

**Report of the
Joint Legislative Audit and Review Commission
To the Governor and
The General Assembly of Virginia**

**Mitigating the Costs of
Substance Abuse
in Virginia**



**HOUSE DOCUMENT NO. 19
2008**

In Brief

Mitigating the Costs of Substance Abuse in Virginia

House Joint Resolution 683 and Senate Joint Resolution 395 from the 2007 General Assembly directed JLARC staff to study the impact of substance abuse on the State and localities.

JLARC staff found that the adverse effects of substance abuse cost the State and local governments at least \$613 million in 2006, incurred primarily in public safety. To mitigate these effects, the State and localities spent \$102 million providing substance abuse services. Most populations that completed substance abuse treatment imposed lower net costs on the State and localities, and the majority experienced better outcomes.

Still, the benefits of substance abuse treatment are not maximized because many Virginians do not seek services, are unable to access them, or do not receive services that are proven effective and best meet their needs. In addition, the majority of offenders do not appear to receive the substance abuse treatment they need despite imposing the greatest costs. To further reduce the costs of drug and alcohol abuse, the State could ensure that existing services are effective, and then consider expanding the availability of substance abuse services.

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**This report is available on the JLARC website at
<http://jlarc.state.va.us>**



COMMONWEALTH of VIRGINIA

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October 8, 2008

The Honorable M. Kirkland Cox
Chairman
Joint Legislative Audit and Review Commission
General Assembly Building
Richmond, Virginia 23219

Dear Delegate Cox:

House Joint Resolution 683 and Senate Joint Resolution 395 of the 2007 General Assembly directed the Joint Legislative Audit and Review Commission to study the impact of substance abuse on the State and localities. Staff were specifically directed to study how the adverse consequences of substance abuse impact State and local expenditures and to make funding recommendations on whether additional investments in services are needed to minimize costs. Findings of the study were presented to the Commission on June 9, 2008.

On behalf of the Commission staff, I would like to thank staff at the Departments of Mental Health, Mental Retardation and Substance Abuse Services; Corrections; Juvenile Justice; and Medical Assistance Services; and the Governor's Office for Substance Abuse Prevention for their assistance during this study.

Sincerely,

A handwritten signature in cursive script that reads "Philip A. Leone".

Philip A. Leone
Director

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JLARC Report Summary:

Mitigating the Costs of Substance Abuse in Virginia

Key Findings

- The adverse effects of substance abuse cost State and local governments approximately \$613 million in 2006, affecting many State agencies but disproportionately impacting the public safety area. To mitigate these effects, the State and localities spent \$102 million providing substance abuse services. (Chapter 2)
- Most populations that completed substance abuse programs evaluated for this study imposed lower net costs on the State and localities, and the majority experienced better recidivism and employment outcomes than similar groups who either did not enter or complete treatment. While this analysis should be supplemented by ongoing evaluations, few Virginia agencies conduct assessments to determine the effectiveness of their treatment programs. (Chapter 3)
- The benefits of substance abuse services are not maximized in Virginia because many individuals who need substance abuse services (1) do not seek them, (2) cannot access them due to cost or logistical barriers, (3) do not receive the most appropriate treatment because of capacity constraints and service gaps, or (4) receive services that do not adequately follow proven practices. (Chapter 4)
- The majority of individuals under the supervision of the criminal justice system do not receive needed services because criminal justice agencies often lack the resources to identify substance use disorders and to offer the most appropriate treatment when needed. In addition, newly released inmates face significant barriers which may undermine their recovery when they reenter the community. (Chapter 5)
- While it is largely unknown whether Virginia prevention programs yield positive results, the allocation of existing resources could be improved with evaluations, greater State coordination and direction, and additional focus placed on ensuring the proper implementation of proven practices. (Chapter 6)
- To maximize returns on its current investment, the State could take steps to ensure that existing services are effective by conducting program evaluations, utilizing proven practices that have been properly implemented, and improving the transition of prison inmates to the community. To fund these initiatives, additional revenues from the Department of Alcoholic Beverage Control could be directed toward substance abuse treatment. (Chapter 7)

House Joint Resolution 683 and Senate Joint Resolution 395 from the 2007 General Assembly direct staff of the Joint Legislative Audit and Review Commission (JLARC) to study the fiscal impact of substance abuse on State and local governments. Studies were requested in part because of concerns that substance abuse services are not sufficiently available in Virginia, despite findings from national studies that treatment can decrease the effects of substance abuse on government budgets. To explore these concerns, the study mandates specifically direct staff to study how the adverse consequences of substance abuse impact State and local expenditures, and to make funding recommendations on whether additional investments in services are needed to minimize costs.

SUBSTANCE ABUSE IMPOSES HIGH COSTS ON VIRGINIA

The adverse effects of substance abuse impose significant costs upon Virginia and its citizens. These costs result from the broad societal ramifications of substance abuse, which impact public safety, health outcomes, social well-being, and economic productivity. A vast body of research has substantiated the link between substance abuse and effects that undermine public safety such as crime, motor vehicle crashes, and fires. In addition, epidemiological studies have demonstrated that alcohol and drug abuse contributes to numerous medical conditions and can complicate the treatment of other diseases. In 2006, nearly 1,800 Virginians are estimated to have died from substance abuse-related conditions. Drug and alcohol abuse have also been shown to take a toll on social welfare due to their relationship with child abuse and neglect, and enrollment in benefit programs. Finally, substance abuse has been found to decrease participation in the labor market, reliability on the job, and productivity.

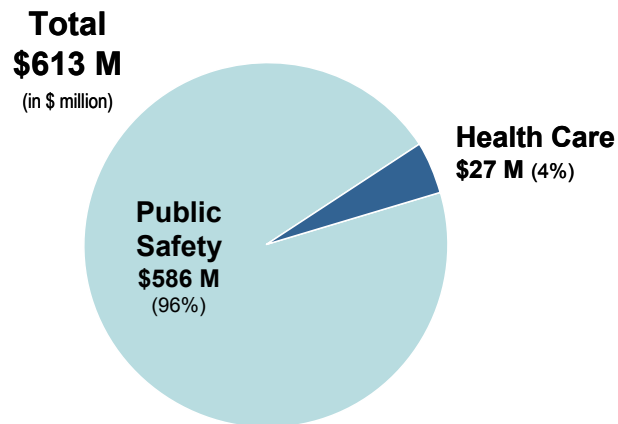
In addition to the economic and personal costs borne by Virginia families, the adverse consequences of substance abuse cost the State and localities more than \$613 million in 2006. The vast majority of substance abuse-related expenditures were incurred by public safety agencies, while medical conditions triggered or aggravated by substance abuse resulted in health care expenditures of \$27 million, as illustrated on the next page. In addition, the State and local governments spent approximately \$102 million providing substance abuse services to Virginians in 2006.

MOST VIRGINIA SUBSTANCE ABUSE PROGRAMS EVALUATED REDUCED COSTS, BUT ONGOING EVALUATIONS NEEDED

In the absence of comprehensive reviews of treatment provided in Virginia, JLARC staff designed an evaluation of substance abuse treatment that captured all services and programs for which reli-

able data exist. This evaluation indicates that for most of the programs examined, completing substance abuse treatment resulted in net cost reductions to the State and localities compared to not completing treatment, as summarized in the figure on the next page. In addition to reducing costs, the majority of substance abuse treatment programs evaluated also appeared to reduce recidivism and improve employment outcomes.

Cost of Substance Abuse on State and Localities (FY 2006)



Source: Staff analysis of data supplied by Virginia agencies.

While the analyses performed for this study offer some insights into the effects of treatment on costs and outcomes, ongoing evaluations are needed to ensure that Virginia makes the best use of limited resources by investing in the most effective programs. However, most State agencies that provide substance abuse services do not conduct comprehensive evaluations to determine the effectiveness of their treatment programs, despite statutory requirements. The lack of adequate evaluations appears to result from insufficient human resources and technology to facilitate the analysis and sharing of information within and across agencies. To address these issues, this report recommends that

- agencies providing publicly-funded substance abuse services conduct a needs assessment to identify the resources needed to capture relevant data and analyze evaluation results.

ACCESS AND EFFECTIVENESS COULD BE IMPROVED FOR SUBSTANCE ABUSE TREATMENT

To fully realize the benefits of substance abuse treatment, individuals must seek and be able to access services, as well as receive services that are proven effective and best meet their specific needs. Most people who need substance abuse services are not trying to access them and consequently remain untreated. This occurs

Most Populations That Completed Treatment Imposed Lower Costs and the Majority Fared Better on Other Indicators Relative to Comparison Groups

		Other Indicators ^b	
	Net Cost Impact ^a	Recidivism	Employment and Earnings
Department of Corrections			
Inmates in Therapeutic Communities	⊕	⊕/-	- -
Inmates in Transitional Therapeutic Communities	⊖	⊕/-	⊕/-
Adults on State Probation	⊕	⊕	⊕
Local and Regional Jails			
Inmates in Therapeutic Communities	⊕	⊕	⊕/-
Inmates in Other Services	⊖	⊕	⊕
Inmates in Therapeutic Communities vs. Other Services	⊕	⊖	⊖
Community-Based Probation Agencies			
Adults on Community-Based Probation	⊕	⊕	⊕
Richmond and Chesterfield Adult Drug Courts			
Offenders Completing Drug Court	⊕	⊕	⊕
Department of Juvenile Justice			
Juveniles on Probation	⊕	⊕/-	⊕
Individuals Not Included Above			
Adult Non-Offenders	⊕	⊕	⊕/-
Juvenile Non-Offenders	⊕	⊕/-	⊕/-
Adult Former Offenders	⊕	⊕	⊕
Juvenile Former Offenders	⊖	⊕/-	⊕

Outcome of Population that completed treatment:

- ⊕ **Better:** imposed lower costs, had lower recidivism rates, or had higher employment rates and earnings.
- ⊖ **Worse:** imposed higher costs, had higher recidivism rates, or had lower employment rates and earnings.
- ⊕/- **Mixed:** had an average difference of less than 5 percentage points across three measures of recidivism or had mixed employment and earnings outcomes.

Note: Comparison groups consist of individuals who did not complete treatment (non-completers) or did not receive treatment (non-participants) or individuals who completed other types of treatment.

^a See Table 11 for summary data on cost reductions related to completing treatment.

^b See Tables 12-23 for data on changes in costs, recidivism rates, and employment and earnings related to completing treatment.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, Richmond City and Chesterfield County Adult Drug Court Programs, DSS, VEC, and Virginia State Police.

most frequently because individuals with substance use disorders deny having a problem, do not perceive the adverse effects of their abuse as bad enough to stop, or are deterred by the stigma attached to substance abuse. While health care professionals could help overcome these challenges and refer patients to needed treatment, many appear to lack sufficient training to recognize the signs of substance abuse.

Individuals who are motivated to pursue substance abuse services may be unable to receive them due to logistical or affordability barriers. Many individuals are reported to lack the transportation and child care support needed to attend treatment. In addition, while community services boards (CSBs) are subsidized with public funds in order to serve individuals regardless of their ability to pay, the demand for services consistently exceeds the supply that can be provided with existing resources, and more intensive forms of treatment are often not available at all. Private providers generally do not discount their fees because they are not subsidized and tend to be unaffordable to anyone who does not have health insurance. However, affordability can be a barrier even for those who are insured. Private health insurers generally place limits on the scope of substance abuse services they cover, and providers of substance abuse services are generally unwilling to participate in the Medicaid program because reimbursement rates appear to be too low. In order to improve affordability and increase CSB revenues, this report recommends that

- the Department of Mental Health, Mental Retardation and Substance Abuse Services assess whether CSBs have consistently developed and effectively utilized sliding-scale fee structures that minimize the amount charged to lowest-income clients while maximizing overall fee revenues, and
- the Department of Medical Assistance Services evaluate whether Medicaid reimbursement rates for substance abuse treatment are high enough to incentivize providers to serve Medicaid enrollees as intended in the program's State plan.

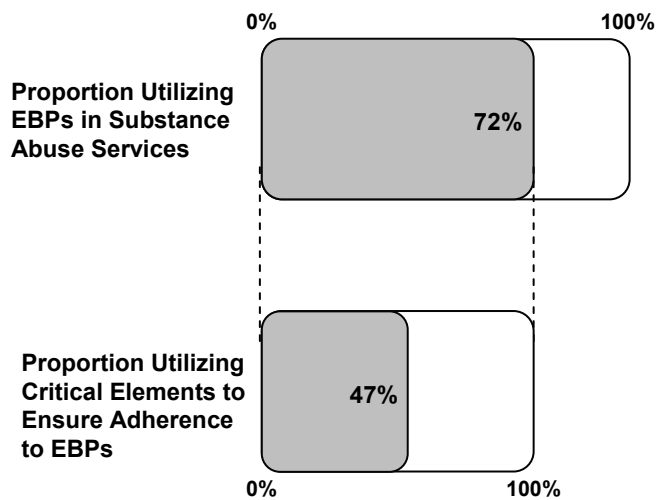
Even when individuals have the motivation and resources to access treatment, service gaps and insufficient capacity often result in them receiving the most readily available services rather than the services that are most appropriate to address their needs. Service gaps were most frequently reported for intensive treatment including individual therapy, residential care, intensive outpatient services, outpatient detoxification, and drug courts. While certain services do not exist at all, most providers also reported that insufficient capacity was frequently an issue for existing services. As a result, individuals who inquire about substance abuse treatment

often encounter lengthy waiting lists, and may drop out before services become available.

Finally, available services do not always follow proven practices, and even those that use evidence-based models do not appear to always be properly implemented as illustrated in the figure below. Evidence-based practices (EBPs) can play a key role in increasing the effectiveness of substance abuse treatment programs and improving treatment outcomes because they are scientifically proven to yield positive results, unlike practices based in tradition, convention, or anecdotal evidence. Although most treatment providers in Virginia have incorporated EBPs into their array of substance abuse services, inclusion of EBPs could be more widespread. Furthermore, most providers who report using EBPs have not ensured the proper implementation of these practices. To address these issues, this report recommends that the Department of Mental Health, Mental Retardation and Substance Abuse Services

- determine the level and nature of resources needed to help CSBs identify and properly implement proven practices, and
- encourage CSBs to use more proven practices by setting utilization targets and providing monetary incentives.

Most Substance Abuse Service Providers Who Use Evidence-Based Practices (EBPs) Do Not Ensure Proper Implementation



Source: Staff survey of providers and purchasers of substance abuse services.

MAJORITY OF OFFENDERS DO NOT RECEIVE MOST APPROPRIATE OR EFFECTIVE SERVICES

Despite the prevalence of substance abuse among offenders and the significant costs they impose, the majority of convicted individuals who are under the supervision of criminal justice agencies do not appear to receive the substance abuse treatment they need. This issue is especially pronounced among less serious offenders, even though many of them go on to commit more serious and costly crimes.

Many offenders do not receive any treatment because the agencies administering their sentence lack sufficient resources to identify substance use disorders or purchase needed services. Judges do not consistently require substance abuse treatment as part of offenders' sentences, and most criminal justice agencies no longer employ staff who are able to screen and assess for substance abuse. To address these issues, this report recommends that

- the Departments of Corrections, Criminal Justice Services, and Juvenile Justice determine the resources needed to provide offenders with needed screenings and assessments, and
- the Department of Mental Health, Mental Retardation and Substance Abuse Services and CSBs collaborate with criminal justice agencies to develop training about substance abuse for judges.

Moreover, the level of funding available to purchase assessment or treatment services is inadequate to meet demand in the majority of criminal justice agencies. Agencies are generally able to accommodate the provision of court-ordered services, and use remaining funds to serve offenders with the most pressing needs, thereby leaving other offenders untreated. While the criminal justice system can exercise leverage to compel treatment, insufficient capacity and resulting waiting lists can prevent offenders from accessing services, especially for locally-responsible offenders who serve sentences lasting less than 12 months.

Certain treatment options that appear to effectively reduce costs and, in some cases, recidivism do not appear to be consistently available to Virginia offenders. In particular, therapeutic community (TC) programs and drug courts can mitigate the cost of substance abuse to the State and localities. Yet, many prison inmates who could benefit from TC programs currently do not participate, and the majority of jails do not offer such programs. Similarly, more than 100 Virginia localities have not implemented drug court treatment programs for either adult or juvenile offenders.

When services can be provided, criminal justice agencies may not always be maximizing their effectiveness. Although contracts can be used to foster accountability with service providers, criminal justice agencies do not consistently use these agreements to set expectations. In addition, in-house programs administered by criminal justice local offices tend to utilize staff who are less qualified, have fewer measurable goals, and are less likely to ensure proper implementation of proven practices than CSBs and private providers.

Finally, while the majority of substance abuse programs provided to incarcerated offenders appear to yield positive results, the benefits of treatment may be partially offset by the barriers faced by inmates when they return to their communities. Inadequate coordination and communication between institution and probation staff undermines the continuity of inmates' substance abuse treatment after they leave prison, which is widely accepted as a critical component of recovery. In addition, most former inmates receive limited support with securing employment and housing, which can greatly weaken their ability to sustain a drug- and crime-free lifestyle. To improve continuity of care and proactively address barriers to reentry that may precipitate recidivism, this report recommends that

- five prison-based specialist positions be added on a pilot basis to collaborate with existing community-based transition specialists in facilitating prison inmates' return to the community.

EFFECTIVE PREVENTION SYSTEM NEEDED TO MITIGATE EFFECTS OF SUBSTANCE ABUSE

The impact of substance abuse prevention initiatives is largely unknown both nationally and in Virginia. A review of the national literature suggests that most substance abuse prevention programs have not been evaluated, although research has found that some prevention initiatives are effective. In Virginia, it is largely unknown whether programs have attained the level of short-term effectiveness shown to be possible in the literature due to a lack of comprehensive and consistent outcome evaluations. Further, limited statewide information exists to assess changes in community-level outcomes. To address these issues, this report recommends that

- the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and the Department of Education (DOE) assess the level and type of resources needed to track outcomes, conduct evaluations, and analyze results pertaining to local prevention programs,

- DMHMRSAS and DOE convene relevant State and local stakeholders to facilitate the development of statewide standard outcome measures that capture the impact of prevention programs on Virginians, and
- the General Assembly consider requiring all Virginia school divisions to participate in a statewide youth survey, and supplementing the federal grant secured by Virginia so that a youth survey that is sufficiently comprehensive to capture regional- and local-level information can be administered.

Despite a lack of comprehensive evaluations, it appears that existing resources devoted to prevention initiatives could be used and allocated more efficiently. While collaboration is strong between State and local agencies involved in prevention, prevention coordinators indicate that Virginia does not have a statewide, coordinated prevention system with a clear plan. This issue appears to exist in part because not all agencies have embraced the same vision, and information is not sufficiently available about the substance abuse issues that are most pressing in Virginia. Moreover, prevention initiatives could receive greater visibility if agency heads were more actively engaged in this area, and a State prevention director reported directly to the Governor.

In addition, the effectiveness of prevention programs may not be maximized in Virginia. Certain populations who are at high risk of abusing substances have limited or no access to prevention services. Moreover, it appears that inconsistent efforts to ensure the proper implementation of evidence-based programs and inadequate staff qualifications may diminish the quality of substance abuse prevention programs implemented in the State.

CONCLUSIONS AND POTENTIAL FUNDING OPTIONS

While the potential consequences of substance abuse cost the State and localities in excess of \$613 million in 2006, results presented in this evaluation and other national studies indicate that substance abuse services can reduce costs to the State and localities and effectively mitigate the negative effects of drug and alcohol abuse. However, this study also suggests that Virginia still has an opportunity to improve upon several key areas in order to maximize the positive impact of substance abuse services. Specifically, Virginia could first take steps to ensure that existing services are effective by

- conducting comprehensive and ongoing evaluations,
- ensuring that providers utilize proven practices that have been properly implemented, and

- improving the transition of offenders from prison to maintain positive gains achieved in institution-based programs.

The State could then consider expanding the availability of substance abuse services, starting with offenders because this population imposes the greatest costs upon Virginia.

House Joint Resolution 683 and Senate Joint Resolution 395 direct JLARC staff to make recommendations concerning funding options for substance abuse services. While this study's analysis indicates that the cost of substance abuse services can ultimately be recouped through savings realized by agencies, an initial investment would be required to improve the effectiveness of existing services and, subsequently, enhance access to treatment. To fund these initiatives, the entire amount currently transferred by the Department of Alcoholic Beverage Control (ABC) to treat individuals with substance use disorders could be appropriated. Alternatively, a percentage of the incremental revenues expected to be generated through Sunday sales and additional ABC retail locations could be designated for substance abuse services.

Overview of Substance Abuse and the Services Addressing Its Effects in Virginia

In Summary

Substance abuse refers to the abuse of or addiction to illicit drugs, prescription drugs, and alcohol. Approximately half a million Virginians abused illicit drugs and/or alcohol in 2006. Certain biological and environmental factors may increase the propensity to abuse or become addicted to substances, but all demographic and socio-economic segments of society are affected by substance abuse. Substance use alters the normal functioning of the brain, and abuse and addiction, which are classified as diseases, can require treatment to restore normal brain functioning. Although relapse is a normal part of the disease, individuals can be successfully treated, and prior studies have shown that treatment can reduce the costs of substance abuse to the State and localities. To combat the adverse effects of substance abuse on Virginia families, the State and localities provide a variety of services aimed at treating and preventing abuse and addiction. In 2006, approximately \$175 million was spent on the treatment of substance abuse in Virginia, the majority of which was funded by the State and local governments. Publicly-funded substance abuse services are primarily provided by community services boards. Substance abuse prevention services are administered largely through community services boards and school divisions, and most frequently target youths.

House Joint Resolution 683 and Senate Joint Resolution 395 from the 2007 General Assembly direct staff of the Joint Legislative Audit and Review Commission (JLARC) to study the fiscal impact of substance abuse on State and local governments. Studies were requested in part because of concerns that substance abuse services are not sufficiently available, despite findings from national studies that treatment can decrease the effects of substance abuse on government budgets. These resolutions are provided in Appendix A.

To explore these concerns, the study mandates specifically direct JLARC staff to study how the adverse consequences of substance abuse impact State and local expenditures, and to make recommendations on whether an additional investment in substance abuse services is needed to reduce costs to the Commonwealth. While Senate Joint Resolution (SJR) 395 asks for a review of the array of social problems aggravated by substance abuse such as crime, diseases, and family violence, House Joint Resolution (HJR) 683 focuses strictly on the reduction of costs that may occur when offenders who are diverted from incarceration receive substance abuse treatment. The issues JLARC is directed to address by HJR 683 can be considered a subset of SJR 395, which directs staff to examine crime within the broader context of substance abuse.

WHAT IS SUBSTANCE ABUSE?

Substance abuse is a term most frequently used to refer to the abuse of or addiction to illicit or legal drugs and alcohol. Consistent with the non-clinical literature, the term "substance abuse" will be used in this report to refer to both substance abuse and addiction. Drug or alcohol use often begins among adolescents and can progress into abuse due to the highly addictive qualities of certain substances and their effect on normal brain functions. Substance abuse and addiction are recognized as two separate diseases that alter brain functions to different degrees, and share similarities with other medical conditions such as heart disease and diabetes.

Commonly Used Substances Include Legal and Illicit Drugs and Alcohol

The substances most often abused include illicit drugs, prescription drugs, and alcohol. Commonly abused illicit drugs include marijuana, cocaine, and heroin, while OxyContin and Percocet are examples of prescription drugs used non-medically. In addition, certain solvents can be inhaled to produce drug-like effects.

Substance Use Can Progress Toward Abuse and Addiction

Drugs and alcohol can initially produce pleasurable effects on the brain, but they can ultimately have serious consequences such as addiction or withdrawal symptoms. The continuum of substance use tends to begin in adolescence and may progress into abuse or addiction. Youths who are exposed to certain biological or environmental risk factors may be predisposed to progress from substance use to abuse.

Substance Use Typically Begins in Adolescence. The progression toward addiction often starts with experimentation, frequently among adolescents. During the teenage years, the brain is still developing important cognitive functions, including the ability to assess situations, make sound decisions, and keep emotions and desires under control. Therefore, adolescents are at increased risk to initiate drug or alcohol use.

Substance Abuse Characterized by Repeated Use Despite Occurrence of Negative Consequences. The degree of substance use and its effects can be characterized in five stages beginning with experimentation and culminating in addiction, as shown in Figure 1. Because substances of abuse all share addictive qualities, experimentation or recreational use of drugs or alcohol can progress into a physical and psychological preoccupation with drugs or alcohol known as addiction.

Figure 1: Continuum of Substance Use

	Experimentation	Recreational Use	Habitual Use	Substance Abuse	Addiction
Characteristics	Voluntary use of drugs or alcohol, usually due to peer pressure or just to see what it is like	Occasional drug use, which may lead to a pattern of use	Regular, frequent use, may feel that they have less control over their substance use	Repeated use of substances despite negative consequences; use in hazardous situations	Uncontrollable, compulsive craving, seeking, and use of substances despite negative consequences
Physical Effects	People at this stage have a low tolerance, and might get drunk or high with relatively little of the substance	Increased tolerance to the substance being used	Long-term abuse may lead to medical conditions such as liver disease	Long-term abuse may lead to medical conditions such as liver disease	Develop withdrawal symptoms; malnutrition; medical conditions may lead to premature death
Psychological Effects	Minimal, if any	Minimal, if any	May experience changes in mood, memory, perception, and emotions	Changes in mood, memory, perception, and emotions become more acute	Addictive preoccupation with alcohol or drugs
Social Effects	May continue to use in order to "fit in"	Typically no negative effects	May begin to withdraw from friends, family, and hobbies	Inability to fulfill major responsibilities in job or relationships; legal and financial problems	Anti-social behavior, job loss, financial problems, criminal behavior, domestic violence

Source: Substance Abuse and Mental Health Services Administration and the National Institute on Drug Abuse.

Although individuals may experience negative personal consequences and impose societal costs at any stage of substance use, the greatest adverse effects on the abuser and society tend to result from individuals who abuse or are addicted to substances because of the frequent or uncontrollable characteristics that define these stages. Demand for treatment typically occurs during these two stages as well.

Several Risk Factors Facilitate Progression of Substance Use Into Abuse. Some individuals may be able to continue to experiment or use drugs or alcohol on a recreational or habitual basis without experiencing severe adverse consequences, but others become abusers or addicted. Certain biological and environmental factors may increase the propensity to abuse or become addicted to substances among youths (Table 1). Specifically, among these risk factors, genetic characteristics account for between 40 and 60 percent of a person's vulnerability to addiction, according to the National Institute on Drug Abuse. Those at higher risk include children of substance abusers, adolescents who are victims of physical, sexual, or psychological abuse, adolescents with mental health problems, especially depressed and suicidal teens, and physically disabled adolescents.

Table 1: Substance Abuse Risk Factors

Biological	Environmental	Other
<ul style="list-style-type: none">• Genetics• Gender• Mental disorders	<ul style="list-style-type: none">• Unstable home environment• Abuse• Parent's use and attitude• Peer influences• Community attitudes• Poor school achievement	<ul style="list-style-type: none">• Early use• Method of drug intake

Source: "Preventing Drug Use Among Children and Adolescents." National Institute on Drug Abuse.

The impact of drugs and alcohol on the immature brain makes adolescents more likely to progress beyond the experimentation stage to substance abuse and addiction. As a result, the age of first-time use is an important indicator of subsequent substance abuse. A national survey on drug use from the U.S. Department of Health and Human Services found that 12.9 percent of individuals who first tried marijuana at age 14 or younger became substance abusers later in life, compared to only 2.2 percent of individuals who first used marijuana at age 18 or older. The progressive nature of substance use is why prevention efforts aim to stop individuals from entering the first stages of this continuum or from escalating toward substance abuse or addiction.

Substance Abuse and Addiction Are Separate Diseases

Substance abuse and addiction are recognized by medical standards as separate diseases characterized by changes in the brain that impair normal functioning. While both substance abuse and addiction share characteristics such as the need to use substances despite negative consequences, an individual who abuses drugs or alcohol may not yet experience compulsive or uncontrollable cravings. In contrast, an individual addicted to drugs or alcohol has such cravings and will continue to use the substance despite extreme negative consequences. Notwithstanding these differences, individuals in both stages are unable to acknowledge the negative effect of their substance use, and therefore may benefit from substance abuse services to assist their recovery.

Unlike substance abuse, addiction has been characterized as a chronic recurrent disease because the effects of drugs and alcohol change the structure and functioning of the brain. In a staff interview, a substance abuse services program manager from a local community services board (CSB) described the onset of addiction as a switch being "flipped" in the brain. Once that switch is flipped, the brain is permanently altered and the individual may have difficulty returning to a life without drugs or alcohol without intervention. As a result, the recovery process is often punctuated

with episodes of relapse. Compared to individuals who abuse substances, addicted individuals may require additional treatment services such as detoxification because of the serious psychological and physical changes that have occurred due to repeated heavy use of substances. However, it is equally important to provide appropriate services to individuals who abuse substances, not only because of the negative impact of their abuse, but also because abuse can progress into addiction if left untreated.

Substance Abuse and Addiction Are Similar to Other Diseases

Clinicians refer to the abuse of or addiction to drugs and alcohol as “substance use disorder.” Substance use disorders share similarities with other diseases. Abuse of and addiction to drugs or alcohol are similar to medical conditions such as type II diabetes and heart disease in that they are most often preventable and treatable. While some factors may increase the risk of becoming addicted to drugs or alcohol, individuals may similarly increase their risk of developing diabetes and heart disease if they have a poor diet or do not exercise regularly, or if they have a genetic predisposition to the disease. Once substance use disorders are established, they impair healthy brain functioning just as heart disease impairs the healthy functioning of the heart. Moreover, all of these conditions are treatable, and advancements in medication-assisted drug and alcohol addiction treatment have increased the number of successful outcomes for this population.

Substance Abuse Has Adverse Effects on Brain Function That Vary Across Substances

Drugs and alcohol interfere with the way nerve cells send, receive, and process information. Over time, substance abuse results in physical changes in the brain. In addition, drug and alcohol abuse have long-term effects on the body, mind, and behavior which vary across substances in type and intensity.

Illegal Drugs and Alcohol Affect Brain Function. Illegal drugs are similar in that they change brain function by flooding the brain with dopamine, a neurotransmitter present in regions of the brain that regulate movement, emotion, cognition, motivation, and feelings of pleasure. Some drugs, such as marijuana and heroin, cause abnormal messages to be sent through the brain's circuitry by mimicking pleasurable chemicals that naturally occur in the brain. Other drugs, such as amphetamine or cocaine, also send abnormal messages to the brain, but do so by releasing abnormally large amounts of pleasurable chemicals in the brain. Although there are variations in how abused substances interfere with the natural functioning of the brain, they all overstimulate the brain's reward

All abused substances overstimulate the brain's reward system, which can transform the voluntary decision to take drugs or alcohol into the inability to exert self control.

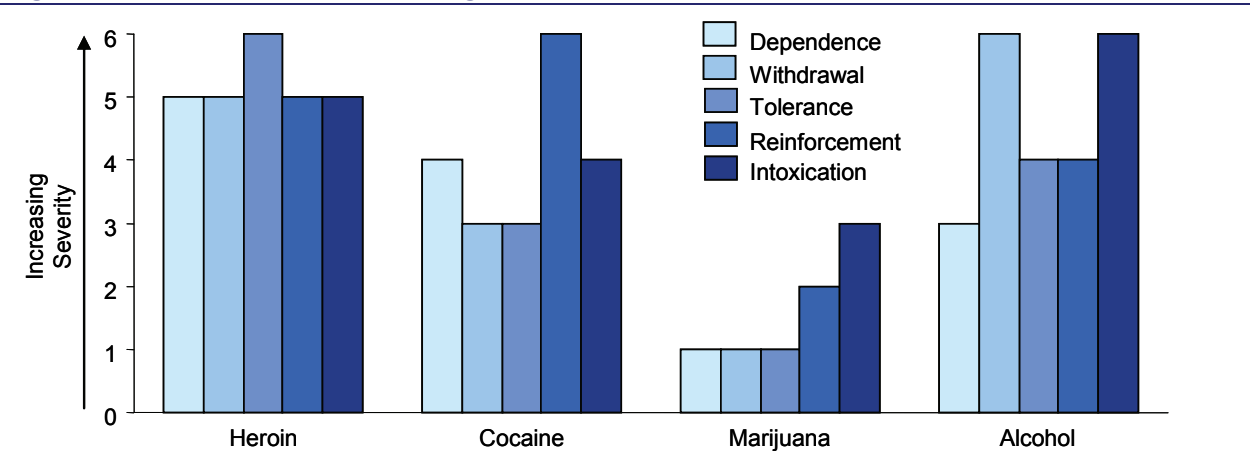
system, which can transform the voluntary decision to take drugs or alcohol into the inability to exert self control. A local practitioner described these effects as strengthening the “go” section of the brain, which triggers instinctive responses, and muting the “know” portion of the brain, which applies logic and tempers the “go” instincts by weighing consequences.

Although scientists do not yet fully understand how, when, and why people become addicted, brain scans of addicted individuals show physical changes in several areas of the brain that may help explain the compulsive and destructive behaviors of addiction. In addition, studies show that something does occur in the brain to permanently alter its functioning.

Seriousness of Long-Term Effects Varies Across Substances. While all substances of abuse trigger the pleasure response in the brain and cause changes in a person's body, mind, and behavior, some have more serious effects than others, as shown in Figure 2. These effects fall into five categories and are measured on a scale of one to six, with six indicating the highest level of severity and intensity experienced by the substance user.

Dependence refers to the likelihood of becoming dependent as a result of using the substance, how difficult it is to quit, and the relapse rate. Withdrawal describes the presence and severity of symptoms characteristic of substance withdrawal. Tolerance refers to how much of the substance is needed to satisfy increasing cravings. Reinforcement is the measure of the substance's ability to get users to take it again in preference to other substances. Finally, although not typically counted as a measure of addiction on its own, intoxication increases the potential personal and social damage of

Figure 2: Effects of Common Drugs



Source: Jack E. Henningfield, Ph.D. for National Institute on Drug Abuse, Reported by Philip J. Hilts, *New York Times*, Aug. 2, 1994, "Is Nicotine Addictive? It Depends on Whose Criteria You Use."

an individual under the influence of a substance. Heroin use results in the highest levels of dependence and tolerance, while cocaine creates the greatest reinforcement, and alcohol results in the greatest levels of withdrawal and intoxication (Figure 2).

HOW PREVALENT IS SUBSTANCE ABUSE IN VIRGINIA?

More than half a million Virginians abused drugs and/or alcohol in 2006 according to the National Survey on Drug Use and Health (NSDUH). They represent all demographic and socio-economic segments of society. However, the incidence of substance abuse is highest among males without a college degree and those who are involved in the criminal justice system.

Trends in Prevalence of Substance Abuse

The number of individuals suffering from substance use disorders in Virginia exceeded half a million in 2006. The prevalence of this disorder is in line with that of neighboring states, and has declined slightly in recent years.

More Than Eight Percent of Virginians Abuse Substances. Approximately 517,000 Virginians aged 12 or older abused either or both illicit drugs and alcohol in 2006. However, this figure may be understated because it includes only those individuals who have been classified with the disorder by an agency that provides substance abuse services; a number of individuals who abuse substances may not have received services, and therefore would not be included in this figure.

The 2006 rate of substance abuse in Virginia (8.38 percent) is below the national and southern states' averages (9.20 percent and 8.78 percent, respectively).

The 2006 rate of substance abuse in Virginia (8.38 percent) is below the national and southern states' averages (9.20 percent and 8.78 percent, respectively). However, the prevalence of substance abuse in Virginia is slightly higher than the average in nine nearby states (Delaware, Georgia, Kentucky, Maryland, North Carolina, Pennsylvania, South Carolina, Tennessee, and West Virginia) with a substance abuse rate averaging 8.33 percent. Only Kentucky, Maryland, Pennsylvania, and West Virginia are below all three averages.

Almost three times as many Virginians abused alcohol as illicit drugs in 2006, with 440,000 individuals abusing alcohol compared to 158,000 abusing drugs. Among drug users, 76 percent smoked marijuana. The non-medical use of pain relievers was approximately half that of marijuana but nearly twice as high as cocaine use over the course of one year.

Abuse of and addiction to illicit drugs and alcohol in Virginia has declined by eight percent since 2002 according to the NSDUH.

This decline is attributable largely to a reduction in the rate of individuals who abused illicit drugs, which decreased by 16 percent between 2002 and 2006. By comparison, abuse of or addiction to alcohol decreased by only three percent between 2002 and 2006.

The reduction in the proportion of Virginians who abuse or are addicted to drugs and alcohol between 2002 and 2006 outpaced the national average, which decreased by one percent. Furthermore, North Carolina and Tennessee have experienced an increase in the proportion of individuals who abuse or are addicted to drugs or alcohol (two percent and nine percent increases, respectively).

Substance Abuse Affects Individuals From All Backgrounds and Geographical Areas, but Disproportionately Impacts Certain Groups

The population that suffers from substance use disorders is widespread and crosses all demographic and socio-economic segments. However, certain groups are disproportionately affected by substance abuse. In addition, substance abuse is more prevalent in certain geographical regions of the State.

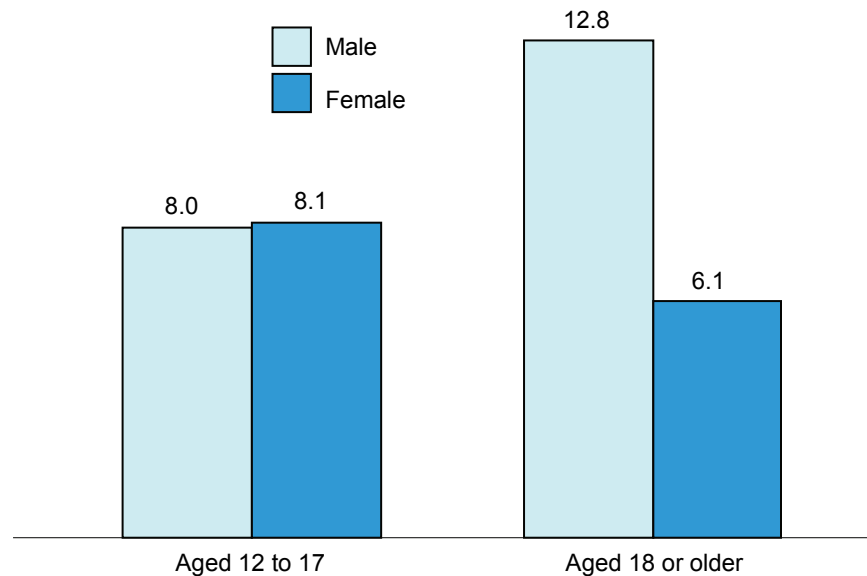
Rates of Substance Abuse Vary Across Demographic and Socio-Economic Groups. While substance abuse occurs in all segments of the population, some variation exists by age, gender, ethnicity, and education levels. Males aged 18 or older were more than twice as likely as adult females to abuse illicit drugs or alcohol according to results from the 2006 NSDUH, as shown in Figure 3. However, the prevalence of substance abuse among youths aged 12 to 17 was approximately the same for both genders, suggesting that gender disparities occur primarily after the age of 18.

The prevalence of substance abuse is comparable across individuals who are black, hispanic, and white, ranging from nine to ten percent. The highest prevalence of substance abuse occurs among individuals who are American Indian or native Alaskan (19 percent), while the lowest prevalence occurs among Asian individuals (4.3 percent).

Educational achievement also appears to be associated with the prevalence of drug and alcohol abuse. Those who have received some college education have the highest prevalence of substance abuse (10.8 percent), while those who graduated from college have the lowest prevalence (7.3 percent).

Rates of substance abuse are disproportionately high among individuals who have committed a criminal offense. Studies conducted by the U.S. Department of Justice estimate that 70 percent of jail and prison inmates used drugs regularly in the late 1990s, com-

Figure 3: Proportion of Individuals Who Abuse Illicit Drugs or Alcohol in Virginia by Age and Gender, 2006



Source: Substance Abuse and Mental Health Services Administration's 2006 National Survey on Drug Use and Health.

Studies conducted by the U.S. Department of Justice estimate that 70 percent of jail and prison inmates used drugs regularly in the late 1990s, compared to slightly more than 9 percent of the overall U.S. population.

pared to slightly more than nine percent of the overall U.S. population. It is unclear why offenders are more likely to be substance abusers than the rest of the population. However, substance abuse appears to precipitate criminal activity among at least some offenders. Nearly one in five inmates surveyed by the U.S. Department of Justice indicated having committed the offense for which they were incarcerated to get money for drugs, and one-third of inmates reported that they were under the influence of drugs or alcohol at the time of the offense, which may have contributed to their engagement in criminal activity.

Regional Disparities Exist Across Virginia Regions. Variation in substance abuse exists between regions in Virginia. The 2004 NSDUH shows that Northern Virginia counties had the highest rate of substance abuse (ten percent), and the Hampton Roads area had the lowest (7.8 percent).

CAN SUBSTANCE ABUSE BE EFFECTIVELY TREATED?

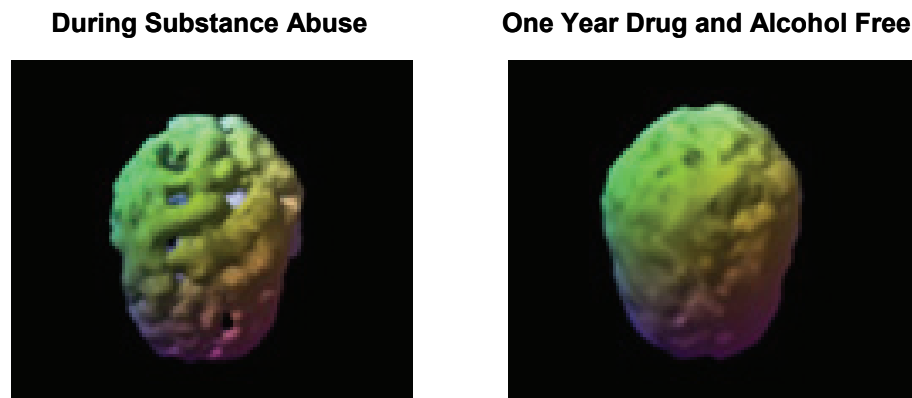
An extensive body of research concludes that substance abuse treatment can reduce the use of drugs and alcohol and its adverse effects, although individual participants' outcomes vary. The effectiveness of services is dependent upon the adequacy of treatment provided, duration of treatment, and individual participants' characteristics. While individuals can and do relapse because of the

chronic nature of addiction, studies have shown that continued treatment can effectively lead to recovery.

Treatment Appears To Effectively Mitigate Adverse Consequences of Substance Abuse but Varies Across Individuals

Numerous studies have shown that substance use disorders can be successfully treated and managed. Common indicators of treatment outcomes include changes in substance use, criminal behavior, family relationships, and employment. In addition, brain scans have shown that much of the damage sustained by the brain due to abuse or addiction can be undone once the individual abstains from using drugs or alcohol, although the brain may never fully return to its unaltered state (Figure 4).

Figure 4: Brain Scan of Recovering Substance Abuser Shows That Damage Can Largely Be Repaired



Source: Amen, D. (2006) *Images of Human Behavior: A Brain SPECT Atlas*.

One of the most comprehensive and long-term studies on the effects of drug and alcohol treatment is the National Treatment Improvement Evaluation Study (NTIES). NTIES is a congressionally-mandated five-year study initiated in 1990 which examined the impact of drug and alcohol treatment on thousands of clients in hundreds of treatment units that received public support from the Substance Abuse and Mental Health Services Administration (SAMHSA). To date, the NTIES evaluation has found significant decreases in the use of participants' substance of choice (73 to 38 percent one year after treatment). Lower rates of substance abuse were accompanied by a 64 percent reduction in arrests and even greater reductions in self-reported participation in illegal activities such as selling drugs. In addition, NTIES subjects experienced lower health care costs, greater rates of employment, and lower reliance on benefit programs after treatment.

Success Rates Affected by Adequacy of Services and Individual Circumstances

Successful treatment outcomes are determined in large part by the adequacy of the services provided. While results appear to vary between different types of treatment, studies have found that any treatment is better than no treatment at all. Studies have also shown that individuals with more time in treatment are significantly more likely to remain in recovery and avoid negative consequences than those with less time in treatment.

The research literature indicates that treatment options are often not sufficiently available to meet individuals' needs. In particular, the literature points to the inadequate supply of services and long waiting lists as two factors that can preclude individuals from readily receiving treatment that matches their needs.

Even those individuals who receive high-quality treatment that is appropriate for their needs can face difficulties in sustaining their recovery because of the strong impact exerted by their environment. Individuals who live in neighborhoods where substance abuse is the norm, belong to dysfunctional families, or have limited education and employment prospects or impaired social skills may be at greater risk of relapse. Moreover, youths who suffer from substance use disorders also have less control over their lives and recovery than their adult counterparts, because their environment is largely affected by their parents.

Relapse Is Normal Aspect of Chronic Disease

Relapse is often a common part of the rehabilitation process for most chronic diseases, and is not viewed as a failure of treatment in the medical community. Treatment of chronic diseases involves changing deeply engrained behaviors, and relapse can indicate that treatment needs to be reestablished or adjusted, or that different treatment is needed. Often, the longer an individual has been abusing drugs or alcohol, the more severe the substance use disorder and the greater the chance of relapse. While individuals may experience relapse multiple times after they receive treatment, they can make significant improvements with each treatment episode and ultimately become productive members of society.

Studies have shown that individuals with chronic diseases other than addiction are also subject to relapse, and that the treatment of addiction is as successful as the treatment of other chronic diseases such as diabetes, hypertension, and asthma. One study found that the one-year relapse rate for addiction (60 percent) is

lower than that of asthma (70 percent) and only slightly higher than that of hypertension (55 percent).

WHAT ARE POTENTIAL COST REDUCTIONS RESULTING FROM SUBSTANCE ABUSE TREATMENT?

Studies conducted by national and state-level organizations have consistently found that substance abuse imposes high costs upon society, and that treatment can not only mitigate the adverse effects of drugs and alcohol but also reduce costs to society. Despite the abundant number of studies that have been conducted on this subject, few have focused on estimating the impact of drugs and alcohol strictly on State and local governments, as directed by this study's mandates. Consequently, although substance abuse treatment is widely regarded as reducing costs for society at large, it is unclear from the literature whether such net cost reductions would also accrue from the perspective of the State and local governments.

National Studies Estimate Billions Spent Addressing Adverse Consequences of Substance Abuse

Many national studies have attempted to estimate the breadth and magnitude of costs that substance abuse imposes upon society. Nearly all have used a "cost of illness" methodology, which identifies the consequences of substance abuse based on the results of epidemiological studies. An economic cost is then assigned to these consequences using the "human capital" methodology, which includes costs to the individual and society.

The most comprehensive study of the costs of illegal drugs is published every few years by the federal Office of National Drug Control Policy (ONDCP). ONDCP estimates that the nationwide economic cost of illegal drug abuse in 2002 was \$180.9 billion. The report attributes the majority of these costs (71 percent) to lost productivity as a result of incarceration, deaths, and drug-related illnesses. Another 20 percent of costs are linked to the criminal justice system and crime victims' costs. Health care costs, which include substance abuse treatment as well as medical care for drug-related diseases, represent another nine percent of the costs of illicit drug abuse.

Using a similar approach to that developed for estimating the costs of illicit drug use, a study published by the National Institute of Alcohol Abuse and Alcoholism estimated the costs of alcohol abuse at \$184.6 billion in 1998. Although this figure is four years older than the ONDCP estimate of the costs of illicit drug use, it is interesting to note that both estimates are fairly close in magnitude, around \$180 billion. As with illicit drug use, the greatest economic

cost of alcoholism (73 percent) results from lost productivity due to premature death or illness. Health care costs, comprised of alcoholism treatment and care of medical consequences, represent 14 percent of the total, and criminal justice costs make up the remaining 13 percent of the costs of alcohol abuse.

A few states have attempted to replicate these national studies. Washington state estimated the cost of substance abuse to its citizens at \$2.5 billion in 1996, while Maine reported an estimated cost of \$618 million in 2000. The proportion of costs spent on various consequences of substance abuse was consistent in both states.

The Center on Addiction and Substance Abuse (CASA) at Columbia University estimated that substance abuse imposed a cost of \$81 billion on state budgets in 1998, including \$1.8 billion in Virginia. This is far less than the costs to society at large described above, suggesting that state budgets assume a relatively small portion of the costs associated with substance abuse. The CASA report indicates that, compared to the rest of the nation, the costs of substance abuse in Virginia appear disproportionately concentrated in the criminal justice system (55 percent in Virginia compared to 40 percent nationally) and mental health services (14 percent in Virginia compared to seven percent nationally). Conversely, Virginia appears to experience lower costs associated with public education, human services, and treatment/prevention.

While the study conducted by CASA comes closest to addressing the questions posed in HJR 683 and SJR 395, some of the costs it includes do not appear to have a robust source and should therefore be used with caution. Moreover, that study includes many costs that co-occur but may not have been caused by substance abuse. For example, criminal justice costs include all crimes committed by offenders who reported abusing substances at some point in their lives, whether or not drugs and alcohol were involved in the specific offense of which they were convicted. Consequently, the estimate reported in the CASA study may overstate the costs that can reasonably be attributed to substance abuse.

Other States Have Experienced Positive Returns on Investments in Substance Abuse Services

Because substance abuse appears to be linked to societal costs, many states and localities have invested in the provision of treatment services designed to mitigate the adverse consequences of drugs and alcohol. Dozens of studies have examined the results of substance abuse treatment programs and determined that they yield net economic cost reductions to society, even though the studies' methodologies varied greatly. The most comprehensive and widely referenced cost studies include those conducted by Califor-

nia and Oregon, which estimated cost reductions of \$7 for every \$1 invested in treatment. A similar study based on a sample of federally-funded treatment programs found returns of \$4 for \$1 in treatment. Other studies focused on smaller populations but all found cost reductions ranging from \$1.30 to \$23 for every \$1 invested in treatment. Across nearly all these studies, most of these reductions in cost were derived from reductions in criminal behavior and increased employment.

This body of literature, which includes more than 58 documents published since 1980, was reviewed and assessed by the Center for Substance Abuse Treatment (a component of SAMHSA). The authors found positive returns for all cost studies reviewed and concluded that any treatment of substance abuse, regardless of the specific program employed, is better than no treatment. Their review did reveal that certain types of treatment may generate greater cost reductions than others. For example, they found that less intensive treatment programs were just as effective as and less costly than more intensive interventions, such as inpatient care. In addition, their interpretation of the literature suggests that longer stays in treatment is consistently linked to higher reductions in cost. While treatment appears beneficial from a broad societal perspective, the authors caution that the magnitude of cost reductions may vary when considering only one perspective, such as that of individuals, businesses, or government.

SUBSTANCE ABUSE TREATMENT SERVICES PROVIDED BY VARIETY OF AGENCIES

While publicly-funded substance abuse treatment is provided by a variety of State and local offices, most services are offered through Virginia's 40 community services boards (CSBs). Agencies whose clients need substance abuse treatment can contract with or make referrals to CSBs or private providers when CSBs cannot meet their needs. In addition, many criminal justice agencies also provide substance abuse treatment to offenders under their supervision. Because offenders tend to have specific treatment needs that sometimes must be accommodated in a secure environment, certain programs have been developed specifically for the criminal justice system such as drug courts and therapeutic communities. Given the breadth of treatment programs and activities across the State, the Virginia Substance Abuse Services Council was developed to coordinate activities and enhance collaboration between agencies.

In FY 2006, approximately \$175 million was spent on the treatment of substance abuse in Virginia.

Spending on Substance Abuse Services Concentrated in CSBs

In fiscal year (FY) 2006, approximately \$175 million was spent on the treatment of substance abuse in Virginia. The majority of this amount was funded by the State and local governments, while federal grants accounted for nearly a quarter of the total spent. Client fees were the primary source of other revenues, especially for CSBs and the Virginia Alcohol Safety Action Program.

The vast majority of Virginia public funding for substance abuse services is spent by CSBs, while the budgets of other State agencies are relatively small (Table 2). This difference exists in part because some of the funding received by CSBs is designed to serve clients referred by other agencies that do not have the means to purchase services. Consequently, agencies other than CSBs have limited budgets to address their clients' substance abuse service needs and must rely heavily upon the availability of CSB funds to access treatment.

Table 2: FY 2006 Spending for Substance Abuse Treatment by Entity and Source (\$ millions)

Department/Entity	Federal	State	Local	Other (Fees, Grants)	Total
Mental Health, Mental Retardation and Substance Abuse Services (CSBs)	\$35.6	\$41.7	\$39.8	\$19.2	\$136.4
Virginia Alcohol Safety Action Program	0.2	0.0	0.0	14.0	14.2
Corrections	0.9	8.5	0.0	0.0	9.4
Drug Courts	1.5	0.6	1.1	1.0	4.2
Jails	0.1	0.6	1.9	0.9	3.6
Juvenile Justice	0.1	2.0	0.0	0.0	2.0
Health Professions	0.0	0.0	0.0	1.7	1.7
Social Services	1.3	0.0	0.0	0.0	1.3
Criminal Justice Services	0.0	0.4	0.4	0.0	0.8
Medical Assistance Svcs.	0.4	0.4	0.0	0.0	0.8
State Employees	0.0	0.7	0.0	0.1	0.8
Total	\$40.0	\$55.0	\$43.2	\$36.9	\$175.3
% of Total, by Source	23%	31%	25%	21%	

Source: Staff analysis of data provided by State agencies, probation offices, and jails.

It is important to note that the estimated total amount spent on substance abuse treatment may be overstated because certain agencies purchase substance abuse services from one another. For example, the Department of Corrections may use part of their federal and State budget to purchase substance abuse services from a CSB, which would categorize these revenues as "fees." This double counting cannot be controlled for because State agencies do not track spending at this level of detail. However, JLARC staff esti-

mate that the magnitude of this double counting is no more than \$10 million, or six percent of the total estimated spending. Furthermore, the amounts reported as federal, State, and local spending are accurate and do not contain double-counted funds.

Majority of Virginia Publicly-Funded Services Delivered by CSBs

The delivery of publicly-funded substance abuse services is overseen primarily by the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and carried out by CSBs. In FY 2006, CSBs provided more than \$136 million in substance abuse services to more than 50,000 Virginians of all ages, genders, and races. The substance abuse services that CSBs provided most frequently included outpatient and case management services. In addition, CSBs often contracted with other providers to deliver more intensive forms of treatment such as residential and detoxification services.

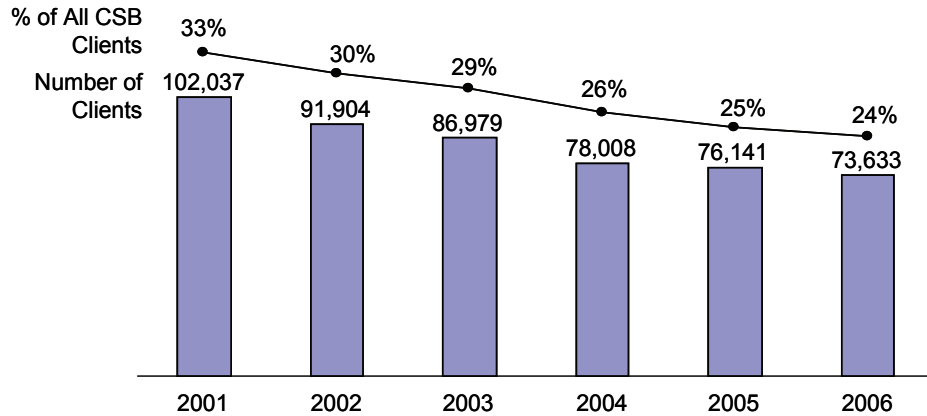
DMHMRSAS Oversees Operations of CSBs Through Performance Contracts. In Virginia, DMHMRSAS is responsible for the provision of publicly-funded substance abuse services. These services are provided by the State's 40 CSBs either directly or through contracts with other providers. CSBs are not considered part of DMHMRSAS, but rather act as operational partners of the department through a performance contract. The standard performance contract between DMHMRSAS and each CSB defines the expectations that each party must meet in the delivery of services, including quality of care and reporting requirements. CSBs are required only to provide emergency and case management services, and are expected to offer other forms of treatment only if resources are available. Moreover, they are required to serve clients to the greatest extent possible but only within available resources. Some CSBs have interpreted this requirement to mean that individuals should be served regardless of their ability to pay.

Broad Cross-Section of Virginians Received Substance Abuse Treatment From CSBs in 2006. Virginia's 40 CSBs provided substance abuse services to more than 50,000 individuals and more than 73,000 duplicated clients in 2006 (Figure 5). Duplicated clients are individuals that CSBs count separately because they receive more than one type of service. The number of duplicated CSB clients receiving substance abuse services has declined since 2001. In addition, the proportion of individuals receiving substance abuse treatment is declining relative to the overall number of CSB clients. While one-third of all CSB clients received substance abuse services in 2001, this figure dropped to 24 percent by 2006.

CSBs provide services to individuals of all genders, ages, and racial backgrounds, which generally mirrors the trends in substance

abuse described earlier in this chapter. Approximately two-thirds of clients served in 2006 were males, and the vast majority were adults under 60, and were white, although all races were represented (Figure 6).

Figure 5: Trend in Number and Proportion of CSB Duplicated Clients Receiving Substance Abuse Services

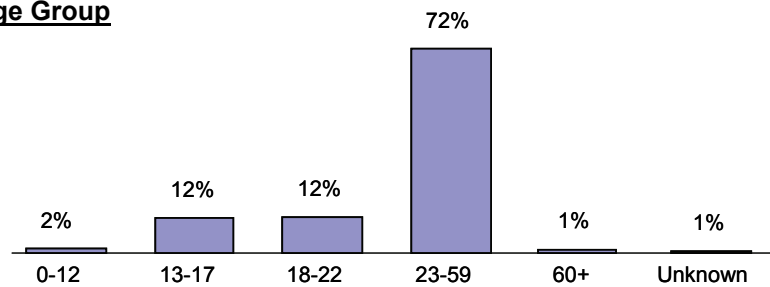


Note: The number of clients reported is duplicated, meaning that a single individual who received two types of services would be captured twice in this figure.

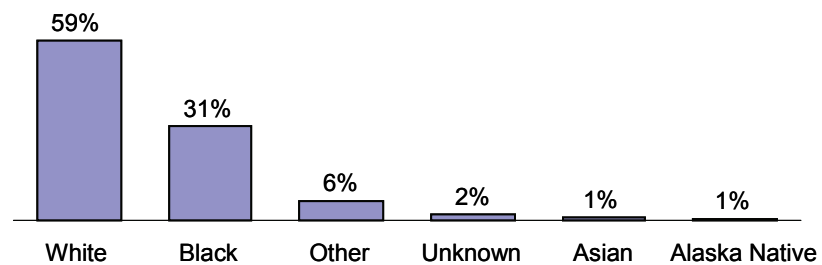
Source: Staff analysis of data contained in 2007 Overview of Community Services Delivery in Virginia, Department of Mental Health, Mental Retardation and Substance Abuse Services.

Figure 6: Distribution of Clients Receiving Substance Abuse Services From CSBs by Age Group and Race, 2006

By Age Group



By Race



Source: Staff analysis of data contained in 2007 Overview of Community Services Delivery in Virginia, Department of Mental Health, Mental Retardation and Substance Abuse Services.

CSBs Provide Array of Services and Often Contract With Private Providers To Supplement Continuum of Care. A vast array of services exists to address substance use disorders in Virginia, and many of them are available in CSBs (Table 3). However, CSBs are required only to provide emergency and case management services. Consequently, the full continuum of substance abuse services is not consistently available in every CSB across Virginia.

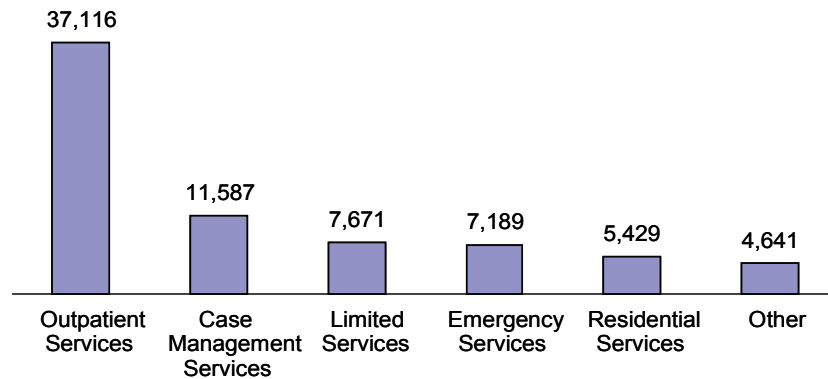
The services most frequently provided to CSB clients appear to be of lower intensity, such as outpatient and case management services (Figure 7). This trend is expected because a small proportion of individuals is faced with substance use disorders so severe as to warrant intensive services such as residential care. Moreover, clinicians attempt to serve clients in the least restrictive, yet most appropriate, settings in order to maximize an individual's ability to maintain recovery in the community.

Table 3: Continuum of Services Available To Address Substance Use Disorders

Category	Description	Service
Prevention	Designed to prevent substance use	Adult and youth outreach and education
Emergency	Often unscheduled and provided over the phone or face-to-face	Crisis intervention Stabilization Referral assistance
Limited Services	Services that are short-term, infrequent, or low-intensity	Screening, assessment, and evaluation Motivational treatment Early intervention
Case Management	Assists individuals in accessing services best suited to their needs	Services coordination Community resource access
Outpatient	Clinical treatment services in individual or group setting, lasting no more than a few hours	Case management Opioid detoxification and treatment Motivational treatment Screening, assessment, and evaluation Individual or group counseling
Day Support	Structured, all-day programs of treatment, activity, or training services to groups or individuals in non-residential settings	Diagnostic testing, psychiatric, psychosocial, and educational treatment Ambulatory crisis stabilization (treatment for individuals experiencing acute crisis) Rehabilitation services (strengthen the person's ability to deal with everyday life)
Residential	Overnight care with an intensive treatment or training program in a setting other than a hospital or training center	Intensive residential services Residential crisis stabilization Jail-based therapeutic communities Supervised or supportive residential care
Inpatient	Short-term care services providing intensive treatment, evaluation, and stabilization in a hospital or training center	Screening, assessment, and evaluation Detoxification services Rehabilitation services for individuals with severe psychiatric impairments, emotional disturbances, or multiple disabilities

Source: Core Services Taxonomy 7.1. 2007. Department of Mental Health, Mental Retardation and Substance Abuse Services.

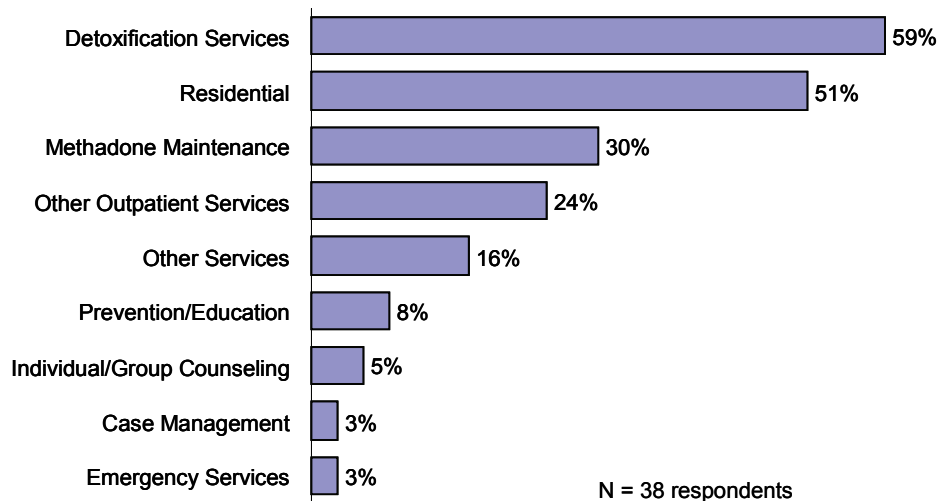
Figure 7: Number of CSB Clients Served by Type of Substance Abuse Service, 2006



Source: Staff analysis of data contained in 2007 Overview of Community Services Delivery in Virginia, Department of Mental Health, Mental Retardation and Substance Abuse Services.

When CSBs lack the resources or have less demand for certain services, they may contract with other providers. These contracts appear to exist largely for the provision of higher-intensity and more specialized services such as detoxification services and residential care (Figure 8).

Figure 8: Proportion of CSBs Contracting With Other Substance Abuse Service Providers, 2007



Source: JLARC staff survey of CSB substance abuse services directors.

Criminal Justice Agencies Offer Substance Abuse Treatment to Convicted Offenders

Virginia's criminal justice system offers an array of services to address the high prevalence of substance abuse among offenders and its sometimes causal link with criminal activity. The specific

Virginia's criminal justice system offers an array of services to address the high prevalence of substance abuse among offenders and its sometimes causal link with criminal activity.

agency responsible for supervising offenders and, when necessary, facilitating access to substance abuse treatment, varies based on the type of crime and sentence. Offenders who are on probation tend to have access to different treatment options than incarcerated offenders.

Various Organizations Oversee Offenders' Sentences. The type of sentence received dictates which agency is required to supervise an offender and, consequently, is responsible for providing or facilitating the delivery of substance abuse services. More severe offenses, such as felonies, tend to carry heavier sentences than misdemeanors and less likelihood of diversion from incarceration. However, judges consider numerous other factors when making sentencing decisions, such as individual criminal histories and risk to public safety. Common types of misdemeanors and felonies are listed in Table 4.

Table 4: Common Types of Misdemeanors and Felonies in Virginia, 2004

Misdemeanors	Felonies
<ul style="list-style-type: none">• Sell/distribute marijuana < 0.5 oz• Possess marijuana/Schedule III drugs• Alcohol purchase/possession under age 21• DUI, 2 or fewer convictions• Simple assault, sexual battery• Larceny <\$200• Prostitution	<ul style="list-style-type: none">• Sell/distribute marijuana >0.5 oz• Distribution, possession, or intent to sell Schedule I or II drugs (cocaine, methamphetamine)• Distribution of controlled substance on school property• DUI, 3+ convictions in 5+ years• Non-capital first/second degree murder• Grand larceny ≥ \$200• Robbery

Source: Virginia Criminal Sentencing Commission.

Offenders who are diverted from incarceration by a judge are generally placed on probation for a given amount of time. Adults convicted of a misdemeanor are supervised by community-based probation offices, and those convicted of a felony are the responsibility of State probation and parole offices. Diverted juveniles on probation are supervised by court services units (CSUs). Convicted adult offenders who are not diverted are generally sent to jail if they committed a misdemeanor or to prison if they are found guilty of a felony. Incarceration sentences that last no more than 12 months are served in jails while those beyond 12 months are served in prisons. Juveniles are generally incarcerated in separate facilities labeled juvenile correctional centers, although some are sentenced to detention centers. Table 5 summarizes which organization is responsible for overseeing each type of sentence and the provision of substance abuse services when appropriate.

Table 5: Organizations Responsible for Sentence Oversight

Disposition	Sentence Type	Responsibility	Organization	Number of Offices or Facilities
Probation	Adult – Misdemeanor	Local	Community-Based Probation Office	37
	Adult – Felony	State	State Probation and Parole Office	43
	Juvenile	State	Court Services Unit	35
Incarceration	Adult – Misdemeanor	Local	Local and Regional Jails	68
	Adult – Felony	State	Prison	40
	Juvenile	State	Juvenile Correctional Centers	6
			Detention Centers	25

Source: Staff analysis of agencies' background documentation.

Treatment Options for Offenders Vary by Sentence Setting

The type of treatment available to offenders differs largely based on whether they are sentenced to probation or incarceration (Table 6). While offenders on probation can theoretically access the full array of substance abuse services offered by CSBs and private providers, some services cannot be offered in jails and prisons. Certain services have been designed specifically to address offenders' needs, including drug courts for offenders on probation, and therapeutic communities for incarcerated offenders.

Table 6: Primary Types of Substance Abuse Treatment, by Sentence Type

Probation	Incarceration
Full range of community-based and residential treatment	Counseling
Psycho-educational services	Psycho-educational services
Narcotics Anonymous (NA) / Alcoholics Anonymous (AA)	Narcotics Anonymous (NA) / Alcoholics Anonymous (AA)
Drug court treatment	Therapeutic communities (institutional and transitional)

Source: Staff analysis.

Scope of Services for Offenders on Probation. The full array of community-based and residential services described in the previous section is available to offenders who are on probation. Given available resources, probation offices refer offenders who have been identified as needing substance abuse services to CSBs or private providers. In addition, approximately 21 percent of crimi-

nal justice agencies (which include State probation and parole offices, community-based probation offices, CSUs, and jails) that responded to a JLARC staff survey indicated that they offer in-house substance abuse services. Most often, these in-house programs included screening, education, and group counseling services. Moreover, recovering substance abusers can participate in peer-run groups such as Alcoholics Anonymous or Narcotics Anonymous.

The availability of services for offenders on probation expanded substantially as a result of two key initiatives adopted in Virginia in the late 1990s. In 1998 and 1999, the General Assembly passed legislation to create the Drug Screening, Assessment and Treatment (DSAT) initiative, which required many offenders to undergo screening and assessment for substance abuse problems, and appropriated funding to implement this program. In addition, Governor Gilmore launched the Substance Abuse Reduction Effort (SABRE) program in 1999, which was approved by the 2000 General Assembly. SABRE aimed to strengthen the enforcement of drug crimes while also providing additional treatment.

In addition to the traditional array of substance abuse services, individuals who commit non-violent crimes related to their substance abuse and meet other strict criteria are eligible to be diverted to a drug court treatment program in some Virginia localities. Drug court treatment programs bring together judges, prosecutors, defense attorneys, probation officers, law enforcement officers, substance abuse and mental health treatment providers, and social services staff to address substance abuse and other issues that precipitated their crimes, while providing intensive supervision and immediate accountability for non-compliance. Participants receive intensive treatment to address their substance abuse as well as other related problems such as mental illness, poor anger management, and domestic violence.

Drug courts are used primarily as alternatives to probation and short-term incarceration. Drug courts either (1) defer prosecution and sentencing pending completion of the treatment program and dismiss charges for successful defendants or (2) convict and sentence offenders but suspend/defer the sentence pending completion of the treatment program. Sentences are waived and, in some cases, records expunged for successful participants. Judicial monitoring of drug court participants is conducted through specialized dockets within the existing structure of Virginia's court system.

Drug court requirements listed below are far more intensive than those of regular probation:

- Participants usually appear before the court and meet with their probation officer on a weekly basis.

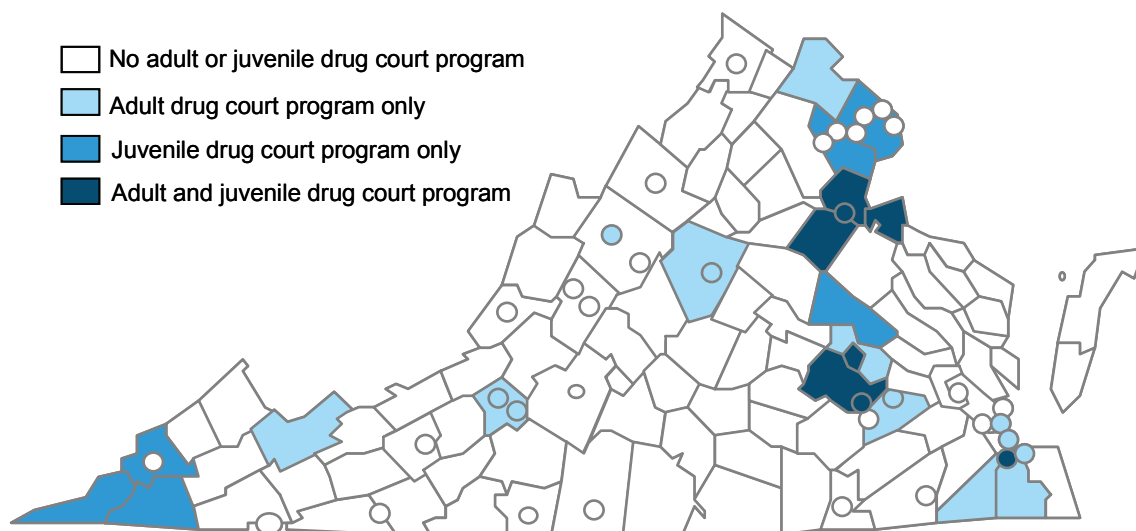
- Participants are subjected to frequent and random drug screens, and police officers conduct unannounced home visits and searches.
- Predetermined sanctions, usually involving jail time, are consistently applied for failure to comply with drug court requirements.
- Participants are required to be employed full-time if adults or in school if juveniles.
- Offenders who participate in drug court programs are subject to program requirements for an average of two years.

In contrast, most offenders sentenced to regular probation or jail are subject to less stringent standards and accountability than those who participate in drug courts. For example, offenders on regular probation generally meet with their probation officer on a monthly basis, and do not appear before the court again unless they are rearrested or violate the terms of their probation. Scheduled drug tests are usually conducted monthly. In addition, whereas the drug court programs last an average of two years, the jail sentence from which drug court participants were diverted would generally have been less than one year.

There are currently 29 drug court programs of four different types in Virginia: 16 for adults, eight for juveniles, four for families who risk losing custody of their children, and one for individuals convicted of driving under the influence (DUI). The 24 court programs available to adult and juvenile offenders span 30 localities, as shown in Figure 9. The State's four family drug court programs are located in the cities of Alexandria, Charlottesville, Newport News, and Richmond, while the single DUI court program serves the Fredericksburg area. Of the 29 programs, 14 received State funding in FY 2008. The remaining programs are funded through a combination of grants, local funding, donations, and offender fees. All adult drug court programs require participants to contribute toward the cost of their treatment (approximately \$500 per year, on average). The first Virginia drug court treatment program was introduced in Roanoke in 1995, after a study commissioned by the 1993 General Assembly recommended establishing a pilot program.

Scope of Services for Incarcerated Offenders. Incarcerated offenders have access to a different array of treatment services than the rest of the population because a primary consideration for jail- or prison-based treatment programs is public safety. Several forms of substance abuse services that are typically delivered on an

Figure 9: Location of Virginia's Adult and Juvenile Drug Court Treatment Programs (2007)



Source: Supreme Court of Virginia.

outpatient basis are altered for confined environments. In particular, individual and group counseling and psycho-educational services are frequently provided to Virginia inmates. In addition, therapeutic communities (TC) have been formed to serve adult inmates in prisons and jails, while intensive services resembling TC programs are provided to incarcerated juveniles.

Counseling and psycho-educational services are provided to many incarcerated adults and juveniles in Virginia. While these services are administered by in-house staff in State prisons and juvenile correctional centers (JCCs), jails often contract with CSBs and private providers to provide treatment. These services were offered in every prison and JCC, and in 85 percent of jails that responded to a JLARC staff survey. However, not every inmate who could benefit from these services received them due to resource constraints.

In addition to counseling and psycho-educational services, many inmates participate in therapeutic community programs. TC programs have been identified in the research literature as a particularly effective way of addressing serious offenders' substance abuse treatment needs in a confined environment. The TC model is an evidence-based practice which is designed to address substance abuse as well as criminal thinking and antisocial behaviors. In the TC environment, inmates live together in a separate housing unit for six to 18 months. The TC program uses peer pressure and role modeling to help offenders learn to improve social interactions and problem solving. To this end, inmates are assigned specific roles so that they can practice skills needed to participate successfully in

any community, and typically engage in treatment and support meetings.

Although the specific design of TC programs can vary, most are comprised of multiple phases that address different parts of offenders' recovery. Participants graduate from one phase to the next once they have demonstrated a mastery of the principles relevant to that particular phase. The final phase of the prison-based TC model is called the Transitional Therapeutic Community (TTC), and is usually completed during the last six months of an inmate's sentence or when first released. TTCs act as a bridge between incarceration and the community and focus on successful reentry. TTCs are situated in the community rather than in prisons.

The availability of prison-based substance abuse treatment in Virginia has increased substantially since the mid-1990s. In particular, the Virginia Department of Corrections has developed TC programs in six facilities with a combined capacity of more than 1,600 participants. Prison inmates typically participate in TC programs once they are within two years of release so that the skills they learn in the program can be applied once they reenter the community. Eligible inmates are required to participate in TC. However, no TC programs exist for low and high-security inmates. The traditional TC program cannot be offered to low-security inmates because they are typically not incarcerated long enough to complete all phases, while the TC programs cannot be implemented in high-security prisons due to safety considerations. Eligible inmates who have successfully completed the institutional portion of the TC program can participate in the community-based, transitional phase of the program (TTC) upon release. However, only non-violent offenders are eligible for TTC. There are five TTCs that can serve up to 182 offenders in Virginia.

Some Virginia jails also offer therapeutic community programs to their inmates. Of the 34 jails that responded to a JLARC staff survey, 15 (or 44 percent) indicated having a TC program that was operated either by jail staff or by a private provider. Several of these programs were initially funded by federal grants, and then by General Funds when the federal grants expired. However, General Funds have not been allocated for these programs since FY 2003 due to budget shortfalls. TCs that remain in operation generally rely on a combination of local funding and new federal grants.

The Department of Juvenile Justice (DJJ) also provides incarcerated juveniles with intensive services that resemble TC programs. Intensive services are available in each of DJJ's six juvenile correctional centers. The programs last between three and six months, and entail psychotherapy as well as educational components.

Unlike in prisons and jails, intensive services are not consistently provided in a separate housing unit due to logistical constraints.

State Council Coordinates Substance Abuse Services

The Substance Abuse Services Council is an advisory council that makes recommendations to the Governor, the General Assembly, and the State Mental Health, Mental Retardation and Substance Abuse Services Board on the policies, goals, and coordination of public and private efforts to control substance abuse in Virginia. The Council is made up of 30 members. The Speaker of the House of Delegates appoints four members from the House, and the Senate Committee on Privileges and Elections appoints two members from the Senate. The Governor appoints seven members representing provider organizations and other stakeholders. The remainder are agency heads and chairs of stakeholder groups, or their designees. The Council meets at least four times a year to help define responsibilities and coordinate programs to create a comprehensive interagency state plan and prevent duplication of efforts.

PREVENTION SERVICES PROVIDED BY MULTIPLE AGENCIES AND COORDINATED AT STATE AND LOCAL LEVELS

A number of programs and services designed to prevent substance abuse are offered in Virginia. Substance abuse prevention efforts in the State are funded primarily with federal resources, which have steadily declined in this decade. Prevention efforts are administered by the State agencies receiving federal prevention funds. The Governor's Office for Substance Abuse Prevention (GO-SAP) provides a vehicle for these agencies to plan prevention efforts collaboratively. Locally-operated community coalitions coordinate available resources to provide services identified by local needs assessments.

Array of Prevention Services Mostly Federally Funded in Virginia

The scope of prevention services varies greatly across Virginia communities. Prevention efforts are most often targeted at school-age children, although community-level programs are also conducted in an attempt to reach everyone who influences children's decisions to use and abuse substances. CSBs and school divisions are the entities primarily involved in the administration of publicly-funded substance abuse prevention programs in Virginia. In 2006, prevention efforts were funded primarily through federal sources.

Scope and Nature of Virginia Prevention Programs Vary Greatly. In 2007, 621 publicly-funded programs were provided by CSBs and

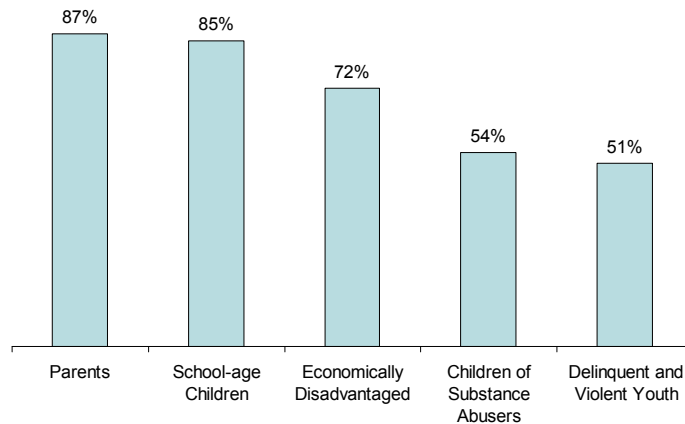
school divisions. CSB programs reached nearly 1.4 million individuals through recurring programs and single events, such as health fairs, while school programs were offered to more than 800,000 students, or 70 percent of all public school pupils in Virginia. Overall, nearly half (48 percent) of all prevention programs administered by CSBs and schools were based on models that have been proven effective at the national level.

Some of the most commonly administered programs included “Project ALERT” and “All Stars.” Project ALERT is a middle school-based program that teaches students skills to resist drug use during 14 sessions. All Stars is an interactive, multi-year middle school program designed to prevent and delay the onset of risky behaviors such as drug use, violence, and sexual activity.

Most prevention programs (64 percent) used “universal” programs to direct their efforts. Universal prevention programs are provided to the general population or a subset thereof, such as children. “Selective” programs target high-risk groups and “indicated” programs target specific high-risk individuals. These program types were defined by the Institute of Medicine, which is a component of the National Academy of Sciences. The most frequently used strategy of conveying prevention messages and tools is through educational programs. Educational prevention programs involve interaction between a facilitator and participants, and aim to affect social skills and decision-making.

Prevention Efforts Focus Primarily on School-Age Children. Substance abuse prevention services focus largely on preventing or delaying the use or abuse of alcohol and other drugs in school-age children. Nearly all CSBs and school divisions provide prevention services for school-age children. School divisions offer school-based programs, while more than 80 percent of CSBs target children through their prevention programs. In addition, a majority of CSBs also provide prevention services for parents, economically disadvantaged youths, and children of substance abusers (Figure 10). Prevention initiatives focus on youths because research shows that 95 percent of adults who abuse or are dependent on alcohol began drinking before age 21, while 13 percent of individuals who first tried marijuana before age 14 became abusers compared to two percent of those who began using marijuana at age 18 or older.

Figure 10: Proportion of CSB Prevention Programs Targeting Various Populations (2007)



Source: JLARC staff survey of CSB prevention coordinators.

Prevention Efforts Administered Primarily by CSBs and School Divisions. The administration of substance abuse prevention initiatives is performed largely by CSB and school staff at the local level. Prevention staff at the 40 Virginia CSBs administer a considerable proportion of substance abuse prevention services statewide. Each CSB has a prevention coordinator who, with the support of other prevention staff, provides substance abuse prevention services in their catchment area. Three quarters of CSBs employ a full-time prevention coordinator. The remaining one quarter of CSBs have a part-time prevention coordinator who spends 22 hours per week in this role, on average. CSBs dedicate four additional staff to prevention on average, although this level of support varies by locality.

In addition, each of the 135 Virginia school divisions has a coordinator responsible for overseeing substance abuse and violence prevention programs funded by the federal Safe and Drug Free Schools and Communities Act (SDFS). According to federal guidance to the states, SDFS is “designed to prevent school violence and youth drug use, and to help schools and communities create safe, disciplined and drug-free environments that support student academic achievement.” According to a JLARC staff survey of SDFS coordinators, 45 percent of their prevention programs addressed substance abuse and 50 percent addressed violence in 2007. Unlike in CSBs, the coordinator of prevention activities is rarely a full-time job in school divisions. SDFS coordinators spend an average of four hours per week administering violence and substance abuse prevention activities, although some have additional staff who support prevention efforts at the division office and in individual schools.

The Virginia State Police and Virginia Department of Alcoholic Beverage Control (ABC) also provide substance abuse prevention, although on a more limited scale than CSBs and school divisions. The Virginia State Police's prevention effort consists of the Drug Abuse Resistance Education (DARE) program. DARE is a locally driven school-based program in which police officers teach children how to resist using drugs and alcohol, and the consequences of substance use. During the 2006-2007 school year, 92 school divisions and approximately 52,000 students participated in DARE. The State police employs a DARE coordinator to provide training to local DARE officers statewide.

ABC also provides an array of substance abuse prevention initiatives that target alcohol use and abuse for all ages. Programs are primarily educational and include responsible sales training for sellers and servers of alcoholic beverages, compliance checks for businesses that sell alcohol, an annual college anti-drinking conference, and an alcohol and aging awareness group.

Prevention Efforts Funded Largely Through Federal Grants. In 2006, approximately \$21.5 million was used for publicly-funded prevention efforts in Virginia (Table 7). Substance abuse prevention programs are funded primarily through federal sources, with some local contributions. No State funds appear to be allocated for substance abuse prevention. While Virginia prevention programs also receive in-kind support, such as staff supervision and travel, the value of these services cannot be readily quantified.

No State funds appear to be allocated for substance abuse prevention.

Table 7: Amount and Source of Prevention Funding in Virginia, FY 2006

In \$ millions	Federal	State	Local	Total
DMHMRSAS/CSBs	\$8.7	\$0.0	\$2.7	\$11.4
DOE/School Divisions	5.1	0.0	1.6	6.7
GOSAP ^a	1.3	0.0	0.0	1.3
Community Coalitions	1.7	0.0	0.0	1.7
ABC	0.4	0.0	0.0	0.4
DARE	0.0	0.0	N/A ^b	0.0
Total	\$17.2	\$0.0	\$4.3	\$21.5

^a GOSAP funding is awarded through competitive grants which may be received by other entities listed in this table. These entities' funding excludes GOSAP grants in this table.

^b Not reported to the State.

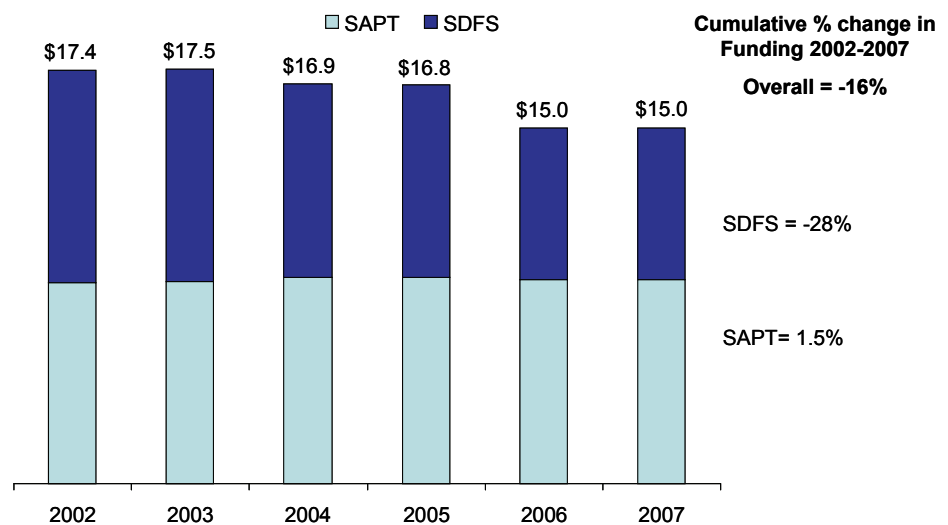
Source: Staff analysis of data from the Department of Mental Health, Mental Retardation and Substance Abuse Services, Virginia Department of Education, Alcoholic Beverage Control, and Drug Abuse Resistance Education, and JLARC staff surveys of CSB prevention coordinators and Safe and Drug Free Schools and Communities (SDFS) coordinators.

Two major federal funding sources largely financed substance abuse prevention services in Virginia in FY 2006:

- The Substance Abuse Prevention and Treatment Block Grant (SAPT) received from the federal Substance Abuse and Mental Health Services Administration requires that 20 percent of funds be allocated to substance abuse prevention. In FY 2006, DMHMRSAS and CSBs received \$8.7 million of the SAPT to fund prevention services.
- The Safe and Drug Free Schools and Communities Act (SDFS) from the U.S. Department of Education allocated \$6.4 million to Virginia in FY 2006. Of this amount, 80 percent was provided to the Virginia Department of Education (DOE) and school divisions for school-based violence and substance abuse prevention programs. The remaining 20 percent, which is allocated at the Governor's discretion, was used to fund GOSAP and provide competitive grants.

The amount of prevention funding made available from these two sources has declined by 16 percent since FY 2002 (Figure 11). To supplement federal funds, local governments provided CSBs with \$2.7 million and school divisions with \$1.6 million in 2006. According to a JLARC staff survey, one-third of CSBs received an average of \$207,000 from local governments, while 20 percent of school divisions indicated receiving an average of \$71,000 from their local governments.

Figure 11: Combined SAPT and SDFS Funding Declined Between FY 2002 and FY 2007 (\$ million)



Source: Department of Mental Health, Mental Retardation and Substance Abuse Services and Virginia Department of Education.

In addition to the SAPT and SDFS grants, the Office of National Drug Control Policy also provides funding for substance abuse prevention through the Drug Free Communities program. Established substance abuse community coalitions (described in more detail on page 32) may apply for federal grant funds. In FY 2006, 17 Virginia community coalitions were awarded \$100,000 each, or a combined total of \$1.7 million, in renewable grants. Some community coalitions also indicated in a JLARC staff survey that they received a limited amount of local support (\$2,700 on average) for a combined total of \$75,000 across Virginia.

Finally, in FY 2006 ABC received federal funds for substance abuse prevention, but the DARE program did not receive either federal or State funding. ABC received approximately \$400,000 in federal and private grant funds for substance abuse prevention. A majority of these funds were from the Enforcing Underage Drinking Laws grant of the federal Office of Juvenile Justice Delinquency and Prevention. The DARE program is primarily locally funded, except for the State DARE coordinator whose salary and benefits are paid by the Virginia State Police. Localities fund DARE officers' salaries and program costs, but local costs are not tracked by the State. In FYs 2007 and 2008, the State DARE program received \$85,000 in State general funds, but funding has been eliminated from subsequent budgets.

Prevention Activities Coordinated at Statewide and Community Levels

The Governor's Office for Substance Abuse Prevention (GOSAP) provides strategic, statewide leadership for prevention issues, while community coalitions coordinate prevention efforts in some Virginia localities. Both groups utilize collaboration with multiple sectors to design and implement prevention plans. Collaboration and coordination promote efficiency to maximize the usefulness of finite resources and eliminate duplication of efforts.

Governor's Office for Substance Abuse Prevention Designed to Provide Strategic Guidance. The mission of GOSAP is to lead and coordinate the Commonwealth's resources to reduce the incidence and prevalence of substance abuse and its consequences. Although substance abuse is part of its name, GOSAP's mission is to prevent a broad array of related risky and unhealthy behaviors, such as violence, delinquency, and child abuse. The GOSAP office, which is comprised of a part-time executive director and three full-time support staff, is part of the secretariat of public safety. Responsibilities of the GOSAP office include coordinating strategic planning efforts in prevention, standardizing and encouraging the use of community prevention planning, providing grant funding to local entities focusing on safety and substance abuse prevention, devel-

oping a statewide marketing and advocacy prevention plan, and facilitating meetings of the GOSAP collaborative.

To facilitate collaboration and promote the GOSAP mission, the GOSAP collaborative was formed and established through Executive Directive 4 (2006). The collaborative consists of 13 State agencies whose missions include prevention. These agencies address a range of prevention areas including not only substance abuse but also tobacco use, bullying, domestic violence, crime, fire damage, injuries, sexually transmitted diseases, suicide, teen pregnancy, and others. The majority of member agencies supervise local entities or offices that provide prevention services, and approximately half of the agencies administer prevention programs at the local level.

Local Efforts Often Coordinated by Community Coalitions. Local substance abuse prevention efforts are often coordinated by a community coalition comprised of community leaders from multiple sectors. Community coalitions are typically locally-driven, volunteer-run entities that do not report to the State or federal government. The precise number of community coalitions that exist in Virginia is unknown, but at least 35 coalitions were identified through a JLARC staff survey. Members frequently include the CSB, schools, law enforcement, businesses, civic organizations, faith-based organizations, health clinics and hospitals, parents, and youth. Substance abuse community coalitions may also address other prevention issues such as violence and bullying, but most appear to focus largely on drug and alcohol abuse.

Substance Abuse Imposes High Costs on the State and Localities

In Summary

Substance abuse imposes high costs on Virginia and its citizens due to numerous adverse consequences that impact public safety, health outcomes, social welfare, and economic productivity. Drug and alcohol abuse imposes economic costs on Virginia families as well as significant personal costs associated with victimization, the breakdown of family structure, and child abuse and neglect, among others. Substance abuse can also place Virginia employers at a competitive disadvantage by contributing to workforce shortages and lowered productivity. The adverse consequences of substance abuse appear to have a substantial impact on State and local budgets, even after excluding effects that cannot be precisely quantified. In 2006, the adverse consequences of substance abuse cost the State and localities approximately \$613 million, impacting several public systems but disproportionately affecting public safety agencies. These costs resulted primarily from drug abuse and were borne largely by the State. To mitigate the effects of substance abuse, the State and local governments spent \$102 million on substance abuse services in 2006.

Research conducted nationally and in other states suggests that substance abuse imposes a high cost on society. This study tests whether this conclusion holds true in Virginia, and attempts to identify the costs of substance abuse that are incurred by the State and local governments. The estimate presented in this chapter captures the costs that are precipitated by substance abuse and may, therefore, be reduced by treatment and prevention services.

SUBSTANCE ABUSE HAS NUMEROUS ADVERSE CONSEQUENCES THAT IMPACT VIRGINIA AND ITS CITIZENS

The adverse consequences of substance abuse have broad societal ramifications impacting public safety, health outcomes, social well-being, and economic productivity. These effects result in economic and personal costs borne by many Virginians, whether or not they abuse drugs and alcohol. In addition, the State and localities incur substantial expenditures to address the consequences of substance abuse.

Substance Abuse Can Negatively Impact Public Safety

A vast body of research has substantiated the link between substance abuse and a variety of effects that undermine public safety such as crime, motor vehicle crashes, and fires. Virginia families must contend with the general threat to public safety posed by

Estimating the Costs of Substance Abuse

To estimate the costs of substance abuse in Virginia, JLARC staff (1) reviewed the research literature published since 1981 on the effects of substance abuse and methods to quantify those effects, (2) obtained data from State and local agencies that incurred material costs as a result of substance abuse, and (3) visited ten Virginia regions to confirm the fiscal and personal effects of substance abuse.

The cost estimate includes only (1) outcomes that can be attributed to substance abuse, and excludes cases in which substance abuse is simply present, (2) costs associated with substance abuse, and excludes the costs of substance use, and (3) operating costs incurred by State and local governments, and excludes the economic burden assumed by other parties such as employers and the federal government.

substance abuse-related crimes, while victims may experience property losses, incur health care costs when injuries are involved, and lose income if these injuries are disabling or fatal. In addition, the State and localities incur the costs of prosecution and corrections for offenders who commit substance abuse-related crimes, and expenditures for emergency personnel dispatched to the scenes of violent crimes, crashes, and fires.

Substance abuse can be a catalyst for criminal behavior. Certain offenses, such as drug possession or public intoxication, are directly linked to drugs and alcohol. Other crimes appear to be indirectly related to alcohol and drugs, and do not strictly occur as a result of substance abuse. For example, some substance abusers may commit robberies or resort to prostitution to finance drug purchases. However, not all cases of robbery and prostitution involve substance abuse. A list of crimes linked to substance abuse is available in this report's online technical appendix.

Substance abuse can also result in unintentional threats to public safety. Alcohol abuse can be a factor in motor vehicle crashes because it impairs brain function. In addition, some studies have implicated alcohol in a substantial proportion of fire-related deaths, and a smaller proportion of fire-related property losses. Alcohol appears to contribute to fires in large part because inebriated smokers may fall asleep without extinguishing their cigarettes.

Substance Abuse Associated With Adverse Health Consequences

Epidemiological studies have demonstrated that alcohol and drug abuse contributes to numerous medical conditions and can complicate the treatment of other diseases, thereby increasing the duration of hospital stays. Furthermore, JLARC staff estimate that 1,761 Virginians died in 2006 as a result of substance abuse-related conditions. Adverse health outcomes translate into higher medical expenditures, which are absorbed by patients and their health insurer, when one is available. The impact of substance abuse on health outcomes and related expenditures affects State and localities because they assume a portion of health care costs for individuals who are enrolled in the Medicaid program, government employees, and the uninsured.

Numerous Diseases and Injuries Attributable to Substance Abuse.

Drug and alcohol abuse affects the health outcomes of not only substance users but can also impact the health of their children, friends, and the victims of violent crimes they commit. A complete list of medical conditions attributable to substance abuse is displayed in this report's online technical appendix. The most com-

mon mechanisms through which substance abuse impacts the health of users are summarized below.

- Exposure to drugs and alcohol can cause certain adverse health effects such as cirrhosis of the liver, and aggravate others such as cerebrovascular diseases or specific forms of cancer.
- Drug users who share needles or other drug paraphernalia may increase their risk of contracting infectious diseases that spread through contact with blood and other body fluids. These infectious diseases include the human immunodeficiency virus (HIV) that causes acquired immune deficiency syndrome (AIDS), hepatitis B and C, and tuberculosis.
- Excessive substance use can impair motor skills and lead to falls or motor vehicle crashes that result in injuries and trauma.
- Injuries may occur because individuals under the influence of drugs or alcohol are more likely to engage in violent exchanges or crimes that result in fractures and other wounds.

The adverse health consequences of substance abuse can also extend beyond the user. For example, infectious diseases such as HIV, AIDS, or hepatitis contracted by substance abusers can be sexually transmitted to nonusers. In addition, pregnant women can compromise their unborn children's short- and long-term health outcomes if they use drugs or alcohol. Studies have found that prenatal drug exposure can lead to premature birth and low birth weight, which increase health risks, neurological impairment, and withdrawal symptoms in newborns. In addition, alcohol use during pregnancy can cause fetal alcohol spectrum disorders, a group of conditions characterized by developmental delays and physical abnormalities. Individuals who suffer mental impairment due to prenatal drug or alcohol use may require not only additional health care, but also special education and lifelong assistance services, and may not become fully productive members of society from an economic standpoint.

Substance Abuse Can Prolong Hospital Stays. Studies have found that treating any medical condition can be more difficult when the patient abuses drugs or alcohol, even when the medical condition is unrelated to substance abuse. For example, substance abuse can weaken individuals' immune systems or need to be stabilized before the primary medical condition can be treated. As a result, patients with a secondary diagnosis of alcohol or drug use disorder tend to stay in the hospital longer than other patients.

Substance Abuse May Be Detrimental to Social Welfare

Drug and alcohol abuse have also been shown to take a toll on social welfare. Studies have found that substance abuse is involved in a disproportionate number of child abuse and neglect cases, which can result in foster care placements and ultimately the breakdown of Virginia families. In addition, the effects of substance abuse on individuals' ability to work may undermine their self-sufficiency and prompt their reliance on benefit programs. Other effects such as homelessness and teenage pregnancies have also been hypothesized, but limited evidence exists to substantiate these theories.

Drug and Alcohol Abuse Associated With Child Abuse and Neglect, Foster Care Placements, and Family Breakdown. The research literature has linked substance abuse to negative effects on children and families. Drugs and alcohol appear to be involved in the majority of child abuse or neglect cases. In the most serious cases, children may be removed from their homes, placed in foster care, and ultimately put up for adoption if their parents are permanently unable to care for them. This process also results in costs to the State and localities, which are responsible for conducting investigations of child abuse or neglect allegations and paying for a portion of the cost of maintaining children in foster care.

Substance Use Disorders Can Precipitate Reliance on Benefit Programs. Substance abuse can preclude individuals from obtaining and maintaining employment, and earning enough to meet their basic needs. Individuals whose income is insufficient to provide for their families may be eligible to participate in certain public assistance programs. In particular, low-income families can qualify for the Food Stamp program, which provides money to purchase food, and the Temporary Assistance for Needy Families (TANF) program, which offers general income assistance for up to two consecutive years. In addition, TANF recipients may also be eligible for the Virginia Initiative for Employment not Welfare program, which helps participants secure and maintain employment. Because public assistance programs are funded primarily with government revenues, individuals who rely on public assistance due to substance abuse impose an additional cost upon the State and localities.

Substance Abuse May Impair Economic Productivity and Reduce Tax Revenues

Substance abuse has been shown to decrease individuals' participation in the labor market, reliability on the job, and productivity. Drug and alcohol abusers are generally less likely to be engaged in the labor force because they may (1) be incarcerated for crimes at-

tributable to substance abuse, (2) become disabled or die prematurely because of substance abuse-related medical conditions, and (3) derive their income from illegal activities such as drug distribution, property crimes, or prostitution. In addition, even those individuals who are able to gain and maintain employment may be absent from work more often and less productive when they attend.

The effects of substance abuse on labor force participation and productivity impact substance abusers and their families, Virginia employers, and the State. Individuals with substance use disorders are not maximizing their incomes and are less able to adequately provide for their families. In addition, Virginia employers are placed at a competitive disadvantage when trying to recruit qualified personnel, and the State foregoes collecting tax revenues on the additional income that would be earned in the absence of substance use disorders.

ADVERSE CONSEQUENCES OF SUBSTANCE ABUSE COST STATE AND LOCALITIES AT LEAST \$613 MILLION IN 2006

The adverse effects of substance abuse impose significant costs on the State and localities, totaling at least \$613 million in 2006. This estimate reflects the costs associated with the adverse effects of substance abuse for which robust and conclusive research exists. However, the fiscal impact of substance abuse in Virginia could reach twice this amount when costs that are less certain are included. The costs associated with drug and alcohol abuse are incurred primarily by public safety agencies. Expenditures appear to result primarily from drug rather than alcohol abuse, and are assumed in large part by the State. In addition, Virginia and its localities spent more than \$100 million treating and preventing substance abuse in order to mitigate its effects in 2006. Because the State taxes and sells alcohol products, the costs of substance abuse are partially offset by profits generated through the Department of Alcoholic Beverage Control.

Certain Effects of Substance Abuse Cannot Be Precisely Quantified

While many studies have demonstrated the existence of a relationship between substance abuse and many adverse outcomes described in the preceding section, an extensive review of the research literature suggests that the magnitude and nature of each relationship has not always been definitively established. For example, numerous studies have shown that alcohol can play a role in precipitating violent crimes, but few have attempted to determine the exact proportion of violent crimes that is attributable to alcohol rather than other factors. As a result, the fiscal impact of alcohol-related violent crimes cannot be quantified with precision.

Moreover, some estimates do not differentiate between the effects of substance use rather than abuse. For example, some drug violations are committed by individuals who use drugs but do not meet the criteria for substance abuse or addiction, and their costs can therefore not be attributed to substance abuse. Finally, certain estimates are very dated, such as the extent of the relationship between substance abuse and fires as well as benefit program participation. A more extensive discussion of the limitations associated with precisely quantifying each effect of substance abuse can be found in this report's online technical appendix.

While not always precise and robust, some attempts have been made to estimate the extent to which substance abuse results in adverse outcomes for most of the areas discussed in the previous section. Rather than disregarding the estimates that are less precise, they have been identified as less robust and assigned a lower confidence ranking. In contrast, certain relationships have been thoroughly examined and can be accurately quantified, and these estimates have been assigned a higher confidence ranking. Table 8 shows the rankings assigned to each of the consequences of substance abuse previously discussed.

Table 8: Confidence Ranking Assigned to Adverse Effects of Substance Abuse on State and Local Budgets

Adverse Consequence of Substance Abuse	Confidence Ranking
★★★★Certain ★★★High Confidence ★★Moderate Confidence ★Low Confidence	
Effects of Substance Abuse on Public Safety	
Drug and alcohol violations committed by substance abusers	★★★★
Drug-related crimes	★★★
Motor vehicle crashes with alcohol-impaired driver	★★★
Alcohol-related crimes	★★
Drug and alcohol violations committed by non-abusers	★
Other alcohol-related motor vehicle crashes	★
Administrative costs	★
Alcohol-related fires	★
Effects of Substance Abuse on Health Outcomes	
Diseases attributable to substance abuse	★★★
Additional hospital days	★★
Effects of Substance Abuse on Social Welfare	
Child abuse and neglect	★★
Foster care	★★
Benefit programs	★
Effects of Substance Abuse on Economic Productivity and Taxes	
Foregone taxes during incarceration	★
Foregone taxes due to premature mortality and morbidity	★
Foregone taxes due to withdrawal from legal economy	★
Absenteeism	N/A
Productivity	N/A

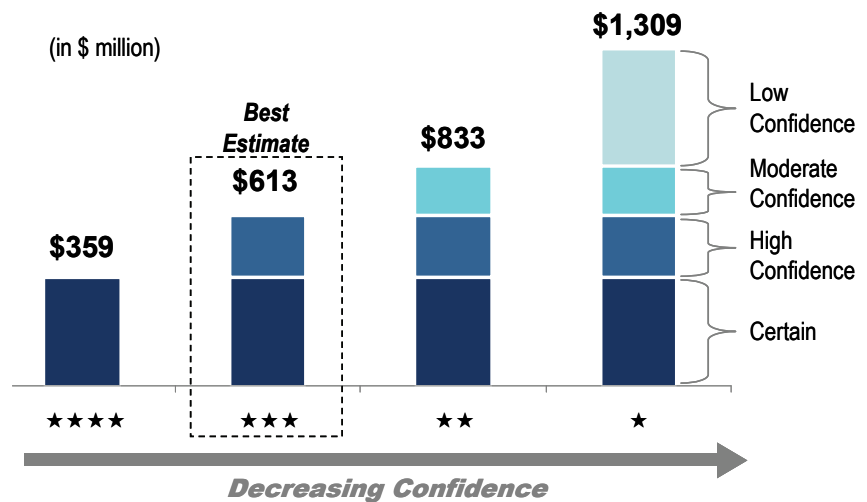
Source: Staff review of the research literature.

The effects that were assigned three or four stars are considered the most reliable and are included in this study's best estimate of the costs of substance abuse in Virginia. Not included in that best estimate are the costs associated with the effects that were assigned one or two stars because they are less reliable; these effects are provided primarily for illustrative purposes and to give a sense of potential magnitude.

Estimated Fiscal Impact of Substance Abuse Varies Based on Level of Confidence

In recognition of the fact that certain costs of substance abuse can be more precisely quantified than others, a range of estimates was calculated that reflects the level of confidence assigned to each of the adverse consequences of substance abuse previously described. As illustrated in Figure 12, the adverse consequences of substance abuse in 2006 cost the State and localities between \$359 million, when including only expenditures that are certain, and \$1.3 billion, when all quantifiable effects are included regardless of the level of confidence they were assigned. The most reliable estimate is \$613 million for 2006, and includes costs that are either certain or in which there is a high level of confidence. This estimate is the one analyzed in further detail in the remainder of this chapter.

Figure 12: Estimated Fiscal Impact of Substance Abuse on State and Local Budgets, by Level of Confidence (FY 2006)



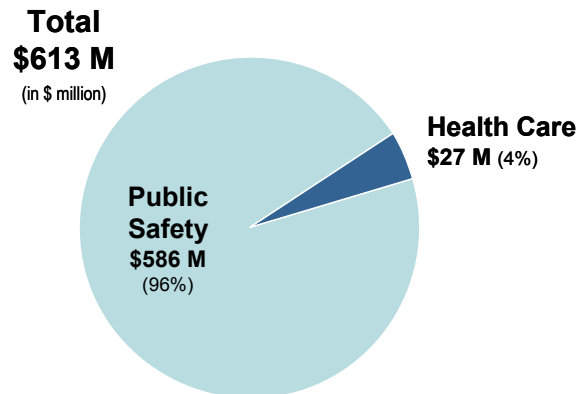
Source: Staff analysis of data supplied by Virginia agencies.

The estimated cost of substance abuse to the State and localities exceeded \$613 million in 2006 and affected several public systems.

Substance Abuse Most Severely Impacts Budgets of Public Safety and Health Care System

The estimated cost of substance abuse to the State and localities exceeded \$613 million in 2006 and affected several public systems (Figure 13). The vast majority of substance abuse-related expendi-

Figure 13: Cost of Substance Abuse to State and Localities, by Category (FY 2006)



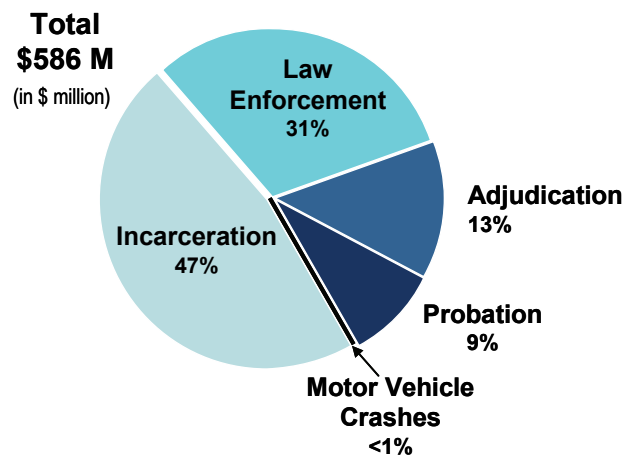
Source: Staff analysis of data supplied by Virginia agencies.

tures is borne by public safety agencies, although health care-related expenditures are also incurred. A detailed discussion of these results is included in this report's online technical appendix.

Nearly 38 percent of all arrests and 20 percent of the days that offenders spent incarcerated or on probation can be attributed to alcohol and drug abuse.

Public Safety Agencies Most Impacted by Substance Abuse. Substance abuse results in a substantial number of crimes that cost State and local public safety agencies approximately \$586 million in 2006 (Figure 14). In fact, nearly 38 percent of all arrests and 20 percent of the days that offenders spent incarcerated or on probation can be attributed to alcohol and drug abuse. Half of the costs resulting from these crimes was spent to incarcerate offenders, and another 31 percent was incurred by law enforcement agencies.

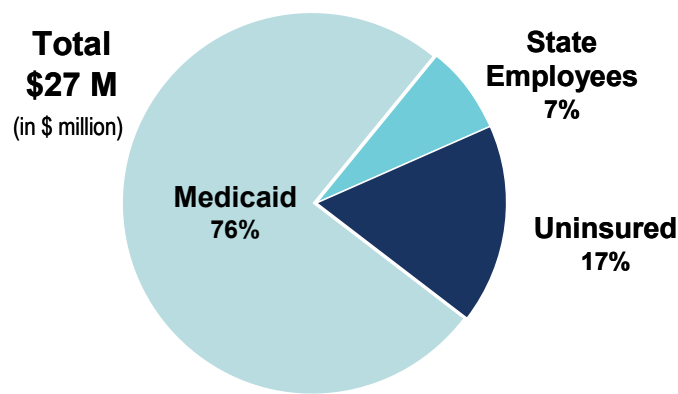
Figure 14: Cost of Substance Abuse to Public Safety Agencies, by Category (FY 2006)



Source: Staff analysis of data supplied by the Departments of Corrections, Juvenile Justice, Criminal Justice Services, and Motor Vehicles, and the Compensation Board, State Police, and the Auditor of Public Accounts.

Diseases and Injuries Attributable to Substance Abuse Place Burden on the Public Health Care System. The host of medical conditions triggered or aggravated by substance abuse cost the State and localities \$27 million in health care expenditures in 2006. Most of these costs were incurred on behalf of Medicaid recipients, for whom the State pays half of health claims (Figure 15). Uninsured individuals who were treated for substance abuse-related conditions through State and local programs incurred 17 percent of total costs. Finally, State employees incurred the remaining drug and alcohol-related health care costs.

Figure 15: Health-Related Costs of Substance Abuse to State and Local Governments, FY 2006



Source: Staff analysis of data supplied by the departments of Medical Assistance Services and Human Resource Management, and Virginia Health Information.

State and Localities Incurred Costs Providing Substance Abuse Services

The State and local governments spent approximately \$102 million providing substance abuse services to Virginians in 2006, mostly in the form of treatment (Table 9). As discussed in Chapter 1, the vast majority of substance abuse services expenditures were incurred by community services boards (CSBs) although criminal justice agencies also spent a significant amount treating offenders. In addition, Virginia incurred some costs for the treatment of State employees and Medicaid recipients. No State dollars were spent on prevention services.

Revenues From Alcohol Sales Partially Offset Costs of Substance Abuse to State and Localities

Alcohol sales generated \$14 million in profits and tax revenues that can be attributed to substance abusers and used to mitigate their fiscal impact on State and local budgets in 2006. Virginia receives revenues from selling and taxing alcohol. The 12 percent of

Virginians age 18 and over who abuse alcohol contribute to Virginia Alcoholic Beverage Control (ABC) sales. Consequently, the ABC profits and tax revenues received from alcohol abusers can be used to offset the adverse effects of substance abuse.

Table 9: Substance Abuse Treatment and Prevention Spending Funded by State and Local Governments in FY 2006 (\$ millions)

Department/Entity	State	Local	Total State & Local
Mental Health, Mental Retardation and Substance Abuse Services (CSBs)	\$41.7	\$39.8	\$81.5
Corrections	8.5	-	8.5
Jails	0.6	1.9	2.5
Juvenile Justice	2.0	-	2.0
Drug Courts	0.6	1.1	1.7
Criminal Justice Services	0.4	0.4	0.8
State Employees	0.7	-	0.7
Medical Assistance Services	0.4	-	0.4
Treatment Services Subtotal	\$54.9	\$43.2	\$98.1
Prevention Services	-	4.3	4.3
Total Treatment and Prevention	\$55.0	\$47.5	\$102.5
% of Total, by Source	54%	46%	

Source: Staff analysis of data provided by State agencies, probation offices, jails, community services boards, and school divisions.

Cost of Substance Abuse to State and Localities Stems Primarily From Drug Abuse and Is Absorbed Largely by State

The adverse effects of drug abuse cost more to the State and localities than alcohol abuse, accounting for 93 percent of the total while alcohol abuse accounts for seven percent.

The adverse effects of drug abuse cost more to the State and localities than alcohol abuse, accounting for 93 percent of the total while alcohol abuse accounts for seven percent. This occurs in large part because a greater proportion of crimes can be attributed to drug than to alcohol abuse, and the vast majority of substance abuse-related costs are incurred among public safety agencies.

More than 60 percent of the costs of substance abuse are incurred by the State rather than local governments. This occurs largely because prisons and the courts are funded largely by general funds. However, localities assume the majority of law enforcement, jail, and emergency personnel expenditures.

Substance Abuse Treatment Generally Reduces State and Local Costs, but Ongoing Evaluations Are Needed

In Summary

Study findings indicate that most substance abusers who completed treatment in Virginia imposed lower costs on the State and localities after treatment, compared to similar substance abusers who did not complete treatment. In addition to reducing costs, the majority of programs evaluated positively impacted measures of societal well-being such as recidivism and employment. While these results appear promising, data constraints limited the scope of this research. Furthermore, the JLARC analysis should be supplemented by ongoing agency evaluations, but these rarely occur. Most Virginia agencies that provide substance abuse services do not conduct comprehensive evaluations to determine the effectiveness of their treatment programs. As a result, it is not possible to fully assess the effectiveness of substance abuse services in Virginia, and to ensure that the State and localities are maximizing returns on their investments in treatment.

Both House Joint Resolution (HJR) 683 and Senate Joint Resolution (SJR) 395 direct JLARC staff to examine the fiscal impact of substance abuse on the State and localities and the cost reductions they experience as a result of providing treatment services to Virginians with substance use disorders. As discussed in Chapter 1, the State and localities currently spend nearly \$100 million providing substance abuse treatment each year. No comprehensive evaluations exist to determine whether this investment is mitigating the adverse effects of substance abuse and translating into lower costs for the State and localities.

While the results presented in this chapter are meant to offer greater insights into the effects of treatment on costs and outcomes, they do not capture all substance abuse treatment programs in the State and only reflect a particular time period. Because treatment programs and individuals' needs are constantly changing, ongoing evaluations should be performed to ensure that Virginia's investment is maximized. Furthermore, despite promising results, other research conducted for this study indicates that the State and localities could further reduce costs, as discussed in the following three chapters.

JLARC ANALYSIS OF SUBSTANCE ABUSE TREATMENT IN VIRGINIA

JLARC staff designed an evaluation of substance abuse treatment that included all services and programs in Virginia for which reliable data exist. The effects of treatment were examined for multi-

ple populations that included adult and juvenile offenders as well as non-offenders who completed substance abuse treatment in 2005. To measure whether substance abuse treatment is associated with reductions in State and local expenditures, the major costs imposed by every individual examined in this study were calculated; major costs included expenditures linked to public safety, health care, social welfare, and foregone taxes. The costs for each of these individuals were generally compared between the 18-month period before and the 18-month period after treatment ended. This comparison, however, is insufficient for establishing whether any cost changes are attributable to treatment or to other factors, such as the passage of time or the impact of punishment. To control for these factors, the costs associated with each population were then compared to the costs imposed by one or more similar groups that did not receive or complete treatment or that received a different type of service. The resulting differences are described as cost reductions relative to the comparison group. The methodology used for this analysis is similar to that used by other states to examine the cost effectiveness of their substance abuse treatment programs and is discussed further in Appendix B as well as in this report's online technical appendix.

SUBSTANCE ABUSE TREATMENT APPEARS TO REDUCE COSTS FOR MOST POPULATIONS

Most populations that completed substance abuse treatment imposed fewer net costs on the State and localities, and the majority fared better on measures of public safety and economic productivity.

Most populations that completed substance abuse treatment imposed fewer net costs on the State and localities after treatment, and the majority fared better on measures of public safety and economic productivity than similar individuals who either did not enter or complete treatment (Table 10). For some populations, such as adult and juvenile non-offenders, costs increased after treatment but remained lower than costs imposed by individuals who did not complete substance abuse treatment, thereby resulting in avoided costs.

Overall, the programs and populations evaluated for this report resulted in cost reductions of \$5.9 million (net of treatment expenditures) (Table 11). This figure most likely understates the magnitude of cost reductions that Virginia currently experiences as a result of existing treatment services because it captures only the treatment programs and populations for which data were available. As described in greater detail in Appendix B, community-based services offered by providers other than CSBs, drug court treatment programs other than the Richmond and Chesterfield adult programs, and services offered to incarcerated juveniles could not be evaluated. Moreover, the cost differences between individuals who did not complete treatment and those who received

Table 10: Most Populations That Completed Treatment Imposed Lower Costs and the Majority Fared Better on Other Indicators Relative to Comparison Groups

		Other Indicators ^b	
	Net Cost Impact ^a	Recidivism	Employment and Earnings
Department of Corrections			
Inmates in Therapeutic Communities	⊕	⊕/-	--
Inmates in Transitional Therapeutic Communities	⊖	⊕/-	⊕/-
Adults on State Probation	⊕	⊕	⊕
Local and Regional Jails			
Inmates in Therapeutic Communities	⊕	⊕	⊕/-
Inmates in Other Services	⊖	⊕	⊕
Inmates in Therapeutic Communities vs. Other Services	⊕	⊖	⊖
Community-Based Probation Agencies			
Adults on Community-Based Probation	⊕	⊕	⊕
Richmond and Chesterfield Adult Drug Courts			
Offenders Completing Drug Court	⊕	⊕	⊕
Department of Juvenile Justice			
Juveniles on Probation	⊕	⊕/-	⊕
Individuals Not Included Above			
Adult Non-Offenders	⊕	⊕	⊕/-
Juvenile Non-Offenders	⊕	⊕/-	⊕/-
Adult Former Offenders	⊕	⊕	⊕
Juvenile Former Offenders	⊖	⊕/-	⊕

Outcome of Population that completed treatment:

- ⊕ **Better:** imposed lower costs, had lower recidivism rates, or had higher employment rates and earnings.
- ⊖ **Worse:** imposed higher costs, had higher recidivism rates, or had lower employment rates and earnings.
- ⊕/- **Mixed:** had an average difference of less than 5 percentage points across three measures of recidivism or had mixed employment and earnings outcomes.

Note: Comparison groups consist of individuals who did not complete treatment (non-completers) or did not receive treatment (non-participants) or individuals who completed other types of treatment.

^a See Table 11 for summary data on cost reductions related to completing treatment.

^b See Tables 12-23 for data on changes in costs, recidivism rates, and employment and earnings related to completing treatment.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, Richmond City and Chesterfield County Adult Drug Court Programs, DSS, VEC, and Virginia State Police.

Table 11: Treatment Completion Among Populations Examined Reduced Costs to State and Localities by \$5.9 Million During 18-Month Period After Treatment Relative to Comparison Groups

Study Population	Size of Study Population (N)	Daily Net Cost Reduction (per Person)	Total Net Cost Reduction After Treatment Relative to Comparison Group
Department of Corrections			
Inmates in Therapeutic Communities	126	2.24	154,668
Inmates in Transitional Therapeutic Communities	126	(\$14.07)	(\$971,505)
Adults on State Probation	587	4.68	1,505,444
Local and Regional Jails			
Inmates in Therapeutic Communities	52	5.44	155,018
Inmates in Other Services	107	(1.41)	(82,677)
Community-Based Probation Agencies			
Adults on Community-Based Probation	597	2.84	929,123
Richmond and Chesterfield Adult Drug Courts			
Offenders Completing Drug Court vs. Jail	28	7.28	111,704
Department of Juvenile Justice			
Juveniles on Probation	158	1.08	93,511
Individuals Not Included Above			
Adult Non-Offenders	1,051	1.04	598,986
Juvenile Non-Offenders	370	0.15	30,414
Adult Former Offenders	2,221	2.84	3,456,587
Juvenile Former Offenders	55	(3.99)	(120,259)
GRAND TOTAL	5,478		\$5,861,013

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, Richmond City and Chesterfield County Adult Drug Court Programs, DSS, VEC, and Virginia State Police.

no treatment at all could not be calculated for many populations, because it is not possible to identify individuals who needed but did not receive treatment.

Treating Adults Under DOC Supervision Usually Reduced Costs and Led to Improvements in Recidivism and Employment

Completing substance abuse treatment reduced costs to the State and localities for certain populations of adult offenders under the supervision of the Department of Corrections (DOC). Offenders who completed treatment also experienced mixed recidivism outcomes compared to similar individuals who either did not enter or complete treatment. This analysis focuses on prison inmates who completed the therapeutic community (TC) and transitional therapeutic community (TTC) programs, and probationers who received treatment through community services boards (CSBs).

TC Completion Reduced Costs but Reincarceration Rates Were Similar to Non-Participants¹. Completing the institutional segment of the TC program resulted in lower costs to the State and localities, even after subtracting treatment expenditures. In fact, State and local expenditures for each TC completer declined by \$57.95 per day between the 18-month periods before and after treatment

Completers, Non-Completers, and Non-Participants

Completers are individuals who completed substance abuse treatment.

Non-completers are individuals who received but did not complete treatment.

Non-participants are individuals who were eligible for treatment but did not receive it.

Recidivism Measures

Three different, separate measures of recidivism were examined:

% Arrested = Percentage of individuals studied who were arrested at least once during the 18-month period after treatment, according to Virginia State Police (VSP) records.

% Convicted = Percentage of individuals studied who were convicted for at least one arrest that occurred during the 18-month period after treatment, according to VSP records.

% Incarcerated = Percentage of individuals studied who were incarcerated in jail or prison during the 18-month period after treatment for any reason, including awaiting trial, sentenced for a new offense, or incarcerated for technical violations related to prior offenses, according to data from the Compensation Board, Department of Corrections (DOC), and Department of Juvenile Justice (DJJ).

ended (Table 12). This cost reduction was greater than for prison inmates who did not participate in the TC program. TC completers cost the State and localities \$2.24 less per day than non-participants, on average. The major reason for the difference in cost reductions was lower prison costs for TC completers. (For the study population of prison inmates, data were available only for jail, prison, State probation, and treatment costs, but these categories comprise the vast majority of costs that offenders impose.)

Table 12: Prison Inmates Who Completed Therapeutic Community Programs Imposed Lower Costs but Were Reincarcerated as Frequently as Non-Participants

Indicator	TC Completers (N=126)	Non- Participants (N=126)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$57.95	\$55.71	\$2.24
Recidivism After Treatment			
% Arrested	45%	n.d.	--
% Convicted	29%	n.d.	--
% Incarcerated	49%	48%	(1%)
Employment After Treatment			
% Employed	69%	n.d.	--
Average Earnings	\$14,074	n.d.	--

Note: n.d., no data.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Though TC completers imposed lower costs than non-participants, they were reincarcerated just as frequently as non-participants during the 18-month period after treatment (Table 12). However, TC completers were less frequently recommitted to prison (eight percent of TC completers compared to ten percent of non-participants), and their prison stay was two months shorter, on average. Due to data limitations, arrest and conviction rates could not be obtained for non-participants.

TTC Completers Imposed Higher Costs After Treatment and Recidivism Measures Were Mixed Relative to Comparison Groups.

Adult prison inmates who successfully completed the TTC program imposed higher costs upon the State and localities after being treated than similar groups, with or without accounting for treatment expenditures. Unlike for most other populations examined in this study, comparing cost reductions over time for TTC completers and comparison groups would not be meaningful. The structure of the TTC program results in substantially lower incarceration costs for participants during the last three to six months of treatment because TTC completers spend that time in the community, while offenders who complete only the institutional portion of the TC pro-

gram or do not participate in the program at all remain incarcerated at a much higher cost. As a result, costs imposed by TC participants and non-participants will inevitably decrease by a much greater amount after treatment than for TTC completers. Therefore, a more relevant analysis is to compare the costs imposed by each group after treatment was completed.

As shown in Table 13, the daily cost of each TTC completer after treatment was

- \$0.78 more than each similar prison inmate who completed only the institution-based segment of the TC program, and
- \$2.35 more than each similar prison inmate who did not participate in either the TC or TTC program.

When treatment expenditures are taken into account, the daily cost imposed by TTC completers after treatment is even higher than for individuals in both comparison groups, averaging

- \$14.07 more than each similar prison inmate who completed only the institution-based segment of the TC program, and
- \$19.21 more than each similar prison inmate who did not participate in either the TC or TTC program.

Table 13: Completing TTC Did Not Lower Costs and Other Indicators Were Mixed Relative to Comparison Groups

				Difference in Outcomes		
Indicator		TTC Completers (N=126)	TC-Only Completers (N=126)	Non-Participants (N=126)	TTC Completers vs. TC Completers Better / (Worse)	TTC Completers vs. Non-Participants Better / (Worse)
Cost After Treatment per Person ^a						
Daily Cost		\$17.35	\$16.57	\$15.00	(\$0.78)	(\$2.35)
Daily Cost Including Treatment \$		\$34.21	\$20.13	\$15.00	(\$14.07)	(\$19.21)
Recidivism After Treatment						
% Arrested		48%	45%	n.d.	(3%)	--
% Convicted		26%	29%	n.d.	3%	--
% Incarcerated		52%	49%	48%	(3%)	(4%)
Employment After Treatment						
% Employed		83%	69%	n.d.	14%	--
Average Earnings		\$12,963	\$14,074	n.d.	(\$1,111)	--

Note: n.d., no data.

^aAnalysis compares differences in costs after treatment, unlike tables 12, 14-18, and 20-23 that focus on cost reductions between the 18-month periods before and after treatment.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

The major cost differences between TTC completers and the two comparison groups resulted from higher State probation expenditures for TTC completers: whereas all TTC completers were under State probation after treatment ended, only 71 percent of TC-only completers and non-participants were supervised by the State.

TTC completers had mixed recidivism outcomes when compared to inmates who completed only the institution-based portion of the TC program and those who did not participate in the TC program at all (Table 13). TTC completers were more frequently rearrested but less frequently reconvicted than inmates who completed only the institutional portion of the TC program. Arrest and conviction rates could not be obtained for non-participants due to data constraints. While TTC completers were more likely to be reincarcerated than either comparison group, they were less likely to return to prison (four percent of TTC completers compared to eight percent of TC-only completers and ten percent of non-participants). This suggests that TTC participants tended to commit less serious offenses after treatment.

Though recidivism measures were mixed, TTC completers had higher rates of employment than TC-only completers during the 18-month period after treatment. Eighty-three percent of TTC completers had earnings during that time period compared to 69 percent of TC-only completers (Table 13). Due to data limitations, employment outcomes could not be obtained for non-participants.

Adults on State Probation Who Completed Treatment Imposed Lower Costs and Had Better Recidivism and Employment Outcomes Than Non-Completers. State probationers who successfully completed substance abuse treatment delivered by CSBs imposed lower costs on the State and local governments, even after including the cost of treatment. State and local expenditures for each treatment completer declined by \$3.87 per day between the 18-month periods before and after treatment ended. In contrast, costs for those who did not complete treatment increased by \$0.81 per day including treatment costs. As a result, State probationers who completed treatment cost \$4.68 less per day than non-completers, on average (Table 14). The major reason for the difference in cost reductions was higher prison expenditures for non-completers.

When compared to non-completers, probationers who completed substance abuse treatment also experienced better recidivism and employment outcomes during the 18-month period after treatment (Table 14). In particular, treatment completers were incarcerated much less frequently than non-completers, and the average duration of their incarceration was three months shorter than for non-completers. Furthermore, treatment completers experienced higher employment rates and higher wages than non-completers.

In fact, treatment completers earned \$8,132 more in wages than non-completers during that time, on average (Table 14).

Table 14: State Probationers Who Completed Treatment Imposed Lower Costs and Had Better Recidivism and Employment Outcomes Than Non-Completers

Indicator	Completers (N=587)	Non-Completers (N=587)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$3.87	(\$0.81)	\$4.68
Recidivism After Treatment			
% Arrested	32%	33%	1%
% Convicted	21%	21%	0%
% Incarcerated	47%	66%	19%
Employment After Treatment			
% Employed	29%	25%	4%
Average Earnings	\$19,214	\$11,082	\$8,132

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Impact of Jail-Based Treatment on Costs and Other Indicators Varies By Type of Service

Treatment completion for jail inmates did not consistently lower costs to the State and localities or yield improvements in measures of societal well-being. This analysis includes jail inmates who completed jail-based TC treatment and those who completed substance abuse treatment provided by CSBs other than TC.

Jail Inmates Who Completed TC Treatment Imposed Lower Costs and Had Lower Recidivism Rates Than Non-Completers. Jail inmates who successfully completed jail-based TC substance abuse treatment imposed lower costs on the State and localities, even after subtracting treatment costs. State and local expenditures for each jail TC completer declined by \$23.54 per day between the 18-month periods before and after treatment ended, which is better than the cost reduction for jail inmates who did not complete TC or other forms of treatment. In fact, each jail TC completer cost the State and localities \$5.44 less per day than non-completers, on average (Table 15). This difference was largely due to greater reductions in jail expenditures for jail TC completers.

Jail TC completers experienced lower recidivism rates than non-completers during the 18-months after treatment, but employment outcomes were mixed. As shown in Table 15, treatment completers were arrested, convicted, and incarcerated at lower rates than non-completers after treatment. While jail TC completers experienced slightly higher employment rates than non-completers, they

earned approximately \$3,000 less during this period than non-completers, on average (Table 15).

Table 15: Completing Jail TC Treatment Yielded Greater Cost Reductions and Improved Most Other Indicators Compared to Non-Completers

Indicator	Completers (N=52)	Non-Completers (N=52)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$23.54	\$18.10	\$5.44
Recidivism After Treatment			
% Arrested	46%	50%	4%
% Convicted	35%	42%	7%
% Incarcerated	56%	62%	6%
Employment After Treatment			
% Employed	23%	21%	2%
Average Earnings	\$9,583	\$12,578	(\$2,995)

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Completing Jail-Based Treatment Other Than TC Did Not Reduce Costs but Yielded Better Recidivism and Employment Outcomes.

Jail inmates who successfully completed substance abuse treatment other than TC (such as therapy or educational services) did not impose lower costs on the State and localities, compared to similar inmates who did not complete treatment. While State and local expenditures for each treatment completer declined by \$14.77 per day between the 18-month periods before and after treatment ended, this cost reduction was less than the one realized for jail inmates who did not complete treatment. In fact, individuals who completed treatment other than TC cost the State and localities \$1.41 more per day than non-completers, on average (Table 16). This difference occurred primarily because arrest costs did not decrease as much for treatment completers as for non-completers.

While treatment completion did not reduce costs, individuals who completed treatment other than TC experienced better recidivism and employment outcomes than non-completers. As shown in Table 16, jail inmates who completed treatment were arrested, convicted, and incarcerated at much lower rates during the 18-month period after treatment than non-completers. In addition, jail inmates who completed treatment other than TC were more frequently working and had higher earnings than non-completers (Table 16).

Table 16: Completing Jail Treatment Other Than TC Did Not Lower Costs but Resulted in Other Improvements Compared to Non-Completers

Indicator	Completers (N=107)	Non-Completers ^a (N=214)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$14.77	\$16.18	(\$1.41)
Recidivism After Treatment			
% Arrested	36%	48%	12%
% Convicted	25%	35%	10%
% Incarcerated	47%	60%	13%
Employment After Treatment			
% Employed	34%	27%	7%
Average Earnings	\$13,326	\$9,957	\$3,369

^a Sample size is higher for non-completers to maximize comparability to completers.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Completing Jail TC Treatment Generated Greater Cost Reductions Than Other Forms of Treatment but Recidivism and Employment Outcomes Were Worse. In addition to imposing lower costs than non-completers, inmates who successfully completed jail-based TC treatment also imposed lower costs on the State and localities than inmates who completed other forms of substance abuse treatment. The State and localities spent \$7.46 less per day on jail TC completers than completers of other treatment, on average (Table 17). This difference exists primarily because jail expenditures decreased more for jail TC completers than for completers of other treatment.

Table 17: Completing Jail TC Treatment Reduced Costs but Did Not Improve Other Indicators Compared to Completing Other Jail Treatment

Indicator	Jail TC Completers (N=52)	Other Treatment Completers (N=52)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$23.54	\$16.08	\$7.46
Recidivism After Treatment			
% Arrested	46%	37%	(9%)
% Convicted	35%	23%	(12%)
% Incarcerated	56%	50%	(6%)
Employment After Treatment			
% Employed	23%	38%	(15%)
Average Earnings	\$9,583	\$16,687	(\$7,104)

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Although jail TC completers imposed lower costs than completers of other forms of substance abuse treatment, they generally experienced worse recidivism and employment outcomes during the 18-month period after treatment. As shown in Table 17, jail TC completers were arrested and convicted more frequently than non-completers. Although jail TC completers were also incarcerated more frequently than non-completers, they experienced similar rates of incarceration in prison and their length of stay was six months shorter, on average. Furthermore, fewer jail TC completers were working, and those employed earned less during the 18-month period after treatment compared to completers of other treatment (Table 17).

Completing Treatment for Offenders on Community-Based Probation Reduced Costs and Improved Other Outcomes

Offenders under the supervision of community-based probation offices imposed lower costs on the State and localities after completing substance abuse treatment provided by CSBs. After subtracting the cost of treatment, State and local expenditures for each treatment completer declined by \$5.37 per day between the 18-month periods before and after treatment ended, and this is greater than the cost reduction for probationers who did not complete treatment. In fact, each treatment completer cost the State and localities \$2.84 less per day than non-completers, on average (Table 18). This difference is due to lower arrest and jail expenditures for treatment completers.

Table 18: Completing Treatment for Offenders on Community-Based Probation Reduced Costs and Improved Other Indicators

Indicator	Completers (N=597)	Non-Completers (N=597)	Difference in Outcomes Better / (Worse)
Net Cost Reduction per Person			
Daily Net Cost Reduction	\$5.37	\$2.53	\$2.84
Recidivism After Treatment			
% Arrested	28%	43%	15%
% Convicted	20%	29%	9%
% Incarcerated	31%	51%	20%
Employment After Treatment			
% Employed	35%	32%	3%
Average Earnings	\$21,832	\$15,440	\$6,392

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

In addition to imposing lower costs than non-completers, offenders on community-based probation who completed CSB treatment experienced better recidivism and employment outcomes during the 18-month period after treatment. As shown in Table 18, treatment

completers were arrested, convicted, and incarcerated much less frequently than non-completers. Though probationers who completed CSB treatment had only slightly higher employment rates than non-completers, they earned much higher wages.

Drug Court Completers Imposed Lower Costs After Treatment and Experienced Significantly Better Outcomes Than Comparison Groups

Adults who completed the Richmond City and Chesterfield drug court programs imposed lower costs than comparison groups during the 18-month period after treatment ended, with or without accounting for treatment expenditures. Unlike for most other programs discussed in this chapter, comparing cost reductions over time between drug court completers and comparison groups would not be meaningful because each group receives treatment in settings whose cost structures are fundamentally different. For example, offenders who are receiving substance abuse treatment while in jail impose much higher daily expenditures on the State and localities (\$36.70) during the 18-month period before treatment ends than do drug court completers (\$6.12) who are served in the community. As a result, costs imposed by offenders who are treated in jails are likely to decrease by a much larger amount after jail-based treatment ends than for drug court completers. Therefore, a more relevant analysis is to compare the costs imposed by each group after treatment completion.

As shown in Table 19, the daily cost of each drug court completer after treatment was

- \$18.78 less than each offender who did not complete drug court treatment,
- \$10.16 less than each probationer who completed treatment, and
- \$13.84 less than each jail inmate who completed treatment.

Even if treatment expenditures are taken into account, the daily cost imposed by drug court completers after treatment is still lower than for individuals in any of the three comparison groups, averaging

- \$14.84 less than each offender who did not complete drug court treatment,
- \$2.43 less than each probationer who completed treatment, and
- \$7.28 less than each jail inmate who completed treatment.

Table 19: Completing Richmond and Chesterfield Adult Drug Court Programs Resulted in Lower Costs and Better Recidivism and Employment Outcomes Relative to Comparison Groups

					Difference in Outcomes		
	Drug Court Completers (N=28)	Non-Completers (N=32) ^a	Probation Completers (N=28)	Jail Completers (N=28)	Drug Court Completers vs. Non-Completers Better / (Worse)	Drug Court Completers vs. Prob. Completers Better / (Worse)	Drug Court Completers vs. Jail Completers Better / (Worse)
Indicator							
Net Cost After Treatment per Person ^b							
Daily Cost	\$1.53	\$20.30	\$11.69	\$15.36	\$18.78	\$10.16	\$13.84
Daily Cost Including Treatment \$	\$11.57	\$26.41	\$14.00	\$18.85	\$14.84	\$2.43	\$7.28
Recidivism After Treatment							
% Arrested	14%	38%	14%	36%	24%	0%	22%
% Convicted	14%	22%	4%	25%	8%	(10%)	11%
% Incarcerated	21%	81%	46%	46%	60%	25%	25%
Employment After Treatment							
% Employed	79%	72%	32%	7%	7%	47%	72%
Average Earnings	\$42,629	\$10,314	\$17,472	\$19,353	\$32,315	\$25,157	\$23,276

^a Sample size is higher for non-completers to maximize comparability to completers.

^b Analysis compares differences in costs after treatment, unlike tables 12, 14-18, and 20-23 that focus on cost reductions between the 18-month periods before and after treatment.

Source: Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRAS, Richmond City and Chesterfield County Adult Drug Court Programs, DSS, VEC and Virginia State Police.

The major cost differences between drug court completers and members of the three comparison groups resulted from lower jail, arrest, State probation, and prison expenditures. Drug court non-completers imposed substantially higher costs than other groups because many were automatically sentenced to jail for failure to complete the drug court program.

Drug court completers experienced significantly better outcomes in the criminal justice system after treatment ended than the three comparison groups. With the exception of probationers, drug court completers were arrested, convicted, and incarcerated much less frequently (Table 19). No drug court completer was convicted of a felony or violent offense during the 18-month period after treatment while nine percent of non-completers and 18 percent of jail treatment completers were convicted of these offenses. Moreover, no drug court completer went to prison after treatment, whereas a portion of every comparison group was imprisoned. Drug court non-completers had substantially higher rates of incarceration after treatment ended because, as previously indicated, many were sentenced to jail for not completing the program. These findings are consistent with a study conducted by the General Accountability Office, which reviewed the research performed on drug court programs between 1997 and 2004 and concluded that most programs led to reductions on most measures of recidivism.

Drug court completers also had higher rates of employment than members of the three comparison groups. During the 18-month period after treatment, 79 percent of drug court completers had earnings while 72 percent of non-completers, 32 percent of probationers, and seven percent of jail inmates had earnings. Furthermore, drug court completers had substantially higher earnings than members of the three comparison groups, on average (Table 19).

Due to the small number of offenders who met the criteria for inclusion in the drug court non-completer comparison group, JLARC staff were not able to select a group that was similar in age. As a result, differences in experiences after treatment between completers and non-completers may be partially attributable to drug court completers being seven years older than non-completers, on average.

Juveniles Who Completed Treatment While on DJJ Probation Imposed Lower Costs and Experienced Slightly Better Outcomes Than Non-Completers

Juveniles who completed CSB substance abuse treatment while on probation imposed lower costs on the State and localities than juvenile probationers who did not complete treatment. While the Department of Juvenile Justice devotes the majority of its substance abuse treatment resources to incarcerated juveniles, data needed to evaluate the impact of treatment provided in correctional centers were not sufficiently available to produce meaningful results. Therefore, this section discusses only the outcomes of juveniles who received substance abuse treatment while on probation. After including treatment expenditures, each juvenile probationer who completed treatment cost the State and localities \$5.80 more per day compared to the 18-month period before treatment ended (Table 20). However, treatment completers still cost the State and localities \$1.08 less than non-completers, on average. This difference resulted from greater arrest expenditures among non-completers.

Juveniles who completed treatment also experienced better recidivism and employment outcomes during the 18-month period after treatment than non-completers, although the differences were not large. As shown in Table 20, treatment completers were arrested, convicted, and incarcerated less frequently than non-completers. Although juvenile probationers who completed treatment were employed at similar rates during the 18-month period after treatment as non-completers, they had higher earnings.

**Table 20: Completing Treatment While on Juvenile Probation
Reduced Costs and Improved Most Other Indicators**

Indicator	Completers (N=158)	Non-Completers (N=316) ^a	Difference in Outcomes Better / (Worse)
Net Cost Reduction			
Daily Net Cost Reduction	(\$5.80)	(\$6.88)	\$1.08
Recidivism After Treatment			
% Arrested	27%	29%	2%
% Convicted	23%	25%	2%
% Incarcerated	37%	41%	4%
Employment After Treatment			
% Employed	35%	35%	0%
Average Earnings	\$8,268	\$4,824	\$3,444

^a Sample size is higher for non-completers to maximize comparability to completers.

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Other Populations That Completed Treatment Usually Imposed Lower Costs but Did Not Always Achieve Better Societal Outcomes Than Non-Completers

Most individuals who completed substance abuse treatment outside of the criminal justice system cost the State and localities less than non-completers after treatment. Furthermore, treatment completers typically experienced greater improvements in indicators of societal well-being when compared to similar groups. Other CSB clients include individuals who had no known criminal history prior to receiving treatment (non-offenders) and those who committed an offense in the past but whose decision to enter treatment was unrelated to their offense (former offenders).

Non-Offenders Who Completed Treatment Imposed Lower Costs and Had Better Recidivism Outcomes Than Non-Completers. Non-offenders who successfully completed CSB substance abuse treatment imposed lower costs on the State and localities compared to individuals who did not complete treatment. After including treatment expenditures, each adult non-offender who completed treatment cost the State and localities \$3.28 more per day and juvenile non-offenders who completed treatment cost \$3.86 more per day after treatment ended. However, treatment completers still cost the State and localities less than non-completers. Adult treatment completers cost \$1.04 less per day than adult non-completers, and juvenile completers costs \$0.15 less per day than juvenile non-completers after treatment, on average. These differences resulted from lower arrest and jail expenditures among adult treatment completers, and Medicaid and juvenile probation costs among juvenile treatment completers. Increases to State and local expenditures among adult and juvenile treatment completers

appear to at least partially be explained by the fact that they imposed minimal costs during the 18-month period before ending treatment. Each adult treatment completer cost the State and localities \$0.16 per day before ending treatment while each juvenile completer cost \$0.73 per day.

Adult and juvenile non-offenders who completed CSB treatment experienced better recidivism outcomes during the 18-month period after treatment than adult and juvenile non-completers, but employment outcomes were mixed. Table 21 indicates that compared to non-completers, treatment completers were arrested, convicted, and incarcerated less frequently, although these differences were small for juveniles. While adult and juvenile treatment completers were working much less frequently during the 18-month period after treatment compared to non-completers, employed completers had higher earnings than non-completers, on average.

Adult Former Offenders Who Completed Treatment Imposed Lower Costs and Had Better Outcomes Than Non-Completers. Adults who had prior criminal histories but did not meet criteria for inclusion in the adult offender populations imposed lower costs on the State and localities. After subtracting treatment costs, State and local expenditures for each treatment completer declined by \$2.15 between the 18-month periods before and after treatment ended, which is more than the cost reduction for those who did not complete treatment. In fact, each treatment completer cost the State and localities \$2.84 less per day than non-completers, on average. This difference results from lower jail and prison expenditures for treatment completers.

Table 21: Adult and Juvenile Non-Offenders Who Completed Treatment Imposed Lower Costs and Had Better Recidivism Rates Than Non-Completers

Indicator	Adult Non-Offenders			Juvenile Non-Offenders		
	Completers (N=1,051)	Non-Completers (N=1,051)	Difference in Outcomes Better / (Worse)	Completers (N=370)	Non-Completers (N=370)	Difference in Outcomes Better / (Worse)
Net Cost Reduction						
Daily Net Cost Reduction	(\$3.28)	(\$4.32)	\$1.04	(\$3.86)	(\$4.01)	\$0.15
Recidivism After Treatment						
% Arrested	7%	17%	10%	9%	11%	2%
% Convicted	4%	11%	7%	7%	8%	1%
% Reincarcerated	7%	18%	11%	8%	9%	1%
Employment After Treatment						
% Employed	28%	38%	(10%)	34%	47%	(13%)
Average Earnings	\$23,241	\$20,508	\$2,733	\$5,975	\$5,424	\$551

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Compared to non-completers, former offenders who completed treatment also experienced better recidivism and employment outcomes during the 18-month period after treatment. Table 22 indicates that compared to non-completers, treatment completers were arrested, convicted, and incarcerated less frequently after treatment. Furthermore, former offenders who completed treatment experienced higher employment rates than non-completers, and earned approximately \$7,400 more in wages during that time, on average.

Table 22: Adult Former Offenders Who Completed Treatment Imposed Lower Costs and Had Better Outcomes Than Non-Completers

Indicator	Completers (N=2,221)	Non-Completers (N=2,221)	Difference in Outcomes Better / (Worse)
Net Cost Reduction			
Daily Net Cost Reduction	\$2.15	(\$0.69)	\$2.84
Recidivism After Treatment			
% Arrested	28%	36%	8%
% Convicted	17%	23%	6%
% Incarcerated	36%	52%	16%
Employment After Treatment			
% Employed	36%	30%	6%
Average Earnings	\$22,837	\$15,405	\$7,432

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Treatment Completion for Juvenile Former Offenders Did Not Reduce Costs and Other Outcomes Were Mixed. Juveniles who had criminal histories but did not meet criteria for inclusion in the juvenile offender populations previously discussed cost the State and localities more after treatment than juveniles who did not complete treatment. After subtracting treatment expenditures, each juvenile who completed treatment cost the State and localities \$15.33 more per day between the 18-month period before and after ending treatment, on average. Moreover, the average increase in State and local expenditures for each treatment completer was \$3.99 more per day than for each non-completer (Table 23). This difference is due to higher juvenile correctional center and Medicaid expenditures for treatment completers.

In addition to costing more than non-completers, juveniles who completed treatment experienced worse outcomes in the criminal justice system during the 18-month period after treatment (Table 23). While treatment completers were arrested and convicted about as frequently as non-completers after treatment, they were incarcerated more frequently than non-completers.

Table 23: Juvenile Former Offenders Who Completed Treatment Imposed Higher Costs and Had Mixed Outcomes Compared to Non-Completers

Indicator	Completers (N=55)	Non-Completers (N=55)	Difference in Outcomes Better / (Worse)
Net Cost Reduction			
Daily Net Cost Reduction	(\$15.33)	(\$11.34)	(\$3.99)
Recidivism After Treatment			
% Arrested	24%	25%	1%
% Convicted	18%	20%	2%
% Incarcerated	55%	47%	(8%)
Employment After Treatment			
% Employed	36%	35%	1%
Average Earnings	\$6,524	\$3,873	\$2,561

Source: Staff analysis of 2003-2007 data supplied by the Compensation Board, DOC, DCJS, DJJ, DMAS, DMHMRSAS, DSS, VEC, and Virginia State Police.

Furthermore, a higher proportion of juveniles who completed treatment participated in publicly-funded health care programs than non-completers, and each group had similar employment rates. As mentioned above, higher Medicaid expenditures for treatment completers is one reason they experienced greater increases in costs than non-completers. Though Medicaid participation rates dropped for juveniles who completed treatment and increased for non-completers after treatment, a higher proportion of treatment completers received health care funded by Medicaid during the 18-month period after treatment (45 percent of completers versus 35 percent of non-completers). Although treatment completers and non-completers were employed at similar rates after treatment, treatment completers had higher earnings during this time (Table 23).

GREATER ACCOUNTABILITY NEEDED TO MONITOR EFFECTIVENESS AND EFFICIENCY OF EXISTING SERVICES

Most Virginia agencies that provide substance abuse services do not conduct comprehensive evaluations to determine the effectiveness of their treatment programs, despite statutory requirements. The lack of comprehensive and ongoing evaluations negatively impacts the ability of lawmakers, providers, and service purchasers to make the best use of limited resources by investing in the most effective programs. Virginia decision makers cannot determine whether substance abuse treatment is a good investment and how best to allocate existing and future resources. Moreover, treatment providers cannot assess whether and where changes should be made to the services they offer, and for which populations services appear to be the most useful and cost-effective. Finally, agencies

Evaluation of Substance Abuse Services in Washington State

In 2000, the state of Washington adopted a Web-based application (TARGET) to facilitate the collection and analysis of extensive data about every individual receiving publicly-funded substance abuse services. In addition, the state's Division of Alcohol and Substance Abuse employs five Ph.D.-level researchers to conduct program evaluations on substance abuse treatment and prevention. Because the research performed by this group using data collected through TARGET demonstrated positive results, the Washington state legislature increased its appropriation for substance abuse services by \$40 million, bringing the state's total in substance abuse services to \$187 million for the 2005-2007 biennium. The estimated number of individuals who abuse drugs and alcohol is comparable between Washington and Virginia.

that purchase services from CSBs are unable to determine whether they should contract with a particular CSB.

The lack of comprehensive evaluations appears to result from insufficient human resources and technology to facilitate the analysis and sharing of information, although some changes are underway to improve access to data within certain agencies. In addition, the most insightful evaluations will require Virginia agencies to share data with each other, but information systems are currently not structured to facilitate this process.

State Agencies Generally Do Not Conduct Comprehensive Evaluations of Substance Abuse Treatment Provided Statewide

Few Virginia agencies conduct comprehensive evaluations that capture whether the substance abuse treatment programs they provide improve participants' outcomes, despite being required to do so by the *Code of Virginia*. In particular, the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) cannot report on the effectiveness of the substance abuse services provided by its 40 CSBs, which receive the vast majority of State and local funding devoted to drug and alcohol treatment. In contrast, the Virginia Supreme Court is in the process of conducting a comprehensive evaluation of drug court treatment programs, and the Department of Corrections (DOC) has been routinely conducting evaluations of its more intensive substance abuse treatment programs, although the scope of these evaluations is somewhat limited.

Code of Virginia Requires Evaluation of Substance Abuse Services.

In 2004, the Virginia General Assembly adopted legislation requiring agencies that provide substance abuse treatment to develop program objectives and report, beginning in 2006,

- the extent to which program objectives have been accomplished as reflected by an evaluation of outcome measures,
- the most effective substance abuse treatment,
- how effectiveness could be improved,
- an estimate of the cost-effectiveness of these programs, and
- recommendations on the funding of programs based on these analyses.

Additional funding was not allocated for implementation. To date, it does not appear that affected agencies have fully met these requirements set forth in the *Code of Virginia* §2.2-2697, although some agencies have taken some steps to provide the information requested.

DMHMRSAS Evaluation Efforts Underway, but Lacking Adequate Support. DMHMRSAS requires all CSBs to report fairly extensive data about their clients' backgrounds and experiences that could be used to assess their outcomes after receiving treatment. To collect this information, DMHMRSAS introduced an agency-developed database in 2001. While the scope of the database appears to be comprehensive, limited use has been made of the information collected due to accuracy concerns. Despite several revisions during the last seven years, the database requires substantial manual entry by each of Virginia's 40 CSBs. As a result, the information captured is prone to human error and interpretation. To further increase the utility of the information supplied by CSBs, DMHMRSAS is attempting to link its data with that of other agencies such as the Virginia Employment Commission and the State Police to validate outcomes such as employment and arrest records.

In addition to statewide efforts led by DMHMRSAS, nearly three-quarters of CSBs report tracking certain measures of effectiveness for the programs they provide. This information can be used by CSBs to determine whether changes need to be made to the services they offer, and by other agencies that wish to know how effective services are before purchasing them. However, these evaluations do not reflect all of Virginia and cannot be used to assess whether State and local funds are adequately allocated to maximize returns. Furthermore, evaluations would be difficult to compare between CSBs because they do not appear to consistently capture the same outcomes. For example, while almost all CSBs measure whether clients' substance use and employment status change after treatment, only 40 percent track relapse episodes and their clients' involvement in the criminal justice system.

The Department of Mental Health, Mental Retardation and Substance Abuse Services is unable to attest to the effectiveness of substance abuse treatment provided by the 40 CSBs it funds.

Despite State and local efforts, the department is unable to attest to the effectiveness of substance abuse treatment provided by the 40 CSBs it funds. The evaluation of substance abuse services does not appear to be a department priority and, as a result, resources have not been made available to adequately support this effort. While substance abuse services comprise less than ten percent of the agency's total expenditures, this program area nonetheless received \$82 million in State and local funding in 2006. Yet, of the 19 measures used by DMHMRSAS to capture its performance in "Virginia Performs," only one pertains to substance abuse services, and it indicates the number of clients who received a specific service rather than their outcomes. The department's Office of Substance Abuse Services and CSBs appear to lack the information technology resources needed to facilitate and support data collection and transfer efforts. In addition, no dedicated position exists at DMHMRSAS to analyze or report the information that is currently collected from CSBs.

Given the yearly \$82 million investment that the State and localities make in substance abuse treatment delivered by CSBs and the statutory requirement for evaluation, adequate resources should be devoted to assessing the effectiveness of these services. This will help to ensure that the State is making sound allocation decisions and receiving an adequate return on its investment.

Recommendation (1). The Department of Mental Health, Mental Retardation and Substance Abuse Services should conduct a needs assessment that identifies the (1) information technology and human resources necessary to obtain accurate client outcomes data from community services boards, and (2) number and expertise of staff required to analyze outcomes information. This analysis should encompass the needs of both the department and community services boards. In addition, the department should identify specific steps that must be taken to produce ongoing evaluations, in accordance with statute. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Department of Corrections Conducts Robust, Statewide Evaluations, but of Limited Scope. The Department of Corrections consistently evaluates the outcomes of inmates who participate in therapeutic and transitional therapeutic communities programs (TC and TTC). However, other forms of substance abuse treatment provided to inmates, such as psycho-educational services, are not currently evaluated because participation in educational programs is not consistently captured in the department's information systems. Furthermore, resource constraints have restricted the scope of current evaluations to solely measuring recidivism. While DOC staff indicated an interest in obtaining information about other types of outcomes such as employment, accessing this information from other State agencies would be a manual and time-consuming process.

DOC is in the process of implementing a new Correctional Information System (CORIS) that should greatly improve the ease of accessing data needed to conduct evaluations of programs other than TC and TTC. However, existing evaluation staff may not be able to assume this additional responsibility given their current workload. Furthermore, internal technological improvements will not address the difficulties in obtaining data from other agencies.

Recommendation (2). The Department of Corrections should conduct a needs assessment that identifies the information technology and human resources necessary to (1) capture relevant data on prison inmates who participate in substance abuse services while in State institutions, and (2) analyze outcomes information. In addition, the department should identify specific steps that must be taken to produce ongoing and comprehensive evaluations of substance abuse services provided to prison inmates, in accordance with statute. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Comprehensive Evaluation of Drug Courts Underway. The Supreme Court of Virginia, which is charged by the *Code of Virginia* to evaluate the performance of drug court treatment programs, has taken steps to assign evaluation staff and build the infrastructure needed to fulfill this requirement. While no statewide studies of drug court treatment programs have been completed to date, a multi-year, comprehensive evaluation containing both outcome and process measures is in progress and should be available in the fall of 2008. This evaluation will address outcomes such as recidivism and changes in alcohol and drug use. In addition, the study will examine the individual characteristics that appear to be linked to successful outcomes.

To obtain the data necessary for this evaluation, a management information system was developed and implemented in July 2007. All Virginia drug courts are required to populate key information such as clients' demographic characteristics, criminal and substance abuse history, progress toward program completion, and drug screen results.

Department of Juvenile Justice Conducts Limited Evaluations. The Department of Juvenile Justice conducts only limited evaluations of the outcomes experienced by juveniles who participate in substance abuse treatment programs in its correctional centers. DJJ currently examines only re-arrest and reconviction rates for juveniles who participated in substance abuse programs. While somewhat useful, this information cannot be used to conclude whether treatment improved outcomes because there are no benchmarks for the recidivism rates that should be expected of similar juveniles who did not complete treatment. Moreover, while DJJ offers several tiers of treatment to address juveniles' needs, recidivism studies do not separate outcomes between the different types of treatment. As a result, it is not possible to determine whether certain programs are more effective than others and which need improvement.

As is the case with other agencies, limited staff and technological resources appear to be the reason why more comprehensive evaluations have not been conducted. In particular, the department's information systems do not capture information about juveniles' treatment experiences while in correctional centers. In addition, interviews with DJJ staff indicate varying levels of buy-in to the value that could be added by conducting evaluations. While the State and localities invested only \$1.6 million in substance abuse services provided in DJJ facilities, effective treatment can be critical in reducing juvenile crime and improving the chances that juvenile offenders will become productive citizens.

Recommendation (3). The Department of Juvenile Justice should conduct a needs assessment that identifies the (1) information technology and human resources necessary to capture relevant data on juveniles who participate in substance abuse services while in juvenile correctional centers, and (2) number and expertise of staff required to analyze outcomes information. In addition, the department should identify specific steps that must be taken to produce ongoing evaluations, in accordance with statute. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Process Needed to Collect Outcomes Information From Other State Agencies. Based on a review of the research literature and interviews with staff at numerous State agencies, it appears that robust evaluations of substance abuse services must include participants' outcomes after they have completed treatment. Yet, obtaining this information can be very challenging because substance abuse has a variety of effects that are captured by numerous agencies whose information systems are not intended to perform an evaluation function. For example, the analysis presented in this chapter relies on data supplied by nine Virginia agencies, and some agencies have multiple internal information systems. In addition to the complexity of receiving and managing data supplied by multiple agencies, issues arise from attempting to transform existing data into information that can be used for evaluation purposes. Furthermore, because every agency uses a different approach to identifying their clients, it can be difficult to ensure that individuals are correctly matched across agencies.

While the agencies that provide substance abuse treatment may place different priorities on the outcomes experienced by their clients, several measures of program effectiveness should be shared between them, such as employment and recidivism. Consequently, agencies that offer substance abuse treatment should undertake a

coordinated effort to obtain needed data from other State agencies. Certain entities, such as DMHMRSAS, have already begun collecting information from other agencies. According to DMHMRSAS staff, it may take more than a year to design a process that will yield the information needed. Coordination should enable agencies to avoid duplication of efforts and to build upon the experience already gained by DMHMRSAS. To this end, agencies that provide publicly-funded substance abuse services could form a workgroup as part of the Substance Abuse Services Council to (1) establish common measures capturing their clients' outcomes after treatment, (2) determine where to obtain outcomes information needed across agencies, and (3) design a process to collect the information from other agencies on an ongoing basis.

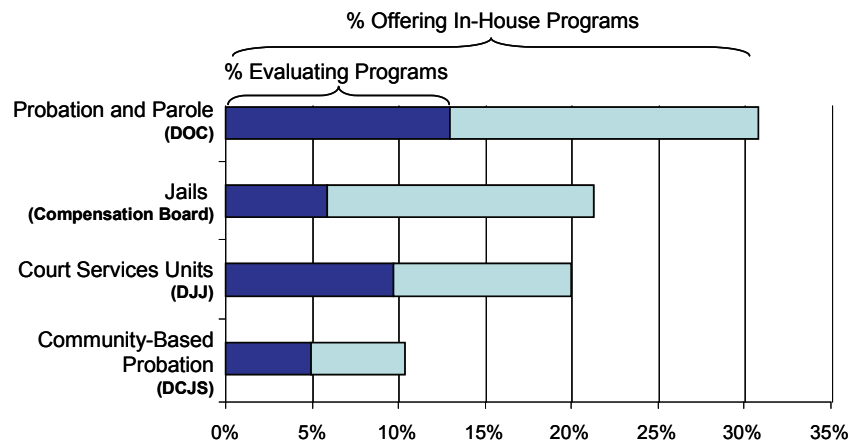
Criminal Justice Agencies Do Not Require Field Offices to Evaluate In-House Substance Abuse Treatment Programs

In addition to the substance abuse services that State agencies offer statewide, 21 percent of criminal justice agencies' field offices (including State probation and parole and community-based probation offices, court services units, and jails) also administer in-house treatment for their clients. However, field offices are not required to collect information that could be used to evaluate whether these programs are effective. As a result, it is unclear whether the resources expended for in-house programs are a worthwhile investment, or whether these funds should be used to contract with other providers or for other purposes altogether.

Locally-administered programs are offered at the discretion of field offices given the availability of resources. As illustrated in Figure 16, probation and parole offices are most likely to offer in-house programs, and local probation offices are least likely to do so. While some field offices have chosen to evaluate the effectiveness of their programs, the majority have not. In particular, only 28 percent of jails that offer in-house substance abuse services evaluate their outcomes experienced by participating inmates.

Because of the time-consuming and costly nature of evaluations, it is understandable that field offices may not have the resources to measure the effectiveness of their in-house programs. However, this information is necessary to determine whether criminal justice agencies are maximizing the use of finite treatment resources by conducting in-house programs rather than contracting with third-party providers. Consequently, agencies should be required to collect information that can be used to demonstrate the utility of their programs.

Figure 16: Proportion of Criminal Justice Agencies Offering and Evaluating In-House Substance Abuse Services (2007)



Source: JLARC staff survey of providers and purchasers of substance abuse services.

Access and Effectiveness Could Be Improved for Substance Abuse Treatment

In Summary

To fully realize the benefits of substance abuse treatment, individuals must seek and be able to access services, as well as receive services that are proven effective and best meet their specific needs. Currently, substance abuse services are provided to only a fraction of those who need them, thereby substantially limiting the cost reduction that the State and local governments could derive from treatment. The majority of Virginians who need substance abuse services are not seeking them at all and remain untreated unless compelled by a court or family and friends. Among those who seek treatment, many are unable to access services because they cannot afford them, or lack the transportation or child care support to attend. In addition, while many substance abuse services appear to yield positive results, their effectiveness could be further enhanced if service gaps and insufficient capacity were addressed, and available services consistently followed proven practices.

House Joint Resolution 683 and Senate Joint Resolution 395 both direct JLARC staff to examine the services needed to meet the needs of Virginians with substance use disorders and mitigate the costs imposed upon the State and localities, as described in Chapter 2. While findings described in Chapter 3 suggest that the majority of Virginia substance abuse treatment programs reviewed for this report yield positive fiscal and societal benefits, the findings presented in this chapter suggest that these benefits may not be fully maximized. Moreover, certain programs evaluated in Chapter 3 do not currently reduce costs or generate other social improvements. To fully maximize the benefit of treatment, Virginia would need to increase the proportion of substance abusers who participate in treatment so that they can begin their recovery from drug and alcohol abuse. In addition, steps would need to be taken to maximize the effectiveness of services that are currently provided by increasing the State's capacity to provide individuals with appropriate services that have been proven to work.

MAJORITY OF SUBSTANCE ABUSERS ARE NOT SEEKING NEEDED TREATMENT

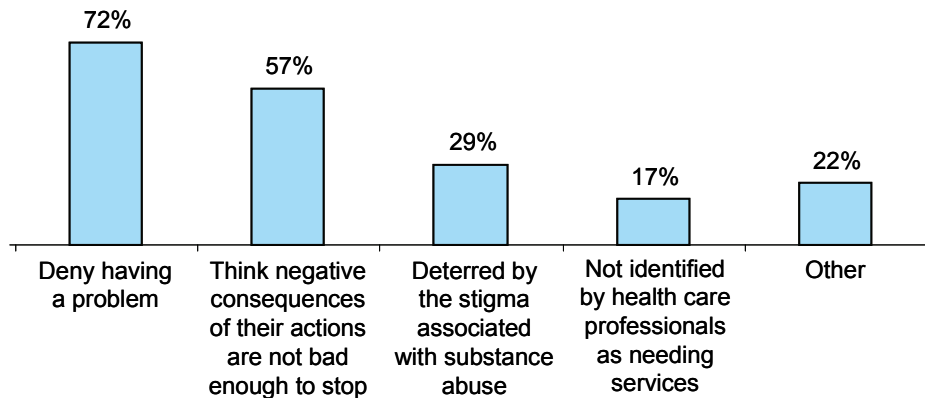
Between 50 and 90 percent of people who need substance abuse services are not trying to access them and consequently remain untreated. The majority of community services boards (CSBs) responding to a JLARC staff survey indicate that at least half of the individuals who need substance abuse services do not receive needed treatment. This trend is not unique to Virginia: a national

Research Methods

To conduct its research, JLARC staff interviewed key staff in State agencies most closely linked to substance abuse issues. JLARC staff also interviewed local staff at community services boards, State and community-based probation offices, and court services units in ten regions of the State. To supplement the information gathered during site visits, surveys were administered to public providers and purchasers of substance abuse services as well as private substance abuse service providers in Virginia. Also, a review of the research literature was conducted.

survey conducted by the Substance Abuse and Mental Health Services Administration indicates that 90 percent of individuals who need treatment for substance abuse or dependence did not receive it in 2005. Individuals may not seek treatment for a variety of reasons, as shown in Figure 17. Individuals who suffer from substance use disorders and remain untreated may continue to incur costs borne by the State and local governments.

Figure 17: Reasons Cited by CSB Staff Why Substance Abusers in Virginia Do Not Seek Access to Services



Source: JLARC staff survey of providers and purchasers of substance abuse services.

Many Substance Abusers Deny Having a Problem That Generates Unacceptable Consequences

Individuals who abuse drugs or alcohol may deny having a problem. Seventy-two percent of CSBs and private providers who responded to a JLARC staff survey indicate that the primary reason why individuals do not access needed services is because their clients think they do not have a problem, and 57 percent indicate that they do not think the negative consequences of their actions are bad enough to stop. As described in Chapter 1, abused substances alter brain function by overstimulating the brain's reward system. People who abuse drugs or alcohol practice denial because they believe their situation to be hopeless, and the substance that contributes to their hopelessness provides temporary relief by feeding their brain's reward system. This population can be difficult to reach because they may hide their abuse and often do not seek treatment until they are forced to by family, friends, or the criminal justice system. At this point, the cost of these individuals' substance abuse generally extends beyond themselves and begins to affect their families and agencies funded by the State and local governments.

Lack of Information and Misconceptions About Substance Abuse Can Deter Individuals From Accessing Treatment

Adults who abuse drugs or alcohol can be discouraged from accessing treatment services because misinformation about the disease may prevent not only the substance abuser from seeking treatment, but also others from encouraging them to get help. Nearly 30 percent of CSB and private providers indicate that individuals are deterred from accessing treatment due to the stigma associated with substance abuse, according to a JLARC staff survey. Substance abuse treatment staff indicate that individuals may feel ashamed of their addiction and try to hide it from friends and family. Those close to the individual may lack sufficient knowledge to identify the signs of substance abuse, may view addiction as a moral failing rather than a chronic disease, or may not have enough information about the effectiveness of treatment. As a result, those with substance use disorders may not get treatment. In addition, some individuals may use drugs or alcohol because it is a common and expected activity among their friends and family, and may therefore be less likely to seek treatment for what may be considered normal behavior.

Juveniles who abuse drugs or alcohol may not receive treatment because their families are unwilling to accept that their child needs help. Staff at juvenile criminal justice agencies indicate that parental support is critical to the successful recovery of a juvenile who abuses drugs or alcohol. Family involvement is needed to reinforce treatment principles in the juvenile's home environment; however, this can be difficult to achieve. Family members may not want their children to access services because of the stigma surrounding abuse and addiction or because they themselves might abuse drugs or alcohol and not want to recognize their own problem.

Health Care Professionals Could Identify and Refer More Individuals in Need of Substance Abuse Services

Some health care professionals are not well educated on recognizing the signs of substance abuse, and therefore may not be able or willing to refer individuals for needed services. Seventeen percent of CSB and private providers who responded to a JLARC staff survey stated that individuals tend not to seek substance abuse treatment because they are not identified by health professionals as needing services. The lack of identification and acknowledgment of substance abuse makes it less likely that treatment services will be recommended, even though they may help increase the individual's chance of recovery and decrease the costs borne by the State and local governments.

Although health care professionals could play a key role in identifying substance abuse and helping addicted individuals access appropriate services, this opportunity is often lost. A 2000 report by the National Center on Addiction and Substance Abuse found that nearly three-quarters of surveyed patients currently receiving treatment for substance abuse said that their primary care physician was not involved in their decision to seek treatment. In addition, when provided with a description of an adolescent patient showing classic symptoms of drug abuse, 41 percent of pediatricians did not make the correct diagnosis. Physicians may not be frequently or accurately diagnosing drug or alcohol abuse for a number of reasons, including inadequate training in medical school, skepticism about the effectiveness of substance abuse treatment, or because physicians believe that patients will volunteer the information to their physicians, even though 85 percent of surveyed patients admit to lying about their drug or alcohol abuse to their physicians.

Treatment experts agree that the sooner an individual is treated, the better their chance of recovery. Because stigma and denial may prevent individuals from accessing substance abuse treatment on their own, health care professionals are in a unique position to encourage more people to access appropriate services that can decrease the negative impact of substance abuse. Health care professionals could receive more education on the signs and symptoms of drug and alcohol abuse, the benefits of treatment, and the treatment programs available to their patients, and be provided with screening tools to help identify substance abuse. In particular, medical schools could offer physicians practicing in Virginia continuing education in identifying and treating substance use disorders.

AFFORDABILITY AND LOGISTICS CAN DETER VIRGINIANS FROM PARTICIPATING IN SUBSTANCE ABUSE TREATMENT

Substance abuse services provided by CSB staff are generally affordable but tend to be lower-intensity, such as education services and group therapy. CSBs tend to refer individuals who need more specialized services to private providers. However, affordability becomes a barrier to accessing intensive services because, unlike CSBs, private providers are not publicly subsidized, and individuals who access services through the CSB tend not to have private health insurance. In addition, Medicaid coverage of substance abuse services has not meaningfully increased the number of people who can access treatment. Finally, logistical barriers such as the lack of transportation and child care can prevent Virginians from attending treatment.

Cost of Substance Abuse Services Can Preclude Low and Middle Income Virginians From Receiving Treatment

Affordability can preclude individuals from receiving substance abuse treatment, especially if they need intensive services. One-third of CSBs and criminal justice agencies indicated that affordability was a barrier for more than 25 percent of their clients, according to a JLARC staff survey. CSBs are designed to serve anyone in need of services regardless of their ability to pay, within the constraints of CSB resources. Because they are heavily subsidized by public funding, CSBs are able to charge clients on a sliding scale reflecting their income. This feature is especially important for uninsured Virginians. While service fees are very low for most lower-intensity services such as assessments or group counseling, local CSB staff consistently indicated during site visits that clients struggle to afford more intensive forms of treatment, such as methadone maintenance or residential care. Although these services are also subsidized, their cost is high and translates into higher client fees.

To minimize fees for clients who can least afford services and possibly increase total fee revenues, the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) could ensure that CSBs have implemented an appropriate income-based sliding scale to establish their fees. Specifically, DMHMRSAS could review whether (1) CSBs consistently use sliding scales, (2) sliding scales are standardized across CSBs and, if not, whether they appropriately reflect geographical differences, (3) the relationship between fees and income appropriately balances affordability with accountability across CSBs, and (4) CSBs collect fees that are charged.

Recommendation (4). The Department of Mental Health, Mental Retardation and Substance Abuse Services should evaluate whether community services boards have consistently developed appropriate income-based sliding-scale fee structures that minimize the amount charged to lowest-income clients while maximizing overall fee revenues.

In addition, CSBs are less likely to offer higher-intensity services and may, therefore, refer clients who need such services to private providers. While 90 percent of surveyed CSBs indicate that their staff provide lower-intensity services, only 17 percent of CSBs provide higher-intensity services such as intensive outpatient, detoxification, or residential services. However, a majority of private providers do not charge reduced fees: only 38 percent of responding private providers indicate that they discount their fees for lower-income clients, according to a JLARC staff survey. Therefore,

higher intensity services may be further unaffordable and less accessible.

Affordability can be a barrier to access even for those who have private health insurance. Sixty-four percent of CSBs indicate that private insurance coverage of substance abuse treatment is either limited or unavailable the majority of the time according to a JLARC staff survey. As a result, less than ten percent of CSB clients receive services that are paid at least partly by private insurance. In particular, private insurance tends not to cover residential care, a highly intensive and costly service. Health insurers are required by Virginia law to cover a certain level of substance abuse services, but this level may not be sufficient to meet the treatment needs of each individual. For example, insurers are required to cover the cost of up to ten days of inpatient services but many residential programs last several weeks. While insurers can choose to offer more comprehensive coverage of substance abuse services, employers are not compelled to purchase such plans, and most do not appear to do so, according to treatment providers.

The medical community recognizes drug and alcohol addiction as a chronic disease. Furthermore, substance abuse is linked to numerous health conditions and lower worker performance, as described in Chapter 2. Consequently, enhancing the level of coverage that private insurers must provide with respect to substance abuse services could be beneficial to both the insured and their employers.

Medicaid coverage of substance abuse services for all program recipients began on July 1, 2007, but this coverage does not appear to have increased the number of enrollees who can access substance abuse services. Interviews with CSBs and criminal justice agencies (which include State probation and parole offices, community-based probation offices, court services units, and jails) indicate that providers are not willing to offer services at the current Medicaid reimbursement rates because they are too low to cover the cost of treatment. Therefore, most CSBs indicate that Medicaid coverage of substance abuse services has improved affordability and access for fewer than ten percent of their clients. Furthermore, while CSBs may be serving Medicaid-eligible individuals, they are not billing the Medicaid program for these services and therefore not making the most of available funding. In fact, the Department of Medical Assistance Services (DMAS) reports paying \$124,000 for substance abuse services between July 2007 and March 2008, approximately one percent of the \$9.4 million that had been budgeted to meet the needs of Medicaid participants enrolled in the fee-for-service program in fiscal year 2008.

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While it can take a few months for providers to begin offering newly covered services, this theory does not entirely explain such

low utilization levels. The State should reassess reimbursement rates to help more people access the substance abuse treatment services that could increase their chance for recovery and diminish the negative effects of their abuse or addiction. DMAS is aware of this issue and has begun evaluating the adequacy of reimbursement rates internally. Still, even if reimbursement rates increase, Medicaid coverage will not address the issue of affordability for many low-income adults because only the poorest adults in Virginia meet Medicaid's eligibility threshold and are enrolled in the program. Furthermore, men under the age of 65 are far less likely to be eligible for Medicaid than women, yet they are much more likely than women to have a substance use disorder.

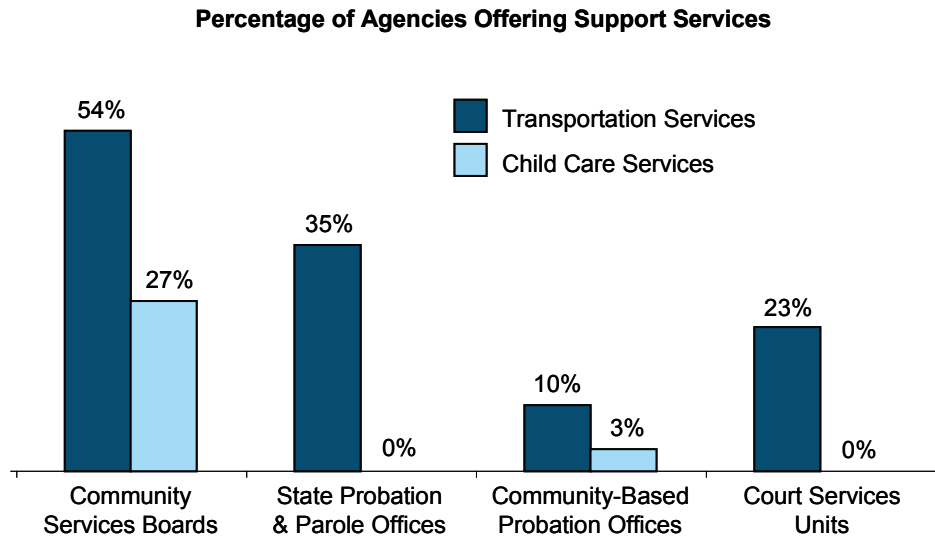
Recommendation (5). The Department of Medical Assistance Services should evaluate whether Medicaid reimbursement rates for substance abuse treatment are high enough to incentivize providers to serve Medicaid enrollees as intended in the program's State plan.

Inadequate Transportation and Child Care Are Critical Barriers to Access

Even when individuals are motivated or compelled to receive substance abuse treatment, logistical barriers such as transportation and child care are frequent obstacles to receiving substance abuse treatment. Although some CSBs, State probation and parole offices, community-based probation offices, and CSUs offer support services or coordinate with other treatment providers to overcome logistical barriers, these agencies indicate that Virginians continue to face significant obstacles to accessing the treatment services that could aid in their recovery process.

Support Services Not Consistently Available, Especially in Criminal Justice Agencies. The most commonly cited barriers to accessing substance abuse services are the lack of transportation and child care, according to site visits and responses to a JLARC staff survey. In fact, more than half of CSBs and criminal justice agencies indicate that these logistical issues are significant problems that preclude individuals from attending substance abuse services. Many of those served by CSBs and criminal justice agencies are low-income individuals, some of whom do not have the resources to own a vehicle, pay for public transportation, or afford child care services. Their inability to access treatment can jeopardize their recovery. In order for these individuals to access needed services, some agencies provide transportation and child care support. However, not all agencies do so, and support services are least available in criminal justice agencies, as shown in Figure 18.

Figure 18: Availability of Support Services Is Limited and Differs Between CSBs and Criminal Justice Agencies



Source: JLARC staff survey of providers and purchasers of substance abuse services.

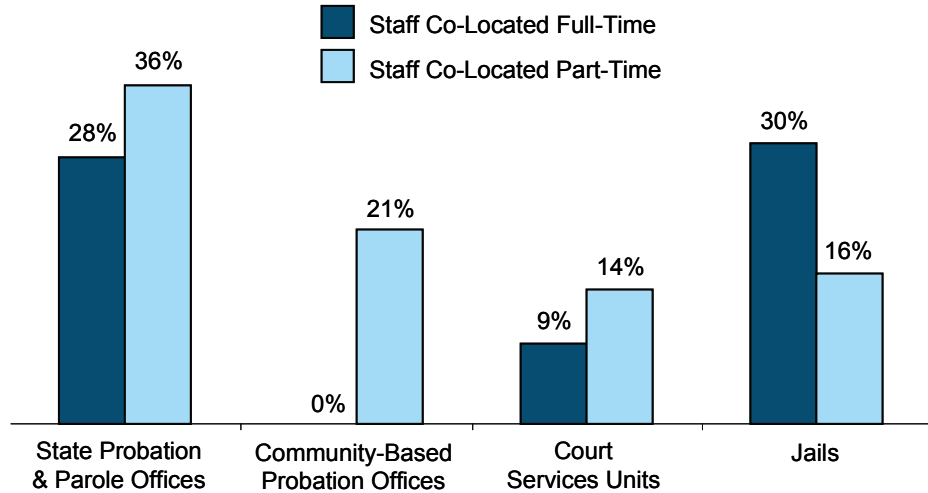
Because some field offices have found innovative ways to address logistical barriers despite resource constraints, sharing best practices could help more agencies support the transportation and child care needs of their clients. To this end, DMHMRSAS could identify local best practices in providing transportation and child care assistance and use technical assistance and training to disseminate this information to substance abuse service providers across Virginia.

Expanding Office Hours and Co-Locating Staff Could Help Increase Access to Substance Abuse Treatment. Interviews with substance abuse treatment providers indicate that many of their clients work, and those who do not are encouraged to find and maintain employment while engaging in treatment services. However, participants' jobs may not allow sufficient flexibility to participate in substance abuse services if they are only provided during regular business hours. In fact, approximately one-third of CSB respondents to a JLARC staff survey indicate that limited office hours could be a problem for participants to attend services. While 86 percent of CSBs and criminal justice agencies provide evening office hours, only 16 percent of these agencies provide weekend hours. Expanding office hours could help increase the number of individuals who are able to attend substance abuse treatment without jeopardizing their employment.

Co-locating substance abuse treatment and criminal justice staff can be an efficient way of providing services to treatment participants based on site visits, yet most criminal justice agencies do not

take full advantage of this opportunity. As shown in Figure 19, State probation and parole offices and jails are most likely to co-locate substance abuse treatment providers at their facility on a full-time basis.

Figure 19: Co-Location of Substance Abuse Treatment and Criminal Justice Agency Staff Not Sufficiently Utilized



Source: JLARC staff survey of providers and purchasers of substance abuse services.

However, few or no treatment providers are co-located with community-based probation agencies or CSUs on a full-time basis, although some providers are co-located with these agencies on a part-time basis. Because the majority of State and community-based probation offices contract with their local CSB for substance abuse services, co-location could play a key role in reducing the logistical barriers to receiving treatment. To help mitigate logistical barriers and increase an individual's access to substance abuse services, criminal justice agencies and CSBs should explore the feasibility of co-locating staff.

In addition, increasing the proportion of CSBs that offer satellite locations could also ease transportation barriers, especially in large or rural counties. Currently, 56 percent of CSBs provide satellite offices so that treatment participants have more location options for accessing treatment services.

MANY INDIVIDUALS ARE UNABLE TO RECEIVE MOST APPROPRIATE SUBSTANCE ABUSE SERVICES

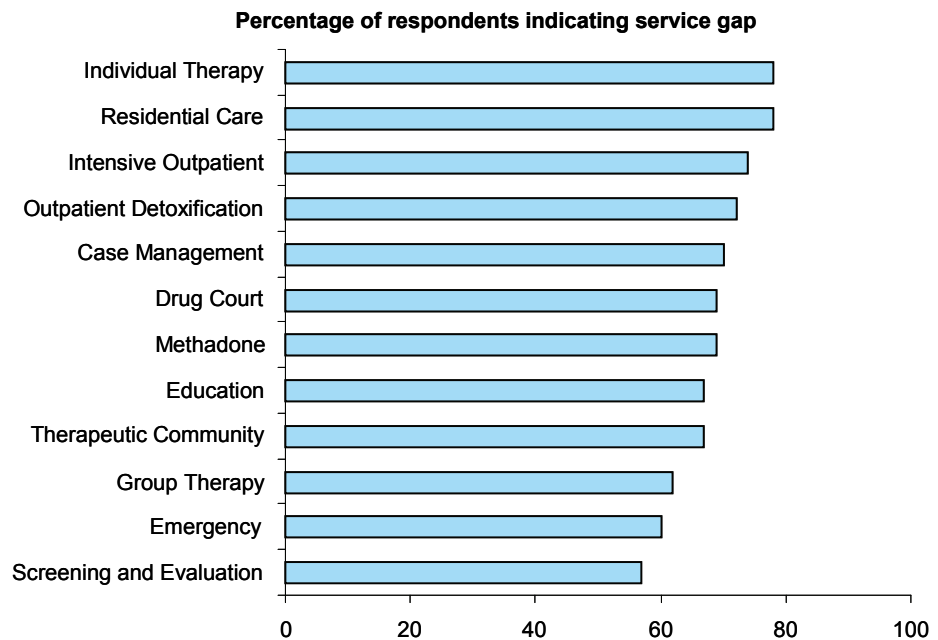
Even though a number of services exist to treat individuals with substance use disorders, the majority of CSBs and criminal justice agencies reported that less than half of their clients received the

most appropriate services to meet their needs, according to a JLARC staff survey. Treatment providers are not consistently able to offer the full array of services to meet every individual's needs. Gaps in the continuum of services exist particularly for higher-intensity services, and many individuals appear to receive the most readily available services rather than the services that are most appropriate to address their needs. In addition, some individuals are placed on waiting lists to receive higher-intensity services but drop out before they receive them, despite some agencies' attempts to keep clients engaged in treatment.

Continuum of Services Contains Gaps, Especially for Higher-Intensity Treatment

Certain substance abuse services are not consistently available across the State. As a result, individuals may not receive the services most appropriate to meet their needs. In fact, nearly three-quarters of respondents to a JLARC staff survey indicated that service gaps were a problem hindering access to services. The most frequently reported service gaps are for intensive services such as individual therapy, residential care, intensive outpatient services, outpatient detoxification, and drug courts (Figure 20). Screening and emergency services were least frequently identified as service gaps.

Figure 20: Service Gaps Most Commonly Reported Are for Intensive Services (2007)



Source: JLARC staff survey of providers and purchasers of substance abuse services.

The most frequently reported service gaps were generally also those that survey respondents indicated were most important to address. However, a high percentage of providers indicated that addressing gaps in services such as screening and emergency services was important, even though these gaps were least common.

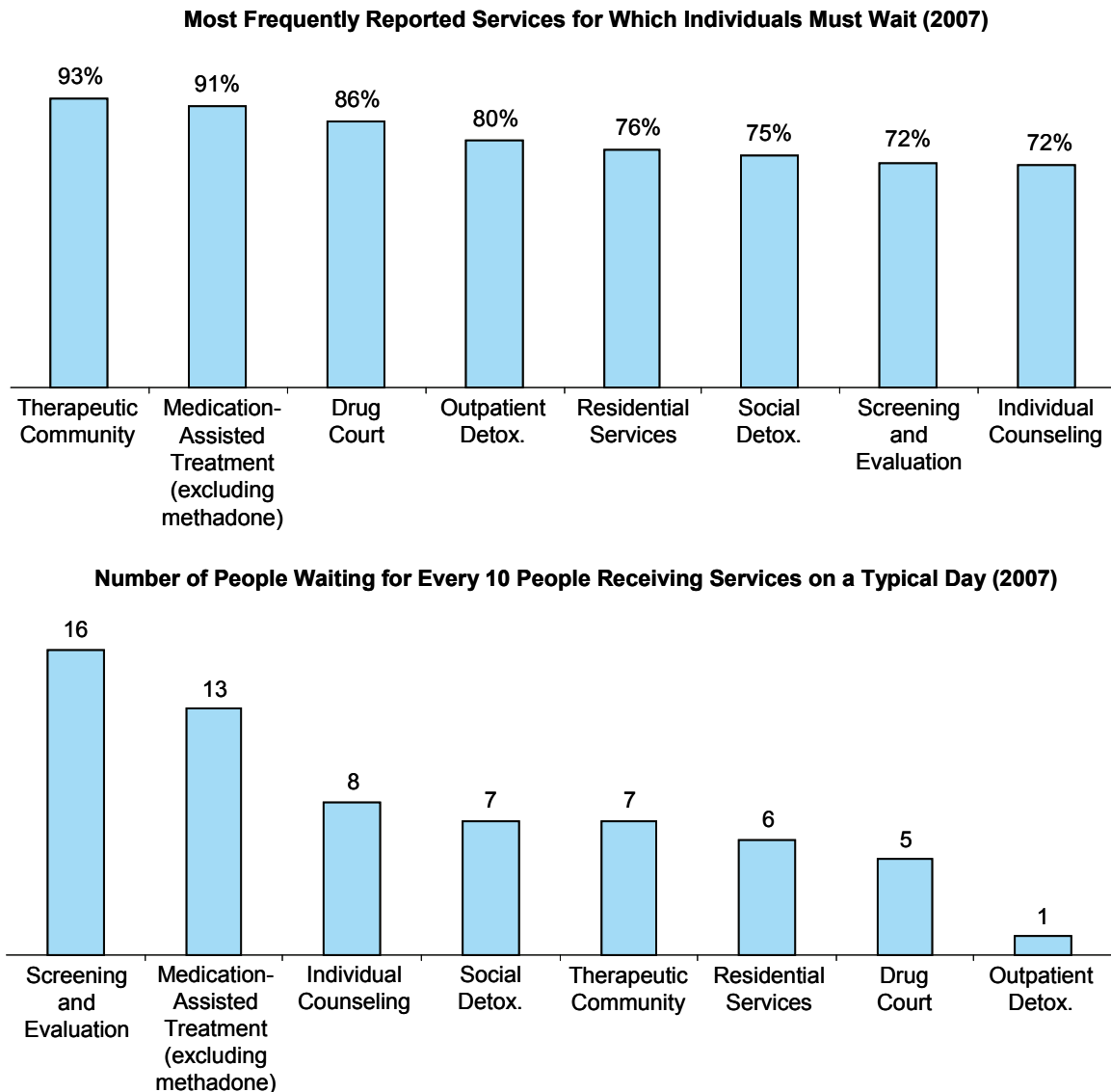
Service gaps may exist due to insufficient resources but also due to insufficient demand for a particular service, especially in less populated areas. Implementing a particular service for only a few clients may be inefficient and not cost-effective. A more efficient way to provide services with limited demand is through regional partnerships that pool together clients. Currently, general funds allocated by DMHMRSAS must be provided to localities and cannot be directed toward regional partnerships. As a result, CSBs that wish to pool resources across a region must invest their own funds, and assume the risk that regional partners may back out after a service has been implemented. To overcome these issues, DMHMRSAS could be granted the flexibility to use a portion of appropriated general funds for regional partnerships.

Some Individuals Never Receive Most Appropriate Substance Abuse Treatment Due to Insufficient Service Capacity

Insufficient capacity exists for most CSB substance abuse services resulting in waiting lists, particularly for higher intensity services such as residential care or therapeutic communities. Waiting lists may not create a problem if the individual eventually receives the most appropriate service to meet their treatment need. To this end, some agencies have attempted to keep clients engaged while they wait for higher-intensity services by offering lower-intensity services such as education and group therapy in the interim. However, local staff indicate that many people do not return for services if there is a waiting list. As a result, the opportunity to help the individual initiate or continue their recovery from substance abuse may be lost.

Capacity Is Insufficient to Meet CSB Clients' Needs for Most Services. Even though most treatment providers agree that providing ready access to substance abuse services is critical to ensuring the effectiveness of services, insufficient capacity causes many individuals to wait before they can receive substance abuse services, particularly if they need more intensive treatment. Figure 21 shows the services for which waiting lists exist based on a JLARC staff survey. Therapeutic communities and medication-assisted treatment were the two services that most frequently had a waiting list.

Figure 21: Insufficient Capacity Results in Waiting Lists for Most Services



Source: JLARC staff survey of providers and purchasers of substance abuse services.

For every ten clients who are being screened and evaluated for substance abuse, 16 people were waiting to be served on a typical day in 2007.

Not only do waiting lists exist for most services, but the size of these waiting lists appears to be large relative to existing capacity. Figure 21 shows the number of individuals waiting for a service for every ten clients currently receiving this service. For example, for every ten clients who are being screened and evaluated for substance abuse, 16 people were waiting to be served on a typical day in 2007. Expressed differently, existing capacity for screening and evaluation services would need to be expanded by 160 percent in order to meet current demand. In contrast, although outpatient detoxification was identified by the majority of survey respondents as having a waiting list, only one out of every ten individuals must wait to receive this service.

Waiting lists may increase the number of people who are not identified for services or do not receive services that are sufficiently intensive to meet their substance abuse treatment needs. Interviews with treatment staff indicate that the longer an individual must wait for services, the more likely it is that their window of opportunity for intervention will close, and the individual may continue their drug or alcohol abuse and not return for treatment. DMHMRSAS could address capacity constraints by re-evaluating the existing continuum of substance abuse services, and determining whether resources are optimally allocated.

Other Services Often Provided to Keep Clients Engaged and Prepared for Treatment, but Many Never Receive Sufficiently Intensive Services. Nearly one-quarter of CSBs indicate that the majority of their clients participate in other services before they can access higher-intensity services that better meet their needs, according to a JLARC staff survey. In some cases, these services are designed to keep clients engaged in treatment until more appropriate treatment becomes available. In addition, these interim services can be used to determine the extent to which clients are motivated to receive treatment, and design service plans that best address individuals' readiness to change.

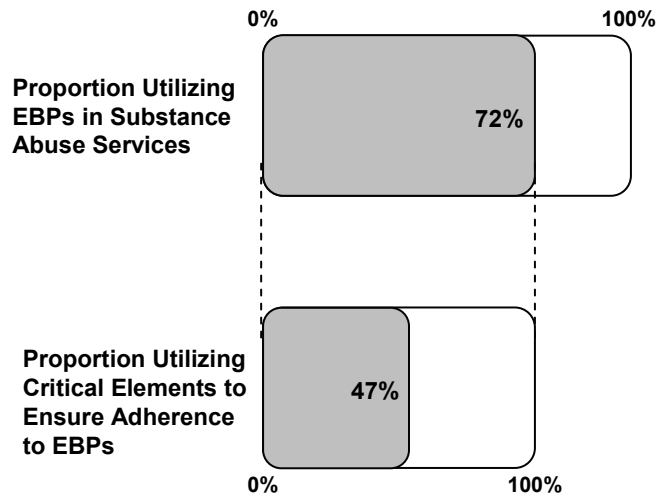
However, many individuals never receive the service best suited for them because they drop out before the more appropriate form of treatment becomes available. Even clients who complete interim services may only receive these lower-intensity services, which may not have as positive an impact on their recovery as the more appropriate services for which they were originally referred.

EFFECTIVENESS MAY BE UNDERMINED BY LACK OF EVIDENCE-BASED PRACTICES AND IMPROPER IMPLEMENTATION

Evidence-based practices (EBPs) can play a key role in increasing the effectiveness of substance abuse treatment programs and improving treatment outcomes. In contrast to practices based in tradition, convention, or anecdotal evidence, EBPs are proven methods of substance abuse treatment based in scientific evidence that have consistently demonstrated positive outcomes. Although most treatment providers in Virginia have incorporated EBPs into their array of substance abuse services, inclusion of EBPs could be more widespread among treatment providers. Moreover, those who have adopted EBPs tend not to adequately ensure proper adherence to their implementation and administration. While nearly three-quarters of providers use EBPs, only 47 percent of them use critical elements to ensure their proper implementation (Figure 22). Although utilizing proven practices is important, neglecting to en-

sure that EBPs are properly implemented can undermine their effectiveness and the value of using proven practices.

Figure 22: Most Substance Abuse Treatment Providers Who Use Evidence-Based Practices Do Not Ensure Proper Implementation



Source: JLARC staff survey of providers and purchasers of substance abuse services.

Encouraging Implementation of Evidence-Based Practices

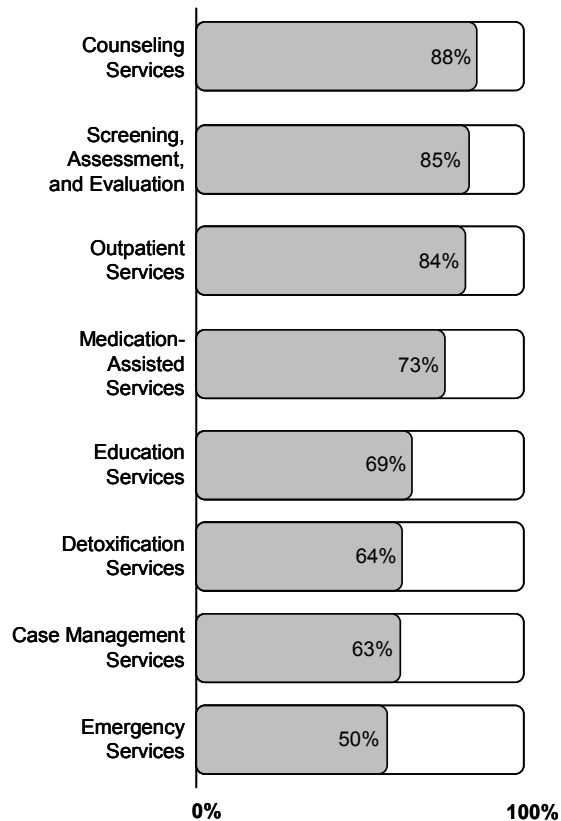
In order to spur the research and implementation of EBPs, the state of Oregon has resolved that 75 percent of the state's Addictions and Mental Health Division funds would be spent on EBPs by July 2009.

Evidence-Based Practices Are Often but Not Always Used

EBPs are used by most but not all substance abuse treatment providers in Virginia. Overall, 72 percent of substance abuse treatment providers in Virginia have incorporated EBPs into some aspect of their spectrum of treatment services. As shown in Figure 23, counseling, screening, and outpatient services most frequently utilize EBPs.

Local providers interviewed by JLARC staff indicate that the use of EBPs may be limited in part because they do not receive enough assistance from State agencies. One-third of respondents report that they are dissatisfied with the guidance provided by the State on the implementation of EBPs, while less than 20 percent are satisfied. Providers also indicate that the implementation process is extremely time consuming, primarily because of training and follow-up supervision. These time requirements can conflict with high caseloads. Despite these constraints, State agencies could provide more incentives to adopting EBPs and offer additional guidance for selecting and implementing proven practices.

Figure 23: Substance Abuse Providers Incorporate Evidence-Based Practices Into Most Substance Abuse Services



Source: JLARC staff survey of providers and purchasers of substance abuse services.

Providers May Not Adequately Ensure Adherence to Proven Practices

Only 47 percent of providers who reported using EBPs had used critical elements to ensure their proper implementation.

A critical aspect of achieving the level of effectiveness associated with proven practices is to ensure that they are adequately implemented. Yet, only 47 percent of providers who reported using EBPs had used critical elements to ensure their proper implementation. The closer a program adheres to the original design of an evidence-based model, the more likely the program is to achieve its intended benefits. EBPs for which proper implementation is not monitored may be less effective in treating individuals abusing drugs or alcohol. Although there are a number of elements to ensuring adherence to EBPs, some are considered more critical than others (Table 24).

As shown in Figure 24, many providers utilize critical elements to oversee the proper implementation of EBPs. However, EBPs must be correctly implemented to yield successful outcomes and cost effectiveness, and other providers may not be implementing EBPs correctly. Staff indicate that training and supervision are critical

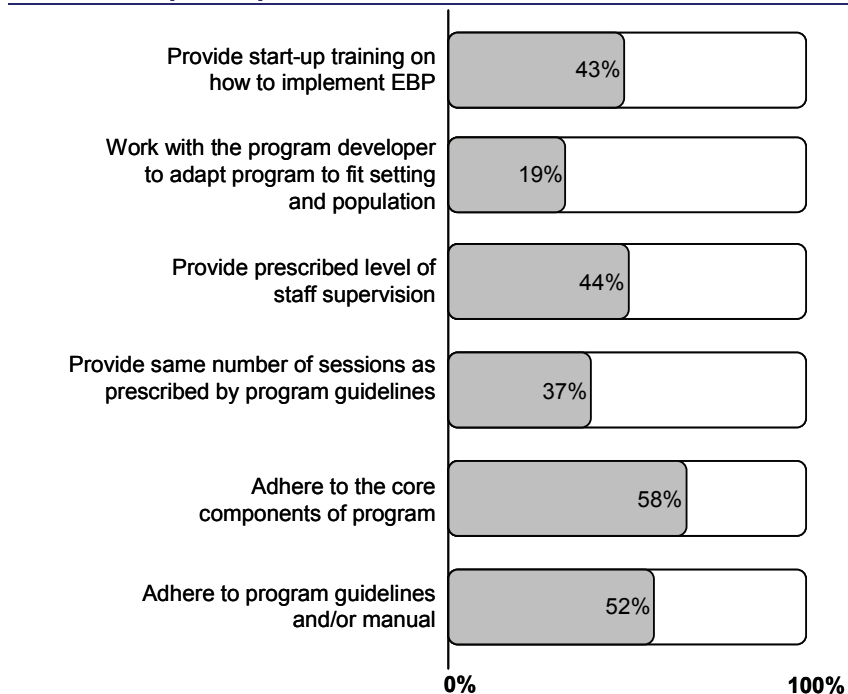
to effectively implementing and sustaining EBPs, yet local staff are not sufficiently tasked with these responsibilities, nor do they have the resources to carry them out.

Table 24: Critical and Important Elements of Ensuring Adherence to Evidence-Based Practices

Critical Elements	Important Elements
<ul style="list-style-type: none"> • Provide start-up training on implementation • Work with program developer to adapt program to fit setting and population • Provide prescribed level of staff supervision • Provide prescribed number of sessions • Adhere to core components • Adhere to program guidelines and/or manual 	<ul style="list-style-type: none"> • Provide follow-up staff training • Ensure program training is provided by developer or another qualified trainer • Train supervisors to provide effective support to practitioners • Adhere to minimum staff qualifications • Adhere to staffing requirements • Adhere to recommended practitioner-to-client ratio • Adhere to recommended supervisor-to-practitioner ratio

Source: Dusenbury, Linda, et al. "A Review of Research on Fidelity of Implementation: Implications for Drug Abuse Prevention in School Settings." *Health Education Research*. 2003.

Figure 24: Substance Abuse Providers Do Not Consistently Ensure Proper Implementation of Evidence-Based Practices



Source: JLARC staff survey of providers and purchasers of substance abuse services.

Recommendation (6). The Department of Mental Health, Mental Retardation and Substance Abuse Services should determine the level and nature of resources needed to help local substance abuse providers identify evidence-based practices, train staff on their correct application, and provide follow-up training to ensure adherence to evidence-based programs. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Recommendation (7). The Department of Mental Health, Mental Retardation and Substance Abuse Services should encourage substance abuse treatment providers to incorporate more evidence-based practices (EBPs) into their services by establishing a percentage of services for which EBPs should be incorporated, with an annual monetary incentive for those who meet or exceed that goal.

Majority of Offenders Do Not Receive Most Appropriate or Effective Substance Abuse Services

In Summary

Despite the prevalence of substance abuse among offenders and the significant costs they impose upon the State and localities, the majority of offenders do not appear to receive the substance abuse treatment they need. The extent to which offenders are able to adequately access services tends to increase as the severity of their offense worsens. Because criminal justice agencies contract with community services boards and private providers to offer much of their treatment, offenders are faced with most of the barriers described in Chapter 4. However, they also face additional hurdles that are unique to the criminal justice population. While offenders can be compelled to receive substance abuse services, some never access them because their substance use disorder is not identified, they are not under court supervision long enough to be treated, or the agency responsible for carrying out their sentence lacks funding to secure treatment. In addition, the most appropriate services needed to address offenders' needs do not appear to be consistently and adequately available. Moreover, criminal justice agencies may not be consistently maximizing the effectiveness of services to which their clients have access. Finally, newly released inmates appear to face significant barriers which may undermine their recovery from substance abuse when they reenter the community.

Most of the costs of substance abuse to the State and localities are borne by public safety agencies because of the link between substance abuse and crime described in Chapter 2. Moreover, a large proportion of offenders recidivate and continue to impose crime-related costs. Meanwhile, the Virginia inmate population is expected to increase. While the majority of offenders who completed substance abuse treatment programs reviewed for this report imposed lower costs on the State and localities and experienced lower rates of recidivism as described in Chapter 3, the majority of Virginia offenders remain untreated or cannot access the substance abuse services that best meet their needs. Greater and more consistent access to substance abuse services for offenders could further reduce costs to the State and localities. However, improving offenders' access to services will only be successful if sufficient capacity also exists to serve them in the community.

MAJORITY OF OFFENDERS CANNOT ACCESS ADEQUATE TREATMENT, ESPECIALLY LESS SERIOUS OFFENDERS

Most criminal justice agencies report difficulties meeting the substance abuse treatment needs of the majority of offenders under their supervision. Further, the extent to which offenders are able to access adequate treatment appears to vary based on the setting in which they are serving their sentences. In particular, less seri-

Most criminal justice agencies report difficulties meeting the substance abuse treatment needs of offenders under their supervision.

Research Methods

Interviews were conducted with key staff in Virginia's criminal justice agencies. In addition, JLARC staff interviewed program staff at criminal justice agencies in ten Virginia regions. Surveys of State probation and parole and community-based probation offices, court services units, and jails were conducted to supplement findings from site visits. Finally, staff reviewed the relevant research literature.

ous offenders tend to have greater difficulties accessing treatment. However, most offenders ultimately commit more serious offenses based on a review of their criminal activity over the course of three years. By treating offenders sooner, a greater number of crimes and associated costs could be prevented.

Majority of Offenders Are Not Receiving Substance Abuse Treatment

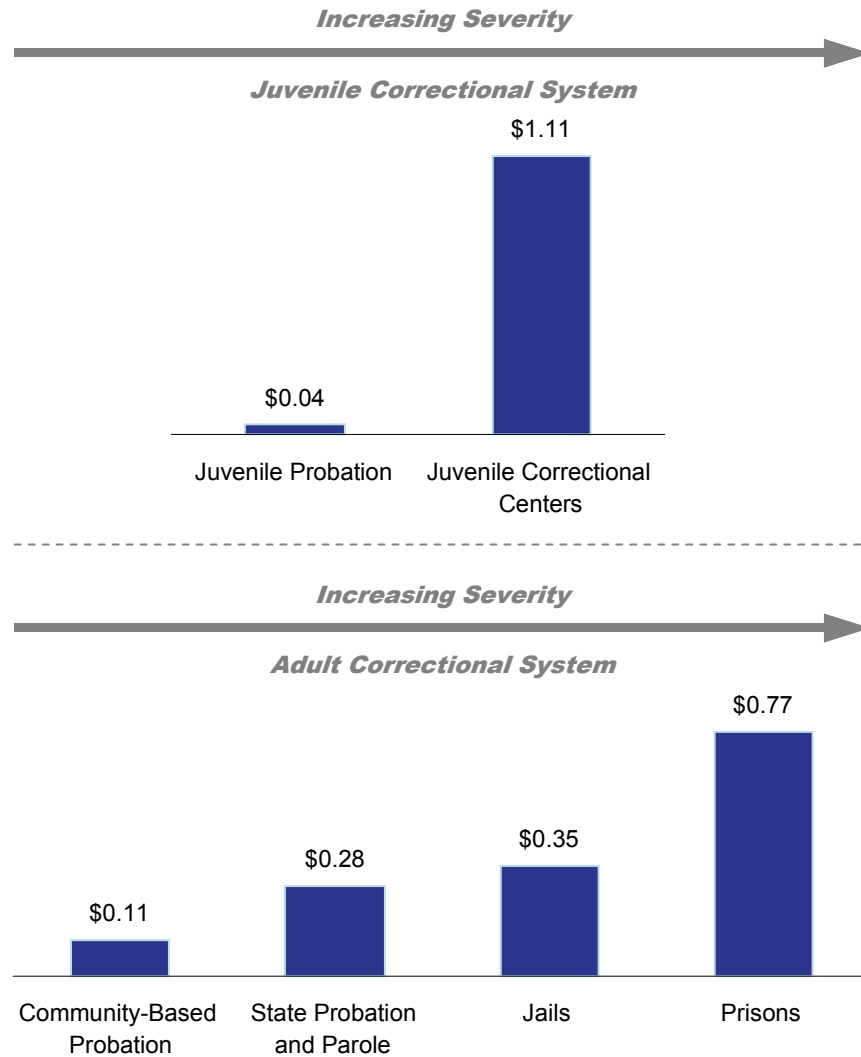
Most criminal justice agencies interviewed and surveyed by JLARC staff indicated being unable to meet the substance abuse needs of the majority of offenders under their supervision. According to a JLARC staff survey of criminal justice agencies, 54 percent of court services units (CSUs), 58 percent of State probation and parole offices, 62 percent of community-based probation offices, and 81 percent of jails reported being unable to adequately serve the majority of their clients.

While similar survey data are not available for prisons and juvenile correctional centers, interviews with staff from the Department of Corrections (DOC) suggest that a similar trend applies to State prisons: although most prison inmates believed to have a substance use disorder engage in low-intensity educational services, only about 40 percent are estimated to participate in intensive treatment such as therapeutic community (TC) programs. The Department of Juvenile Justice (DJJ) appears to be in a better position than prisons and jails to meet the needs of inmates: committed juveniles are generally provided with educational or intensive substance abuse services that match their level of needs.

Less Serious Offenders Least Likely To Receive Adequate Substance Abuse Treatment, Although Many Ultimately Commit More Serious Crimes

The proportion of offenders who are able to access adequate substance abuse services appears to generally increase as the severity of their offense worsens and the intensity of their supervision increases, according to interviews conducted during site visits and an analysis of treatment budgets across criminal justice agencies. As illustrated in Figure 25, the amount available to provide offenders with substance abuse services is substantially lower in probation agencies than in institutions for both juvenile and adult offenders. In addition, disparities also exist between probation agencies and institutions: the daily, per offender treatment budget of community-based probation offices, which tend to serve individuals guilty of committing misdemeanors, is less than half that of State probation and parole offices, which usually serve more serious offenders. Similarly, the daily amount available to jails to treat each inmate is less than half that of State prisons.

Figure 25: Average Treatment Expenditures per Offender per Day Increase With Intensity of Supervision (FY 2006)



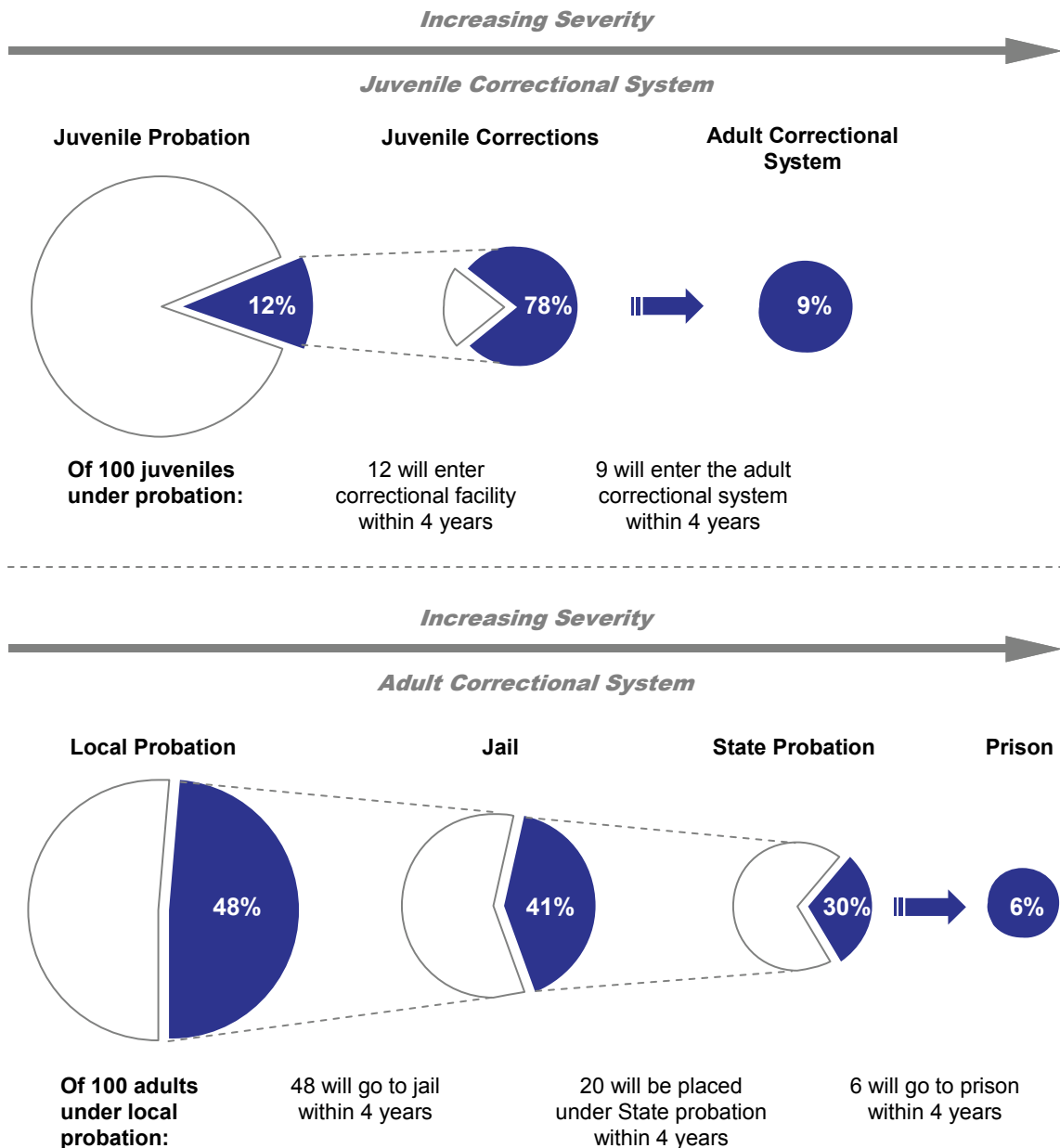
Note: Analysis includes all offenders under supervision regardless of substance use.

Source: Staff analysis of treatment expenditures and offender days supplied by the Departments of Juvenile Justice, Criminal Justice Services, Corrections, the Compensation Board, and jails responding to a JLARC staff survey.

The limited availability of adequate substance abuse services for less serious offenders may ultimately have associated costs for the State and localities because many offenders appear to commit more serious crimes over time. As illustrated in Figure 26, a substantial proportion of offenders became subject to more intensive supervision or incarceration over the course of only four years, which is the period for which data were available. If this period were extended to span offenders' lifetimes, these numbers would likely increase. Currently, adequate substance abuse treatment may not be provided until offenders have had repeated contacts

with the criminal justice system and committed more severe crimes. Yet, providing effective substance abuse treatment to individuals before they become chronic offenders could curb recidivism, thereby improving public safety and lowering costs for the State and localities.

Figure 26: Proportion of Offenders Who Commit More Serious Crimes Over Time (2003–2007)



Source: Staff analysis of data provided by the Department of Juvenile Justice, Department of Criminal Justice Services, Compensation Board, and Department of Corrections.

SOME OFFENDERS WITH SUBSTANCE USE DISORDERS RECEIVE NO SERVICES

Although most offenders are reported to need substance abuse services, some may not receive them because the agencies administering their sentence have not identified the need for services or lack sufficient funding to accommodate them, or because they are not engaged in the criminal justice system long enough. The period of time during which offenders are incarcerated or on probation provides a valuable opportunity to compel substance abuse treatment, especially for those who may not be motivated to seek treatment on their own. However, agencies appear to often lack the resources to assess and treat offenders who need substance abuse treatment, and insufficient capacity may delay access to services beyond offenders' incarceration or probation period. As a result, offenders may remain untreated, which increases the likelihood that they will continue to commit crimes that are costly to Virginia government and society at large.

Some Offenders May Not Be Identified or Referred for Substance Abuse Treatment

The criminal justice system is in a unique position to provide substance abuse services to individuals who are particularly costly to the State and localities due to their criminal behavior. The challenge of convincing substance abusers to seek treatment is easily overcome for offenders because they can be compelled to receive treatment as part of their sentence, yet not all offenders who could benefit from treatment are identified or referred for services. A lack of capacity to screen and assess offenders in order to determine their treatment needs combined with the lack of information about drug and alcohol addiction and treatment alternatives are key factors preventing more individuals from being identified as needing treatment.

Substance Abuse Screenings and Assessments Not Consistently Conducted for Offenders. Most offenders appear to lack timely access to screening and assessment services. Limited access to assessment services appears to be largely attributable to insufficient resources among criminal justice agencies as well as community services boards (CSBs). In the absence of adequate assessments, substance use disorders may remain unidentified and untreated, and offenders may continue to commit substance abuse-related crimes.

Probation agencies once screened and assessed the majority of their clients for substance abuse in accordance with legislation passed by the General Assembly in 1998. As a result of this legislation and associated funding, positions were created to identify

the existence of substance use disorders and make referrals for necessary services. However, funding reductions in 2002 resulted in the elimination of most of these positions, while some of them were redeployed to assist with offender supervision and case management.

While certain agencies have developed alternative strategies to continue identifying substance abuse, they have generally relied primarily on screening instruments rather than clinical assessments due to a lack of staff expertise. For example, DJJ reports that they are in the process of implementing a simple screening tool that does not have to be administered by clinicians. While screening tools indicate the possibility of substance abuse, clinical assessments still have to be performed to confirm the existence and scope of substance abuse problems.

Even those agencies that can conduct formal assessments are generally not able to meet the demand for this service, as evidenced by large waiting lists. Criminal justice agencies that responded to a JLARC staff survey indicated that 72 percent of clients who need to be evaluated for substance abuse were on a waiting list on a typical day. For example, CSU staff screened fewer than 1,000 and assessed 200 of the 7,200 juveniles who were placed on probation during 2006, even though DJJ staff report that the majority of youths in the juvenile justice system have a substance abuse problem.

Due to a lack of staff expertise and capacity, an increasing number of offenders who are identified for screening or assessment are now referred to third-party providers, most frequently CSBs. However, funding is not consistently available to purchase this service. Moreover, CSBs also lack the capacity to evaluate all offenders even when funding exists. On average, CSBs that participated in a JLARC staff survey indicated that 65 percent of clients referred to their agency for screening or assessment were on a waiting list.

Because identifying the existence of substance abuse is a critical step toward recovery, maximizing the number of offenders who are screened and assessed could ultimately result in reduced criminal activity, given adequate access to treatment. To this end, additional resources should be made available for criminal justice agencies to either conduct evaluations in-house or contract for this service with providers. These agencies previously received funds to provide these services through the Drug Offender Screening, Assessment, and Treatment (DSAT) initiative and the Substance Abuse Reduction Effort (SABRE) program, and should be able to use past experience to estimate future needs.

Recommendation (8). The Departments of Corrections, Criminal Justice Services, and Juvenile Justice should determine the amount of additional resources needed to adequately provide offenders under their agencies' responsibility with substance abuse screenings and, when necessary, assessments. Preliminary results should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Substance Abuse Treatment May Not Be Consistently Required by Courts. Judges may not consistently require substance abuse treatment as part of offenders' sentences. Criminal justice agency staff indicate that this can occur because many judges have limited knowledge about substance use disorders and the effectiveness of treatment. Drug court judges interviewed for this study explained that before they began presiding over drug courts and learned more about substance abuse, they were less likely to recognize the role that drugs and alcohol played in crime and, therefore, ordered treatment less frequently than necessary.

In addition, while pretrial services offices can help judges identify the presence and extent of offenders' substance abuse problems by facilitating assessments, many Virginia localities lack this capability. Pretrial services staff assist the court in making bail and sentencing decisions by gathering necessary information and providing supervision while defendants await trial. However, more than 50 Virginia localities do not have pretrial services offices. As a result, judges in these localities may remain unaware of defendants' substance abuse history and make sentencing decisions that do not address treatment needs. In addition, pretrial services can help to reduce the number of offenders awaiting trial in jail, thereby decreasing incarceration costs. While the *Code of Virginia* requires localities to offer pretrial services if they have a jail and receive State funding for pretrial purposes, 26 localities do not receive general funds that would enable them to comply with this requirement.

Better Service Identification and Pretrial Options in Alabama

Alabama enacted legislation that assists judges in identifying and referring people charged with driving under the influence of alcohol or other drugs. In addition, the state created pretrial diversion from alcohol and drug prosecution, giving those with drug-related charges the option to enroll in a drug abuse treatment program in lieu of prosecution. One year after the launch of these initiatives, 96 percent of surveyed participants indicated decreased use of illegal substances and 90 percent reported no arrests after completing the program.

Judges play a key role in determining whether offenders with a substance abuse problem will receive treatment as part of their sentence. In addition, judges have the authority to direct treatment for offenders who likely would not otherwise seek treatment and thus continue to abuse substances and be a public safety risk after serving their sentence. To address this issue, a two-pronged approach could be used. First, judges could receive additional education about substance abuse and its treatment. Second, pretrial services could be made more widely available in the State so that judges would have full information about defendants and their

substance abuse history. The State association representing community-based probation and pretrial services offices estimates that expanding pretrial services across Virginia would cost approximately \$2.7 million per year.

Recommendation (9). The Department of Mental Health, Mental Retardation and Substance Abuse Services and local community services boards should collaborate with criminal justice agencies to develop a training curriculum or tool for judges that would address the effects of substance abuse, the benefits of treatment, and the treatment options available.

Recommendation (10). Given the importance of pretrial services in identifying substance abuse, the Department of Criminal Justice Services should evaluate the costs and benefits of expanding pretrial services offices across the State and present their findings to the joint legislative subcommittee studying substance abuse pursuant to Senate Joint Resolution 77 (2008).

Criminal Justice Agencies Report Insufficient Funding To Secure Needed Services for Offenders

Even when offenders have been identified as needing substance abuse treatment, the level of funding available to provide treatment is inadequate to meet demand according to the majority of criminal justice agencies responding to a JLARC staff survey. Staff interviewed during site visits explained that they were generally able to accommodate the provision of court-ordered services, and used remaining funds to serve offenders with the most pressing needs, thereby leaving other offenders untreated. Thirteen percent of agencies indicated having no substance abuse treatment budget at all.

When resources are not available, criminal justice agencies typically make referrals to service providers without providing payment. Nearly three-quarters of agencies reported making referrals rather than contracting for services for some offenders. However, referrals typically do not result in the provision of services unless offenders can pay for them. Yet, local staff interviewed during site visits indicated that most offenders on probation cannot afford to purchase substance abuse services themselves, even when referred to CSBs. In addition to the general affordability issues described in Chapter 4, offenders also frequently face additional financial pressures such as being responsible for restitution payments, fines, and legal fees. Furthermore, offenders are more likely to be unemployed or underemployed than the rest of the population. Consequently, criminal justice agencies' ability to pay for services is critical to securing access to services for most offenders.

Offenders Serving Short Sentences May Be Unable To Secure Services While in Criminal Justice System

Insufficient service capacity and resulting waiting lists can prevent offenders from accessing services while in the criminal justice system, especially for locally-responsible offenders who serve sentences less than 12 months. This short period of supervision results in a relatively limited window of opportunity to provide substance abuse services to this population. Therefore, eligible participants may be unable to access or complete substance abuse services before finishing their sentence, at which point the State can no longer compel treatment. At this point, offenders may be less likely to initiate recovery on their own and may continue their drug or alcohol abuse.

In addition to precluding offenders from being assessed to determine treatment needs (as described in the previous section), interviews with criminal justice agencies indicate that inadequate service capacity can also delay access to needed treatment. As shown in Table 25, waiting lists exist for many services in CSBs and criminal justice agencies because their capacity to provide services is lower than the number of individuals trying to access these services. Moreover, a 2006 report by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) indicated that clients waited for nearly one month to access outpatient substance abuse services, in addition to the time that they may wait for an assessment.

Table 25: Insufficient Capacity Delays Access to Substance Abuse Services for Offenders (2007)

Service	% of All Clients Waiting for CSB Services on a Typical Day	% of All Clients Waiting for Criminal Justice Agencies' Services on a Typical Day
Individual Counseling	52%	64%
Social Detoxification Services	42%	N/A
Group Counseling	38%	6%
Education Services	34%	33%
Drug Court	32%	24%
Case Management Services	32%	10%
Prison- or Jail-Based Therapeutic Communities	N/A	30%
Intensive Outpatient	28%	N/A

Source: JLARC staff survey of providers and purchasers of substance abuse services.

TREATMENT OPTIONS TAILORED TO OFFENDERS OFTEN UNAVAILABLE

Certain treatment options that appear to effectively mitigate costs and recidivism do not appear to be consistently available to Virginia offenders. Based on the evaluation performed for this study as well as a review of the research conducted nationally and in other states, incarceration-based therapeutic communities and drug court programs can reduce costs and improve recidivism. However, not all offenders who could benefit from these programs are able to access them. As a result, the State and localities may not be maximizing the cost reductions that could result from providing these forms of treatment to offenders.

Capacity of Prison-Based Therapeutic Communities To Become Insufficient in Next Biennium

Prison-based therapeutic communities (TC) appear to reduce costs to the State and localities based on this evaluation and the body of national research. While data limitations precluded JLARC staff from evaluating the impact of TC programs on recidivism measures other than reincarceration, a review of the national literature conducted by the U.S. National Institute of Justice found that TC programs can produce significant reductions in recidivism rates among chronic drug users, and that positive results can be sustained over time. Furthermore, national evaluations have also found that TC programs are cost-effective as a result of lower crime- and health-related costs associated with substance abuse, especially among higher-risk offenders.

However, DOC staff indicate that many inmates who could benefit from participating in TC programs are currently not identified and referred due to information system limitations. In fact, only approximately 40 percent of eligible inmates who report a history of substance use are currently participating in TC programs prior to their release. It is unlikely that the remaining 60 percent of inmates with substance use disorders all need the intensive services provided in a TC environment, but a portion of them do, according to DOC staff.

DOC is in the process of implementing a new information system that will greatly improve the identification of inmates who are suitable candidates for TC programs beginning in 2009-2010. However, the program already operates at full capacity and it will not be possible to accommodate higher demand given current space and resources. As a result, resources will need to be prioritized toward inmates that appear to pose the greatest level of risk or show the greatest need for services. While this strategy may allow Virginia to maximize returns on its current investment, there may be

lost opportunities to further reduce costs by not providing TC services to some inmates who likely would benefit from them.

Majority of Jails Do Not Offer Therapeutic Community Programs

The evaluation conducted for this study suggests that jail inmates who complete TC programs generate greater reductions in cost to the State and localities than other similar inmates who either do not complete TC programs or complete other forms of treatment. Also, the national literature supports the effectiveness of institution-based therapeutic communities. However, the majority of jails do not offer TC programs. The lack of therapeutic communities was the third most frequently reported service gap among jails that responded to a JLARC staff survey. As a result, some jail inmates may not receive substance abuse services that would best meet their treatment needs. Criminal justice staff interviewed during site visits indicated that funding as well as adequate programming space were the two most prominent barriers to implementing TC programs in Virginia jails.

Based on a JLARC staff survey, jails that offered TC programs spent a median amount of \$134,000 on substance abuse treatment in 2006. With half of Virginia jails responding and 56 percent of respondents not offering TC programs, it can be estimated that expanding the availability of jail-based TC programs across the State would cost approximately \$5 million per year, not including capital expenditures that may be required to establish adequate program space.

Most Localities Have No Access to Drug Courts, Despite Promising Impact on Costs and Recidivism

Although national research and the evaluation conducted for this study suggest that drug court graduates impose lower costs on the State and localities and are significantly less likely to recidivate after treatment than other similar offenders, most Virginia localities currently do not have access to drug court treatment programs. As discussed in Chapter 1, more than 100 of Virginia's 135 localities have not implemented drug courts for adult and juvenile offenders. Respondents to a JLARC staff survey indicated that lack of funding and staff were the biggest obstacles to developing a drug court program in their locality. When drug courts are unavailable, localities must rely on traditional sentencing options such as probation and jail. However, access to adequate substance abuse treatment is limited in these settings as previously discussed, and the jail inmate population continues to increase yearly.

The General Accountability Office conducted a review of the research performed on drug court programs between 1997 and 2004,

and concluded that most programs led to reductions on most measures of recidivism. Similarly, the evaluation conducted for this study suggests that drug court graduates from the Chesterfield County and City of Richmond adult programs cost less, are less likely to commit future crimes, and are more likely to be employed than similar probationers and jail inmates.

While the analysis presented in this report was limited to the Chesterfield County and City of Richmond adult drug court programs, a statewide evaluation is being conducted by the Supreme Court of Virginia. Findings from this comprehensive evaluation should be reviewed to determine whether drug court treatment programs appear to generally yield positive outcomes across the State, and utilized to decide whether the State should expand drug court programs across Virginia.

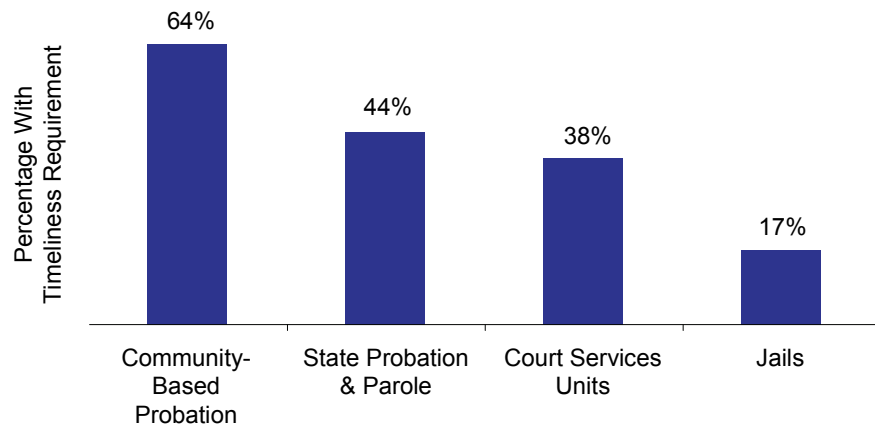
EFFECTIVENESS OF AVAILABLE TREATMENT COULD BE IMPROVED

Substance abuse services provided to offenders could better support their recovery if additional steps were taken to enhance accountability and the quality of available treatment. While contracts can be used to foster accountability with service providers, criminal justice agencies do not consistently use these agreements to set expectations. In addition, because CSBs do not have the capacity to immediately serve all offenders referred to them, many criminal justice agencies provide in-house substance abuse treatment in order to expedite access to services. While these in-house services can be beneficial, they tend to utilize staff with lower qualifications, have fewer measurable goals, and be less likely to ensure proper implementation of evidence-based practices compared to CSBs and private providers. As a result, in-house programs may not be as effective as services purchased from other substance abuse providers.

Criminal Justice Agencies Do Not Consistently Hold Third-Party Providers Accountable for Quality of Services Delivered

Although nearly 70 percent of criminal justice agencies surveyed by JLARC staff enter into contractual agreements with substance abuse treatment providers, they do not consistently make demands to ensure the efficient and effective provision of services. For example, while nearly two-thirds of community-based probation offices require that contracted providers serve their clients within a specified period of time, other agencies generally do not require providers to expedite services (Figure 27).

Figure 27: Agencies Do Not Consistently Include Timeliness Requirements in Service Contracts With Third-Party Providers (2007)



Source: JLARC staff survey of providers and purchasers of substance abuse services.

In addition, criminal justice agencies do not consistently require service providers to supply information about their clients' progress. On average, only 59 percent of agencies require providers to supply progress reports at least monthly, and 57 percent request periodic meetings with staff. Jails are the least likely to request monthly progress reports (18 percent) and meetings with staff (39 percent).

Interviews with criminal justice agencies indicate that holding third-party providers accountable by regularly sharing information on clients' progress helps to provide a better level of service. Consequently, inconsistent information sharing may compromise the quality of services provided to offenders. Criminal justice agencies and the providers with which they contract could improve the provision of services to offenders by sharing information more regularly.

Recommendation (11). The Departments of Corrections, Criminal Justice Services, and Juvenile Justice should adopt policies requiring local offices to enter into standardized contractual agreements with third-party providers of substance abuse services that hold the providers accountable for the quality of services provided, including requirements for reporting on clients' progress and timeliness of providing services.

Although In-House Programs Conducted by Criminal Justice Agencies Can Bridge Gaps, Greater Focus on Ensuring Effectiveness May Be Needed

Many criminal justice agencies have developed substance abuse services that are administered by in-house staff when waiting lists or logistical barriers prevent offenders from accessing services at CSBs or private providers. These programs help keep clients engaged in services and may, in turn, increase their likelihood of remaining free from drugs and alcohol. In fact, some criminal justice agencies feel that the services they provide are more effective than those provided by CSBs or private providers. However, staff who administer substance abuse programs in criminal justice agencies tend to be less qualified and use fewer measures to ensure the proper implementation of EBPs than their CSB and private provider counterparts. Therefore, although in-house programs fill an important gap for substance abuse treatment, it is unclear whether the quality and effectiveness of these services has been maximized.

In-House Programs Are Important Aspect of Addressing Offenders' Substance Abuse. Many criminal justice agencies provide substance abuse services with in-house staff due to the barriers that may preclude their clients from accessing services outside the agency such as waiting lists, logistical hurdles, and service gaps. In addition, many agencies see several advantages of providing in-house services rather than contracting with third-party providers, and 55 percent of criminal justice agencies view these programs as an important aspect of meeting the substance abuse treatment needs of their clients. Most criminal justice agencies report that in-house services are important because clients already have a relationship with their organization (75 percent), and their case managers and probation officers can collaborate more closely and share information about clients (88 percent), as well as know with certainty whether clients received services (71 percent).

Criminal justice agencies also believe that their in-house programs tend to be more effective than contracted services. Nearly 60 percent of criminal justice agencies responding to a JLARC staff survey indicate that their in-house programs are at least somewhat effective in meeting their expectations, compared to less than half for services provided by CSBs and private providers. Yet, most agencies indicated that a combination of in-house and contracted services was the best way to meet their clients' substance abuse treatment needs. However, a lack of funding to hire more staff to provide services prevented 71 percent of respondents from offering in-house substance abuse programs as a supplement to contracted services.

Staff Certification, Measurable Goals, and Limited Adherence to Evidence-Based Practices May Compromise Service Efficacy.

Although in-house services provided by criminal justice agencies are an important aspect of meeting offenders' substance abuse treatment needs, some indicators suggest that the effectiveness of these services could be enhanced. For example, clinical staff in criminal justice agencies are less likely to hold a certification than their counterparts at CSBs and private offices. In most CSBs, the majority of clinical staff holds credentials that are designed to enhance the provision of substance abuse services. In contrast, fewer than 25 percent of clinical staff hold credentials in most criminal justice agencies. Certification ensures that service providers meet a minimum level of competency to administer substance abuse programs and services. In their absence, and combined with a lack of clinical supervision in most criminal justice agencies, individuals responsible for the administration of substance abuse programs may lack the qualifications to deliver effective services.

Tracking clients' outcomes is another important aspect of providing substance abuse services because it can indicate whether programs are effectively addressing clients' needs, and help staff identify areas needing improvement. While 72 percent of CSBs and private providers indicate that they have measurable goals to determine the effectiveness of the substance abuse services they provide, only 42 percent of criminal justice agencies report having developed any goals.

Properly implementing and ensuring adherence to evidence-based practices (EBPs) can also help optimize the effectiveness of services provided to offenders who abuse drugs or alcohol. More than 48 percent of CSBs and private providers report using critical elements to ensure adherence to EBPs, and 41 percent of criminal justice agencies employ such elements to ensure proper implementation. Improper implementation can compromise the effectiveness of EBPs and ultimately undermine clients' progress toward recovery.

While criminal justice agencies clearly fill a need and their substance abuse services are an important component of the continuum of care, they should be encouraged to increase staff qualifications, track outcomes, and more consistently follow EBPs. DMHMRSAS and local CSBs could lend their expertise to criminal justice agencies to increase the use of EBPs and ensure they are properly implemented.

LACK OF ADEQUATE CONTINUITY OF CARE AND RE-ENTRY SERVICES MAY REDUCE EFFECTIVENESS OF OFFENDER TREATMENT

While substance abuse services provided to incarcerated offenders appear to generally yield positive results, the benefits of treatment may be partially offset by the barriers faced by inmates when they return to their communities. Inadequate coordination and communication between institution and probation staff undermines inmates' continued involvement in substance abuse treatment, which is widely accepted as a critical component of recovery. In addition, most former inmates receive limited support securing employment and housing, which can impair their ability to sustain a drug- and crime-free lifestyle. Consequently, focusing strictly on the quality of institution-based substance abuse treatment may not be sufficient to minimize costs and improve public safety, and greater attention may need to be placed on adopting models that continue to combat recidivism after inmates' release.

Lack of Continuity of Care Between Secured Environment and Community May Undermine Benefits of Treatment

Limited coordination appears to exist between institution- and community-based personnel of criminal justice agencies serving adults. As a result, planning for community-based substance abuse treatment often does not begin until the offender has returned home, which may delay access to services by several weeks. These delays are problematic because former inmates are most prone to relapse immediately after they are released and are re-exposed to the environment and triggers that supported their substance abuse prior to incarceration. As a result, the benefits of institution-based treatment may be undermined without proper continuity of care in the community.

Nearly 70 percent of State and community-based probation agencies indicated that coordination with jails and prisons is ineffective.

Limited Coordination Exists Between Adult Probation Offices and Institutions. Based on a JLARC staff survey, nearly 70 percent of State and community-based probation agencies indicated that coordination with jails and prisons is ineffective. In particular, probation staff interviewed during site visits reported that they are not consistently notified of inmates' impending release, and that any notification typically does not elaborate on inmates' substance abuse treatment needs after release. As a result, continuity of care cannot be maintained for the majority of former inmates who require ongoing substance abuse services. Instead, probation officers must usually address former inmates' need for ongoing substance abuse services when offenders are first required to report to them.

While probation officers can readily help offenders locate nearby support groups such as Alcoholics Anonymous and Narcotics

Anonymous, it may take weeks to access services provided by CSBs because of inadequate service capacity. Yet, according to probation and clinical staff interviewed during site visits and a large body of research literature, inmates are most prone to relapse during the first 90 days after their release. Ready access to substance abuse services in the community is critical. With better coordination and advance notification, offenders could be placed on CSB waiting lists prior to their release and be ready to commence treatment immediately, thereby eliminating gaps in treatment.

In contrast to the poor level of coordination that appears to occur in the adult correctional system, only 12 percent of CSUs reported that coordination with DJJ institutions is ineffective. DJJ has developed a process that assigns a parole officer to each juvenile upon his or her commitment to a correctional center and keeps the parole officer involved with institutional counselors throughout the incarceration period. Prior to every juvenile's release, parole officers and institutional counselors collaborate in designing a parole plan that incorporates substance abuse services when needed.

DJJ and DOC staff indicated that one of the key differences between the juvenile and adult correctional systems is the volume of inmates released each year: whereas fewer than 1,000 juveniles are released from correctional centers annually, more than 12,000 adults are released from prisons and an even greater number from local and regional jails. Consequently, far more resources would be needed to implement DJJ's release process in the adult correctional system. Furthermore, the volume of former adult inmates needing substance abuse services could not be absorbed by CSBs that are unable to meet current demand.

Barriers to Inmates' Reentry Into Community Could Undermine Recovery From Substance Abuse

Nearly every Virginia inmate who received substance abuse treatment will ultimately be released into the community and have to utilize the skills learned during institution-based treatment to remain substance- and crime-free. However, a variety of barriers such as joblessness and homelessness can precipitate recidivism. While these barriers can affect all former inmates, they are especially problematic for substance abusers because they can increase the odds of relapse which, in turn, may also result in new crimes. Consequently, an important element of relapse and recidivism prevention includes addressing barriers to community reentry. The importance of reentry initiatives has been acknowledged at both the State and federal levels. In fact, federal legislation that would fund states to implement reentry initiatives is currently pending in Congress.

Virginia surveys and JLARC staff interviews with criminal justice staff and prison inmates indicate that most inmates face barriers to employment, housing, and restoring family connections upon their release. The majority of inmates have no high school diploma or GED, one quarter have no employment history, and all have a criminal record which can limit employment opportunities. In addition, many inmates have no home to return to because they have alienated friends and family members or do not want to be exposed to others' substance use. Moreover, former inmates generally lack sufficient financial resources to secure housing before they start working again. These environmental stressors combined with renewed exposure to the triggers that sustained their substance abuse prior to incarceration can lead to relapse for some former inmates regardless of the quality of the substance abuse treatment they received in jail or prison.

Virginia has been involved in a multitude of initiatives aimed at minimizing recidivism by better addressing barriers to reentry into the community. Most notably, Virginia was one of seven states selected by the National Governors Association to participate in its Prisoner Reentry Policy Academy beginning in 2003. The Prisoner Reentry Policy Academy was formally established in Virginia through Executive Order Number 22 in 2006. The State's reentry academy brings together staff from a variety of criminal justice agencies as well as agencies and organizations that provide services to former offenders and their families. Academy members have worked together to identify the root causes of recidivism and developed a reentry model that is being piloted in five Virginia localities. This model involves pre-release planning, community collaboration, integrated service delivery, and connections to positive community and family influences. The pilot strategy will help determine which methods are most cost-effective in decreasing recidivism. In addition to the Prisoner Reentry Policy Academy, several criminal justice agencies have also implemented programs to address specific barriers focusing on enhancing educational attainment, facilitating access to housing, and restoring family connections, among others.

Since 2005, a legislative subcommittee has reviewed the reentry efforts underway in Virginia, synthesized findings from the various reentry initiatives, and made recommendations on how best to address recidivism. While many of the subcommittees' recommendations were adopted, several remain largely unaddressed, including

- requiring the development of comprehensive reentry plans for inmates,

- providing funding for additional substance abuse treatment for prison inmates and offenders on State probation,
- providing funding to expand capacity of substance abuse services in the community, and
- providing funding for the statewide expansion of the reentry model currently piloted in five localities.

Transitional Resources Could Help Bridge Institution and Probation Supervision and Reduce Recidivism

Because of the importance of ensuring continuity of care and addressing barriers to reentry, a few transition specialists have been put in place to improve coordination and planning between prison and State probation staff, and to identify resources available to support former inmates' successful reentry into their communities. A variety of services and resources frequently exists to mitigate common barriers such as housing and employment, but these services are often very fragmented and difficult to find. Transition specialists can help identify available resources and coordinate them to ease offenders' return to the community in order to reduce their likelihood of committing further crimes.

Currently, DOC transition specialists facilitate reentry for inmates who participated in the community-based transitional therapeutic communities (TTC) and, to a lesser extent, the institution-based therapeutic communities (TC) programs. TTC transition specialists establish contact with probation offices 30 days before participants are expected to complete the program and begin planning for the array of services, including substance abuse treatment, which participants may need once they no longer receive TTC supports such as housing. A similar process takes place for TC participants who are nearing release from prison, but fewer TC transition specialists exist to serve the large TC population, and they typically cannot provide as intensive a level of support as their TTC counterparts. Consequently, while they may develop a transition plan and notify probation officers of a TC participants' impending release, generally no steps are taken to secure the resources needed to execute the inmate's transition plan. Moreover, prison-based transition specialists do not have counterparts in probation offices, and must therefore work with probation officers whose job responsibilities focus primarily on ensuring proper supervision and public safety rather than facilitating access to services.

To improve continuity of care and proactively address barriers to reentry that may precipitate recidivism, transition specialist positions could be added in Virginia prisons and probation and parole offices. Five transitional specialist positions in probation offices were authorized for the 2008-2010 biennium at an approximate

cost of \$0.5 million per year. However, community-based transition specialists need institution-based counterparts who are familiar with inmates' individual situations and needs. Moreover, there are 43 probation offices and 40 prisons across the State, which cannot be served by only five transition specialists. To increase the benefits of the State's existing investment in transition resources, additional specialist positions could be created on a pilot basis in the prisons that most frequently interact with the five probation offices where community-based transition specialists will be deployed at an approximate cost of \$0.5 million per year. The benefits of a fully developed transition program could be evaluated by DOC and used to determine the value of adding specialist positions in all Virginia probation offices and institutions.

Recommendation (12). The Virginia General Assembly may wish to consider funding the addition of five prison-based transition specialists who would collaborate with existing community-based transition specialists to facilitate prison inmates' return into the community.

Effective Prevention System Needed To Mitigate Effects of Substance Abuse

In Summary

While national studies indicate that prevention programs can be effective, these studies typically rely on short-term results and do not assess long-term effectiveness in preventing substance abuse and its adverse consequences. In Virginia, it is largely unknown whether prevention programs have attained the level of short-term effectiveness that research has shown to be possible. Outcome evaluations conducted by programs across Virginia are inconsistent and, in some cases, absent. Furthermore, limited statewide information exists to assess changes in community-level outcomes. Despite limited data on program effectiveness, it is clear that certain aspects of the substance abuse prevention system could be improved to maximize short-term outcomes. While collaboration is strong across many State and local agencies, the allocation of existing resources could be improved with greater State coordination and direction. In addition, prevention programs do not reach all communities, and certain high-risk populations appear to be underserved due to insufficient resources. Finally, the effectiveness of prevention programs may be undermined by the limited focus placed on ensuring the proper implementation of proven practices and staff qualifications.

Prevention is the first step on the continuum of substance abuse services. As discussed in Chapter 2, substance abuse has numerous adverse consequences that create substantial costs for the State and localities. The most effective means of minimizing these costs is to avoid them altogether. Prevention services and initiatives aim to prevent substance use, which can ultimately escalate into abuse. In theory, preventing substance abuse would not only lower the associated costs but also decrease adverse societal consequences, such as crime and diseases that are attributable to drug and alcohol use. In practice, it is important that effective prevention programs be identified and implemented in order to reap the theoretical benefits of prevention efforts. However, it is currently not possible to assess whether and to what extent Virginia prevention programs succeed in curbing substance use and abuse.

SHORT-TERM IMPACT OF PREVENTION SERVICES UNKNOWN IN VIRGINIA, AND LONG-TERM EFFECTIVENESS GENERALLY DIFFICULT TO DEMONSTRATE

The social and fiscal impact of substance abuse prevention services is largely unknown both nationally and in Virginia. A review of the national literature suggests that most substance abuse prevention programs have not been evaluated, but research has found that some programs are effective. However, effectiveness has been

Research Methods

JLARC staff interviewed prevention staff in multiple State agencies as well as community services boards (CSBs) during site visits to seven regions of the State. JLARC staff also conducted four prevention surveys of (1) the Governor's Office for Substance Abuse Prevention collaborative members, (2) CSB prevention coordinators, (3) Safe and Drug Free Schools coordinators, and (4) substance abuse community coalitions. In addition, JLARC staff conducted an extensive review of the research literature on substance abuse prevention.

characterized primarily by short- rather than long-term outcomes. In Virginia, the inconsistency in outcome measures used across local prevention agencies and limited knowledge about community-level outcomes impede the State's ability to identify which programs effectively curb substance use and abuse and reduce costs to the State and localities.

Performance of Many Prevention Programs Is Unknown or Ineffective, but National Literature Recognizes That Prevention Can Yield Positive Results

National literature reviews cite a deficit in substance abuse prevention research demonstrating effectiveness. Of those prevention programs reviewed for effectiveness, many are found not to be effective at reducing substance use. However, some programs do appear to positively affect outcomes. For example, a review of substance abuse prevention studies published since 1966 showed that 76 percent of programs produced positive results. In addition, the National Registry of Evidence-Based Programs and Practices (NREPP), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), reviewed more than 1,100 substance abuse prevention programs from 1997 to 2003 and identified 66 (six percent) of these as "model" evidence-based programs (EBPs). Because of the high threshold used to designate programs as evidence-based, it should be expected that only a small proportion of them would rise to this level.

Outcome Measures Generally Track Short-Term Results and Are Not Standardized

Evaluations of substance abuse prevention programs typically track short-term results. Based on a review of meta-analyses and literature reviews, few recent long-term studies of substance abuse prevention have been conducted. One review of long-term substance abuse prevention studies identified only 25 studies published since 1966 which showed positive outcomes during follow-ups ranging from two to 15 years. Researchers report that most programs do not track long-term outcomes due to the difficulty in following program participants over time, and because only programs with funding specifically targeted for evaluation have the resources to track long-term outcomes. Therefore, the long-term effectiveness of prevention programs in mitigating the adverse consequences of substance abuse to the State and localities is usually unknown.

In addition, no standard outcome measures appear to exist for evaluating prevention programs. For example, the developers of EBPs each create their own measures, which vary from one program to the other. As a result, it can be difficult to compare effec-

tiveness across different programs and to determine which ones represent a better use of resources. Most programs that are evaluated focus on changes in 30-day substance use, perception of risk, and disapproval of use. One researcher also notes that many programs measure outcomes through changes in knowledge, attitudes, and refusal skills as opposed to substance use, which may be a better indicator of effectiveness.

Outcome Evaluations Are Absent or Inconsistent in Virginia

The issues facing Virginia with respect to measuring the effectiveness of its prevention programs mirror those experienced nationally. Not all prevention programs are evaluated in Virginia, especially those administered by community services boards (CSBs). This appears to occur in part because State agencies do not consistently require local offices to collect data that could be used to evaluate their programs, and also due to a lack of local resources to gather or evaluate this information. As a result, it may be difficult to identify which prevention initiatives in Virginia should be undertaken in order to minimize substance use and abuse, and avoid future costs.

CSBs are subject to performance contracts enforced by the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), which require that all EBPs be evaluated. This requirement is reinforced by federal guidelines governing the Substance Abuse Prevention and Treatment Block Grant (SAPT), which is the primary funding source of CSB prevention initiatives. However, a JLARC staff survey finds that 39 percent of CSB prevention programs are not evidence-based and are, therefore, exempt from this requirement. In contrast, the Safe and Drug Free Schools (SDFS) program administered by the Virginia Department of Education (DOE) requires all prevention programs to establish and track goals aimed at reducing drug use and violence. In addition, projects awarded competitive grants using the Governor's discretionary SDFS funds must be evaluated each year.

While CSBs can choose to evaluate programs that are not evidence-based, DMHMRSAS prevention staff indicate that many CSBs have inadequate staffing or resources to assume this additional responsibility. Moreover, evaluating programs that are not evidence-based is especially difficult. Whereas outcome measures have usually been identified by the developers of EBPs, local staff would need to develop their own outcome tracking instruments to evaluate other programs. Designing evaluations is resource intensive and requires expertise which State and local prevention staff agree is generally not available.

In addition, the outcomes tracked by local offices appear to vary greatly. According to JLARC staff surveys of CSB and SDFS prevention coordinators who track outcomes, 41 percent follow up with participants after completion while 55 percent track outcomes only during the program. This lack of consistency in outcome measures appears to occur because standardized, statewide outcomes have not been developed. As a result, the effectiveness of individual programs cannot be compared, ineffective programs cannot be identified and remedied, and resources cannot be allocated toward the prevention initiatives that appear to yield the most positive outcomes.

Finally, existing outcome measures may not always be adequate in assessing the performance of prevention programs. Local prevention coordinators appear to need additional training and technical assistance in order to develop adequate measures and conduct robust evaluations. According to a JLARC staff survey of prevention coordinators, only one-third of CSBs and 16 percent of responding SDFS coordinators indicate that their organization is very effective in evaluating programs. The 2006-2007 SDFS progress report also finds that there is a wide range of proficiency across school divisions in developing appropriate goals and measuring progress, and more than half of SDFS coordinators report a priority or moderate need for additional assistance in program evaluation. State prevention staff report that these issues occur because local prevention coordinators frequently lack the time and training necessary to effectively evaluate their programs. Moreover, there are not enough State prevention staff to bridge this gap through technical assistance. DMHMRSAS employs two full-time staff to support 40 CSBs, and DOE offers three staff to support 132 public school divisions as well as three schools considered to be divisions for federal funding purposes. In contrast, recipients of competitive SDFS grants receive on-going training and technical assistance throughout the duration of the program, and cross-site evaluations are conducted annually with the assistance of Virginia Commonwealth University staff to assess program implementation and outcome measures.

State Agencies Do Not Consistently Hold Local Offices Accountable

While the majority of programs are evaluated locally in some fashion, these results are currently not being reviewed by State agencies in order to hold local offices accountable for administering effective programs, identifying best practices, and adjusting resource allocations if needed. Although they are available to discuss evaluation results as needed, DMHMRSAS prevention staff do not systematically collect or review program outcomes. As part of their annual progress report, DOE requests a summary of results from

South Carolina Implemented a Prevention Data Infrastructure

South Carolina used funds from the Substance Abuse Prevention and Treatment Block Grant to hire a consultant to create a data collection infrastructure for prevention programs. This includes standardized prevention outcome measures assessed through pre- and post-test evaluations, technical assistance for local substance abuse prevention agencies, and comprehensive local evaluation reports. The standard outcomes data is used to demonstrate effectiveness and advocate for increased prevention funding.

each school division in reaching their SDFS objectives. Both agencies do collect and review process measures such as the number of people served and type of services provided. However, this information cannot be used to evaluate the effectiveness of prevention programs statewide. DMHMRSAS and DOE both cite insufficient State staff to conduct meaningful reviews of the outcome information collected locally, and the absence of an infrastructure to collect and share this data. Furthermore, reviewing existing outcome evaluations may be of limited value given that certain programs are not evaluated while others may not be properly measured, as discussed previously. In order to reduce costs and determine whether State and local funding should be used to supplement current prevention efforts, Virginia should consider investing in the human and systems infrastructure necessary to develop a mechanism for statewide evaluation of prevention programs.

In order for State agencies to hold CSBs and school divisions accountable for administering effective programs, the following resources are needed:

- training for local prevention staff on designing and conducting appropriate program evaluations;
- additional staffing for local offices to collect data necessary to complete evaluations for all prevention programs;
- additional qualified State prevention staff to provide technical assistance to local staff with program evaluations and to review the results of these evaluations;
- standardized statewide outcome measures that are flexible enough to accommodate a diverse Virginia population; and
- an information system infrastructure to allow evaluation results to be compiled and shared with State agencies in a way that minimizes the incremental burden upon local staff.

Recommendation (13). The Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and Virginia Department of Education (DOE) should work with local offices to assess the level and type of resources needed to track outcomes and conduct evaluations effectively for local prevention programs. DMHMRSAS and DOE staff should also assess the level and qualifications of additional resources needed in the State prevention offices to provide adequate training and technical assistance to local prevention staff, and to review the results of these evaluations. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Recommendation (14). The Department of Mental Health, Mental Retardation and Substance Abuse Services and Virginia Department of Education should convene relevant State and local stakeholders to facilitate the development of statewide standard outcomes measures to capture the impact of prevention programs on Virginians. A plan detailing the timeline for developing and implementing these measures across the State should be developed, and an assessment should be conducted to identify the resources needed to implement a statewide system for tracking program outcomes, including the need for information technology. Preliminary results should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Limited Information Exists for Assessing Changes in Community-Level Outcomes

Another means to gauge whether prevention efforts are effective is to measure changes in indicators of substance use and abuse in the community, but statewide and comprehensive youth surveys have not been conducted in Virginia to gather this information. According to GOSAP, a youth survey is the most efficient way to ask youths about their attitudes, perceptions, and initiation of risky behaviors, such as substance use, anger and violence, and suicidal thoughts.

Changes in community-level outcomes are a useful supplement to program-specific evaluations, which often examine small numbers of participants and reflect only one brief period of time. In recent years, SAMHSA developed national outcome measures (NOMs) that capture changes in population behavior across multiple domains such as crime and social connectedness (Table 26). While some information can be gathered through existing mechanisms, Virginia currently lacks data to adequately determine whether all NOMs are improving over time. For example, the Department of Motor Vehicles gathers information on the number of alcohol-related motor vehicle crashes, which can be used to calculate one NOM. In contrast, limited data is available to capture the extent to which families discuss drug use with their children. State prevention staff report that SAMHSA plans to cease funding agencies that cannot show improvements in NOMs performance. However, these measures must first be captured before improvements can be seen and reported.

Prevention staff in Virginia and across the nation report that youth surveys on substance use are the most effective means of ga-

Table 26: Virginia Lacks Data To Report Certain National Outcome Measures Required by SAMHSA

Domain	Measure	Data Available From	
		Any Source	Virginia Source
Reduced Morbidity	30-day substance use	Yes	No
	Perceived risk of use	Yes	No
	Age of first use	Yes	No
	Perception of disapproval	Yes	No
Employment/ Education	Average school attendance	Yes	Yes
Crime	Alcohol related traffic fatalities	Yes	Yes
Social Connectedness	Family communication around drug use	Yes	No
Access/Capacity	Number of persons served by age, gender, race and ethnicity	Yes	Yes
Retention	Percent of youth seeing, reading, watching or listening to a prevention message	Yes	No
Cost Effectiveness	Services provided within cost bands	Yes	Yes
Use of Evidence-Based Programs (EBPs)	Total number of EBPs and strategies	Yes	Yes

Source: Substance Abuse and Mental Health Services Administration, National Outcome Measures, and DMHMRSAS prevention staff.

thering the information needed to gauge community-level trends and track NOMs. Some youth surveys have been conducted in Virginia to capture salient information about children's experiences. Such a survey was last performed in 2005, and another one is planned for 2009 through a five-year grant from the Centers for Disease Control and Prevention (CDC) secured by the Virginia Department of Health. The CDC grant will provide \$35,000 to \$50,000 per year to administer the survey to a random sample of students.

One shortcoming of the CDC-funded survey is that results will only be valid at the state level, and it will not be possible to draw detailed and representative conclusions about areas that need attention in specific regions and localities. To conduct a survey of all Virginia public school students in the 6th, 8th, 10th, and 12th grades would cost a total of approximately \$600,000 based on a GOSAP analysis. However, it may be possible to derive regional- and local-level results from a survey that is administered to a representative sample of students that exceeds the sample size planned for the CDC survey, yet does not encompass the entire population of public school students in relevant grade levels.

Youth surveys cannot be successfully conducted statewide because school divisions and schools where surveys are administered have discretion over whether to participate. According to State and local staff interviewed for this study, some schools do not want to acknowledge the presence of substance abuse in their student population and therefore choose not to participate. Meanwhile, 55 percent of school divisions are already proactively administering their own youth survey which they use to determine where to concentrate their efforts, based on the 2006-2007 SDFS progress report. According to a JLARC staff survey of prevention coordinators, other localities appear to rely primarily on more subjective community needs assessments, staff experience, and word of mouth to allocate resources.

While two separate 2007 reports to the Governor recommended initiating a statewide youth survey, the cost of undertaking this effort combined with concerns over privacy and time requirements have forestalled its implementation. According to the Governor's Office for Substance Abuse Prevention (GOSAP), Virginia is one of only four states that does not conduct a statewide youth survey, and this places the State at a competitive disadvantage when applying for federal grants. Moreover, the federal SAPT block grant requires states to show improvement on NOMs in order to continue receiving funding, but certain outcomes can only be assessed with data gathered through statewide surveys. While the *Code of Virginia* allows for local youth surveys to be administered in schools with parental notification, it does not require school divisions to participate, and no statewide funding has been made available to conduct a statewide, comprehensive survey.

Recommendation (15). The General Assembly may wish to consider requiring all Virginia school divisions to participate in a statewide youth survey, and supplementing the federal Centers for Disease Control and Prevention grant secured by Virginia so that a youth survey that is sufficiently comprehensive to capture regional- and local-level information on substance use and abuse can be administered.

GREATER COORDINATION AT ALL LEVELS OF PREVENTION SYSTEM COULD IMPROVE ALLOCATION OF RESOURCES

While collaboration is strong among State agencies involved in prevention, greater coordination of services and visibility could improve the efficiency of substance abuse prevention and the allocation of finite resources. The situation is similar at the community level: many localities report strong collaboration, but the coordination of prevention services appears to be minimal in some areas of the State. The lack of coordination at both the State and local levels may lead to inefficiencies and duplication of efforts.

GOSAP Has Fostered Strong Communication and Collaboration Between State Agencies Involved in Prevention

The GOSAP collaborative appears to facilitate positive relationships between State-level prevention coordinators. All respondents to a JLARC staff survey of collaborative members said that GOSAP has improved relationships between State agencies, and 75 percent reported that the collaborative has led to more collaboration between State agencies. As described in Chapter 1, GOSAP's mission is to lead and coordinate the Commonwealth's resources to reduce the incidence and prevalence of substance abuse and its consequences. To this end, GOSAP fosters collaboration across prevention entities. By holding meetings four times per year, GOSAP allows State-level prevention coordinators from 13 agencies to share information and work together on relevant initiatives. For example, GOSAP engaged several State agencies to produce a prevention guide for parents. The Department of Criminal Justice Services provided technical assistance during its development, and the Departments of Fire Programs and Motor Vehicles (DMV) arranged for its distribution through fire stations and local DMV branches. According to prevention staff, cross-agency collaboration is key to promoting a more efficient prevention system and maximizing the impact of finite resources.

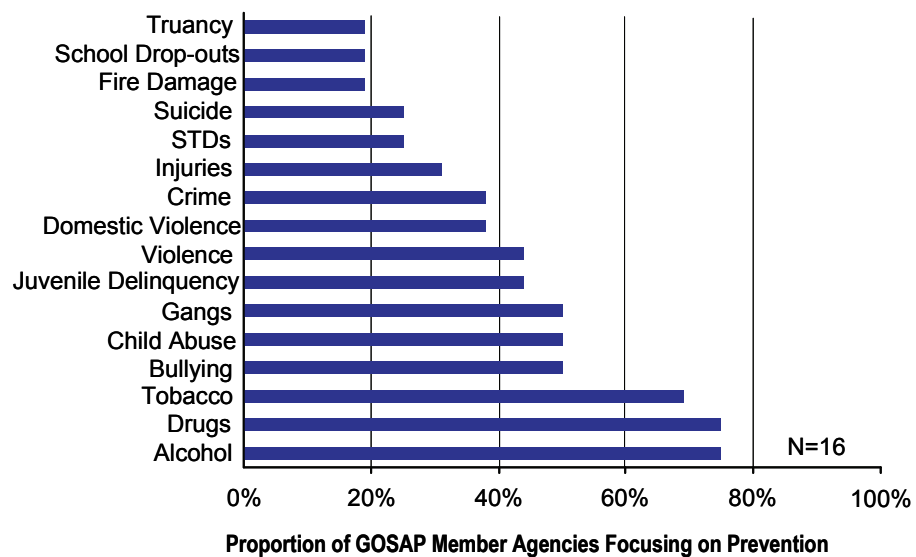
State and Local Agencies Report Lack of a Statewide Prevention System

Strong collaboration between State agencies does not appear to have yet translated into the formation of a statewide, coordinated prevention system with a clear plan. In particular, State and local agencies involved in substance abuse prevention report that services are not adequately coordinated across the State. The majority of State and local prevention coordinators who responded to JLARC staff surveys indicated that the clarity and relevance of Virginia's prevention agenda needed improvement. Moreover, 41 percent of respondents stated that a coordinated statewide system is needed to improve the effectiveness of prevention initiatives in Virginia. As a result, the efficiency and effectiveness of prevention initiatives may be weakened in the State. According to a survey of GOSAP collaborative members, half of respondents indicated that the collaborative could further improve the efficiency of prevention programs, and nearly one-third reported that GOSAP's impact on the effectiveness of prevention initiatives could also be improved.

It appears that Virginia may not have yet achieved a statewide prevention system in part because not all agencies have embraced the same vision. In fact, a quarter of GOSAP members indicated on a JLARC staff survey that the collaborative needed to improve upon creating a shared vision. While members of GOSAP report

that they are committed to the work of the collaborative and that their respective agencies support this work, some members appear to question their role in substance abuse prevention. Specifically, the collaborative is comprised of representatives from the GOSAP office and 12 State agencies whose missions include prevention of a variety of issues, including not only substance abuse but also tobacco, child abuse, violence, and fire (Figure 28). Because many of these issues are interconnected and substance abuse can be a factor in triggering numerous adverse consequences, GOSAP has chosen to utilize a holistic approach to prevention.

Figure 28: GOSAP Collaborative Member Agencies Address Many Prevention-Related Issues



Source: JLARC staff survey of GOSAP collaborative members.

However, some agencies report that this weakens GOSAP's focus on its primary purpose of curbing substance use and abuse, thus possibly limiting the impact that GOSAP has on substance abuse prevention. Moreover, two collaborative members told JLARC staff that recent GOSAP initiatives are unrelated to their agencies' missions, and another member agency reports they are not involved in prevention. According to GOSAP staff and other collaborative members, a comprehensive approach is more efficient and effective because research shows that factors that prompt a child to use substances are the same as those that influence other problem behaviors such as violence and delinquency. While each approach appears to have some merit, GOSAP should address and resolve the philosophical differences about the collaborative's scope, find common ground across all member agencies, and determine when and how they should collaborate.

Another factor that may undermine the State and GOSAP's ability to set a clear and relevant agenda is the lack of comprehensive and timely information about the substance abuse issues that are most pressing in Virginia. As discussed above, there is limited information from a comprehensive youth survey to identify the areas and populations on which to focus prevention efforts. As a result, some prevention staff have indicated that GOSAP's agenda is largely reactive and reflects national interests rather than local needs. For example, last year's GOSAP prevention conference focused on bullying. This issue appears to be largely a federal area of focus and may be of less relevance in Virginia than issues such as the use of inhalants. To best address Virginia's prevention needs, GOSAP should increase the use of survey and related data to guide its agenda and efforts.

GOSAP members also expressed concerns that the scope and effectiveness of the collaborative was highly dependent upon gubernatorial and legislative priorities, which have the potential to change every few years. In fact, nearly two-thirds of members who responded to a JLARC staff survey indicated that the degree of emphasis placed on prevention by the administration and the legislature was key to GOSAP's effectiveness. Because fostering collaboration and trust across agencies can be a lengthy process, a lack of stability could set back the progress made by GOSAP in these areas over the last few years.

Some GOSAP members also reported that prevention may receive more visibility and support if higher-level agency staff were involved in GOSAP or a similar forum, and if GOSAP's executive director was a full-time position reporting directly to the Governor. Currently, prevention staff rather than agency heads are assigned to GOSAP. As a result, prevention may not consistently be on some agencies' agendas. A forum in which the directors of State agencies convene to discuss prevention and hear about the work performed by GOSAP's current members could serve to elevate the issue of prevention in all State agencies as well as agencies' local offices. In addition, GOSAP is currently part of the Secretariat of Public Safety, and its executive director devotes only a portion of her time to prevention. Placing the GOSAP office under one Secretariat appears to be at odds with the collaborative's stance that substance abuse prevention cuts across numerous areas and all State systems. Furthermore, part-time leadership may be insufficient to provide the State with the level of guidance and coordination necessary to create an effective prevention system.

Collaboration Is Strong in Many Localities

Collaboration is widespread between local offices whose missions include prevention. Based on JLARC staff surveys of local preven-

tion entities, nearly two-thirds of CSBs and community coalitions report that their collaboration with other groups is very effective. However, only one-third of SDFS coordinators report effective collaboration. Staff resources may be a barrier to collaboration for the SDFS program: on average, SDFS coordinators spend four hours per week on prevention programming while CSB prevention coordinators tend to be full-time positions.

Local offices collaborate in a variety of ways such as providing services or technical assistance to each other, or co-administering programs. Community coalitions appear to be one of the most common mechanisms through which agencies collaborate. In addition, local entities can be required to collaborate with others as a condition of funding. For example,

- The CSB performance contract requires prevention staff to work with community coalitions to develop local prevention plans;
- Federal guidance for SDFS programs requires school divisions to involve parents and communities, and coordinate with other entities involved in violence and substance abuse prevention; and
- Community coalitions that receive Drug Free Communities (DFC) funding are required to have worked on substance abuse prevention initiatives with representatives from 12 sectors, including CSBs, businesses, schools, youth, and others for a minimum of six months prior to receiving the grant.

Some Localities Lack Meaningful Collaboration, and Many Have No Community Coalition To Provide Leadership

Although collaboration is widespread between local entities involved in substance abuse prevention, some localities do not appear to have achieved a level of meaningful collaboration. Twenty-one percent of CSB prevention coordinators and ten percent of SDFS coordinators rate the extent and nature of collaboration as weak. As a result, some community coalitions and CSBs reported that more collaboration is needed to enhance the effectiveness of substance abuse prevention.

Weak collaboration in some localities may be the result of insufficient State-level direction and the absence of community coalitions. As discussed above, State agencies have not consistently embraced the same vision and may not share a common agenda. Some of these State-level discrepancies may be filtering down to local offices and undermine collaboration to some extent. Furthermore, not all localities have a community coalition to provide community-wide leadership on substance abuse prevention initia-

tives. As described in Chapter 1, community coalitions connect multiple sectors to gain a more complete understanding of the community's substance abuse problems and coordinate comprehensive plans and programs to address them. Nearly all CSB prevention coordinators report that they collaborate with a community coalition, but not all localities are represented. For example, one CSB prevention coordinator told JLARC staff that no substance abuse community coalition was active in their catchment area, which includes seven counties. Another CSB leads a community coalition that covers ten localities.

The precise number and distribution of community coalitions are unknown because they are locally organized and are not represented by a statewide organization or reporting to a State agency. A lack of coordination at the community level may lead to the inefficient use of finite resources because of duplicated efforts. In addition, local collaboration enables agencies to better understand the needs of their entire community rather than only those of their own clients.

PREVENTION PROGRAMS LACK CAPACITY TO SERVE ALL VIRGINIA YOUTHS AT RISK OF USING SUBSTANCES

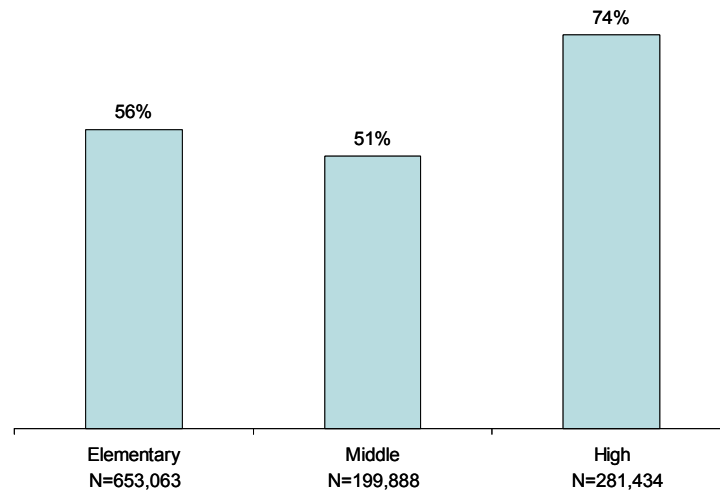
Access to substance abuse prevention services is limited in certain localities and for certain populations at greater risk for substance abuse, thereby undermining the State's ability to serve all youths at-risk of using or abusing substances. School-age children most frequently receive substance abuse prevention services, but SDFS-funded programs are not administered in all schools. In addition, youths at higher risk of abusing substances, such as school dropouts, are frequently unserved or underserved. Moreover, high-intensity prevention and early intervention services do not appear to be consistently available for youths who have already begun using substances. State and local prevention staff point to a lack of financial and human resources as undermining their ability to serve all Virginians in need of substance abuse prevention services. Because certain populations have limited or no access to substance abuse prevention programs, the impact of prevention initiatives may not be maximized in Virginia.

Some School Children Not Reached Through SDFS Programs

Prevention programs funded by SDFS do not reach all public schools in Virginia. According to the 2007 Virginia SDFS progress report, substance abuse and violence prevention programs were provided in 79 percent of public schools in 2006-2007. This percentage was greatest for high schools, and less for elementary and middle schools (Figure 29). DOE staff report a lack of financial re-

sources to reach all school-age children statewide. While prevention programs other than those funded by SDFS are offered, State prevention staff indicate that these are still insufficient to reach all Virginia youths. The lack of access to prevention services for some school children could undermine the impact of substance abuse prevention programs.

Figure 29: Proportion of Public School Students in Virginia Served by SDFS in 2006-2007, by School Level



Source: Virginia Department of Education, Safe and Drug Free Schools and Communities Act Program, Office of Student Services.

High-Risk Populations Appear To Be Underserved

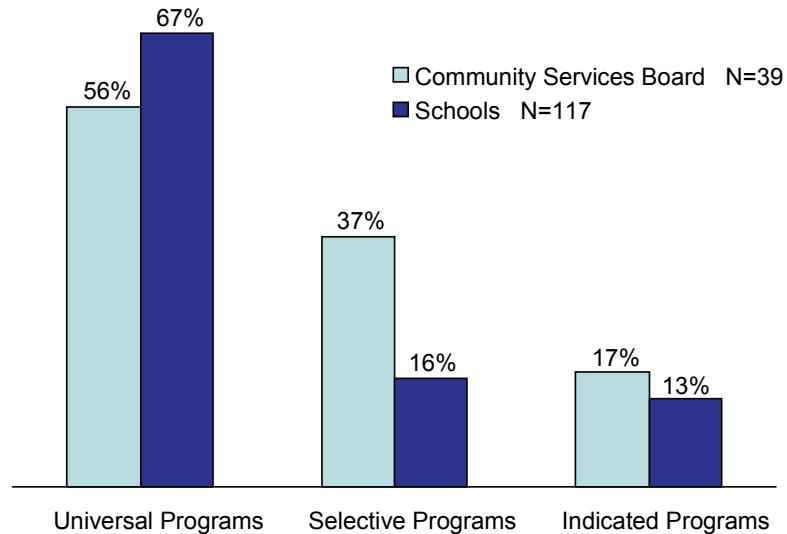
Based on a review of the research literature, preventing high-risk populations from using and subsequently abusing substances may provide the greatest opportunity to mitigate the costs of drug and alcohol abuse in Virginia. However, certain high-risk populations appear to be unserved or underserved in the State.

According to JLARC staff surveys of CSB and SDFS prevention coordinators, the populations most frequently unserved or underserved are school dropouts (59 percent), children of substance abusers (42 percent), and delinquent/violent youth (39 percent). Prevention programs which serve high-risk populations, called selective programs, are less frequently implemented by CSBs and SDFS. Based on JLARC staff surveys, 16 percent of SDFS and 37 percent of CSB prevention programs are selective (Figure 30).

The majority of other programs are universal and offered to everyone, regardless of their risk of using drugs and alcohol. Prevention coordinators report that high-risk populations can be difficult to reach. For example, because most youths are reached through school-based prevention programs, engaging school dropouts is a

challenge. As a result, prevention initiatives may not maximize cost avoidance because services are not provided to populations most at-risk of future substance abuse.

Figure 30: Distribution of Prevention Programs, by Targeting Strategy and Type of Local Office (February 2008)



Note: Numbers may not add to 100 percent due to rounding. Universal prevention programs serve everyone; selective programs serve high-risk populations; and indicated programs serve relatively new substance users.

Source: JLARC staff surveys of community services board and Safe and Drug Free Schools prevention coordinators.

Early Intervention Services Not Consistently Available for New Users

Youths who have begun to use substances but do not yet abuse them may not receive adequate services. “Indicated” prevention programs are early intervention services for relatively new users, and they are the type of prevention programs least frequently offered. According to prevention coordinators, 13 percent of SDFS and 17 percent of CSB prevention programs are indicated (Figure 30). State prevention staff at DMHMRSAS do not encourage CSBs to provide indicated programs to high-risk individuals because funding is insufficient and prevention staff may not be qualified to work with these individuals. In addition, some prevention staff believe that early intervention is a treatment rather than prevention function.

In addition, programs designed to link high-risk individuals, such as new users, with services also appear to be lacking in some communities. The problem identification and referral strategy, which specifically targets high-risk individuals, is used in only 44 percent of CSB prevention programs and 14 percent of SDFS pro-

grams. In order to better serve high-risk youths, student assistance programs are utilized in some school divisions to address the array of issues faced by students at high risk for substance abuse.

Student assistance programs (SAPs), funded at least partially by the SDFS grant, address the needs of students at high risk for substance abuse and other problems, but are not widely available throughout Virginia. SAPs serve the needs of at-risk students who (1) use drugs and/or alcohol, (2) are high risk for reasons unrelated to drugs or alcohol, and (3) are children of substance abusers. Nearly half (47 percent) of school divisions offer elements of SAPs in Virginia. According to a JLARC staff survey, 46 percent of SDFS prevention coordinators reported that greater access to SAPs would increase the effectiveness of prevention initiatives in school divisions. However, funding for SDFS has been decreasing, and many high-risk students do not have access to SAPs that could serve to prevent or reduce future substance abuse among these individuals.

Limited Resources Preclude Agencies From Serving All Youths Who May Benefit From Prevention Services

State and local prevention coordinators consistently report that current staff and funding levels are insufficient to provide access to substance abuse prevention services for all Virginians who could benefit from them. Accordingly, they cite sustainable funding and additional staff as the two most needed resources to enhance the effectiveness of prevention programs. Currently, there are no State funds dedicated to substance abuse prevention. As described in Chapter 1, federal grants largely support Virginia's prevention initiatives along with some local contributions. However, the case for investing State funds in Virginia's prevention system is weakened due to the limited amount of evidence showing that prevention programs can mitigate the long-term adverse consequences of substance abuse, and the lack of information about the effectiveness of Virginia programs in affecting even short-term outcomes.

The level of funding for substance abuse prevention is less than one-eighth of the investment made in treatment services in Virginia. In fiscal year 2006, Virginia prevention programs received \$21.5 million for substance abuse prevention services through a combination of federal and local funds, compared to \$175.3 million for substance abuse treatment. While no State funds were used for prevention services, staff analyses indicated that State funds represented 31 percent of spending on substance abuse treatment in 2006. According to the Office of National Drug Control Policy, Virginia is one of seven states that do not allocate state funds for substance abuse prevention to its lead substance abuse agency. Other

Virginia is one of seven states that do not allocate state funds for substance abuse prevention to its lead substance abuse agency.

states include Alabama, Arkansas, Louisiana, Massachusetts, Mississippi, and West Virginia.

Funding levels for prevention efforts have a direct effect on staffing. Based on a JLARC staff survey of SDFS coordinators, four staff are available to address substance abuse and violence prevention in each Virginia school division, which serve a total of 1,863 schools and more than 1.2 million students. Therefore, one professional is responsible for addressing the substance abuse and violence prevention needs of 2,200 students on average. Further, many of these staff have numerous other responsibilities besides prevention. In particular, SDFS coordinators spend an average of only four hours per week on prevention initiatives. CSB prevention coordinators reported that, on average, five staff address the prevention needs of all Virginians in their CSB's catchment area. Unlike for school divisions, most CSB prevention coordinator positions are full-time.

QUALITY OF PREVENTION PROGRAMS COULD BE IMPROVED

Inconsistent efforts to ensure proper implementation of evidence-based programs and inadequate staff qualifications may diminish the quality of substance abuse prevention programs offered in Virginia. Substance abuse prevention programs administered by CSBs and SDFS are largely evidence-based, but they must be properly implemented in order to ensure effectiveness. However, adherence to evidence-based programs appears to be ensured inconsistently statewide. In addition, some prevention coordinators lack experience and certification.

Evidence-Based Programs

Evidence-based prevention programs are evaluated in a research setting using outcome measures that assess changes in behavior, attitude, or knowledge related to substance use when compared to a control group that does not participate in the program.

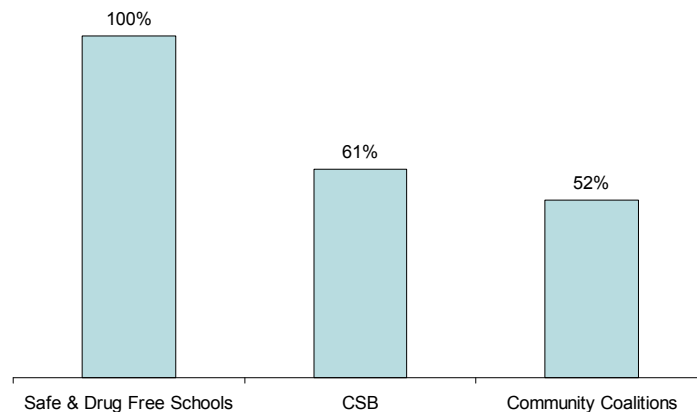
Most Virginia Prevention Programs Modeled After Evidence-Based Practices, but There Is Room to Expand

Currently, the majority of prevention programs provided in Virginia are evidence-based, as illustrated in Figure 31, including all SDFS-funded prevention programs. SDFS funding requires that schools and recipients of the Governor's SDFS set-aside follow four principles of effectiveness identified by the U.S. Department of Education, including the use of EBPs for all prevention programs. School divisions may also apply for a waiver from this requirement if they conduct a program evaluation that demonstrates the effectiveness of a local practice, but only one waiver was granted during the 2007-2008 school year.

Based on a JLARC staff survey of CSB prevention coordinators, 61 percent of their substance abuse prevention programs are evidence-based. The FY 2008 CSB performance contract requires that 50 percent of their prevention programs be evidence-based, and this proportion will increase to 75 percent in FY 2010. However, 13

out of 40 CSBs have not attained this goal, and no consequences are imposed for failing to meet this requirement. CSBs cite several barriers that preclude them from implementing more evidence-based programs. In particular, more than 70 percent of CSB prevention coordinators reported in a JLARC staff survey that the cost of purchasing EBPs from their developers is prohibitive. In addition, staff shortages and turnover can complicate EBP implementation.

Figure 31: Proportion of Prevention Programs Using Evidence-Based Practices, by Provider (February 2008)



Source: JLARC staff surveys of CSB prevention coordinators and substance abuse community coalitions, and SDFSCA Principles of Effectiveness.

Although community coalitions are not required to use EBPs, those that provide direct prevention services often do. For example, the Drug Free Communities grant does not require the use of EBPs except for the strategic prevention framework, a five-step evidence-based process for community planning. Yet, according to a JLARC staff survey of substance abuse community coalitions, more than half of respondents who provide substance abuse prevention programs consistently use EBPs.

The use of evidence-based programs and practices may ensure that funding is allocated to substance abuse prevention programs proven to yield positive outcomes. Nearly all State and local prevention coordinators indicate that EBPs are an important aspect of maximizing effectiveness, and one-third reported they are critical. As a result, State agencies may want to consistently require all prevention programs to follow proven practices. Because relying strictly on national EBPs could exclude effective models developed in Virginia, exemptions could be granted for local programs that have been evaluated, similar to SDFS guidelines. However, adequate resources must be made available for evaluation purposes.

Adherence to EBPs Is Not Consistently Ensured

Adherence to EBPs does not appear to be consistently ensured across substance abuse prevention programs in Virginia, suggesting that their effectiveness may be undermined. The research literature on EBPs shows that the effectiveness of evidence-based programs depends on proper implementation, and that poor implementation may lead to less successful outcomes. While adherence to evidence-based programs is characterized by different elements, the literature identifies several factors that are critical to proper implementation (Table 27). According to JLARC staff surveys, one-third of prevention coordinators report that their office does not use all critical factors to ensure adequate implementation. For example, one-third of local prevention staff indicated that their agency had implemented EBPs for a different population than the one intended by its developer.

Table 27: Critical and Important Elements of Ensuring Adherence to Evidence-Based Programs

Critical Elements	Important Elements
<ul style="list-style-type: none">• Provide start-up training on how to implement EBP• Work with program developer to adapt program to fit setting and population• Provide prescribed level of staff supervision• Provide same number of sessions as prescribed by program guidelines• Adhere to core components of program• Adhere to program guidelines and/or manual	<ul style="list-style-type: none">• Provide follow-up staff training• Ensure program training is provided by developer or another qualified trainer• Train supervisors to provide effective support to practitioners• Adhere to minimum staff qualifications• Adhere to staffing requirements• Adhere to recommended practitioner-to-client ratio• Adhere to recommended supervisor-to-practitioner ratio

Source: Dusenbury, Linda, et al. "A Review of Research on Fidelity of Implementation: Implications for Drug Abuse Prevention in School Settings." *Health Education Research*, 2003, and Stith, Sandra, et al. "Implementing Community-Based Prevention Programming: A Review of the Literature." *The Journal of Primary Prevention*, 2006.

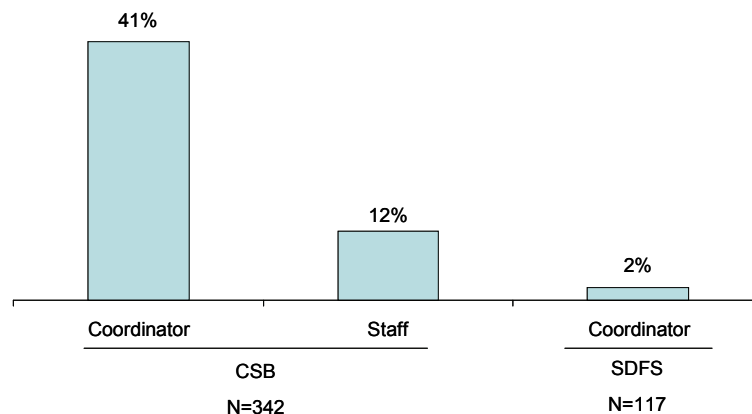
Insufficient funding, staff, and technical assistance from State agencies appear to impact local offices' ability to adhere to EBPs. However, as discussed earlier, State agencies lack the resources to provide additional technical assistance. Given that only certain prevention programs have been found effective, and that proper implementation is necessary to achieve positive outcomes, additional resources should be made available to State agencies for the provision of technical assistance on adhering to evidence-based programs.

Recommendation (16). The Department of Mental Health, Mental Retardation and Substance Abuse Services and Virginia Department of Education should determine how many staff and supporting resources are required to provide adequate technical assistance to local offices on selecting and adhering to evidence-based programs, and what expertise they should possess. Preliminary findings should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Staff Qualifications Could Be Enhanced

A small proportion of substance abuse prevention staff statewide is certified in prevention, and staff may need additional prevention training to achieve proficiency in their field. According to JLARC staff surveys and data from DMHMRSAS, 41 percent of CSB prevention coordinators, 12 percent of CSB prevention staff, and two percent of SDFS coordinators have been certified in substance abuse prevention (Figure 32). Certification provides evidence of proficiency in the field. Prevention staff without certification may lack the ability to implement effective programs in their locality.

Figure 32: Proportion of Prevention Staff With Certification



Source: JLARC staff surveys of CSB and SDFS prevention coordinators and DMHMRSAS data.

As discussed earlier in this chapter, local offices exercise considerable discretion over resource allocations and program implementation given the limited degree of State-level oversight. One-third of SDFS coordinators and ten percent of CSB prevention coordinators identified better qualified prevention staff as needed to improve effectiveness. Moreover, certification can be an effective tool for building credibility with prevention program participants.

The low proportion of substance abuse prevention staff in Virginia that hold certification may be due to the fact that they are not required to be certified, and often receive no benefit from obtaining certification. Unlike for clinical staff, most CSBs do not adjust compensation for staff who receive prevention certification. In addition, most school divisions do not offer or recognize prevention endorsements, and also do not compensate accordingly. While DMHMRSAS currently provides funding support for prevention coordinators applying for certification, the department may want to consider requiring CSBs to employ a minimum percentage of certified prevention staff and to reflect certification in compensation. Exemptions could be granted in communities where recruiting is a challenge. Such requirements may not be feasible for SDFS coordinators, who devote only four hours to prevention initiatives per week, on average.

In addition, more training could be offered to local prevention staff as a supplement or substitute to certification. Based on a JLARC staff survey of CSB prevention coordinators, 56 percent report that the State should provide greater support for training prevention staff. In addition, one-third of CSB, SDFS, and GOSAP collaborative prevention coordinators report that training prevention staff would improve the effectiveness of substance abuse prevention.

Conclusions and Potential Funding Options

In Summary

While Virginia's investment in the substance abuse programs evaluated for this report appears to frequently reduce costs to the State and localities as well as improve public safety and employment outcomes, this study suggests that additional steps could be taken to further mitigate the adverse fiscal and societal effects of substance abuse on Virginia and its citizens. Priority should first be placed on ensuring that existing substance abuse programs are effective. The State could then consider expanding the availability of services to populations that are currently unserved or underserved, focusing first on offenders due to their high impact on State and local budgets as well as public safety. If the State decides to expand the availability of services, potential funding options include appropriating the entire amount transferred by the Department of Alcoholic Beverage Control for substance abuse services as currently directed by budgetary language, or designating a portion of the incremental revenues produced by the State's recent expansion in alcohol sales capacity.

While substance abuse costs the State and localities in excess of \$613 million every year, results presented in this evaluation and other national studies indicate that substance abuse services can often mitigate the adverse consequences of drug and alcohol abuse and reduce costs. However, this study also suggests that Virginia still has an opportunity to improve several key areas in order to maximize the positive effects of substance abuse services. Although all the recommendations contained in this report aim to minimize the long-term fiscal impact of substance abuse upon State and local budgets, some of them could be prioritized to ensure that Virginia receives the greatest possible return on its investment in substance abuse services. House Joint Resolution 683 and Senate Joint Resolution 395 both direct JLARC staff to examine funding initiatives that could reduce the costs of substance abuse in Virginia. Therefore, several funding options are presented in this chapter.

ADVERSE EFFECTS OF SUBSTANCE ABUSE CAN BE MITIGATED THROUGH TREATMENT

The adverse consequences of substance abuse have a substantial negative impact upon the Commonwealth, imposing an economic burden of at least \$613 million upon the State and localities in 2006 and resulting in innumerable personal costs to Virginia families. The fiscal effects of drug and alcohol abuse are incurred primarily by public safety agencies, and will continue to rise as more jails and prisons are built to accommodate the growing offender population. Moreover, substance abuse takes a substantial toll on

all Virginians, whether they are victims of crime and drunk driving, contract diseases from drug and alcohol users, or experience the dissolution of their family or lose income due to a spouse's substance use disorder.

While substance abuse can have far-reaching effects, the evaluation conducted for this study and the national literature indicate that it can be effectively treated. As shown in Chapter 3, most programs evaluated for this study reduced costs to the State and localities. Moreover, the majority of programs evaluated yielded improvements in recidivism and employment. These findings regarding treatment effectiveness are supported by a vast body of research literature conducted nationally and in other states.

Still, substance abuse treatment did not produce short-term cost reductions for certain populations examined in this report, most notably prison inmates who participated in transitional therapeutic communities. While these results are concerning, it is important to note that they may stem from unavoidable methodological limitations caused by data constraints. In particular, the evaluation conducted for this study examined a relatively short time-frame which may not be indicative of longer-term effects and cost reductions, and reflected program practices that were employed in 2005 and may have subsequently been enhanced. These shortcomings point to the need for ongoing evaluations of these programs. Long-term, focused evaluations of transitional therapeutic community programs across the nation have found that this form of substance abuse treatment can greatly reduce recidivism and improve other outcomes.

BENEFITS OF SUBSTANCE ABUSE TREATMENT COULD BE INCREASED BY IMPLEMENTING KEY RECOMMENDATIONS

Despite promising quantitative results, the qualitative research performed for this study suggests that Virginia could further reduce expenditures caused by substance use disorders. In order for the State and localities to reduce the annual cost of substance abuse-related issues and to improve societal well-being, Virginia could first take steps to ensure that existing services are effective. After the effectiveness of existing services has been maximized, Virginia could then consider expanding the availability of substance abuse services, starting with individuals who impose the greatest costs upon the Commonwealth.

Virginia could first take steps to ensure that existing services are effective and then consider expanding the availability of substance abuse services.

To maximize returns on its investment in existing substance abuse services, the State may wish to consider directing any additional funding toward the following priorities:

Substance abusers who are committed to State prisons impose the highest costs upon the State and localities and pose the greatest safety risk to Virginians, yet they seldom receive adequate substance abuse services after their release.

- (1) Conducting ongoing and comprehensive evaluations so that decision makers can determine whether the investment in substance abuse services is yielding positive benefits, and if this investment is allocated in the most efficient manner across agencies and populations of substance abusers (Chapters 3 and 6). Evaluations would provide Virginia with a mechanism to hold State agencies accountable for how they currently spend more than \$100 million in State and local funds on substance abuse services.
- (2) Ensuring that service providers receive the proper guidance and support to consistently utilize and properly implement proven practices (Chapters 4 and 5). Practices that have been proven effective should constitute a more efficient use of limited resources and generate better outcomes.
- (3) Transitioning offenders from prison to their community in order to maintain positive gains achieved during institution-based programs, starting with a pilot that can be evaluated for further expansion (Chapter 5). Substance abusers who are committed to State prisons impose the highest costs upon the State and localities and pose the greatest safety risk to Virginians, yet they seldom receive adequate substance abuse services after their release and lack assistance to secure basic necessities such as employment and housing. A more seamless transition process could help reduce the chances of relapse and recidivism.

In addition, the State could avoid future costs by expanding the availability of substance abuse services to populations that are currently unserved or underserved, particularly after the effectiveness of existing services has been enhanced and routinely evaluated. The populations toward which additional services and funding could be directed are, in order of priority:

- (1) Offenders who are currently not receiving needed substance abuse services either while incarcerated or on probation. Additional funding provided to criminal justice agencies for purposes of identifying and treating offenders' substance use disorders could result in greater treatment capacity, shorter waiting lists, and fewer service gaps in community services boards (CSBs) and/or private providers (Chapters 4 and 5). The costs of substance abuse to the State and localities are generated primarily by offenders who also create a threat to public safety.
- (2) Individuals who are not currently involved in the criminal justice system. While non-offenders impose few costs upon the State and localities, the strong link between substance abuse and crime suggests that some of these individuals

will ultimately commit costly offenses and pose a threat to public safety. Additional funding provided to CSBs could help to enhance affordability, mitigate logistical barriers, expand capacity, reduce service gaps, and shorten waiting lists that currently preclude Virginians from accessing the substance abuse services they need (Chapter 4).

POTENTIAL OPTIONS FOR FUNDING REPORT RECOMMENDATIONS

While the cost of substance abuse services could ultimately be recouped through savings realized by other agencies, an initial investment would be required to improve the effectiveness of existing services and enhance access to treatment. In addition to maximizing federal funding through Medicaid and possibly increasing fee revenue in CSBs as described in Chapter 4, Virginia could also infuse additional State funds into substance abuse services by redirecting a portion of revenues generated by alcohol sales.

Utilizing ABC Interfund Transfers for Treatment

While the State budget directs the Department of Alcoholic Beverage Control (ABC) to transfer funds for the care of substance abusers, the amount appropriated to Virginia agencies for the specific purpose of providing substance abuse services is approximately \$18 million less than ABC transfers. Since at least 1976, the Virginia General Assembly directed the Department of Alcoholic Beverages Control to transfer a portion of its profits to defray expenses incurred for the “care, treatment, study, and rehabilitation of alcoholics by the Department of Mental Health, Mental Retardation and Substance Abuse Services and other State agencies.” In fiscal year 2006, the amount to be transferred by ABC into the pool of General Funds for this purpose reached \$72.6 million. Yet, an analysis conducted for this study shows that the State spent approximately \$55.0 million on substance abuse treatment during this period, or approximately \$17.6 million less than ABC transfers. This discrepancy suggests that nearly \$18 million intended for substance abuse treatment is being used for other purposes.

The General Assembly may wish to revisit the purpose of funds transferred by ABC and the amount currently appropriated for substance abuse treatment. If the intent of transferring ABC profits is to care for, treat, and rehabilitate individuals with substance use disorders, then the level of funding appropriated to Virginia agencies for the delivery of substance abuse services should correspond to the amount transferred by ABC for treatment purposes. State agencies would receive an additional \$18 million beyond cur-

rent appropriations for substance abuse treatment, based on 2006 budgets. Even if additional funds are not appropriated for substance abuse treatment out of the ABC transfer, the State budget language should be changed to more accurately characterize the actual use of these funds. In particular, the use of the term “alcoholics” should be updated to reflect the latest clinical terminology, which is “individuals with substance use disorders.”

Redirecting Portion of Forecasted Growth in ABC Revenues

As described in the previous section, the General Assembly appears to have already contemplated the use of a portion of ABC profits for substance abuse services. If the State chooses to increase its investment in substance abuse services to further mitigate the cost of its adverse consequences, additional ABC revenues could be directed for this purpose. A percentage of the incremental revenues expected to be generated through Sunday sales and additional ABC retail locations could be designated for substance abuse services, which would require reductions in other areas.

Between 2006 and 2010, 28 new ABC retail stores are expected to open, generating additional profits and tax revenues of \$18 million per year by 2010. In addition, recent changes in State law have enabled ABC stores to operate on Sundays in several localities. This enhanced sales capacity is estimated to increase State revenues by approximately \$1 million per year between 2006 and 2010, excluding new retail outlets. Together, Virginia’s increased alcohol sales capacity will increase annual State revenues by nearly \$20 million by 2010.



List of Recommendations:

Mitigating the Costs of Substance Abuse in Virginia

1. The Department of Mental Health, Mental Retardation and Substance Abuse Services should conduct a needs assessment that identifies the (1) information technology and human resources necessary to obtain accurate client outcomes data from community services boards, and (2) number and expertise of staff required to analyze outcomes information. This analysis should encompass the needs of both the department and community services boards. In addition, the department should identify specific steps that must be taken to produce ongoing evaluations, in accordance with statute. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.
2. The Department of Corrections should conduct a needs assessment that identifies the information technology and human resources necessary to (1) capture relevant data on prison inmates who participate in substance abuse services while in State institutions, and (2) analyze outcomes information. In addition, the department should identify specific steps that must be taken to produce ongoing and comprehensive evaluations of substance abuse services provided to prison inmates, in accordance with statute. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.
3. The Department of Juvenile Justice should conduct a needs assessment that identifies the (1) information technology and human resources necessary to capture relevant data on juveniles who participate in substance abuse services while in juvenile correctional centers, and (2) number and expertise of staff required to analyze outcomes information. In addition, the department should identify specific steps that must be taken to produce ongoing evaluations, in accordance with statute. Preliminary results of the assessment should be presented to the

joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

4. The Department of Mental Health, Mental Retardation and Substance Abuse Services should evaluate whether community services boards have consistently developed appropriate income-based sliding-scale fee structures that minimize the amount charged to lowest-income clients while maximizing overall fee revenues.
5. The Department of Medical Assistance Services should evaluate whether Medicaid reimbursement rates for substance abuse treatment are high enough to incentivize providers to serve Medicaid enrollees as intended in the program's State plan.
6. The Department of Mental Health, Mental Retardation and Substance Abuse Services should determine the level and nature of resources needed to help local substance abuse providers identify evidence-based practices, train staff on their correct application, and provide follow-up training to ensure adherence to evidence-based programs. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.
7. The Department of Mental Health, Mental Retardation and Substance Abuse Services should encourage substance abuse treatment providers to incorporate more evidence-based practices (EBPs) into their services by establishing a percentage of services for which EBPs should be incorporated, with an annual monetary incentive for those who meet or exceed that goal.
8. The Departments of Corrections, Criminal Justice Services, and Juvenile Justice should determine the amount of additional resources needed to adequately provide offenders under their agencies' responsibility with substance abuse screenings and, when necessary, assessments. Preliminary results should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

9. The Department of Mental Health, Mental Retardation and Substance Abuse Services and local community services boards should collaborate with criminal justice agencies to develop a training curriculum or tool for judges that would address the effects of substance abuse, the benefits of treatment, and the treatment options available.
10. Given the importance of pretrial services in identifying substance abuse, the Department of Criminal Justice Services should evaluate the costs and benefits of expanding pretrial services offices across the State and present their findings to the joint legislative subcommittee studying substance abuse pursuant to Senate Joint Resolution 77 (2008).
11. The Departments of Corrections, Criminal Justice Services, and Juvenile Justice should adopt policies requiring local offices to enter into standardized contractual agreements with third-party providers of substance abuse services that hold the providers accountable for the quality of services provided, including requirements for reporting on clients' progress and timeliness of providing services.
12. The Virginia General Assembly may wish to consider funding the addition of five prison-based transition specialists who would collaborate with existing community-based transition specialists to facilitate prison inmates' return into the community.
13. The Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and Virginia Department of Education (DOE) should work with local offices to assess the level and type of resources needed to track outcomes and conduct evaluations effectively for local prevention programs. DMHMRSAS and DOE staff should also assess the level and qualifications of additional resources needed in the State prevention offices to provide adequate training and technical assistance to local prevention staff, and to review the results of these evaluations. Preliminary results of the assessment should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.
14. The Department of Mental Health, Mental Retardation and Substance Abuse Services and Virginia Department of Education should convene relevant State and local stakeholders to facilitate the development of statewide standard outcomes measures to capture the impact of prevention programs on Virginians. A plan detailing the timeline for developing and

implementing these measures across the State should be developed and an assessment should be conducted to identify the resources needed to implement a statewide system for tracking program outcomes, including the need for information technology. Preliminary results should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

15. The General Assembly may wish to consider requiring all Virginia school divisions to participate in a statewide youth survey, and supplementing the federal Centers for Disease Control and Prevention grant secured by Virginia so that a youth survey that is sufficiently comprehensive to capture regional- and local-level information on substance use and abuse can be administered.
16. The Department of Mental Health, Mental Retardation and Substance Abuse Services and Virginia Department of Education should determine how many staff and supporting resources are required to provide adequate technical assistance to local offices on selecting and adhering to evidence-based programs, and what expertise they should possess. Preliminary findings should be presented to the joint legislative subcommittee studying substance abuse services pursuant to Senate Joint Resolution 77 (2008) prior to its last meeting, and the final results should be submitted to the chair of the joint subcommittee no later than the first day of the next session of the General Assembly.

Study Mandates

SENATE JOINT RESOLUTION NO. 395

Directing the Joint Legislative Audit and Review Commission to study the impact of issues related to substance abuse on state and local fiscal expenditures. Report.

Agreed to by the Senate, February 6, 2007

Agreed to by the House of Delegates, February 16, 2007

WHEREAS, Virginia has received significant federal funding from the Substance Abuse and Mental Health Services Administration, including nearly \$43 million during fiscal years 2005-2006 to address substance abuse and its prevention; and

WHEREAS, despite such financial support, substance abuse continues to produce many social ills at the local level; and

WHEREAS, this burden includes teenage pregnancies, unmarried parents, premature births, and fetal alcohol syndrome, and drug abuse by a pregnant woman triples the likelihood that her baby will have serious medical problems; and

WHEREAS, the vast majority of criminal offenses are committed while under the influence and many repeat offenders have addictions to alcohol and drugs; and

WHEREAS, the adverse impact of substance abuse on families and society in Virginia requires further review of state and local expenditures; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Joint Legislative Audit and Review Commission be directed to study the impact of issues related to substance abuse on state and local fiscal expenditures. The study should consider social problems aggravated by substance abuse including, but not limited to, teenage pregnancy, out-of-wedlock births, sexually transmitted diseases, domestic violence, broken families, homelessness, crime, and poor school performance.

In conducting its study, the Joint Legislative Audit and Review Commission shall examine existing programs, the need for new programs, and funding initiatives that could potentially save significant sums of money by focusing on prevention and treatment of substance abuse.

Technical assistance shall be provided to the Joint Legislative Audit and Review Commission by the Department of Mental Health, Mental Retardation and Substance Abuse Services. All agencies of the Commonwealth shall provide assistance to the Joint Legislative Audit and Review Commission for this study, upon request.

The Joint Legislative Audit and Review Commission shall complete its meetings for the first year by November 30, 2007, and for the second year by November 30, 2008, and the chairman shall submit to the Division of Legislative Automated Systems an executive summary of its findings and recommendations no later than the first day of the next Regular Session of the General Assembly for

each year. Each executive summary shall state whether the Joint Legislative Audit and Review Commission intends to submit to the General Assembly and the Governor a report of its findings and recommendations for publication as a House or Senate document. The executive summaries and reports shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

HOUSE JOINT RESOLUTION NO. 683

Directing the Joint Legislative Audit and Review Commission to study the actual cost of substance abuse to the Commonwealth to determine the financial savings available to the Commonwealth as a result of providing treatment to offenders diverted from incarceration. Report.

Agreed to by the House of Delegates, February 22, 2007

Agreed to by the Senate, February 21, 2007

WHEREAS, a 2005 report released by the Bureau of Justice Statistics found that 68 percent of jail inmates reported symptoms in the year before their admission to jail that met substance dependence or abuse criteria and 16 percent of convicted jail inmates said that they committed their offense to get money for drugs; and

WHEREAS, studies have found that recovery treatment services offered to offenders are successful in preventing recidivism; and

WHEREAS, recidivism remains high for offenders exhibiting substance abuse or co-occurring disorders who do not receive treatment services when diverted from jail; and

WHEREAS, the California Drug and Alcohol Treatment Assessment found that a dollar invested in alcohol and drug treatment resulted in over seven dollars in social savings due to reductions in crime and health care costs; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Joint Legislative Audit and Review Commission be directed to study the actual cost of substance abuse to the Commonwealth, to determine the financial savings available to the Commonwealth as a result of providing treatment to offenders diverted from incarceration.

In conducting its study, the Joint Legislative Audit and Review Commission shall examine (i) the policies and procedures governing treatment services, (ii) the effect treatment has on participant behavior, including differences in behavior and experience reported by respondents before and after treatment, (iii) the cost of treatment in different settings, and (iv) the economic value of such treatment to the Commonwealth. The economic value of treatment to the Commonwealth should be measured in terms of (a) costs avoided due to reductions in crime, (b) costs avoided due to reductions in mental and physical illness and disorders, and (c) shifts in income sources. The Joint Legislative Audit and Review Commission shall also make recommendations concerning appropriate levels of funding for specific types of treatment and recovery services required to meet the needs of Virginians, to provide the greatest opportunity for growth and economic prosperity in the Commonwealth.

All agencies of the Commonwealth shall provide assistance to the Joint Legislative Audit and Review Commission for this study, upon request.

The Joint Legislative Audit and Review Commission shall complete its meetings for the first year by November 30, 2007, and for the second year by November 30, 2008, and the Director shall submit to the Division of Legislative Automated Systems an executive summary of its findings and recommendations no later than the first day of the next Regular Session of the General Assembly for each year. Each executive summary shall state whether the Joint Legislative Audit and Review Commission intends to submit to the General Assembly and the Governor a report of its findings and recommendations for publication as a House or Senate document. The executive summaries and reports shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for

the processing of legislative documents and reports and shall be posted on the General Assembly's website.

Research Activities and Methods

Key research activities for this study included

- site visits to community services boards, State probation and parole districts, community-based probation and pretrial offices, and court services units in ten Virginia regions;
- surveys of clinical, prevention, and criminal justice staff from State agencies and field offices across Virginia;
- data collection and analysis;
- structured interviews with staff from State agencies;
- reviews of the literature on substance abuse; and
- attendance of professional conferences.

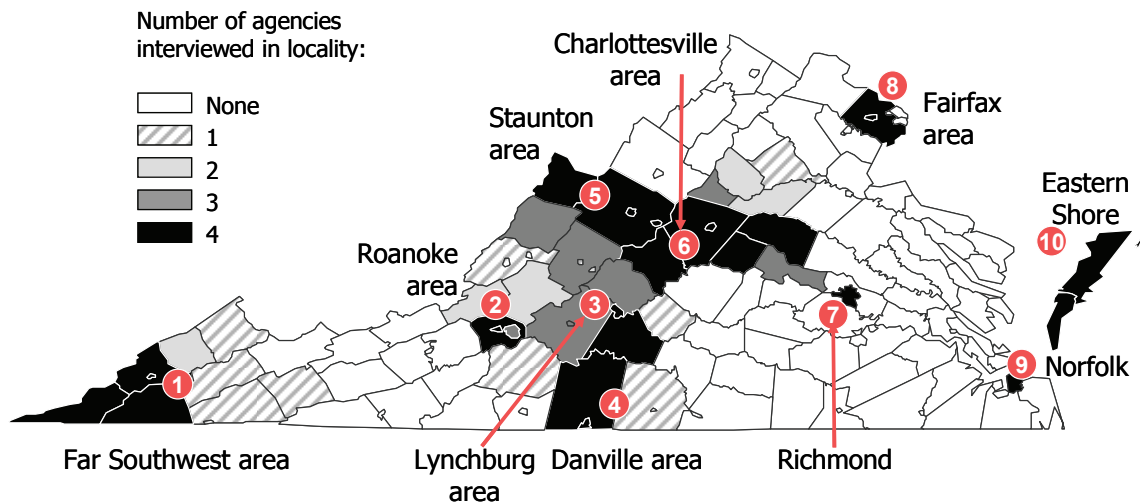
SITE VISITS

JLARC staff visited ten Virginia regions to conduct structured interviews with staff from agencies that are most affected by the adverse effects of substance abuse, including community services boards (CSBs), State probation and parole offices, community-based probation and pretrial offices, and court services units (CSUs). These site visits were conducted in September and October 2007, and each visit was completed in one to two days. Staff interviewed included substance abuse program directors, treatment, and prevention staff in CSBs, and probation and parole officers in criminal justice agencies' field offices. Topics discussed during site visits included the effects of substance abuse and the benefits of services; obstacles to accessing appropriate substance abuse services such as unwillingness to receive treatment, logistical barriers, affordability, service capacity, and collaboration; root causes of and potential solutions to access issues; and prevention services.

The ten regions visited by JLARC staff (Figure 33) were selected because they

- represented all major areas of the State and captured urban, suburban, and rural localities;
- were subject to varying levels of fiscal stress; and
- included each of the four agencies to be interviewed.

Figure 33: JLARC Staff Visited Ten Virginia Regions



Source: Staff analysis.

In addition, JLARC staff conducted site visits to several correctional facilities to learn about their substance abuse treatment programs:

- Indian Creek Correctional Center, therapeutic community;
- Beaumont Juvenile Correctional Center, intensive and educational substance abuse services;
- Henrico County Jail, Recovery in Safe Environment (RISE) therapeutic community.

Finally, three drug court programs were examined for this study. JLARC staff met with judges and staff involved in the Richmond City adult, Chesterfield County adult, and Chesterfield County juvenile drug court treatment programs, and observed drug court proceedings and graduation ceremonies.

SURVEYS

JLARC staff administered several surveys targeting providers and purchasers of substance abuse treatment as well as prevention services in Virginia. Surveys were designed to supplement the information gathered during site visits and data collection efforts. Topics covered in the surveys included the access, availability, and cost of substance abuse treatment and prevention services, as well as the resources needed to maximize the effectiveness of these services.

Survey of Providers and Purchasers of Substance Abuse Services

JLARC staff surveyed the major providers of substance abuse treatment and agencies purchasing their services in Virginia. Survey responses were requested from the substance abuse director of each CSB, as well as the directors of all State probation and parole offices, community-based probation and pretrial offices, CSUs, jails, and private provider agencies belonging to the Virginia Association of Drug and Alcohol Programs (VADAP) and the Virginia Association of Alcohol and Drug Abuse Counselors (VAADAC). One response was requested from each agency. The entities surveyed, the number of potential respondents contacted by JLARC staff, and their response rates are shown in Table 28.

Table 28: Type and Number of Entities Contacted and Response Rates for Survey of Providers and Purchasers of Substance Abuse Treatment Services

Surveyed Entity	Number of Potential Respondents Contacted	Response Rate
Community Services Boards	40	95%
State Probation and Parole Offices	43	91%
Community-Based Probation and Pretrial Offices	40	73%
Court Services Units	35	100%
Local and Regional Jails	72	64%
Private Substance Abuse Treatment Providers	125	26%

Source: JLARC staff survey of providers and purchasers of substance abuse treatment services.

Topics addressed in the survey included the scope and characteristics of substance abuse services, cost of substance abuse services provided, access to and intensity of services, convenience of services, clients' willingness to access services, funding available to purchase or provide services, collaboration, quality of services, continuity of care, and utilization of evidence-based practices.

Surveys of Prevention Staff

To gather information on substance abuse prevention services delivered in Virginia, JLARC staff conducted four surveys of prevention coordinators in State and local entities: CSBs, school divisions, the Governor's Office for Substance Abuse Prevention (GOSAP) collaborative, and substance abuse community coalitions. The purpose of these surveys was to gather information on prevention programs administered in Virginia and the extent of collaboration occurring between prevention agencies. Survey topics in-

cluded characteristics of prevention staff, number and types of programs, populations served, evidence-based programs, support and collaboration, funding, and effectiveness. The entities surveyed, the number of potential respondents contacted by JLARC staff, and their response rates are shown in Table 29.

Table 29: Type and Number of Entities Contacted and Response Rates for Survey of Prevention Coordinators

Surveyed Entity	Number of Potential Respondents Contacted	Response Rate
Community Services Boards	40	98%
School Divisions	133	88%
State Agencies Participating in Governor's Office for Substance Abuse Prevention Collaborative	17	94%
Community Coalitions	66	55%

Source: Staff surveys of prevention coordinators.

QUANTITATIVE ANALYSIS OF COST OF SUBSTANCE ABUSE AND COST REDUCTIONS GENERATED BY TREATMENT

JLARC staff analyzed data collected from more than ten State agencies. In response to the study's mandates, an estimate of the costs of substance abuse incurred in Virginia was calculated. In addition, key substance abuse treatment programs were examined to determine whether they reduced costs incurred by the State and localities, and generated improvements in indicators of public safety and economic productivity. A more detailed discussion about these analyses can be found in this report's online technical appendix.

Quantifying the Costs of Substance Abuse in Virginia

To estimate the costs that substance abuse imposes upon the State and localities, JLARC staff conducted an extensive review of the research literature to identify the extent to which adverse effects can be attributed to substance abuse and how these effects result in additional activities for State and local agencies. Virginia-specific data were then obtained on the prevalence of these adverse effects, and the proportion of agency activities attributable specifically to substance abuse was calculated for each effect. State and local spending information was obtained for all Virginia agencies substantially affected by the adverse effects of substance abuse. The fiscal impact of substance abuse on the State and localities was calculated by multiplying agencies' total spending by the proportion of the agency's activities attributable to substance abuse.

Analyzing Cost Reductions Generated by Substance Abuse Treatment

To fulfill the two study mandates, analyses were conducted to determine the effects of treatment on incarcerated and community-based offenders, as well as substance abusers with no involvement in the criminal justice system. Data limitations restricted the type and provider of services, and in some cases the size of the population that could be reviewed (Figure 34).

Figure 34: Not All Types and Providers of Substance Abuse Treatment Were Included in Evaluation

Population Examined	Type and Provider of Substance Abuse Service			
	All Services Provided by CSBs	All Services Provided by Other Providers	Intensive/Therapeutic Services Provided by Criminal Justice Agency	Education Services Provided by Criminal Justice Agency
Offenders				
<u>DJJ</u>				
Juveniles under court services supervision	●	○	○	○
<u>DOC</u>				
Adults incarcerated in prison	N/A ¹	N/A ¹	●	○
Adults under State probation supervision	●	○	○	○
<u>Local Jail</u>				
Adults incarcerated in jail	●	○	○	○
<u>Community-Based Probation Offices</u>				
Adults on community-based probation	●	○	○	○
<u>Drug Court</u>				
Adults participating in Richmond and Chesterfield programs ²	●	○	○	○
Individuals not Included Above³				
Adults	●	○	N/A ¹	N/A ¹
Juveniles	●	○	N/A ¹	N/A ¹

● Data available and evaluated ○ Data unavailable and not evaluated.

¹Service type or provider not applicable for this population.

²Treatment providers included staff from CSBs who are part of the drug court program. CSB services not related to drug court program were not included.

³Includes CSB clients without a criminal history (non-offenders) as well as CSB clients who have a criminal history but did not complete probation or incarceration in 2005 (former offenders).

Source: Staff analysis.

Statewide data were not centrally available regarding the treatment provided to drug court participants and juveniles incarcerated in juvenile correctional centers. Therefore, data were collected through reviews of case files. Due to the time-consuming nature of reviewing case files, only a few programs were selected for evaluation. The Chesterfield and Richmond adult drug court programs were examined because they serve very different populations. The

programs at Bon Air and Beaumont juvenile correctional centers were reviewed because they deliver substance abuse treatment in different environments. Beaumont delivers intensive services in a unit separate from the rest of the incarcerated population, while Bon Air does not separate treated juveniles. However, quantitative results pertaining to the programs offered at Beaumont and Bon Air were ultimately not used in this evaluation due to small sample sizes.

To measure whether substance abuse treatment is associated with reductions in State and local expenditures, JLARC staff calculated the major costs imposed upon State and localities by every individual examined for this study. These costs related to the four areas most affected by substance abuse, as described in Chapter 2: public safety, health care, social welfare, and economic productivity. However, not all costs described in Chapter 2 could be identified for individuals due to data limitations; foster care is one example.

Two types of comparisons were performed to determine whether substance abuse treatment resulted in cost reductions for the State and localities. First, State and local costs associated with each individual studied were compared between the 18-month periods before and after treatment ended. The 18-month timeframes were selected because many State agencies do not maintain historical data beyond this period of time. To determine whether changes in expenditures were attributable to treatment, the costs associated with each population were then compared to the costs incurred by one or more similar groups comprised of Virginians who (1) had been identified as having a substance abuse problem but did not participate in treatment, (2) received but did not complete substance abuse treatment, or (3) completed an alternative type of substance abuse treatment. Virginians who completed treatment were matched to comparison groups based on similarities in age, gender, race, substance abuse history, and where appropriate, current offense and criminal history.

STRUCTURED INTERVIEWS

JLARC staff conducted several interviews with staff of the following entities to gain additional insight into the structure of substance abuse treatment programs, types of problems experienced by substance abusers, availability and effectiveness of treatment and prevention services, data captured on substance abuse treatment outcomes, availability of resources to provide services, and legislative history of substance abuse services:

- Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services,

- Virginia Department of Corrections,
- Virginia Department of Juvenile Justice,
- Virginia Department of Criminal Justice Services,
- Virginia Department of Education,
- Virginia Department of Alcoholic Beverage Control,
- Virginia local pretrial/probation organization,
- Supreme Court of Virginia,
- Governor’s Office on Substance Abuse Prevention,
- Virginia Association of Community Services Boards,
- Mid-Atlantic Addiction Technology Transfer Center,
- Virginia Substance Abuse Services Council, and
- Virginia Senate Finance, Health and Human Resources, and Public Safety Committees.

Additional interviews were conducted with staff from the Department of Medical Assistance Services, Compensation Board, and Virginia State Police to determine the type of data collected by these agencies and whether it could be used in the analyses conducted for this study.

REVIEW OF RESEARCH LITERATURE AND VIRGINIA POLICIES

JLARC staff reviewed numerous documents and studies to supplement and validate findings, as well as to identify other states’ best practices that could be transferred to Virginia. A review of the literature was conducted regarding the

- adverse effects associated with substance abuse and how to quantify their fiscal impact,
- savings generated by substance abuse treatment nationally and in other states and the methodology used to quantify them,
- effectiveness of substance abuse services, and
- practices used in other states or recommended nationally.

Finally, JLARC staff reviewed State statutes and policies related to substance abuse services.

ATTENDANCE OF PROFESSIONAL CONFERENCES

During the review, project staff also attended four professional conferences related to substance abuse services. Two were treatment-related and two were prevention-related, including

- a treatment system transformation conference sponsored by the Department of Mental Health, Mental Retardation and Substance Abuse Services;
- the National Center on Addiction and Substance Abuse's conference entitled "Sobering Up the High Society: Substance Abuse and Public Policy";
- the annual prevention research conference hosted by the National Prevention Network; and
- the "Prevention Comes First" conference sponsored by the Governor's Office for Substance Abuse Prevention.

Appendix C

Agency Responses

As a part of the extensive validation process, State agencies and other entities involved in a JLARC assessment are given the opportunity to comment on an exposure draft of the report. Appropriate technical corrections resulting from comments provided by these entities have been made in this version of the report. This appendix includes written responses from the

- Department of Mental Health, Mental Retardation and Substance Abuse Services,
- Department of Corrections,
- Department of Juvenile Justice,
- Department of Medical Assistance Services, and
- Governor's Office for Substance Abuse Prevention.



JUN - 2 2008

COMMONWEALTH of VIRGINIA

DEPARTMENT OF
MENTAL HEALTH, MENTAL RETARDATION AND SUBSTANCE ABUSE SERVICES

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COMMISSIONER

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May 30, 2008

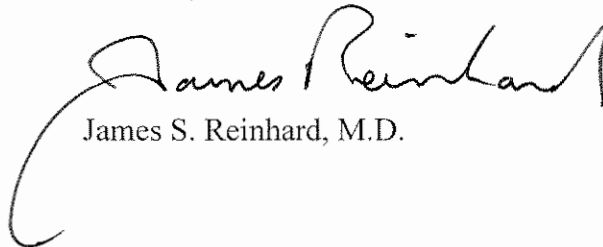
Mr. Philip A. Leone, Director
Joint Legislative Audit and Review Commission
General Assembly Building - Suite 1100
Capitol Square
Richmond, Virginia 23219

Dear Mr. Leone:

Thank you for the opportunity to review the exposure draft of "Mitigating the Costs of Substance Abuse in Virginia." I very much appreciate the investment of time, talent and energy expended by your staff to complete this study. I am aware that staff in this agency are sharing some technical suggestions for the report with JLARC staff. On the whole, we find the report to be thorough and complete in its discussion of the impact of substance abuse in Virginia, and an accurate description of the numerous barriers to enhancing the quantity, quality and accountability of Virginia's publicly funded system of substance abuse prevention and treatment services.

I look forward to working to implement the many suggestions offered by the report.

Sincerely,



James S. Reinhard, M.D.

JSR:MR

pc: Frank Tetrick
Ken Batten



COMMONWEALTH of VIRGINIA

GENE M. JOHNSON
DIRECTOR

Department of Corrections

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May 30, 2008

Mr. Philip A. Leone, Director
Joint Legislative Audit and Review Commission
Suite 1100, General Assembly Building, Capitol Square
Richmond, VA 23219

Dear Mr. Leone,

As follow up to our May 28, 2008 response to your report, Mitigating the Costs of Substance Abuse in Virginia, please note that our staff from the Divisions of Operations, Community Corrections, and Administration have provided some comments which are attached.

Again, we appreciate the work and approach of your staff and the opportunity to respond to your report. We look forward to working with the Joint Legislative Subcommittee (2008 Senate Joint Resolution 77) in following up the recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Gene M. Johnson", with a long horizontal flourish extending to the right.

Gene M. Johnson

cc: Mr. John Jabe, Deputy Director, Operations
Mr. James Camache, Deputy Director, Community Corrections
Ms. Cookie Scott, Deputy Director, Administration
Ms. Natalie Molliett, Ribet, JLARC



COMMONWEALTH of VIRGINIA

GENE M. JOHNSON
DIRECTOR

Department of Corrections

P.O. BOX 26963
RICHMOND, VIRGINIA 23261

**Re: Joint Legislative Audit and Review Commission Report
Mitigating the Costs of Substance Abuse in Virginia**

Since 2000 the Division of Operations has evaluated its Therapeutic Community (TC) and Transitional Therapeutic Community (TTC) programs to measure fidelity of services and recidivism outcomes. Offenders begin the program while incarcerated at a prison TC and transfer to the final phase of the program in a community based TTC.

Dr. Peggy Plass of James Madison University conducted a recidivism study of offenders who completed all phases of the TC program (including the TTC phase) in 2001. Participants and matched control groups were tracked for three years to determine recidivism rates compared with control groups. The status report check in January of 2004 of the 2001 releases showed the following outcomes:

Study Group	Re-Arrest	Reconviction	Recommitment
TC Completers	48.5%***	30.1%***	13.6%
Institutional TC Only	58.8%***	46.1%***	20.0%
No Treatment	66.1%***	52.1%***	22.5%

*** Statistical significance ($p \leq .01$)

Those individuals that completed the entire TC program – which included TTC phase - had the lowest recidivism rates. The findings of this James Madison University study are in keeping with research results in other states.

In contrast with the James Madison University Study, JLARC's one year snapshot study of the 2005 TTC release cohort shows mixed results. These results were disappointing but not surprising to DOC, as there were many factors that negatively impacted program operations in 2004 and 2005. Although these issues were corrected starting in 2005/2006, they are listed below to provide the Commission with good insight into administrative problems and model changes that reduced the potential effectiveness of the treatment model during 2005.

- Privatization of our largest TC: In August of 2004 DOC contracted with the private treatment provider, CiviGenics, Inc., to operate the TC program at Indian Creek Correctional Center. While we believe this move is proving to be beneficial, the transition period from a DOC staffed operation to a private vendor produced excessive staffing shortages, including a vacancy with the TC Director's position. Unfortunately,

during some of 2004 and part of 2005, while CiviGenics was hiring and training over 30 staff, a full scale treatment program was not in place. In the JLARC study, the majority of the TTC recidivists (30 out of 33) were from Indian Creek Correctional Center, which is also our largest TC program.

- Overhaul of Botetourt Correctional Center TC: In the third quarter of 2004 a transition period began at the Botetourt program as it became a single mission treatment facility. The number of treatment beds doubled from 176 to 352. As was the case with Indian Creek Correctional Center, hiring and training new staff, and transferring of inmates affected programming quality, and the TC was not fully operational until the fourth quarter of 2005.
- TC Director Vacancies – There is no greater factor than staffing when it comes to producing anticipated outcomes and ensuring fidelity of programming. The TC Director's position is a pivotal one at each program. All three TC Director positions were vacant at some time during 2004 – 2005.
 - Botetourt: vacant from 3rd quarter of 2004 to 2nd quarter of 2005.
 - Indian Creek: A new director was hired when CiviGenics came aboard in the third quarter of 2004, but only stayed two months. The current TC Director arrived in February of 2005.
 - Virginia Correctional Center for Women: vacant from 1st quarter of 2005 to 3rd quarter of 2005.
- Clinical Staffing Shortages: All of the TCs experienced significant staffing shortages in the counseling ranks during 2004 – 2005. DOC's operational standards for TC programs call for a staff-to-inmate ratio no greater than 1:20. Indian Creek, which as mentioned previously had the largest number of the TTC recidivists, had staffing ratios as high as 1:42 in mid 2004, and early 2005 and the staff that were present were newly hired and inexperienced. In the last half of 2005, Botetourt's ratio steadily rose ending the year at 1:39. These programs can experience major negative impacts with staff vacancies and/or inexperienced staff. Typically it takes two years for new TC staff to become competent at the TC modality.
- Major Change to the Treatment Model with PreRelease: Funding was provided to increase the number of community based TTC beds so that participants in prison TC programs could begin TTC programs 6 months before release (while still in an inmate status). This was a benefit to the system because it freed up prison TC beds for additional participants, provided incentives to encourage inmate positive performance, and helped decrease DOC's need for additional prison beds. The push to fill additional TTC beds with pre-release inmates (to be accountable for the funding) caused inmates to be taken out of the prison TC treatment prematurely, before successfully completing that phase. The TTCs are intended to provide aftercare and transition to the community and not main treatment provided by the TC. Therefore, during 2005, the TTCs were required to transition inmates that had not progressed sufficiently in the main in-prison treatment phase. During this period we heard complaints from the TTC staff about the immature participants transferred to TTC, however, DOC was driven by the need to fill beds.

- Court Ruling Shortened Sentences for Some Participants. In the 2nd quarter of 2005 a court ruling required the DOC to give prison sentence credit to inmates for time previously served in detention and diversion centers. Some inmates received time credit of as much as 6 months. This caused some inmates who were in the TC main treatment phase to be immediately released or immediately transferred to a TTC with insufficient time in treatment.

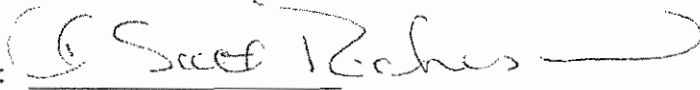
As mentioned earlier, the DOC continually evaluates its own programs and was aware of these negative impacts to our programming. We anticipate our evaluation of the 2007 and 2008 release cohorts will show improved recidivism reduction and cost benefits, as is shown by national studies on the TC model and by Virginia's JMU study.

Changes made since 2005 include:

- Staffing levels has stabilized. DOC conducted a national search for TC Directors and the positions have been filled by skilled Directors for over 2 years.
- Wardens have taken extra measures recruit staff, by visiting colleges and holding job fairs. Clinical staff positions are more consistently filled.
- The Indian Creek Correctional Center TC run by CiviGenics is fully operational. DOC holds regular meetings with the CiviGenics' Regional Director to review program operations and discuss any needs for improvement.
- Aggressive staff training programs have helped to increase skills of inexperienced staff.
- Cognitive Behavioral Skills Curricula have been integrated into already existing TC programming
- A DOC position has been tasked with regularly traveling to the TTC programs and ensuring fidelity of operation.
- Transition of participants from TC to TTCs considers a review of the participants progress in treatment, not just length of time from release
- Formal substance abuse assessment instruments from Texas Christian University (TCU) have been implemented.
- An online data collection system (CADMUS) has been implemented with the help of CiviGenics at all TCs as of the end of 2007. It should provide more timely managerial information than our prior quarterly program fidelity reports which were produced via paper reporting methods.
- Transition Specialists positions at all TCs to assist with effective transition of participants from prison TCs to TTCs or directly to the community.
- DOC's Classification unit has designated a full time position to focus solely on identifying participants for TC and TTC programs.

We welcome members of the JLARC Commission and the joint legislative subcommittee studying substance abuse pursuant to Senate Joint Resolution 77 (2008).

Prepared by:

A handwritten signature in black ink, appearing to read "Scott Richeson", written over a horizontal line.

Scott Richeson

Program Director, Division of Operations



COMMONWEALTH of VIRGINIA

WALTER M. PULLIAM, JR.
CHIEF OF OPERATIONS

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Re: Joint Legislative Audit and Review Commission Report
Mitigating the Costs of Substance Abuse in Virginia

Generally, the report is comprehensive with supportable findings and recommendations. Our comments include:

- **Drug Treatment Courts (Pages 22 – 23)** – We concur that this approach shows promise but we would urge that the evaluation report referenced on Page 64 be completed as age is a major factor in criminality. The opportunity for Drug Treatment Courts to be selective in deciding participants is an important finding. It suggests more research into proper assessment and responsivity in matching offenders to services so as to maximize resource use. The treatment and services in this approach need to incorporate evidence-based practices (EBP) to complement judicial engagement and interagency collaboration.
- **Substance Abuse Services Council (Page 26)** – It may be useful to review the role and responsibilities of the Council to develop and follow up a comprehensive state plan. Its general charge seems adequate but “what happens with the output” ?
- **Residential Transition Therapeutic Communities (TTC) (Pages 47 – 48)** – We believe that the study group included some participants who were not quite ready for TTC. The private vendors were just gearing up to the DOC Phase Program Model. These Virginia findings seem contrary to the national results and later Virginia outcomes. JLARC Recommendation 12 supports prison transition of which TTC is one of the reentry program options.
- **Recommendation 11 (Page 136)** – The Department of Corrections has begun incorporating EBP requirements and reporting into its treatment services contracts and Memoranda of Agreement (MOA) as they are renewed or re- issued.

Prepared by:

Chief of Operations

Date: May 30, 2008



JUN - 2 2008

Barry R. Green
Director

COMMONWEALTH of VIRGINIA

Department of Juvenile Justice

May 29, 2008

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Mr. Philip A. Leone, Director
Joint Legislative Audit & Review Commission
General Assembly Building, Suite 1100
Capitol Square
Richmond, Virginia 23219

Dear Mr. Leone:

We appreciate the opportunity to review this report prior to its publication; we would like to provide a few comments for the record.

The bulk of agency funding that we expend for substance abuse treatment occurs in our juvenile correctional centers. Every juvenile who is committed to the department is fully assessed and tested during their stay at our Reception and Diagnostic Center, and all who are found to be in need of substance abuse services receive them while incarcerated. The levels of services required and therapeutic services delivered depend upon the identified needs and may not be the same for each child. The majority of youth are found to have other treatment needs beyond simply substance abuse. As you know, a majority of these young people require mental health treatment, and many others require an array of anger management, special education, and other services. Our goal is to treat the whole child, as addressing only partial needs would not likely result in their successful functioning once they return to their homes.

As noted in several sections of your report, there are often insufficient resources in Community Service Boards (or funds through which the department may contract with private providers) to continue treatment (relapse prevention and mental health) once they return to their communities. This remains a concern of ours, and we believe that better coordination of such services, as well as additional CSB resources, would lead to improved results.

I would also like to note for the record that overall success rates for juveniles released from our centers has shown a marked improvement over the past few years. Since 2004, we have recorded a drop in recidivism of more than 8 percentage points for this population. While we have made changes to the treatment modality for substance abuse over the past year, installing a new, evidence based program, there have also been many other systems modifications both within our institutions and for parole services that we feel have contributed to this increased performance.

Mr. Philip A. Leone
May 29, 2008
Page Two

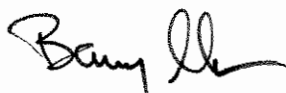
For juveniles, the majority of the report deals with those who remain in their communities on probation. The single largest obstacle to determining whether this population is being appropriately served is a lack of resources to conduct substance abuse screenings and assessments. As you note, funding that was provided for this purpose was removed in budget reductions during the 2002 legislative session, for this department but also for the Department of Corrections and for local adult probation services through reductions in the Department of Criminal Justice Services.

Without the ability to conduct these assessments, it is difficult to determine the numbers of individuals who require services, or the modes of treatments that are required. I understand that the report contains best guesses received in surveys of community program staff, but these should be taken only as gut level responses which are not supported by hard data. This lack of information makes it difficult to estimate with any accuracy the cost for providing needed treatment.

I commend your staff for the amount of work it took to complete this study and produce this report. It contains much good and useful information that will focus attention on assessing outcomes. We concur with the overall set of recommendations, primarily concerning evaluation. However, I would like to again stress that successful outcomes will not result from addressing substance abuse needs alone. Any evaluation will, of necessity, have to include the many other issues that impact these juveniles and how we, as a system, address them.

Thank you again for the opportunity to provide our comments. Please feel free to contact me if I can provide anything more.

Sincerely,

A handwritten signature in black ink, appearing to read "Barry R. Green". The signature is fluid and cursive, with the first name "Barry" being more prominent than the last name "Green".

Barry R. Green



MAY 29 2008

COMMONWEALTH of VIRGINIA

Department of Medical Assistance Services

PATRICK W. FINNERTY
DIRECTOR

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May 28, 2008

Mr. Philip A. Leone, Director
Joint Legislative Audit and Review Commission
Suite 1100, General Assembly Building, Capital Square
Richmond, VA 23219

Dear Mr. Leone:

Thank you for the opportunity to review and comment on Medicaid-related sections of the exposure draft of the report titled *Mitigating the Cost of Substance Abuse in Virginia*. I commend you and your staff's effort in its broad examination of the issues surrounding substance abuse services in the Commonwealth.

As the draft report accurately reflects, Virginia Medicaid began coverage of substance abuse services as a State Plan service in July 2007. Prior to that date, limited substance abuse services had been provided, when medically necessary, under Medicaid through the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program for children and were also available for pregnant women in the program. As a State Plan service, substance abuse services are now more broadly available as a benefit for Medicaid recipients, however, as the report cites, utilization to date has not been nearly as high as initially estimated.

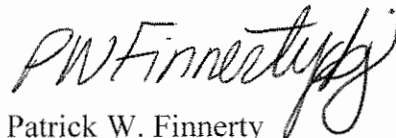
We believe this lower than expected utilization has been *partially* the result of "ramp-up" typically seen with the start-up of newly covered services; in fact we have begun to see some relative increase in utilization over the past few months. However, at this point in the implementation, it is clear that provider readiness is not driving this apparent under utilization. As your staff has also heard during the JLARC review, we have heard from providers and advocates that the Medicaid reimbursement levels are hindering substance abuse services providers' participation in the Medicaid program, thus impacting utilization of these new services. As such, we agree with the JLARC staff recommendation (Recommendation #5) that the Department of Medical Assistance Services (DMAS) should conduct a review of reimbursement rates for these services.

Mr. Philip A. Leone
May 28, 2008
Page 2

In fact, DMAS has already begun a limited internal review of certain substance abuse service rates, which, based on this JLARC report, we now intend to broaden. Our intention would be to complete this review in time for consideration by the Governor and General Assembly for authority to modify substance abuse services rates, if the review deems it necessary, during the 2009 Legislative Session.

The report also cites Medicaid expenditure levels for both substance abuse treatment and for medical services costs attributed to substance abuse. In the time allowed for our review we have not independently verified these expenditure totals. However, we have no reason to question the JLARC staff analysis of the Medicaid data provided. Again, thank you for the opportunity to comment on this draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "PW Finnerty", with a stylized flourish at the end.

Patrick W. Finnerty
Director

PWF/sf

cc: The Honorable Marilyn B. Tavenner, Secretary of Health and Human Resources



JUN - 2 2008

COMMONWEALTH of VIRGINIA

Office of the Governor

John W. Marshall
Secretary of Public Safety

Marilyn P. Harris
Deputy Secretary of Public Safety

May 30, 2008

Mr. Philip A. Leone, Director
Joint Legislative Audit and Review Commission
General Assembly Building
Capitol Square
Suite 1100
Richmond, Virginia 23219

Dear Mr. Leone:

On behalf of substance abuse prevention professionals across the Commonwealth, I commend the Joint Legislative Audit and Review Commission (JLARC) and its staff for placing substance abuse prevention and treatment at the forefront of state government research in Virginia.

The research present in the report provides a strong foundation for recognition of substance abuse as a preventable disease and recognizing the alarming costs of substance abuse in emotional, physical and monetary terms. I am grateful to JLARC for providing objective documentation on a number of issues that have provided obstacles to Virginia's prevention efforts for many years. More importantly, my staff and I are pleased that the report not only recognizes these issues, but includes recommendations that may aid in their resolution.

The Vision of Collaboration

In 2005, the agency heads of all 13 Governor's Office of Substance Abuse Prevention (GOSAP) Collaborative members signed a Memorandum of Agreement to support principles of sound prevention practices. Agencies agreed to comprehensive **assessment** through use of relevant objective data, **planning** through selecting vigorously evaluated programs and strategies that match the need of the targeted population, **implementation** of proven, evidence-based models, and **evaluation** of both short and long-term results of the programs to ensure that progress is being made. JLARC's findings and recommendations reflect an understanding of and appreciation for this framework, as well as some of the existing barriers to its full implementation in the Commonwealth.

Through this Memorandum, agency heads agreed to place their full support and allocate significant resources toward curbing substance abuse. While not present at the Collaborative meetings, their designees fully participate and convey the agenda of the Collaborative to the agency head he/she represents. I also update the agency heads and the Secretariat under which each agency falls concerning Collaborative programs and initiatives. The cabinet secretaries and agencies are very receptive and willing to provide resources to programs, upon request, and have made the initiatives of the Collaborative a priority on their agendas.

The Collaborative strives to operate with coordination and cooperation of separate parts to exchange information and consistently move together into one collective body to operate efficiently. The Collaborative has provided coordinated prevention efforts throughout the Commonwealth because the workgroup that meets quarterly consists of passionate individuals that have placed prevention as their foremost mission.

Collaboration has been defined as utilizing diversity, insight, challenge, competition, and disagreement to create a product that benefits all those involved. I truly believe that we have embodied that definition and will continue to as we leverage resources to address one of the most prevalent exploitations of our youth, underage drinking.

GOSAP and Public Safety

Since its development in 2002, GOSAP has taken a holistic approach to addressing substance abuse in the Commonwealth. Regarding this approach, some question has been raised as to the effects of GOSAP being placed under one secretariat. This placement is addressed by Governor Kaine in the attached Executive Directive 4 (2006).

Bullying and the Prevention Comes First Conference

Last fall, over 500 prevention coordinators crowded in the Koger Conference Center in Richmond for the Prevention Comes First Conference. After careful planning and consideration of national and state studies, recent statistical surveys, and the expressed concern of GOSAP and the Department of Health over the recent statistical rise in reported incidence of bullying, the Collaborative chose bullying as the theme for our foremost training event of the year.

Other contributing factors to the selection of this topic included research by Dr. Dewey Cornell, University of Virginia's Curry School of Education, which studied many issues concerning threats to the health and well-being of youngsters. Among many topics, his research included bullying and the use of inhalants in the Commonwealth. The statistical evidence he presented concluded that while inhalant use outpaces national rates, bullying overwhelmingly outpaces inhalant use.

GOSAP staff was also aware of early reports that indicated the perpetrator of the shootings at Virginia Tech had been bullied during his attendance of public schools in Northern Virginia. GOSAP will continue to address inhalant abuse and members of the Collaborative will continue to partner with the Virginia Inhalant Abuse Prevention Coalition by providing substantial funding and in-kind support for programs such as the widely successful inhalant prevention training institute that took place in March of 2008.

Community Profile Database

One of the most significant tools omitted from the JLARC report is universal access to the Prevention Comes First *Community Profile Database* on the GOSAP website. The database provides a wide-ranging tool that gained national attention by both substance abuse prevention organizations and mainstream organizations such as National Association of State Chief Information Officers who recognized the database as the most innovative technology on the web in 2006.

This feature-rich application provides customized data reports for every county, city and town in the Commonwealth. It also contains a comprehensive listing of service organizations that have taken the lead in fighting substance abuse and other youth disorders in their communities. The technology has already aided local organizations in obtaining information to develop strategies for addressing the pre-eminent issues in their community and help obtain government and private grants. Further development to the technology and content of the database is being developed.

Conclusion

Relative to state agencies throughout the Commonwealth, GOSAP is in its infancy. Since its implementation in 2002, it has been a tremendous honor, in addition to serving as the Deputy Secretary of Public Safety, to serve as the Director of such a vital organization. Despite the fact that the position is un-compensated, it has been a privilege for me to see the devotion of the prevention community who exemplify commitment and perseverance to healthy youth and families.

I extend many thanks to JLARC for this important study and I look forward to working with the joint subcommittee to study reducing the cost of substance abuse.

Sincerely,

A handwritten signature in black ink, appearing to read "Marilyn P. Harris", with a long horizontal flourish extending to the right.

Marilyn P. Harris

Attachment:

Executive Directive 4 (2006) – Governor Kaine Establishes the GOSAP Collaborative



Executive Directive 4 (2006)

Establishing the Governor's Office for Substance Abuse Prevention (GOSAP) Collaborative

Importance of the Issue

Recognizing that prevention efforts would be more efficient and effective if coordinated, in 2002, the Governor's Office for Substance Abuse Prevention (GOSAP) brought together key leadership representatives from 13 state agencies and organizations responsible for prevention programming throughout the Commonwealth of Virginia to form the GOSAP Collaborative.

Since that time, this informal body has used its collective knowledge and experience to develop and provide numerous resources and tools that are critical to achieving meaningful, community-level change, not only in substance abuse, but throughout the spectrum of community well-being.

Establishing the Governor's Office for Substance Abuse Prevention Collaborative

In recognition of its significant and growing accomplishments, and to capitalize on its resources, knowledge base and existing momentum, I hereby establish the GOSAP Collaborative. The Collaborative shall consist of members, representing the thirteen agencies of the Commonwealth that have prevention responsibilities. Additional members may be appointed at the Governor's discretion. Those agencies include:

- Department of Alcoholic Beverage Control
- Department of Criminal Justice Services
- Department of Education
- Department of Fire Programs
- Department of Health
- Department of Juvenile Justice
- Department of Mental Health, Mental Retardation and Substance Abuse Services
- Department of Motor Vehicles

- Department of Social Services
- Governor's Office for Substance Abuse Prevention
- Virginia National Guard
- Virginia State Police
- Virginia Tobacco Settlement Foundation

The Director of GOSAP shall chair the Collaborative and staff support shall be provided by GOSAP and agencies of the Commonwealth that have prevention responsibilities and such other agencies as may be appropriate. All agencies of the Commonwealth shall cooperate fully with the Collaborative and provide all such information, data, and other support requested.

Duties of the GOSAP Collaborative

The Collaborative shall have the following powers and duties:

Collaboration to enhance capacity, improve efficiency and produce results:

- Advise the Governor and his Cabinet on proposed policy and operational changes to facilitate interagency communication and collaboration in planning, implementing and monitoring prevention-related programs, services and strategies between state, local, public and private entities.
- Coordinate strategic planning efforts and initiatives to minimize duplication of effort and resources, to model interagency/inter-initiative collaboration and to work towards a seamless continuum of programs, services and strategies accessible to all Virginians.
- Develop and implement prevention planning and management standards to encourage communities to do one comprehensive community plan, reduce local duplication of effort and simplify funding application procedures.
- Maintain GOSAP's website to encourage and facilitate wider use of programs and practices proven effective by research, to promote related training opportunities and to disseminate prevention-related information throughout the Commonwealth.

Infrastructure to sustain and integrate prevention into practice:

- Prioritize, coordinate and leverage Virginia's existing prevention resources to improve efficiency.
- Identify gaps in resources and recommend strategies to sustain prevention efforts, activities and initiatives throughout the Commonwealth.

- Examine other issues and make recommendations for related policy, initiatives and resources as may seem appropriate.

Data to target resources and monitor results:

- Collect, compile and disseminate data on the consequences, incidence and prevalence of preventable problem behaviors. The data shall be used, at both state and community levels, to allocate resources, plan programs, services and strategies, and monitor community-level change.
- Coordinate similar new and existing data collection and dissemination efforts to minimize duplication of effort and resources.
- Research and determine the feasibility of a statewide survey of youth to monitor attitudes, perceptions and behaviors that contribute to the health and well-being of Virginia's youth, families, schools and communities.

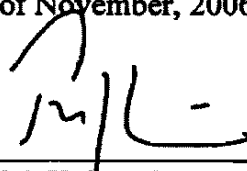
Report to the Governor

The GOSAP Collaborative shall report to the Governor annually, by October 30, through the Secretary of Public Safety, its activities, barriers, progress and achievements towards developing and implementing the Commonwealth's prevention infrastructure. Additionally, the report shall include recommendations to overcome barriers and to fully implement and sustain a prevention infrastructure in the Commonwealth.

Effective Date of the Executive Directive

This executive directive shall take effect upon signing and shall remain in full force and effect until June 30, 2010, unless amended or rescinded by further executive directive.

Given under my hand this 10th day of November, 2006.



Timothy M. Kane, Governor



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These reports are available on the JLARC website at <http://jlarc.state.va.us>



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