YOUTH SUBSTANCE ABUSE IN BERKELEY

A Report on Current Status and Policy Options

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EXECUTIVE SUMMARY

This report summarizes current initiatives related to youth Alcohol and Other Drug (AOD) use within the City of Berkeley and presents quantitative and qualitative evidence on current levels of youth substance use in the city. For the purposes of this report, we focus on alcohol and marijuana, the most commonly abused drugs among Berkeley's high school-aged students.

Our report finds that Berkeley High School students use marijuana and alcohol at high rates as compared to their state and national counterparts. Further, our analysis reveals a mismatch between current use levels within Berkeley and the resources dedicated to youth AOD services in the city.

The City of Berkeley, Berkeley Unified School District and the University of California at Berkeley have limited services dedicated to youth substance abuse prevention, and virtually no public treatment options available for youth. In recent years there have been increased efforts to address substance abuse prevention within Berkeley High School and within the City's Health Department. In addition, while Berkeley's Police Department has improved enforcement efforts around youth alcohol abuse in recent years, the City of Berkeley has extremely lenient policies regarding marijuana enforcement.

In sum, recent efforts related to youth AOD use are relatively small and decentralized, and do not reflect a coordinated effort within the City of Berkeley to address the issue of youth substance abuse.

In light of this service gap, we consider three alternative modes of improving services related to youth AOD use: prevention/education, treatment and enforcement. Based on our analysis, we conclude that Berkeley should focus its efforts on youth AOD education and prevention services.

We recommend that the City of Berkeley explore the following programming/policy options to improve youth AOD prevention and education services:

- Centralize efforts to address the issue of youth AOD use within the City of Berkeley by creating a youth AOD coordinator position either within the Health Department's Mental Health Division, or within Berkeley High School.

- Pursue grant funding for a citywide AOD prevention program modeled on Berkeley's Tobacco Prevention Program.

- Monitor and support recent AOD-related initiatives within the health department, police department and school district to ensure they are well-implemented, sustained and evaluated for effectiveness.

PART I. STATUS OF CURRENT YOUTH SUBSTANCE ABUSE RESOURCES IN THE CITY OF BERKELEY

The City of Berkeley, Berkeley Unified School District (BUSD) and the University of California at Berkeley have limited services dedicated to youth substance abuse prevention, and virtually no treatment options available for youth. The City Health Department administers one small program related to youth substance abuse, and runs a health center through Berkeley High School (BHS), which has limited resources to address the issue. Berkeley Police Department does provide counseling for youth who are apprehended for drug-related infractions, but considers marijuana use a low-priority enforcement issue. At the same time, the Police Department has been successful in curbing liquor sales to minors in recent years. The University of California, Berkeley has dedicated considerable resources to curbing underage drinking among undergraduates, which has had the positive effect of limiting alcohol access to minors throughout the City of Berkeley.

Berkeley's public entities (the City, BUSD, and UC Berkeley) offer no Alcohol and Other Drug (AOD) prevention or treatment resources for parents who wish to learn more about methods of preventing their children from abusing drugs and alcohol, or how to intervene and provide AOD related counseling and treatment for their children.

CURRENT INITIATIVES: CITY OF BERKELEY

City of Berkeley Department of Health

The City of Berkeley is one of three cities in the State of California with its own Public Health jurisdiction. In general, this provides Berkeley with more autonomy in deciding how to meet the public health needs of its residents, as compared to cities where health services are provided through the county. Within Berkeley's Health department, there is a separate Division of Mental Health.

The City of Berkeley's Public Health Department collaborates with Berkeley Unified School District to administer the Berkeley High School Health Center, which is housed in Berkeley High School. The Health Center, established in 1991, serves approximately 41% of the BHS student population, and provides a variety of preventative services, including alcohol and drug counseling. While the Health Center does have a mental health component, the resources and staff available to address substance abuse prevention are extremely limited.

In addition, the city's Mental Health Division provides on-site mental health services at Berkeley's elementary and middle schools. However, none of these are specifically related to substance abuse prevention or treatment.

Outside of the limited resources provided at the BHS Health Center, Berkeley's Public Health Department has few resources dedicated to substance abuse prevention, and even fewer dedicated to treatment. Almost all of the current substance abuse education and

prevention efforts that do exist within the city's health department are directed toward adults and, in particular, pregnant mothers.

The City Health Department does administer one substance abuse prevention program targeted toward youth. The Alcohol and Drug Injuries Prevention Program was launched in 2005 and is funded through a $240,000 grant from the California State Office of Traffic Safety. The program is focused on a "harm reduction" model—reducing the harm to the Berkeley community that results from driving under the influence of alcohol and other drugs. Using peer education, 16 high school students are trained to deliver education and prevention on several public health issues, including driving under the influence, to middle and high school students in Berkeley. The program is new and small. There have not yet been any attempts to quantify its effectiveness. Funding for the Alcohol and Drug Injuries Prevention Program is secured through the 2006-07 academic year, but funding availability beyond that period is unclear. The Health Department plans on applying for an extension of the state grant when current funding expires.

In addition, the City Health Department coordinates a program that trains UC Berkeley students to provide substance abuse education to the Berkeley community at large. While some of these services might reach youth in the community, they are not targeted to youth and are small in number and irregular in nature.[1]

The City of Berkeley does not offer any treatment services—either at the school, or outside of the school system—for youth struggling with substance abuse issues.

City of Berkeley Police Department: Counseling Services for Youthful AOD Offenders

The Berkeley Municipal Code (BMC) is the set of laws that governs the City of Berkeley. The ordinance explicitly direct police officers to regard marijuana infractions as a low priority issue.[2]

Therefore, while the Berkeley Police Department is legally obligated to protect juveniles whenever they witness a situation that could potentially be dangerous, police officers will not arrest juveniles for consumption or possession of marijuana unless they are clearly visually under the age of sixteen. However, the Berkeley Police Department does consider dealing drugs a high priority enforcement issue, and any youth caught selling a drug of any kind is automatically taken into custody. [3]

In general, Berkeley youth arrested for drug-related infractions receive some degree of counseling through the Berkeley Police Department. Depending on the offender's history

[1]Kimi Sakashita, interview by author(s), Berkeley, Ca., 22 March 2006.
[2] Laws contained within the BMC are created and/or changed by ordinances which are voted upon by the City Council members and the mayor. Section 12.24.030 of the BMC reads: "The City Council shall seek to ensure that the Berkeley Police Department gives lowest priority to the enforcement of marijuana laws. (Ord. 5137-NS § 2, 1979) Section 12.24.040 similarly reads: "The City Council shall seek to ensure that the Berkeley Police Department makes no arrests and issues no citations for violations of marijuana laws." (Ord. 5139-NS § 3, 1979)
[3]Sergeant David White, interview by author(s), Berkeley, Ca., 6 March 2006.

and the officer handling the case, a youth apprehended for a drug-related infraction will typically either be put into a "diversion program" through the county or an "in-house" program through the Berkeley Police Department.

The Berkeley Police Department runs two "in-house" programs for youth arrested for substance-related infractions: 1) Counsel and Release: Offending juveniles and their parents meet with officers on a regular basis to track their progress; or 2) Counsel and Supervision: Offending juveniles are legally required to check in with a police officer on a regular schedule.[4]

Youth who are unable to meet the requirements of in-house counseling, or who are not adequately served by these programs, are referred to a community-based program, or to the court system, depending upon the intensity of the situation.

City of Berkeley Police Department: Alcohol-Related Initiatives

The Berkeley Police Department has undertaken a major initiative to address underage liquor sales in Berkeley over the past three years. The department received three consecutive year-long Alcoholic Beverage Control (ABC) grants from the State of California in 2003, 2004 and 2005, and hopes to apply for continued funding to support the initiative.

The alcohol control initiative focuses on compliance checks for businesses, in order to limit alcohol sales to minors, "bar checks" to make sure youth are not using false identification to enter bars, "shoulder taps" to identify and discourage adults from buying alcohol for minors, and LEAD trainings to train businesses about responsible alcohol sales practices. The Minor Decoy Program allows law enforcement agencies to use persons under 20 years of age as decoys to purchase alcoholic beverages from licensed premises.

The City Policy Department implemented this initiative in 2003, and shut down five establishments in Berkeley for selling alcohol for minors between 2003 and 2006.[5] The number of businesses that have been found out of compliance with laws restricting alcohol sales to minors has decreased considerably over the three years that this initiative has been in effect. In 2003, the city had a non-compliance rate of 56%, and that dropped to 24% in 2006.

The following chart shows how the non-compliance rate has slowly begun to decline over the course of the past two years:

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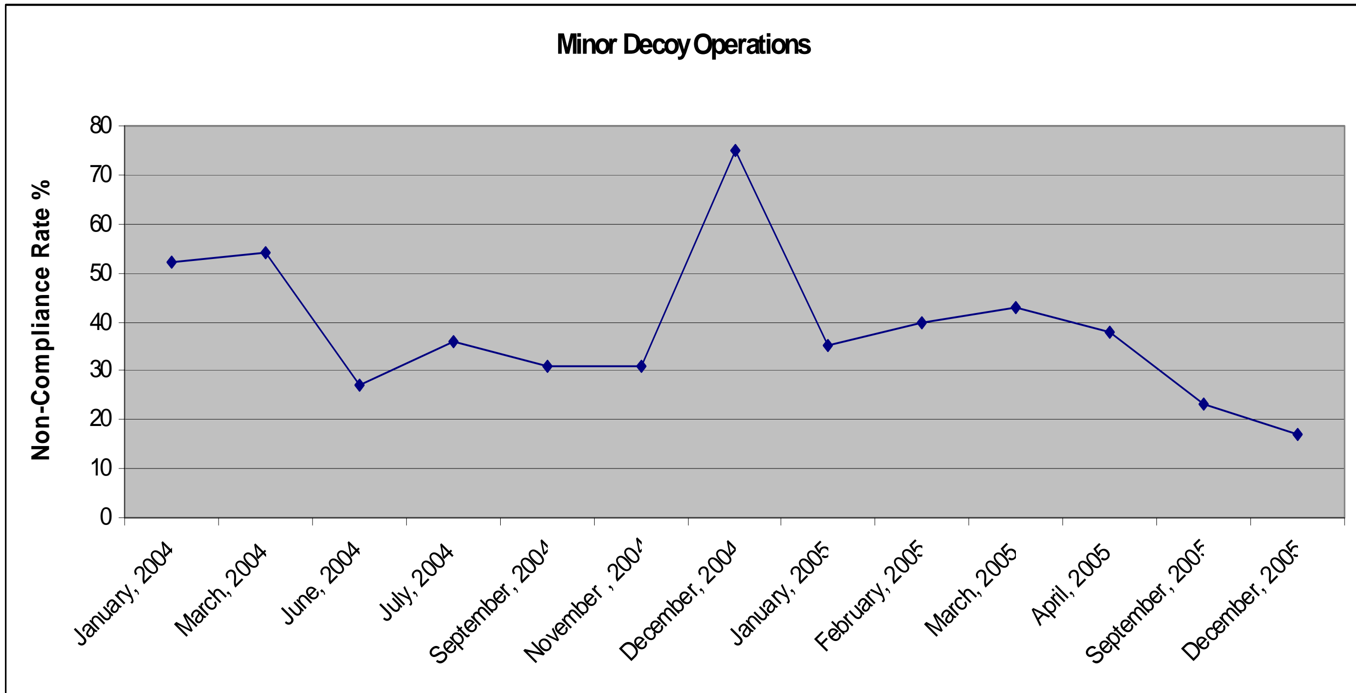
[4] This typically occurs on a weekly basis, though depending on the individual situation, daily, bi-weekly or monthly check-ins may be required.

[5] Businesses get a warning the first time they sell to a minor, a fine the second offense, and a revocation of their license if they are found to sell to a minor a third time.



Source: Berkeley Police Department, ABC Grant Report, January 2006.

This trend suggests that fewer alcohol vendors are selling to minors than in the past. In addition, anecdotal evidence suggests that youth are finding it increasingly difficult to access alcohol in Berkeley.

CURRENT INITIATIVES: BERKELEY UNIFIED SCHOOL DISTRICT

Berkeley Unified School District (BUSD) educates 3,260 high school students in grades 9 through 12, through the Berkeley High School (BHS) main campus, Alternative High School Program, and Independent Study program. The three middle schools in BUSD educate a combined total of 2,020 students in grades six through eight.

Curriculum

Every district in California receives "Safe and Drug Free School" money from the state. That funding has been increasingly linked to state-approved drug education programs. School districts in California must implement a state-approved research-validated program in order to receive substance-abuse prevention funding from the state.

In Spring 2006, BUSD implemented two new substance abuse programs – one at the high school level and one at the middle school level. The high school program, Project Toward No Drug Abuse, and the middle school program, Project Alert, provide substance abuse education and prevention for all middle and high school students within BUSD. At the high school level, the program is integrated into the freshman seminar class that covers health-related issues. In the middle schools, substance abuse education will be integrated into the science curriculum.

Project ALERT was developed by the RAND Corporation and uses video, classroom discussion, group activities and role-playing as part of an eleven-lesson curriculum to teach students about drug prevention. Students have the initial eight lessons in seventh grade followed by three lessons in eighth grade. Project Toward No Drug Abuse was developed by University of Southern California's Department of Preventive Medicine and Psychology and consists of twelve lessons to educate students about drug prevention using group discussions, games, role-playing exercise, videos, and student worksheets.

Prior to the implementation of Project Toward No Drug Abuse and Project Alert, BUSD was out of compliance with the state mandates for substance abuse education. Teachers had taken a "home-grown," decentralized approach to addressing youth substance abuse, teaching the topic in their classrooms through uncoordinated methods.[6]

In addition to this curriculum, which is integrated into the school day, one of Berkeley's middle schools has a small after school drug prevention program.[7] Due to the relatively short amount of time in place and its small size, there has not yet been an effort to evaluate its effectiveness.

Counseling and Treatment

Berkeley High School does not have a licensed substance abuse counselor on staff. The school does have a staff member dedicated to its Tobacco Prevention Program, who also coordinates the new substance abuse prevention curriculum that is being implemented in the middle and high schools. While BHS does have some funds dedicated to "School Safety and Violence Prevention" that could be used to hire an AOD counselor, there is currently no staff member to counsel students on the issue. Berkeley Alternative High School does have a counselor who deals with these issues.

In Spring 2006, Berkeley High School applied to California's State Department of Education for a Safe and Healthy Kids Violence Prevention grant, which would fund a counselor dedicated to Violence, Alcohol and Other Drug issues at Berkeley High School. The grant would provide five years of funding for such a position, beginning in the 2006-07 school year.

Berkeley's Department of Health administers a health center within Berkeley High School, which does provide minimal substance abuse services for youth. While the health center does have a mental health component, it is "at capacity" meaning that it does not have resources or staff to specifically address substance abuse prevention.

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[6] Tricia Brazil, interview by author(s), Berkeley, Ca., 28 February 2006.

[7] Longfellow Middle School's drug prevention program, which was developed in collaboration with the City's Department of Health, was established in the 2005-06 school year, and serves approximately 10-to-12 students per year. Students meet twice a month. The program, which is voluntary, provides peer training and is designed to provide incentives for youth to participate and stay away from drugs.

Berkeley Unified School District does not offer any immediate intervention or treatment options for youth struggling with alcohol and other drug issues.

CURRENT INITIATIVES: UNIVERSITY OF CALIFORNIA, BERKELEY

Most of the work that the University of California, Berkeley is involved in, with respect to youth substance abuse, is focused on addressing the issue among undergraduates on campus and, in particular, the problems of drinking and binge drinking. While there are no direct initiatives at the University to address youth substance abuse among Berkeley's pre-college population, University initiatives to curb drinking among undergraduates could have the added beneficial effect of curbing use among high school students who are often exposed to college AOD use.

The University has embarked on an effort to curb liquor sales to minors particularly on the south side of campus, and there is a possibility that by cracking down on alcohol sales to minors is also helping to curb alcohol sales to high school students in the community. The University is working closely with the Berkeley Police Department to address underage drinking and liquor sales in Berkeley.

Social codes which govern Greek fraternity and sorority life on campus were revised over the summer and fall of 2005 via a task force. This placed stricter limits on entry to parties, thereby limiting access to underage drinkers. In addition, a self-monitoring program, called Greeks Advocating for Mature Management of Alcohol (GAMMA), was founded in response to the task force. GAMMA organizes student patrols to monitor parties and surrounding neighborhoods on weekends, in part to help ward off non-University party-goers, including underage high school students. Anecdotal evidence from the Berkeley Police Department and from UC Berkeley's office of student life suggests that it is more difficult for youth to sneak into such parties now as compared to the past.

A "Student-Neighbor Relations Task Force" addresses issues of community relations on the south side of campus and looks at issues related to drinking and partying, and how it impacts the University's relations with the community. This task force works closely with the Berkeley Police Department on initiatives to control underage drinking on campus and its spillover effects in the surrounding community.

UC Berkeley's School of Public Health organizes students via classroom lecture to deliver tobacco prevention outreach at Berkeley High School. It does not, however, have any initiatives or courses that deal with youth alcohol and other drug abuse among youth in Berkeley.

PART II. TOBACCO PREVENTION IN BERKELEY—A COMPARATIVE LOOK

It is useful to consider the relative dearth of youth AOD prevention and education resources within the City of Berkeley as compared to the strength of the city's youth tobacco prevention and education resources. The City of Berkeley has a strong, collaborative tobacco prevention program that is a coordinated effort between the city health department, BUSD and UC Berkeley. The program has been consistently implemented and well-funded for sixteen years.

The City Health Department dedicates significant resources to its Tobacco Prevention Program, much of which is focused on prevention of youth tobacco use. These youth-related initiatives are supported through several funding streams, including a competitive grant and a standard allocation from the California Department of Health Services, California's Tobacco Tax (Proposition 99), and a grant from the Alameda County Health Care Services Agency's Public Health Department Tobacco Master Settlement Funds. In all, the city health department annually receives $150,000 from the State of California, $69, 000 from Alameda County Settlement Money to support its Tobacco Prevention Program, which is heavily youth-oriented. In addition, the City Health Department shares a $130,000 grant with UC Berkeley to collaborate on tobacco prevention and cessation in Berkeley.[8] In total, the City of Berkeley's Health Department spends an average of $310,000 per year on tobacco prevention.

Tobacco prevention initiatives at the Health Department include programs to promote opportunities for Berkeley youth to take action against the glamorization of tobacco, including blunts, cigars and hookahs, and by the music industry; decrease the sale of tobacco products to minors by Berkeley tobacco merchants; promote collaborative efforts between school and community partners to strengthen smoke-free school policies and prevent tobacco use among students through participation in tobacco prevention, education and advocacy activities; and engage African-American youth from South and West Berkeley and Asian Pacific Islander Cal students to conduct photo-voice projects to illustrate through video narratives, how tobacco affects their communities.

In 2004-05, more than 4,470 Berkeley students in grades 4th – 12th received some type of prevention and/or cessation intervention through the city's tobacco prevention program. This included educational presentations delivered by students at UC Berkeley's School of Public Health, peer prevention programs, assemblies on the dangers of tobacco use, a semester-long tobacco cessation class in the high school, as well as other cessation efforts.

[8]The City Health Department estimates that of this funding, approximately $90, 000 is allocated to the City directly. Marcia Brown-Machen, Director of the City's Tobacco Prevention Program, estimates that the City uses $60,000 to 70,000 of its total funding to support collaborative efforts with BUSD's Tobacco Prevention Program

In addition to assemblies and cessation programs, the high school provides "brief intervention" for students who are "at risk.[9]" Through this program, identified students are taken aside and engaged in one-on-one discussions about tobacco use with the school Tobacco Prevention Program Coordinator. This strategy aims to reach smokers who were not far along enough on the quitting continuum to consider a traditional 6-session cessation class.

Berkeley High School partners with a class at UC Berkeley's School of Public Health on the issue of tobacco use. UC Berkeley's Public Health 103 students provide tobacco prevention presentations in the high school, and work to educate high school students about the health implications of tobacco use.

PART III. EVIDENCE OF ALCOHOL AND OTHER DRUG USE AMONG BERKELEY YOUTH

This report summarizes data regarding youth substance use in Berkeley, collected via the California Healthy Kids Survey (CHKS). This is a statewide survey conducted on a yearly basis by the State of California. It constitutes the most complete data set available for Californian students and drug use levels. We present a comparison of use levels for alcohol, marijuana and tobacco use at Berkeley High School in 1999, 2002 and 2004. Alcohol, marijuana and tobacco are by far the most widely used substances in Berkeley, and this report therefore focuses on those substances. Use of so-called "harder drugs" does exist among youth in Berkeley, but is negligible in comparison, and is therefore not the focus of this report. In addition, this report provides comparison statistics of Berkeley's youth substance use levels as measured against average levels of use statewide and nationally.

A comparative analysis of the CHKS data suggests that substance use does exist in Berkeley and that the percentage of students using alcohol in Berkeley is at least as high as statewide and national averages, as measured by the California Student Survey (CSS) and national Youth Risk Behavior Surveillance (YRBS). A higher percentage of Berkeley students report marijuana use than their statewide and nationwide counterparts. At the same time, CHKS suggests that fewer students in Berkeley use tobacco than their statewide or nationwide counterparts. The differences in tobacco use between Berkeley students and state and national averages do appear to be measurable.

While the CHKS data presented below provides us with an estimate of use levels, it is important to recognize the limitations of the dataset: 1) BHS students must receive explicit parental permission in order to participate in the survey; and 2) the data is self-reported and may not portray exact or truthful information.

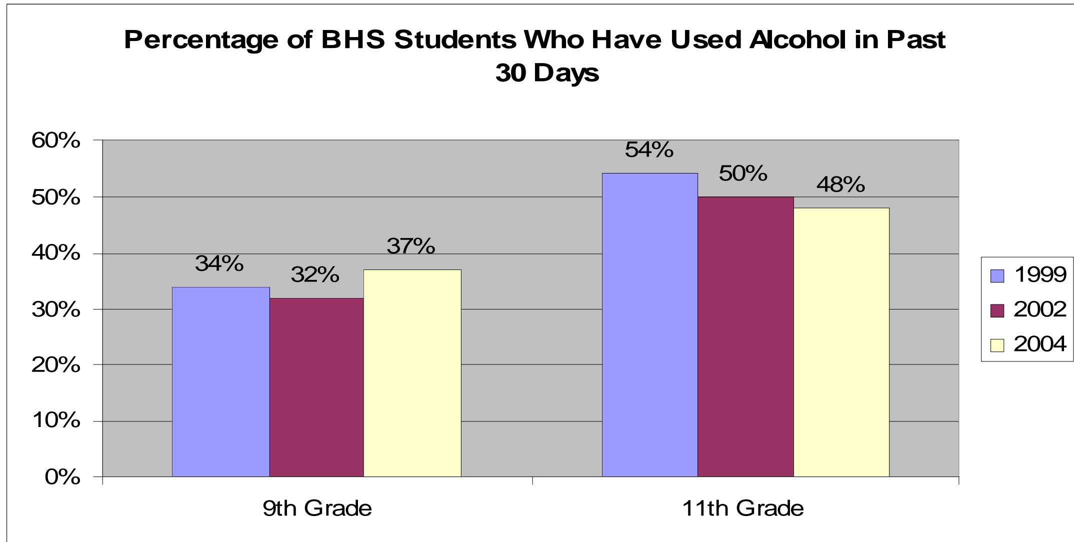
EVIDENCE: ALCOHOL USE

Alcohol is the most widely used drug among Berkeley's youth. This is consistent with statewide and nationwide trends of youth substance use.

[9] Tricia Brazil, interview by author(s), Berkeley, Ca., 28 February 2006.

Figure 1 below shows current alcohol use levels in Berkeley in 1999, 2002 and 2004, as reported in the CHKS. The data shows that thirty-seven per cent of 9th graders and forty-eight per cent of 11th graders in BHS reported that they had used alcohol in the previous 30 days in 2004, a statistic that is typically used as a proxy for current use levels.

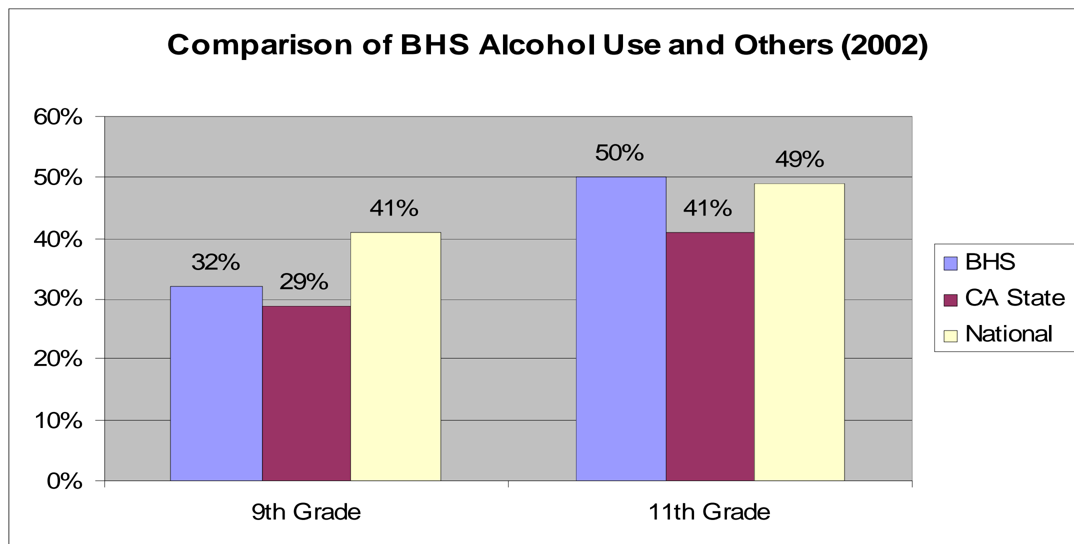
Figure 1: Current Alcohol Use



Source: California Healthy Kids Surveys, 1999, 2002 and 2004.

The extent of alcohol use in 2004 varies slightly from 1999 and 2002 levels; however the survey does not provide enough information to draw conclusions as to whether such fluctuations are statistically significant.

Figure 2: Current Alcohol Use – State and National Comparisons



Source: California Healthy Kids Surveys 2002. California Student Survey, 2002. National Youth Risk Behavior Surveillance Survey, 2002.

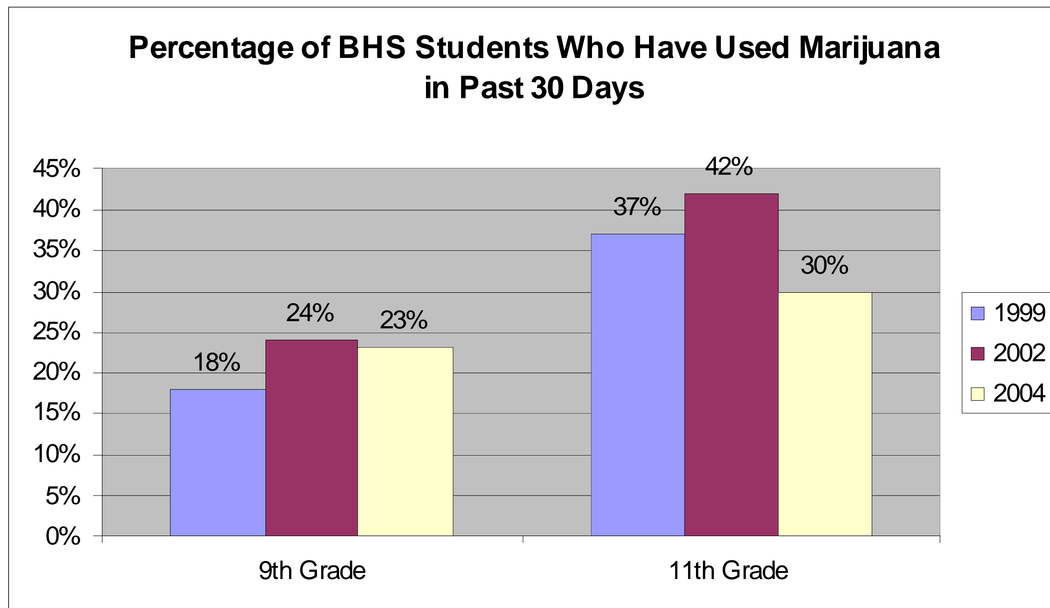
When compared to national survey statistics for current use, as measured by the YRBS, BHS 9th graders fall below the national average, but 11th graders hover right around the national current alcohol use average. Berkeley High 9th and 11th graders have a higher current alcohol use level than their counterparts statewide, as measured by the CSS. In 2002, the most recent year with available comparison statistics, 32% of BHS 9th graders reported current alcohol use, as compared with 29% statewide, and 41% nationwide. For 11th graders, BHS reported 50% current use levels, as compared with 41% statewide and 49% nationwide (Figure 2).

While it is useful to note that Berkeley youth appear to use alcohol at least as much, if not more, than the state and national averages, the CHKS does not provide enough information to draw conclusions about whether such differences are in fact statistically significant.

EVIDENCE : MARIJUANA USE

Marijuana is the second most widely used drug among Berkeley youth. In 2004, 23% of 9th graders and 30% of 11th graders reported "current" marijuana use, as measured by the percentage of students who had used the drug at least once in the 30 days prior to taking the survey. (Figure 3)

Figure 3: Current Marijuana Use



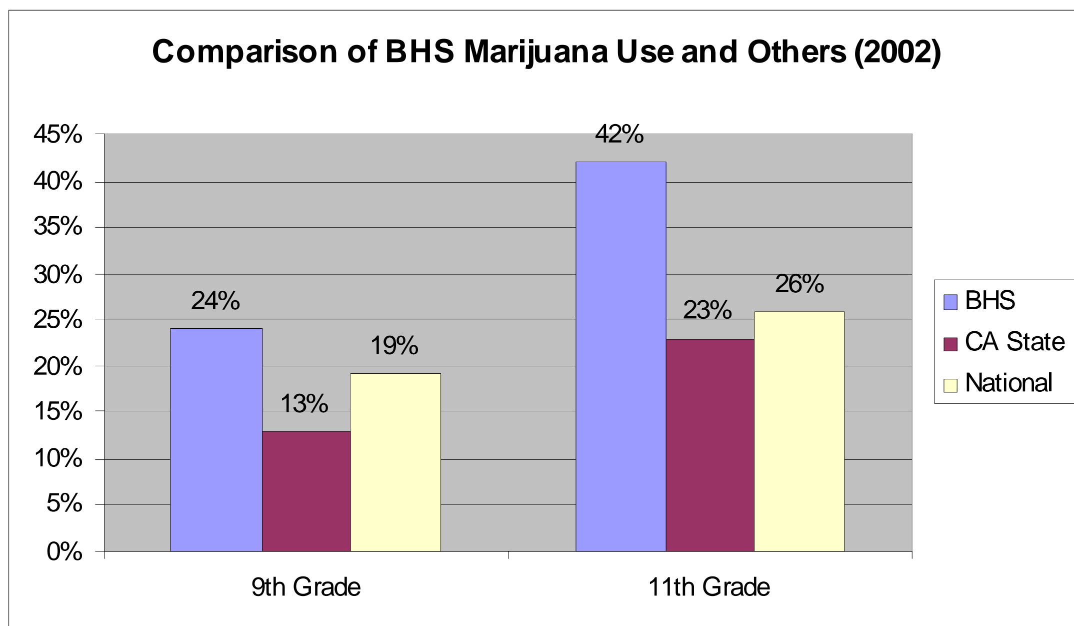
Source: California Healthy Kids Surveys, 1999, 2002 and 2004.

Again, the survey results show some fluctuation in use levels over time, with 9th graders reporting increasing rates since 1999, and 11th graders reporting a net decrease in marijuana use between 1999 and 2004. The CHKS does not provide enough information

to draw conclusions as to whether these fluctuations are significant and is insufficient for us to draw any conclusions about trends of marijuana use in Berkeley over time.

When compared with national survey statistics for current use, as measured by the National YRBS, Berkeley High School 9th and 11th graders report marijuana use levels above the national means. Berkeley's 9th and 11th graders also report higher current marijuana use than their counterparts statewide, as measured by the CSS. In 2002, the most recent year with available comparison statistics, 24% of BHS 9th graders reported current marijuana use, as compared with 13% statewide and 19% nationwide. Berkeley High 11th graders reported 42% current use levels, as compared with 23% statewide and 26% nationwide (Figure 4).

Figure 4: Current Marijuana Use – State and National Comparisons



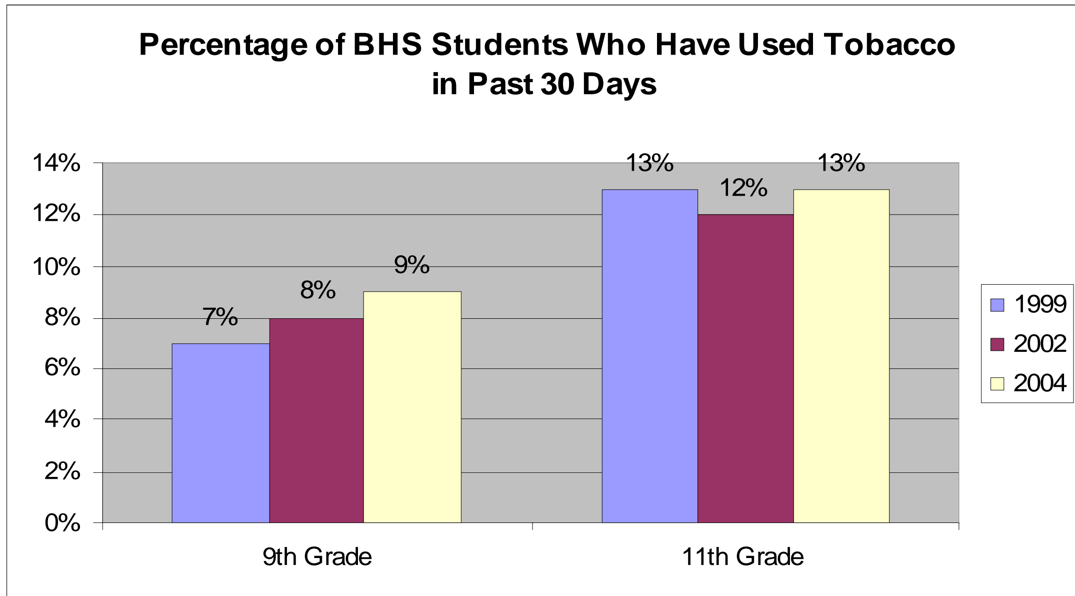
Source: California Healthy Kids Survey, 2002. California Student Survey, 2002. National Youth Risk Behavior Surveillance Survey, 2002.

While it is useful to note that a greater percentage of BHS youth appear to use marijuana than state and national averages, the CHKS does not provide enough information to draw conclusions as to whether such differences are in fact statistically significant.

EVIDENCE: TOBACCO USE

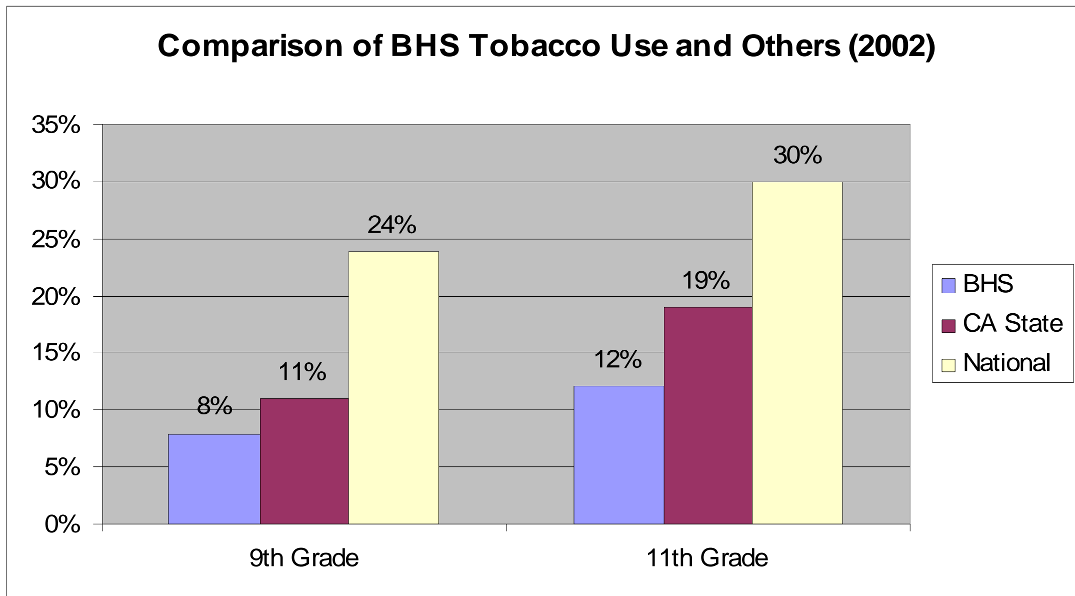
Tobacco is the third most widely used drug among Berkeley youth, though reported use levels are well below those of alcohol or marijuana. In 2004, 9% of 9th graders and 13% of 11th graders reported current tobacco use, as measured by the percentage of students who had used the drug at least once in the 30 days prior to taking the survey (Figure 5).

Figure 5: Current Tobacco Use



Source: California Healthy Kids Surveys, 1999, 2002 and 2004.

Figure 6: Current Tobacco Use – State and National Comparisons



Source: California Healthy Kids Surveys, 2002. California Student Survey, 2002. National Youth Risk Behavior Surveillance Survey, 2002.

Reported tobacco use levels appear to have remained relatively constant between 1999, 2002 and 2004, though the CHKS data does not provide enough information to make this conclusion with certainty.

When compared to national and statewide survey statistics for current use, Berkeley High School 9th and 11th graders report tobacco use levels far below the national and state averages. In 2002, the most recent year with available comparison statistics, 8% of Berkeley 9th graders reported current marijuana use, as compared with 11% statewide, and 24% nationwide. Berkeley's 11th graders reported 12% current use levels, as compared with 19% statewide and 30% nationwide (Figure 6).

While it is useful to note that a smaller percentage of Berkeley youth appear to use tobacco than state and national averages, the CHKS does not provide enough information to draw conclusions as to whether such differences are in fact statistically significant.

Additional Data on Alcohol and Other Drug Use Levels Among Berkeley Youth

A comparative analysis of the CHKS data suggests that substance use does exist in Berkeley and that the percentage of students using alcohol is at least as high as statewide and national averages. A higher percentage of Berkeley students report marijuana use than their statewide and nationwide counterparts, though Berkeley's rates of alcohol and marijuana use do not differ markedly from state or national averages. At the same time, CHKS suggests that fewer students in Berkeley use tobacco than their statewide or nationwide counterparts.

These reported levels of alcohol use are consistent with recent survey data collected by the Alameda County Behavioral Health Care Services (BHCS). In Spring 2005, BHCS conducted an Alcohol and Other Drug Youth Survey at Berkeley High School and in April 2006 released a report of their findings. This report compared results from the BHS survey with county-wide and state-wide cohorts and found that Berkeley students had a higher alcohol use rate as compared with Alameda County as a whole and a higher alcohol use rate as compared with the state of California as a whole.

The report also looked at marijuana use rates in Berkeley and did not find significant differences in reported marijuana use rates as compared with the whole of Alameda County or the State of California.

The report did not address tobacco use levels.

The report's major additional findings were related to alcohol use and suggested the following conclusions:

●Female students in Berkeley have a higher alcohol use rate than males. This is the reverse of the trend in Alameda County and the State of California as a whole, where males reported a higher alcohol use rate than females.

● Berkeley reported more students experiencing difficulty obtaining alcohol as compared with Alameda County or the State of California as a whole.

In addition, data from Berkeley High School's Health Center provides some quantitative indications on the extent of alcohol use among high school students. The Health Center tracks the topics discussed most frequently during student visits and reported 12% of all Health Center visits are related to alcohol use.

This data suggests that alcohol use is among the most frequent topics discussed during Health Center visits at Berkeley High School. Anecdotal reports from Health Center staff suggest that other drug use is also a topic of concern for BHS students, though one that is raised less frequently than alcohol-related topics.

PART IV. ARE SUBSTANCE USE LEVELS AMONG BERKELEY YOUTH PROBLEMATIC? WHEN DOES "USE" BECOME "ABUSE"?

While measuring current substance use levels allows for a comparative study of youth substance use rates in Berkeley with statewide and national averages, use levels do not necessarily indicate whether the degree of youth substance use in Berkeley is problematic. Prevalence rates of drug abuse do not correlate perfectly with actual damage resulting from drug use and the task of teasing out whether a certain level of drug use constitutes a problem in any particular community is difficult and subjective.

Measurements of problematic drug use are often defined by the particular mores of a community. Some communities might view any and all substance use as unacceptable and unhealthy. Other communities might be more open to the idea of youth experimentation with alcohol and other drugs and might have a considerably higher threshold for when substance use should be deemed problematic.

All drug use carries with it certain dangers including health damage, the result of risky or socially destructive behaviors while under the influence, and the possibility of progressing to habitual or compulsive use. Some people consider any of these dangers sufficient criteria for categorizing any and all drug use as problematic. On the other hand, some people find there to be positive effects of drug use such as relaxation, pleasure, or relief from physical pain. A person or community may weigh these perceived benefits against potential harms and conclude that experimentation with drugs, or responsible drug use, does not constitute a problem.

Communities might also judge whether drug use is problematic based on how the drug affects a person's ability to fulfill their social responsibilities.[10] If a community finds that alcohol or marijuana use is contributing to the lack of fulfillment of these expectations, it may conclude that a substance abuse exists. In addition, a community may conclude that there is a substance abuse issue if the existence of drug or alcohol use is negatively affecting the lives of other members of the community. For example, drug use might lead

[10]Mark A.R. Kleiman, *Against Excess: Drug Policy for Results*. (New York: BasicBooks, 1992), 386. Generally, social standards hold that members of a community will 1) act responsibly in public and in accord with community standards, and 2) fulfill their responsibilities, such as being a good son or daughter and attending school.

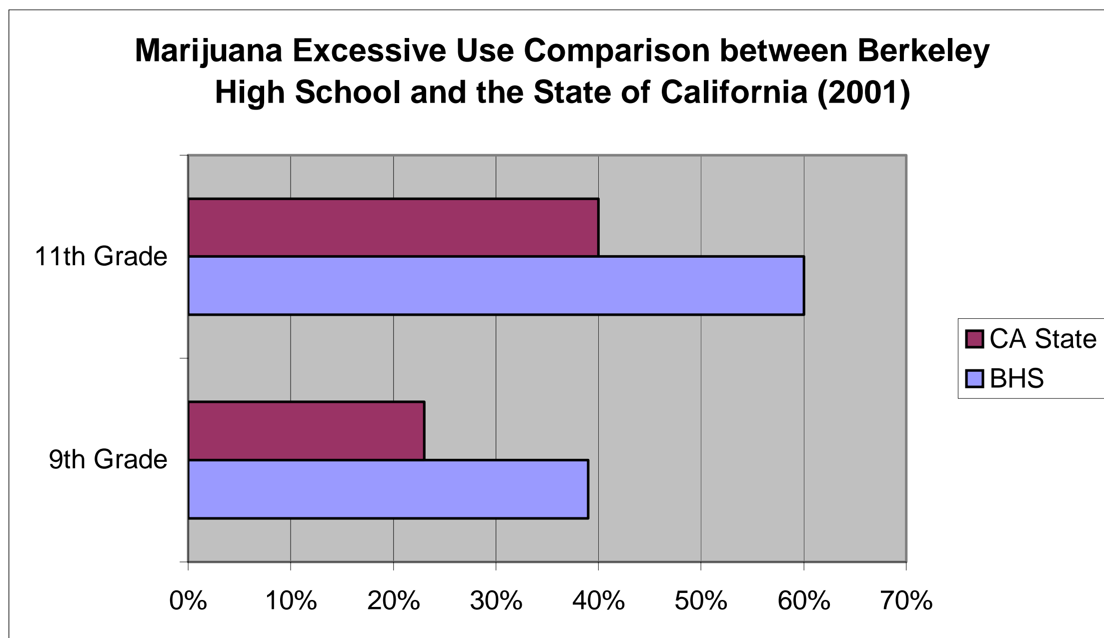
to increased crime rates, elevated school drop out rates, or the negative portrayal of a community.

Anecdotal evidence suggests that the community of Berkeley has a very tolerant attitude toward alcohol and other drug use. This is partially a result of the community's progressive social outlook and a result of the City's history as a Mecca for counter-culture and experimentation. The City Council directs police to consider marijuana a lowest priority enforcement issue and many parents consider drug experimentation normal. While there are certainly deviations from this general perspective, our interviews with community members and health providers in the City of Berkeley seem to suggest that the general trend is toward a large degree of tolerance with respect to drug and alcohol experimentation among youth and is likely to not reverse itself.

While the City's subjective social standard for what constitutes problem drug use may be relatively lenient, there are more quantitative ways to measure the extent of drug use in Berkeley and whether it might be considered problematic. Another objective way to quantify problem drug use is through measures of how frequently one may use a substance. For example, we might measure levels of binge drinking or marijuana use during school hours and ascertain problem use at a specified level.

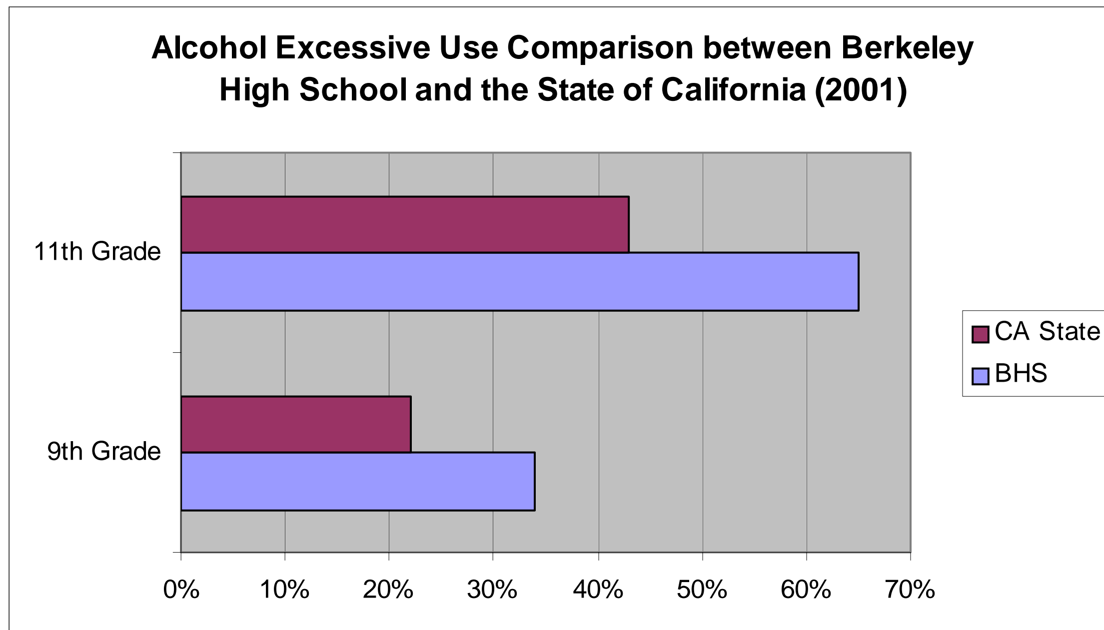
According to data collected from the CHKS, BHS students report excessive marijuana and alcohol use that exceed levels reported statewide, both among 9th and 11th grade students (Figures 1 and 2). Excessive use is defined as using the drug to a degree that results in sickness. This includes the inability to properly function and literal illness, such as vomiting. National data for excessive use was not available.

Figure 1: Excessive Marijuana Use



Source: California Healthy Kids Survey, 2001.

Figure 2: Excessive Alcohol Use



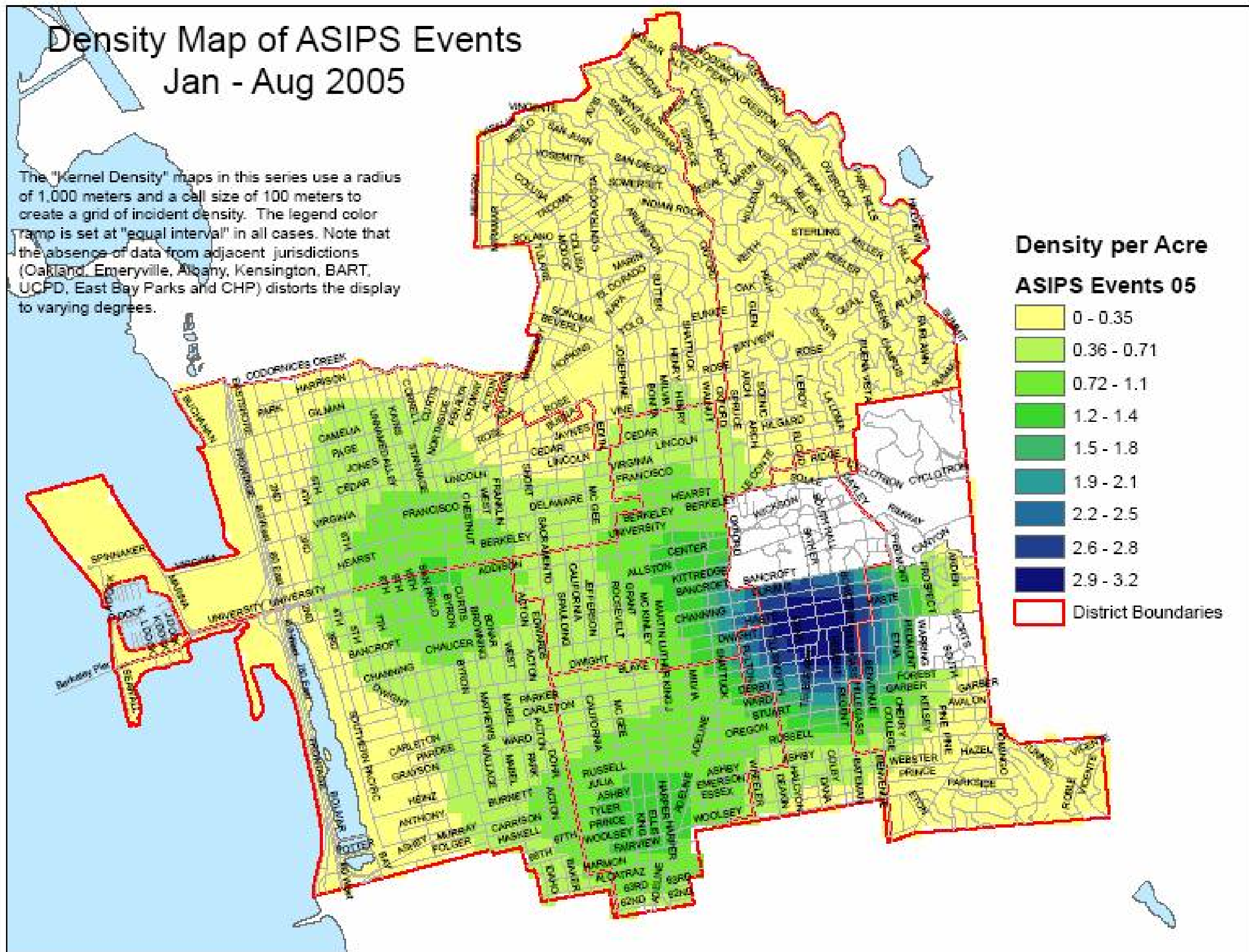
Source: California Healthy Kids Survey, 2001.

Berkeley High School students report high levels of excessive alcohol and marijuana use as compared to statewide means. This provides perhaps the strongest quantitative indication that use levels in Berkeley are high and require attention.

Another quantitative indicator of the extent of problematic alcohol and drug use might be the density of alcohol and other drug related police incidents in particular areas of the community. The Berkeley Police Department uses an Alcohol Sensitive Information Planning System (ASIPS) to pinpoint where alcohol and other drug related police activity have occurred over a given period of time. While the data on drug and alcohol related activities include both youth and adult incidents, looking at the location of these incidents does illuminate some of problem use trends in the community. Additionally, exposure to such incidents may promote a sense of social acceptance around substance use or heightened curiosity toward alcohol and other drugs.

The map below shows the density of alcohol and other drug related police incidents in Berkeley from January through August 2005 (Figure 3). The dark blue area, which represents the highest density of incidents, is concentrated in the vicinity of the University of California, Berkeley campus. Dark green areas, which represent lesser, but still high density of incidents, generally correspond to parks within the City where drug users tend to congregate, but also where students typically hang out.

Figure 3: Alcohol and Drug Related Police Incidents



Source: City of Berkeley Police Department

While the above map does not provide any conclusive evidence about substance use among youth, it does suggest that problematic use is present in the direct vicinity of the high school (marked with a dark green area on the map above), and is present in the City's parks. This suggests a certain degree of exposure to problem drug use for youth in the community. However, based on this data, it is impossible to draw conclusions about how youth in particular contribute to the density of drug and alcohol incidents in a given area.

Perhaps the strongest evidence about whether there is problematic drug and alcohol use in Berkeley comes from anecdotal evidence from school staff, community members, and police. In more than a dozen interviews with people involved in youth issues and public health in the City of Berkeley, there was a consensus that there is indeed problematic youth drug and alcohol use in Berkeley. Their observations of youth AOD use offered an on-the-ground perspective surrounding the reality of use levels in the community. While it is important to keep in mind that many of these professionals work directly in the field,

and therefore tend to have very low levels of tolerance for substance use among youth, they also provide institutional knowledge of AOD issues in the community over many years, and in some cases decades. Taken together, these interviews suggest that the following regarding anecdotal indicators of problem abuse:

- An existence of substantial levels of drug and alcohol use with virtually no attention to the issue within BUSD, the City or the University.

- A culture of acceptance around experimentation with substance in Berkeley. Students report obtaining alcohol from adults in the community.

- A growing concern for alcohol use among girls in Berkeley. Girls may be using alcohol in Berkeley at a higher rate than in the past. This is a nationwide trend and may be linked to the popularity of certain products such as “alco-pop” which are marketed toward females. Increased alcohol use among girls has implications for sexual experimentation and potentially risky behaviors.

- A relative ease of access to marijuana and, until recently, alcohol.

While none of this data allows us to quantify the extent of problematic substance use among Berkeley’s youth, it does provide convincing evidence that youth substance use in Berkeley is a serious issue and warrants policy attention.

It is true that not everyone in Berkeley views current levels of youth AOD use as a problem. Some parents are content with the current resources and view additional resources devoted to the issue as unnecessary. Likewise, there are doubtless individuals at Berkeley High School and within the Health Department who believe that resources could be better devoted to other pressing issues.

Despite the lack of consensus in the community, our anecdotal evidence in conjunction with the overwhelming quantitative survey evidence of use levels comparing BHS to state and national averages suggest that there is indeed a mismatch between the degree of youth AOD use in the community and the services available to address this level of use.

PART V. AN ANALYSIS OF POLICY ALTERNATIVES: PREVENTION, TREATMENT AND ENFORCEMENT

This report considers three policy options for the City of Berkeley to pursue to address the mismatch between levels of youth AOD use and services dedicated to the issue, as described in Part III of this report. We consider improving prevention/education, treatment, and enforcement and evaluate these alternatives based on their cost, feasibility and effectiveness.

We evaluate costs based on both the fixed costs of implementing improved services and the annual costs of maintaining such services. We consider feasibility with respect to both political and administrative matters. And finally, we evaluate effectiveness based on three

measures: the number of youth served, prevalence reduction (as defined by the potential decrease in the total number of youth using drugs), and harm reduction (as defined by the potential decrease in drug-related harm to the Berkeley community.)

ALTERNATIVE I: PREVENTION/EDUCATION

Drug prevention and education programs are often used as models for addressing youth substance abuse in communities throughout the United States. Such programs assume a variety of form, have demonstrated varying degrees of success, and come at a range of economic and social costs. In the first section of this report we provided a summary of the relatively few resources dedicated to AOD prevention and education in Berkeley, and in Sections II and III we summarized statistical and anecdotal evidence of use and abuse levels concluding that more attention needs to be given to youth AOD use. In this section, we consider the costs, feasibility, and effectiveness of establishing an AOD prevention program modeled on Berkeley's successful tobacco prevention program.

Costs

There are many programmatic similarities between tobacco prevention programs and programs designed to educate and prevent alcohol and other drug use. We use the financial cost of Berkeley's tobacco prevention program as a close proxy for the cost of introducing and maintaining a similarly designed program which focuses on prevention of alcohol and other drug use.

Estimated Financial Costs. Berkeley Unified School District's Tobacco Use Prevention Education (TUPE) Program is funded by two grants from California's State Department of Education. A $37,000 annual allotment funds the City's high school tobacco prevention program. In addition, the school district receives $10,000 to$12,000 annually to fund tobacco prevention programming for 4th through8th graders. The funding supports Berkeley High School's Tobacco Prevention Counselor, who coordinates a series of education and prevention programs related to tobacco consumption. BUSD has received such funding consistently for the past 16 years and the strength of its program is a result of consistent financial support and strong, consistent staffing.

In addition, the Berkeley Health Department dedicates significant resources to its Tobacco Prevention Program, which focuses on prevention of youth tobacco use. These youth-related initiatives are supported through several funding streams, including a competitive grant and a standard allocation from the California Department of Health Services through California's Tobacco Tax (Proposition 99) and a grant from the Alameda County Health Care Services Agency's Public Health Department Tobacco Master Settlement Funds. In total, the City of Berkeley Health Department spends an average of $310,000 per year on tobacco prevention in the city. A significant portion of this programming is heavily oriented toward youth.[11]

[11] In all, the City Health Department receives $150,000 annually from the State of California and $69,000 from Alameda County Settlement Money to support its Tobacco Prevention Program. In addition, the City Health Department shares a $130,000 grant with UC Berkeley to collaborate on tobacco prevention and

Opportunity Costs. When considering the costs of implementing an AOD prevention program, it is important to consider whether the City will have to sacrifice resources for other worthy projects in order to pursue a comprehensive youth AOD program. Is there some other issue for which resources could be better used? There are few opportunity costs for creating such a program if the funding comes from state funds earmarked specifically for drug prevention issues. In addition, the establishment of such a program would free up other resources in the following manner: the High School tobacco prevention coordinator, now stretched thin trying to provide AOD services as well as tobacco and other services, would have more time to dedicate to those issues and health services personnel, who now struggle to provide even the bare minimum on this issue, would be freed up to provide stronger services on other issues of need. Creating a strong AOD prevention program would require an initial fixed allocation from the City to support grant writers to raise funds for the program. Estimates for this initial cost are low, approximately $12,000, particularly given the potential benefits of increased funding on the issue.

In total, the City of Berkeley and Berkeley Unified School District spend $357,000 per year on tobacco prevention. This high level of funding allows the city to provide excellent tobacco prevention resources. While a comparable funding level would be ideal for creating a strong AOD prevention program in Berkeley, our research suggests that a high quality program, if well designed, could be implemented for considerably less. Estimates from the City of Berkeley Health Department suggest that the program itself would require a minimum of $200,000 per year in grant funding.

In summary, we estimate that establishing and implementing a strong AOD prevention program akin to Berkeley's tobacco prevention program would require an initial fixed cost of $15,000 to hire a grant writer to raise funds from state and county sources. The program itself would require a minimum of $200,000 per year in grant funding.

Feasibility

Creating an AOD prevention program akin to Berkeley's tobacco prevention program is politically feasible, but also faces potential barriers. Creating such a program might be met with resistance from parents and other community members who do not believe that there is an AOD problem in the community or who are wary of having Berkeley stigmatized as a city with youth AOD problems. One of the strengths of Berkeley's tobacco prevention program is that it has widespread support from the community—there seems to be a consensus that tobacco use is harmful and that it is a problem that needs to be addressed. AOD use is a more polarizing subject—Berkeley, as a community, does not seem to have a consensus viewpoint on whether current levels of youth AOD use constitute a problem and many are concerned about the potential damage that the admission of such an issue could have on the community's reputation. Still, many

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cessation. The City Health Department estimates that of this funding, approximately $90,000 is allocated to the City directly. The city uses $60,000 to $70,000 of its total funding to support collaborative efforts with the school district's tobacco prevention program.

parents, health professionals, and school personnel are likely to be extremely supportive of such a program and view it as a way to improve their community and protect their children from potential harms.

In addition, the State of California has taken several steps in recent years to prioritize youth AOD prevention and has set stricter standards for prevention education throughout the state. Much of the strength of Berkeley's tobacco program can be attributed to the strong and consistent state funding that flowed into Berkeley after Proposition 99 passed in 1988. While the state does not offer funding of comparable scale when it comes to AOD prevention, the California State Department of Education administers funds allocated by the federal Safe and Drug Free Schools and Communities Program. This funding provides formula grants related to AOD prevention to communities based on need. Berkeley already receives this form of funding It also provides competitive grants based on Requests for Funding (RFA's).[12]

While there are some potential barriers to creating a strong, collaborative AOD program in Berkeley, if elevated to a priority issue by the City of Berkeley and BUSD, it is both financially and politically feasible.

Effectiveness

The potential effectiveness of a youth AOD prevention and education program is dependent on both the creation of a well-designed program that is appropriate for Berkeley's specific needs, as well as proper implementation of the program, both with respect to adequate funding and consistent, competent staffing.

Number of Youth Served. A comprehensive AOD prevention program modeled on the current tobacco prevention program could reach an estimated 3,500 high school students, as well as a number of middle and elementary school students through community and parent and sibling education. In 2004-05, more than 4,470 BUSD students in grades 4th – 12th received some type of prevention and/or cessation intervention in Berkeley through the City's Tobacco Prevention Program. A similar AOD prevention program could likely reach thousands of students in the City.

Prevalence Reduction. Research shows that good prevention programs can be effective in decreasing prevalence of drug use and, in particular, retarding the first age of use.[13] Much literature on problem drug use finds relationships between early age of first use and subsequent problem use.[14]

[12]Safe and Drug-Free Schools and Communities Act, Title IV, Part A.
[13] Mark A.R. Kleiman, interview by author(s), Berkeley, Ca., 22 March 2006.
[14] Ibid.

Statistical research suggests that well-designed and well-implemented prevention programs can be very effective in reducing substance use, particularly for at-risk youth.[15] However, even when prevention programs are well designed and implemented, there isn't any guarantee that these programs will be effective. There are various risk factors which play a strong role in whether a child uses drugs. Community and family factors, for example, play an enormous part in putting youth at risk for drug use and in determining the relative effectiveness of a drug prevention program.[16]

The best prevention programs enhance protective factors, such as strong community and family education, and reverse or reduce risk factors, including ease of access to alcohol and other drugs.[17] The National Institute on Drug Abuse (NIDA) concludes that prevention programs should strengthen students' bonds with family, school, and the community and seek to establish the norm that drug use is unacceptable. They should also be specifically targeted to the needs of the particular community, should focus on family, community and student education, and should be consistently implemented over time.[18]

A prevention program would provide education to a broad range of BHS students, but is that the optimal way to prevent prevalence of drug abuse in Berkeley? Some experts argue that drug prevention programming primarily reinforces the beliefs of students who would be unlikely to use drugs with or without the presence of a prevention/education program. Another potential weakness of prevention programs is that they tend to deliver the same message to all students and typically fail to provide differential prevention and education programming for "at risk" students, versus students who are unlikely to experiment or become habitual users. As Mark Kleiman, a substance abuse policy expert and professor at UCLA, points out: "the heterogeneity of the audience necessarily makes whatever message is delivered inappropriate, or at least irrelevant, to some of those who receive it." [19]An adolescent who has already begun experimenting with drugs will not be able to relate to a "just say no" program message, for example, and promoting abstinence-only education might cause rebellious or curious teens to experiment or use drugs more frequently.

Despite the fact that drug prevention education does not provide a silver bullet to "fix" drug use problems, it is extremely cost effective and has proven to decrease drug abuse among youth. It is inexpensive and practical—and it makes a difference in use and abuse levels if designed and implemented well.

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[15] Soledad Sambrano, et al., "Understanding prevention effectiveness in real-world settings: The National Cross-Site Evaluation of high risk youth programs," *American Journal of Drug and Alcohol Abuse*, August 2005.
[16] National Institute on Drug Abuse, *Preventing Drug Use among Children and Adolescents* (Bethesda, Md.: U.S. Department of Health and Human Services, 2003).
[17] J.D. Hawkins, R.F Catalano, and M. Arthur, *Promoting science-based prevention in communities.* Addictive Behaviors 90(5): 2002, 1–26.
[18]National Institute on Drug Abuse, *Preventing Drug Use among Children and Adolescents* (Bethesda, Md.: U.S. Department of Health and Human Services, 2003).
[19]Mark A.R. Kleiman, *Against Excess: Drug Policy for Results*. (New York: BasicBooks, 1992), 168.

Harm Reduction. AOD prevention and education is primarily aimed at decreasing the prevalence of drugs among Berkeley youth and not with "harm reduction," or decreasing the total drug-related harms, such as violence, irresponsible drug use, or community health risks associated with drug use. Still, prevention programs could also reduce harm in the community if, for example, Berkeley focused its efforts on a "responsible use" prevention model which concentrates efforts on drug use in moderation, self-control, and expressing the dangers of risky behaviors such as drinking and driving.[20] At the same time, it should be noted that such a responsible use model might encounter particular opposition from parents who might construe this programming as condoning certain types of drug use.

ALTERNATIVE II: TREATMENT

There is a significant gap between the need and the availability of treatment services for youth in Berkeley, especially for individuals of low socio-economic status. Currently, most AOD treatment services are only available to those who have private means of paying. Youth who cannot afford health insurance coverage have extremely limited access to treatment programs. In this section, we consider the policy alternative of addressing the dearth of youth AOD services in Berkeley by improving treatment services available to youth, and in particular, poor youth.

In this section we consider the cost, feasibility and effectiveness of improving treatment services by having the City of Berkeley contract with nearby treatment facilities. Substance using youths, along with their parents, and the school, could then choose from these programs and enroll in one most suitable for their specific needs. The treatment services would be funded, at least in part, by the City of Berkeley.

We base our estimation of this treatment model on the "CARE" Program, a youth-based treatment model that is currently being implemented in Los Angeles County, as well as in the Sacramento area. The CARE program serves youth between the ages of 12 through 20 residing in Los Angeles or Sacramento counties. Under this program, eligible youth can access substance abuse treatment and recovery support services from a CARE network comprised of treatment providers and community-based organizations, including those that are faith-based. The services are available to youth both with and without health care coverage.

A list of treatment facilities in the Berkeley vicinity with which the City of Berkeley could potentially contract are provided in Appendix A of this report.

Costs

We estimate the costs of this alternative for the City of Berkeley based on the estimated number of youth needing treatment services in Berkeley, and the average cost of treatment services. We calculate costs that the City of Berkeley would incur if it were to

[20] Ibid, 174.

contract with treatment facilities in a similar fashion to the way the county of Los Angeles contracts with treatment providers on youth AOD issues. Based on the unit service costs of treatment and the estimated utilization level in Berkeley, we estimate that this policy option would cost the City of Berkeley $3,432,000 per year.

Costs of treatment are estimated using key unit service costs of treatment, in conjunction with the type and amount of services that are appropriate for the City of Berkeley, given current levels of youth AOD abuse. In our analysis, we calculate a general, lower-bound cost of providing city-subsidized treatment in general, but a desegregation of different types of treatment for different types of addiction is beyond the scope of our report.

Estimated Financial Costs. Estimates of key unit service costs are based on the services of one of the most likely candidates for contracted service providers, Thunder Road Center, which specializes in substance abuse treatment for adolescents.[21] We estimate based on both short-term inpatient program costs and intensive outpatient services (more common for youth), as well as long-term residential program (for higher level of drug use offenders, who are referred through the probation department or social services.)[22]

Residential unit service costs average $500 per bed per day. Intensive treatment sessions run $180 per session per hour. At an average of 10 hrs/week, for 8 weeks, the program cost is estimated at $4,500 per person. Fees would be negotiable in the case of a contract with a city government.

Based on self-reported use levels, we estimate an upper-bound number of students who would utilize treatment (everything ranging from one-time counseling services to residential treatment) to be 440 students. [23]

Research suggests that most of the treatment services provided for substance abusing youth are lower level treatment like outpatient services while few intensive drug users would need long-term or short term residential programs.[24] Testimony from staff at treatment facilities in Berkeley also indicate that most of the youth patients use intensive outpatient services and only a relatively small number of intensive drug users referred by social services or probation office would need residential programs. Based on these

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[21] Options Recovery, New Bridge Foundation, Thunder Road Adolescent Treatment Center, and Kaiser are all potential contractors. Options Recovery is the treatment facility closest to Berkeley community, but does not provide many youth services. New Bridge in Walnut Creek, Kaiser, and Thunder Road all have programs. Thunder Road is the only inpatient. The others are outpatient.

[22] Treatment programs could be categorized into different levels. Within residential services, facilities provide detoxification services with medical management and rehabilitation services focusing on substance abuse treatment and building skills. Outpatient services include regular outpatient services (approximately 1 hour per week for group or individual counseling) and intensive outpatient services (several hours per week for counseling), outpatient services is a lower level of treatment compared to residential services.

[23] Estimated based on self-reported use levels in the California Healthy Kids Survey, 2004.

[24] According to Substance Abuse and Mental Health Services Administration (SAMHSA) studies, among adolescent admissions, the percentage of those receiving ambulatory and outpatient was 83% in 2002. Admissions requiring rehabilitation/residential services was 15% during this same time period. The percentage of admissions for detoxification services remained relatively constant at around 2 to 3 percent of total adolescent admissions.

estimates, we calculate that approximately 80% of the services used would be intensive outpatient services (at an average of 8-week intensive treatment sessions); 20% residential program (4-8-week).

Based on outpatient and inpatient unit service costs, and potential utilization levels in Berkeley, we estimate the cost to the City of adopting this policy option to be $3,432,000 per year. [25]

<u>Feasibility</u>

Funding is the biggest obstacle for implementing a youth AOD treatment program in Berkeley. Contracting with treatment facilities to provide youth AOD treatment services would require significant new funding sources, or a significant redirection of funds from the City of Berkeley's budget.

In the past, aggressive actions or additional efforts within the City of Berkeley's Mental Health Division to improve AOD treatment services have been met with political resistance, and have not received priority status from the city government, or from the community.

At the same time, there seems to be a gradual movement toward more attention to this issue. A "Transitional Youth" movement that emphasizes the well-being and health of youth has recently gained momentum in the City of Berkeley's Health Department. If this trend continues then the reallocation of funding to this alternative might be within the realm of plausibility. However, at this point of time, this treatment alternative is highly improbable. Again, implementing this treatment alternative would require a significant shift in priorities within the City of Berkeley, the City of Berkeley Health Department, and the community. It would also require a massive dedication of funding from the City of Berkeley's budget, at the likely cost of other programs.

<u>Effectiveness</u>

There is little conclusive research on the effectiveness of treatment programs. Effectiveness of treatment is dependent on both the performance of treatment facilities near Berkeley and the likelihood for the enrollees to complete their programs.

Number of Youth Served. The number of youth served by this new treatment program would be those currently using drugs and identified as needing treatment after need-assessment. We roughly estimate the size of this population currently at BHS to be 440 students

Prevalence Reduction. While treatment programs, according to health studies, may generate positive behavioral changes in individuals having substance abuse problems, there is no conclusive research that demonstrates significant effects of treatment

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[25] Outpatient: 440 students* 80%* $4500 =$1,584,000; Inpatient: 440 students*20%* $500* 7*6= $1,848,000

programs on reducing the prevalence rates in the overall population. As the treatment alternative under consideration would be targeted exclusively at the substance using youths needing treatment (a very small proportion of the whole student population) the treatment program is expected to have very little impact on the overall rate of substance use among general students.

Harm Reduction. Research shows that a *successful* treatment program could reduce harm of substance use to individual and to the community through improving physical conditions, social functioning, mental health, and reducing crime tendency of the patients.

However, the effectiveness of common treatment programs *in practice* is ambiguous. A recent Rand research study on the effectiveness of treatment programs for adolescents was inconclusive and concluded that more studies on treatment programs for adolescents are needed to evaluate their effectiveness.[26]

Additional evidence-based practice studies suggest that the effectiveness of treatment in harm reduction presented by research-based reports tend to be inconsistent with the results of programs in practice.[27] The gap between research and practice could be due to various individual and community-specific factors. Researchers also point out that treatment programs often fail because they attempt to create a safe environment for the user to overcome his or her dependency on their drug of choice. However, these programs cannot change the realities of daily life once a user returns to his or her home and lifestyle away from the program facility. [28]

The effectiveness of any treatment program in reducing the harm of substance abuse for youth in Berkeley would also depend on the success of the program with respect to completion rates, and number of students who stay substance-free after completing the program. According to the information provided by the treatment facilities[29] in the Berkeley community, after a complete treatment program, about 80% of the youth patients could function well and go back to school again.

While this suggests that a treatment program will likely have positive effects on a good percentage of the youth that it serves, it is ambiguous whether such a program would lead to a significant reduction in overall harm to the community.

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[26] Pollack H. Reuter, "How Much Can Treatment Reduce National Drug Problems?," *Addiction*, March 2006, 341-47.
[27] IOWA Consortium for Substance Abuse Research and Evaluation, “An implementation Guide for Community-Based Substance Abuse Treatment Agencies,” [electronic document] (Iowa City, Ia., 2003 [cited 24 April 2006]); http://www.uiowa.edu/~iowapic/files/EBP%20Guide%20-%20Revised%205-03.pdf; INTERNET.
[28] Mark A.R. Kleiman, *Against Excess: Drug Policy for Results*. (New York: BasicBooks, 1992),183.
[29]Karen Kern, interview by author(s), Berkeley, Ca., 24 April 2006.

ALTERNATVE III: ENFORCEMENT

Costs

We use the costs of tobacco enforcement initiatives in Berkeley to estimate the costs of changing drug use policies in order to reclassify marijuana as a high priority enforcement issue. While we recognize that tobacco use laws cannot be used as an exact proxy for marijuana laws, this report considers the costs of improving anti-tobacco enforcement a lower-bound estimate of the potential costs of heightening marijuana enforcement in the City.

Estimated Financial Costs. Berkeley's Tobacco Prevention Program has successfully changed multiple regulations within the City of Berkeley regarding tobacco use, sale and advertisement. It has also led to the implementation of entirely new ordinances to curb smoking rates. The most time consuming act lasted nearly three years and cost in the vicinity of $90,000, which includes the costs of salary fringe benefits, contracts, budget reporting, hirings, trainings, grant writing, new equipment and other indirect expenses.[30] This estimation does not take into consideration the value of the time spent working toward these policy changes. While it is difficult to estimate the exact costs of reclassifying marijuana to a high-priority status, it is safe to say that costs to the City would likely exceed $90,000.

According to the Berkeley Police Department, without a guarantee of a long-term budget increase, grants would not be sought to cover new hires and thus the Berkeley Police Department is more likely to shift resources from one department to another, if marijuana was reclassified as a high-priority enforcement issue. The Berkeley Police Department was unable to offer estimates of the cost within the department were these policy changes to occur. This theoretical issue was beyond the scope of their ability.[31] However, our research suggests that such a policy change would require the Berkeley Police Department to hire a minimum of two additional patrol officers and/or clerical staff. As a lower bound annual estimate we foresee an added cost to the City of Berkeley of $200,000 per year as a Police Department budget increase to cover the costs of additional salaries for new hires and basic equipment.

Effectiveness

Number of Youth Served. An increase in marijuana priority which would require the Berkeley Police Department to arrest users, sellers and those in possession of marijuana could affect up to 300 students. This is a higher-bound estimate based on the percent of self-reported current high school users. It is likely that increased enforcement would not affect all current users; however it could have deterrent effects on a significant number of adolescents.

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[30] Marcia Brown-Machen, interview by author(s), Berkeley, Ca., 13 April 2006.
[31] Sergeant David White, interview by author(s), Berkeley, Ca., 13 April 2006.

Prevalence Reduction. The United States' War on Drugs data leads to the consistently stated conclusion that an increase in law enforcement will not necessarily reduce the number of drug users within a community. The national Monitoring the Future survey, which provides statistics on the effectiveness on the nations War on Drugs policies, suggests that high school students continually found it "fairly easy," or "very easy" to access marijuana locally during the late 1990's and early twenty-first century despite increased enforcement.[32] A theoretical law enforcement increase around marijuana use in the City of Berkeley would therefore not necessarily decrease drug use prevalence among youth.

Harm Reduction. Increasing enforcement around marijuana use has the potential to decrease harm to the community by taking drug users off the street, improving the image of the neighborhood, and decreasing the degree to which non-users encounter public drug use. The line between an illicit drug and a medical remedy is blurred in California with regard to marijuana. With a prescription drug comes the belief that the substance is safe and marijuana is therefore often viewed differently among Californian communities than in other states. In addition, marijuana is more readily available at a low cost, since the price of a medical-use substance is typically less on the black market than an illicit drug.[33] Some research suggests that making marijuana more difficult to obtain by increasing enforcement efforts could increase crime, violence and other harmful activities within the community. The theory is that when prices are low, less people who prefer this drug will need to steal or become violent in order to gain access to the substance since it is relatively affordable, and vice versa..[34]

How well enforcement will work is based on the elasticity of the good – the degree to which users will respond to price changes – the capacity of sellers, and skill of enforcement efforts. Directly increasing enforcement in high substance abuse areas may not, in actuality, decrease violence. Berkeley Police Department enforcement staff has echoed these conclusions. The Berkeley Police Department reports that, with respect to other drugs which are highly enforced, line officers often see "more violent tendencies" among individuals as law enforcement increases.[35] By patrolling an area more heavily, illegal activity in that area becomes more risky and more violent behaviors may result. Therefore, increasing enforcement around marijuana could potentially increase its price, increase violence around the drug, and, unless vast resources are dedicated to effective enforcement control, it could increase harm in the community.

<u>Feasibility</u>

The City of Berkeley has systematically sanctioned marijuana use since the late 1970's by passage of multiple city resolutions and ordinances. Ballot initiatives in 1972, 1973, and 1979, which were in favor of decriminalization of marijuana, were all passed by the

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[32]Justice Policy Institute, *Efficacy and Impact: The Criminal Justice Response to Marijuana Policy in the U.S.*, (Washington, D.C.: JPI, 2005).
[33] Mark A.R. Kleiman, *Against Excess: Drug Policy for Results*. (New York: BasicBooks, 1992), 88-94.
[34] Cheryl Carpenter, et al., eds., *Kids, Drugs, and Crime* (Toronto: Lexington Books, 1988), 82-85.
[35] Sergeant David White, interview by author(s), Berkeley, Ca., 13 April 2006.

Berkeley community. Prosecution of individuals for the use of marijuana was first forbidden in 1979 with City Ordinance 5137-NS. The first section lays out the desires of the citizens of Berkeley that the cultivation, use and sale of marijuana be supported by the City's government as the "return of our basic freedoms of life, liberty and the pursuit of happiness."

The Berkeley Police Department does not actively apprehend adult marijuana users on either public or private property. In addition, youths who appear to be over age 16 and are only participating in the consumption of cannabis are not arrested. However, if there are juveniles clearly underage smoking marijuana in public, officers of the law are under obligation to protect these children from potentially harmful behavior and, thus, will take them into custody. It is not clear how often underage youth are actually apprehended for marijuana use in public.

Berkeley City Ordinance 5137-NS § 2-3 states, "The City Council shall seek to ensure that the Berkeley Police Department gives lowest priority to the enforcement of marijuana laws," and is followed by, "The City Council shall seek to ensure that the Berkeley Police Department makes no arrests and issues no citations for violations of marijuana laws."

In addition the ordinance forbids the authorization of public funds, either through the City Council or another body of city government, which would be used "for any activity or activities performed by any employee or agent of the City, including but not limited to members of the Berkeley Police Department, directed toward enforcement of" specific sections of the California Health and Safety Code that would lead to the arrest and incarceration of individuals due to possession, use or sale of marijuana. (Ordinance 5137-NS § 4)

Therefore, any action that would seek to increase law enforcement concerning the issue of youth marijuana use within the City of Berkeley is condemned by City statute. Additionally, only private funding and action by individuals not employed through the City or an agent of the City may enforce California State marijuana laws within the City of Berkeley. This means neither the school district nor the Mayor's office may propose and/or support a community group or coalition to overturn the current marijuana sanctions. In essence, it would require a coalition within the community that is not directly employed by the City to propose and follow through with an ordinance change. This ordinance would need to be struck from the law after nearly three decades of social and political support within the community.

We do not have any reason to believe voters would prefer to change these regulations, nor are there any coalitions or community groups speaking out against the lack of marijuana enforcement. Thus there are few prospects for political support or direct action from the people. We believe that the feasibility of increased law enforcement around the issue of marijuana use within the City of Berkeley is extremely unlikely given the current legal and political realities in the city.

The political atmosphere within the City of Berkeley, the City's progressive leanings, and these established City ordinances render the prospect of heightening enforcement around marijuana use both politically and administratively infeasible.

PART VI. WHERE SHOULD BERKELEY FOCUS ITS EFFORTS: PREVENTION, TREATMENT OR ENFORCEMENT?

The following matrix provides summary information about the costs, feasibility and effectiveness of the three policy options under consideration. Based on this analysis, improving prevention and education services around youth AOD use in Berkeley appears to be the least expensive, arguably the most effective, and certainly the most feasible policy option for Berkeley to pursue.

Figure 1: Comparing Alternatives Based on Criteria

ALTERNATIVES	CRITERIA					
	Cost (in thousands of dollars)		Feasibility	Effectiveness		
	Initial	Annual		# of Youth Served	Harm Reduction	Prevalence Reduction
Education and Prevention	15	200	M	> 4,000	M	M
Treatment	50	3,432	L	440	M	L
Enforcement	UND.	200	L	300	L	L

KEY:
M = Moderate
L = Low
UND = Unable to Determine

Certainly, this conclusion does not mitigate the fact that the lack of adequate youth AOD treatment services in Berkeley represents a major service gap. Our research suggests that affordable AOD treatment for youth in Berkeley is seriously lacking and is an issue that requires attention. In addition, our research suggests that increased enforcement around the issue of substance abuse, and particularly marijuana use, could have positive deterrent and harm reduction benefits to the Berkeley community—though it could also have undesired effects and may not be in line with the values and desires of the community.

In summary, our analysis leads to the following conclusions:

• Levels of youth substance use in Berkeley are high as compared with state and national averages, and this is an issue that warrants policy attention.

• There is a gap between levels of youth substance use in the community and the resources available to address these use levels.

• There have been improvements with respect to youth substance abuse prevention services in Berkeley over the last two years, but there remains a lack of emphasis or agreement that resources need to be dedicated to these issues.

PART VII. RECOMMENDATIONS

Given its limited resources, the City of Berkeley should prioritize improving education and prevention efforts related to youth substance abuse in the city. We recommend that the City of Berkeley explore the following programming/policy options related to youth AOD prevention services:

1) Centralize efforts to address the issue of youth AOD use within the City of Berkeley by creating a youth AOD coordinator position either within the Department of Health's Mental Health Division, or within Berkeley High School.

The current decentralization of services around the issue of youth AOD use is a major barrier to creating organized, strong youth AOD services in the City. We recommend that the City of Berkeley address this issue by hiring a youth AOD coordinator who works jointly within the Health Department's Mental Health Division and Berkeley High School. This staff member would direct the implementation and support of collaborative youth AOD programs in the City. Among the central initiatives that such a staff person might pursue:

A) Providing Berkeley's middle and high school students with access to a licensed Alcohol and Other Drug counselor. This is currently a major service gap in the community.

B) Providing more resources for parents on issues of substance abuse prevention and treatment for youth, either within the Department of Health, or within Berkeley middle schools and Berkeley High School.

C) Establishing a collaboration between BHS and UC Berkeley's CALCORPS program to create a substance abuse outreach program. CALCORPS, which administers the student outreach and community service volunteer programs on the UC Berkeley campus, administers a "Bonner Program" that places student leaders in a school or non-profit organization within the City of Berkeley and, from that position, is in charge of recruiting volunteers and running a service program.[36] In the 2006-07 academic year there will be 60 Bonner leaders placed in different organizations throughout Berkeley. There will be a new Bonner position in the 2006-07 academic year at "Berkeley Boosters" in South Berkeley,

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[36] Some Bonner leaders are placed in the middle schools or elementary schools, where they run after-school programs, or mentoring programs. There is currently no Bonner leader in BHS.

and there is a possibility that this position could have a substance abuse component.

D) Encouraging collaboration so that UC Berkeley's School of Public Health or School of Social Welfare students can counsel Berkeley High School students on the issue of substance abuse.

2) Pursue grant funding for a city-wide AOD prevention program modeled on Berkeley's Tobacco Prevention Program.

The California State Department of Education administers funds allocated by the federal Safe and Drug Free Schools and Communities Program. This funding provides formula grants related to AOD prevention to communities based on need. Berkeley already receives this form of funding. However, the State Department of Education also provides competitive grants based on Requests for Funding (RFA's), which Berkeley could potentially pursue. In addition to funding options from the state, the City of Berkeley should explore the possibility of funding from private foundations to support a city-wide youth AOD program.

3) Monitor and support recent education and prevention initiatives within the Health Department, Police Department and school district to ensure they are well-implemented, sustained and evaluated for effectiveness.

Recent efforts to improve youth AOD services in the city include: the implementation of new AOD prevention curriculum in Berkeley's middle schools and Berkeley High School in Spring 2006; the implementation of the city Health Department's Drug Injuries Prevention Program in 2005; and the implementation, beginning in 2003, of Police Department initiatives to curb underage alcohol use.

The success of these initiatives is dependent on proper implementation and continued funding. We recommend that the City of Berkeley direct Berkeley's Health Department to monitor recent education and prevention initiatives within the City of Berkeley to ensure that they are well-implemented and evaluated for effectiveness.

Appendix A: Potential Treatment Contractors

NAME	ADDRESS	TELEPHONE	WEBSITE
Options Recovery Services	1931 Center Street Berkeley, CA 94704	(510) 666-9552	www.optionsrecovery.org
New Bridge Foundation Inc	1816 & 1820 Scenic Ave Berkeley, CA 94701	(740) 342-1991 (510) 548-7270	www.new-bridge.org
Horizon Services Chrysalis	3839, 3841, & 3845 Telegraph Avenue Oakland, CA 94609	(510) 450-1190	www.horizonservices.org
Thunder Road Chemical Dependency Recovery Hospital	390 40th Street Oakland, CA 94609	(510) 653-5040	www.thunder-road.org
Mandana Community Recovery Center	3989 Howe Street Oakland, CA 94611	(510) 595-9690	N/A
Healthy Babies Project John George Recovery Center	471 34th Street Oakland, CA 94609	(510) 450-0881	N/A
Berkeley Addiction Treatment Services	2975 Sacramento Street Berkeley, CA 94702	(510) 644-0200	N/A
Center Point Inc	400 El Cerrito Plaza El Cerrito, CA 94530	(510) 215-9378	www.cpinc.org

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