sodomy, sexual assault with an object, forcible fondling). Vandalism and Disorderly represent those crimes. Property crimes are made up of juvenile arrests reported for property crimes except for destruction/damage/vandalism. It appears from this data that Putnam County had fewer arrests on all measures.

**Juvenile Arrests per 1,000 of juvenile population**

	<b>Putnam County</b>	<b>Tennessee</b>
<b>Alcohol-related Crimes</b>	1.7	1.4
<b>Drug-related Crimes</b>	0.8	2.5
<b>Violent Crimes</b>	0.8	5.2
<b>Vandalism/Disorderly Conduct</b>	1.5	3.8
<b>Property Crimes</b>	3.8	5.3

## Alcohol Related Automobile Fatalities

Data drawn from the National Highway Traffic Safety Administration for fatal alcohol related accidents is presented in the graph below. For comparison purposes data is presented per 100,000 of population. National rates have been steady over the last five years of available data. The state of Tennessee has rates that were nearly double the national average in 1999, but currently approach the national average. Putnam County rates have fluctuated significantly over the five-year time period, and have also steadily declined. Rates were three times the national average in 1999 and were below the national average in the last available data (2004).



## School Attendance and Suspension/Expulsions

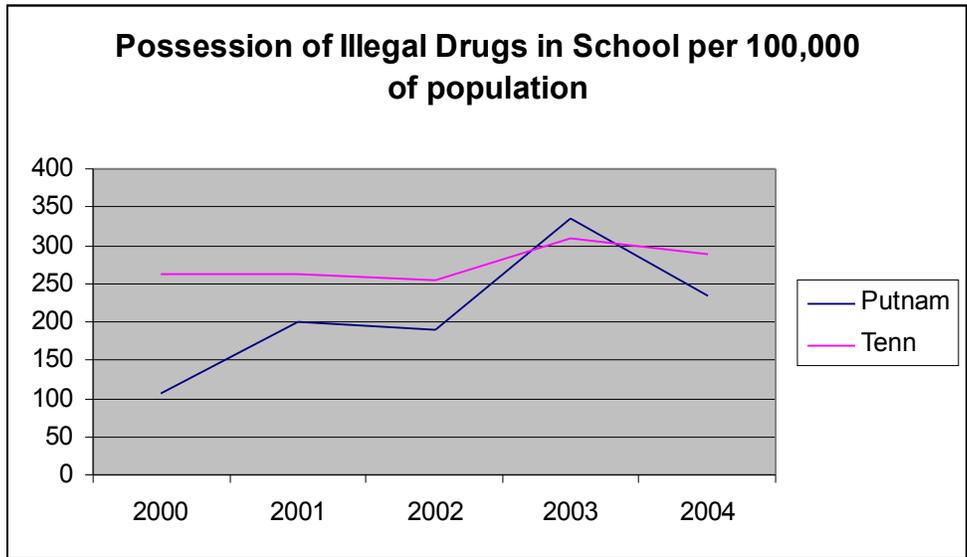
School Suspensions and Expulsions: Putnam County had a lower rate of suspensions and expulsions per student than the rest of the state. Approximately six percent of students in Putnam County were suspended last year as compared to 9.2% for the rest of the state. Similarly, there were fewer expulsions. Less than 0.1% of students were expelled from Putnam County schools as compared to 0.2% for the state.

Retention rates: Putnam County schools had few dropouts both compared to the prior year (10.7% vs. 2.9%) and during the past school year 10.4% vs. 4.6%).

Attendance rates: Attendance rates for Putnam County schools are generally similar and slightly higher than the rest of state. In K-8 attendance rates the past two years have been the same in the county (95.1%) and are higher than the rest of the state both years (94.8% and 94.2%). Attendance rates in high school the past two years (93.4% and 92.8%) are lower than elementary school, but above the state average for both years (92.2%).

Promotion rates: Similar to the above statistics over the past two years students in Putnam County have been promoted at high levels (97.8% and 97.9%), which are just slightly above the rates for the state (97.1% and 97.5%).

Possession of Illegal Drugs in Schools: Rates of possession charges for Putnam County students have steadily increased over the past five years. Despite the downturn in 2004, rates have more than doubled over the same time period, and are now equivalent with the state rates.



**B. REVIEW OF NATIONAL OUTCOME MEASURES DATA**

Baseline measures of the National Outcome Measures are presented in prior sections of this document or are included here in the following ways.

**Reduced Morbidity- Drug and alcohol use**

The following NOMS-specific data was collected in the youth survey and the results are presented in section C:

- Substance use in the last month (page 11)
- Age of first use (page 11)
- Perceived risk/harm of substance use (page 12)
- Disapproval of substance use (page 12)

**Employment/Education**

The following NOMS-specific data was collected in archival data and the results are presented in section D:

- ATOD related suspensions/expulsions (page 16)
- Daily school attendance (page 16)
- Perception of workplace policy

A baseline measure has yet to be collected regarding perceptions of workplace policies at the county level. The workgroup anticipates working with SPF-SIG to develop a measure of this indicator.

**Crime/Criminal Justice**

The following NOMS-specific data was collected in archival data and the results are presented in section D:

- Alcohol related car crashes/injuries (page 15)
- Alcohol related car crashes (page 15)
- Alcohol or drug related crimes (pages 14 and 15)

**Social Support/Connectedness:**

The following NOMS-specific data was collected in the youth survey and the results are presented in section C:

- Family communication around drug use (page 13)

### Access and service capacity:

- Numbers served

The following data was reviewed in an attempt to develop a proxy measure of the number of individuals served. This data is not currently collected for the entire county and the data measures substance abuse treatment and not substance abuse prevention, yet it provides a baseline measure. *Data for treatment capacity is drawn from the Tennessee Treatment Resource Survey of 2000.* Discharges for co-occurring disorders are drawn from Tennessee Hospital Discharge Database, 2005. The workgroup anticipates working with SPF-SIG to develop a more accurate measure of this indicator.

#### Treatment Capacity per 100.000 of population

	Putnam County	Tennessee
<b>Treatment Capacity</b>	316.1	395.1
<b>Discharges for Co-occurring Disorders</b>	4.6	1.4

### Retention

- Number of evidenced based programs

The workgroup is working with local providers to develop a resource assessment to measure this indicator.

- Number of times youth see prevention messages

A baseline measure has yet to be collected regarding number of times youth see prevention messages at the county level. The workgroup anticipates working with SPF-SIG to develop a measure of this indicator.

### Cost effectiveness

- Cost bands

The workgroup anticipates working with SPF-SIG to develop a measure of this indicator. The following cost bands are available from SAMHSA/CSAT for various modalities of substance abuse treatment. Based on their experiences in administering treatment programs SAMHSA/CSAT found the following program costs to be reasonable (subtracting 20% for the costs of SAMHSA evaluation requirements).

The following are considered reasonable ranges by treatment modality:

- Residential: \$3,000 to \$10,000
- Outpatient (Non-Methadone): \$1,000 to \$5,000
- Outpatient (Methadone) : \$1,500 to \$8,000
- Intensive Outpatient: \$1,000 to \$7,500
- Screening/Brief Intervention/Brief Treatment/Outreach/Pretreatment Services: \$200 to \$1,200
- Drug Court Programs (regardless of client treatment modality): \$3,000 to \$5,000
- Peer Recovery Support Services: \$1,000 to \$2,500

## F. REVIEW OF ADDITIONAL DATA

This section includes a review of other available data related to substance use and/or consequences.

### Substance Use by Middle School Students

Data from the latest TMSHS collected in 2002 suggests that use rates for alcohol, marijuana, cocaine and inhalants are generally comparable between Putnam County and the rest of the State of Tennessee. However, alcohol use appeared to be significantly elevated for Putnam County.

### Middle School Use Rates

	Putnam County	State of Tennessee
<b>Alcohol Lifetime**</b>	41.8	37.5
<b>Alcohol this year**</b>	28.6	26.2
<b>Alcohol this month</b>	19.3	17.6
<b>Alcohol binge this month</b>	4.1	2.9
<b>Marijuana Lifetime</b>	15.6	14.9
<b>Marijuana this year</b>	11.0	10.8
<b>Marijuana this month</b>	7.7	7.6
<b>Cocaine Lifetime</b>	3.5	3.5
<b>Cocaine this year</b>	2.6	2.6
<b>Cocaine this month</b>	2.1	1.9
<b>Inhalants Lifetime</b>	8.8	9.0
<b>Inhalants this year</b>	7.1	7.2
<b>Inhalants this month</b>	6.0	5.9

### Adult Population Use Rates

Data drawn from the Tennessee Adult Health and Lifestyles Survey (TAHLS, 1998) for population use rates is provided in the table below. Based on this data, it appears that adults in Putnam County report using less alcohol and cocaine, but more marijuana than other residents of the state.

### Adult Substance Use Rates

	Putnam County	State of Tennessee
<b>Alcohol this month</b>	26.8	35.6
<b>Alcohol binge this year**</b>	13.3	15.8
<b>Marijuana this month</b>	4.0	2.6
<b>Cocaine this month</b>	0.0	0.8

### NOMS measures for Adult Population

Data drawn from the National Survey on Drug Use and Health (NSDUH): Alcohol & Other Drug Use 2000 is provided in the table below. Putnam County residents use tobacco at significantly higher rates than the rest of the state and country, but use alcohol and marijuana at lower rates. Putnam County adults also more frequently reported bingeing on alcohol and using marijuana monthly to be a great risk than adults in the rest of the state and nation.

### Adult Substance Use and Attitude Measures

	Putnam County	State of Tennessee	USA
<b>Cigarette use this month</b>	37.6	34.9	25.3
<b>Alcohol this month</b>	32.3	35.1	46.2
<b>Alcohol binge this month</b>	15.5	16.3	20.4
<b>Marijuana this month</b>	3.7	4.4	4.8
<b>Alcohol binge is a great risk</b>	50.1	51.2	46.1
<b>Marijuana use monthly is a great risk</b>	48.5	46.9	44.1

### Health Consequences of Substance Use

Data for the health consequences of substance use is drawn from the CDC for deaths due to alcohol use, and the Tennessee Hospital Discharge Database (2005). Putnam county residents had comparable rates of death due to alcohol use, lower rates of alcohol and cocaine related hospitalizations, and higher rates of marijuana and methamphetamine related hospitalizations.

#### Rates of Health Consequences of Substance Use per 100,000 of population

	Putnam County	State of Tennessee
<b>Deaths due to Alcohol</b>	9.7	9.3
<b>Alcohol related hospitalization</b>	54.2	88.8
<b>Marijuana related hospitalization</b>	4.6	3.3
<b>Cocaine related hospitalization</b>	15.5	20.2
<b>Methamphetamine related hospitalization</b>	3.1	2.5

### Teen Births

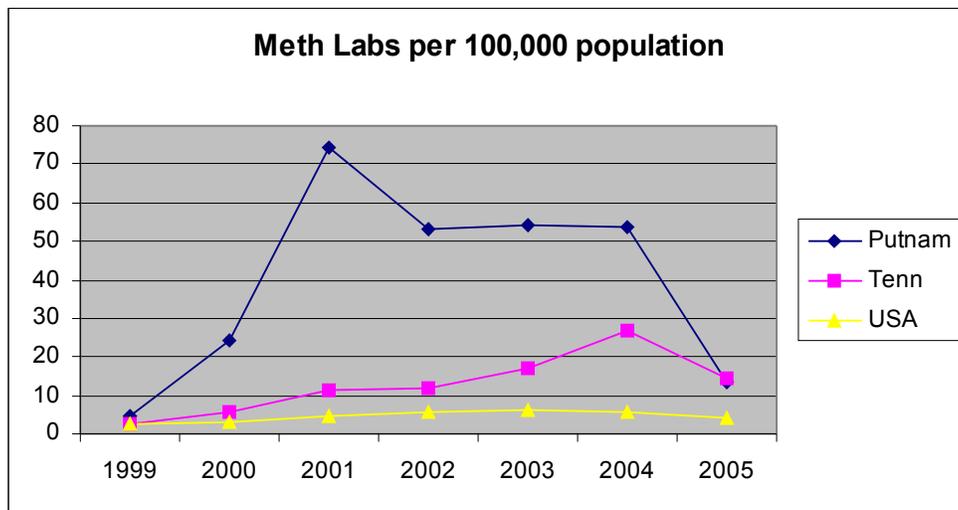
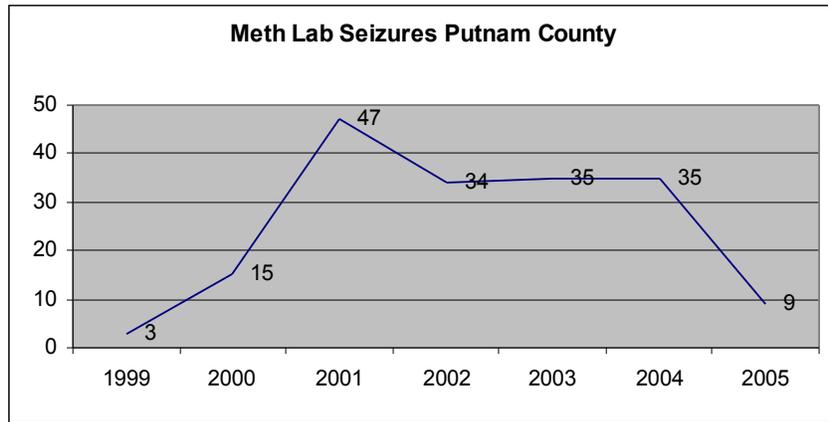
Birth rates to teen-age mothers are provided in the table below for the latest available data (2004). Rates in Putnam County are slightly higher than the rates for the rest of the state, and three and half times the national average. While this may or may not be related to substance use, but are important to developing a complete picture of youth at-risk behaviors in Putnam County.

#### Teen Births per 100,000 population (2004)

	Teen Birth Rate
<b>Putnam County</b>	14.1
<b>State of Tennessee</b>	13.5
<b>USA</b>	4.2

## Methamphetamine Lab Seizures

Methamphetamine use has been a recent, but ongoing problem in Putnam County in particular and the Upper Cumberland area in general. Data on methamphetamine lab seizures for the past six years is presented in two graphs below. The first graph provides the number of lab seizures in the county, which increased dramatically and has steadily decreased. The second graph provides a comparison of per capita lab seizures for the county state and nation.



## Youth in State Custody

Possibly related to the rise in methamphetamine use has been a recent up tick in child abuse reports and youth in custody in Putnam County. Child abuse reported at a population rate of 7% was reported by DCS to be nearly double the state rate of 4% for the rest of the state. There is also a higher rate of youth in state custody in Putnam County than the rest of the state in 2004 the latest available data drawn from the Tenn Kids, Kids Count database.

### Youth in State Custody per 100,000

	Under 18	Under 20
<b>Putnam County</b>	7.1	9.8
<b>State of Tennessee</b>	4.9	6.4

## **G. IDENTIFICATION OF ATOD PROBLEMS**

Based on the data reviewed in this report the following information appears to indicate the following problems in Putnam County.

### **County Demographic Profile**

Putnam County has experienced strong economic and population growth, yet there have been recent large layoffs that affect significant subpopulations. Measures of poverty indicate that Putnam County residents are less well off than other residents of Tennessee or the rest of the country.

Measures of educational attainment suggest that residents of the county are less educated than other residents of Tennessee or the rest of the country.

Residents of Putnam County are predominately Caucasian; the county is growing increasingly more diverse due to a growing population of Hispanic/Latinos.

### **Review of Youth Survey Results**

By the end of high school the majority of Putnam County students report experimenting with alcohol and cigarettes; and significant proportions of students report trying marijuana, smokeless tobacco, inhalants, cocaine, and methamphetamines. Substance use rates are similar to the rates for the rest of the state with the exception of cocaine, which is used at higher rates by Putnam County students and alcohol which is used less.

The majority of Putnam County students disapproved of all of substance use; and students generally perceived substance use to be a great risk. Putnam County students matched up with their peers across the state, but were more likely to perceive regular marijuana use as a great risk. Putnam county parents were generally reported to be involved in their children's lives at rates comparable and slightly higher than the rest of the state.

### **Review of Archival Data**

The review of arrest data suggests that youth in Putnam County are less frequently arrested than their peers across the state for substance use related crimes, but were more frequently referred to juvenile court. In contrast young adults were more frequently arrested for substance related crimes.

Rates of fatal alcohol automobile accidents in Putnam County have fluctuated significantly over the five-year time period. Rates were three times the national average in 1999 and were below the national average in the last available data (2004).

Putnam County schools have lower levels of School Suspensions and Expulsions; and higher retention rates, attendance rates, promotion rates than other schools in the state.

Rates of possession charges in schools for Putnam County students have steadily increased over the past five years. Despite the downturn in 2004, rates have more than doubled over the same time period, and are now equivalent with the state rates.

### **Review of Additional Data**

Data on adult substance use for Putnam County generally suggests lower overall use rates and higher disapproval of substance use than the rest of the state, with the possible exceptions of alcohol and marijuana use.

Putnam county residents had comparable rates of death due to alcohol use, lower rates of alcohol and cocaine related hospitalizations, and higher rates of marijuana and methamphetamine related hospitalizations.

Putnam County has experienced a recent decrease in methamphetamine lab seizures, but the per capita rates are above state and national averages.

Putnam County has experienced higher levels of child abuse reports and higher rates of children in custody.

## **H. IDENTIFICATION OF INTERVENING VARIABLES**

Based on a review of the information in the previous section, it appears that Putnam County has much strength to draw on in maintaining and improving the status of substance use among youth in the community (strong schools, involved parents, pro-social attitudes towards drug use, etc.). With the exception of cocaine, when taken in the aggregate, Putnam County youth on average are using substance at rates similar or lower than their peers across the state. However there are some troubling issues, as most youth will have used both alcohol and drugs by the time they are in the 12<sup>th</sup> grade. It also appears that while most youth are benefiting from the protective factors available in the environment, there is a small, but important cohort of youth who are heavily involved in substance use and suffering the consequences. This is evidenced by the previously mentioned spike in cocaine use, the higher than average rates for arrests in schools for drug possession and the high rates of arrests for young adults. This drug use appears to be primarily limited to stimulant use (cocaine and methamphetamines).

The following hypotheses are some of the suggested intervening variables.

The literature it is quite clear that youth attitudes drive drug use rates, it is apparent that a small cohort of individuals are not internalizing these messages and may need additional specific interventions.

Putnam County has experienced a significant rise in methamphetamine use over the past few years and the youth data may be a part of this overall trend. Therefore it may be important to continue to target messages specific to methamphetamine as well as identify and target youth who are at extreme high risk for using this substance or other powerful stimulants, i.e. cocaine.

Community consensus needs to be developed around the treatment options for youth who are harmfully involved with hard drugs.

Additional information regarding those youth at high risk for using hard drugs needs to be collected to identify additional intervening variables which can be targeted for additional interventions.