

**Risk Assessment of Delinquent Offenders  
Committed to West Virginia Youth Correctional Facilities**

by

Paul DeMuro and Jeffrey A. Butts

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**SUMMARY**

This risk assessment study of youths recently committed to the West Virginia Industrial Home and the Davis Center indicates that the state is over-utilizing secure confinement for juveniles. Approximately half of the youths in the study sample could have been placed in community-based programs rather than an institutional setting. A portion of the funds currently used to operate the institutions should be reinvested in the development of less expensive, community-based programs for non-violent juvenile offenders. In order to achieve this goal, state officials must act soon to restrict access to institutional placements.

## INTRODUCTION

The authors of this report responded to a request from the West Virginia Supreme Court of Appeals' Juvenile Justice Committee to study the population of committed delinquent youths placed in the two juvenile facilities operated by the Department of Corrections. The *West Virginia Industrial Home for Youth (WVIHY)* is a traditional training school located on a campus outside of the community of Salem. The *Davis Center* is a dorm-style, vocationally oriented camp for older, non-violent males and is located in the heavily forested area of the Eastern panhandle of West Virginia.

The primary focus of this report is a risk assessment which analyzes legal and demographic data about youths from these two facilities. The youths are ranked according to the seriousness of their past behavior and the potential risk they present to the public safety.

This study is only a tool or guide. It does not provide the master plan for how the state should deploy its juvenile justice resources. Instead, it offers a comprehensive examination of a cohort of youths who experienced all phases of the juvenile justice system -- from arrest, to adjudication, confinement, and release. A better understanding of these youths will allow the reader to draw conclusions about the adequacy of the West Virginia juvenile justice system, and to consider the efficiencies that could be gained by diversifying state resources so that institutional placements are reserved for serious juvenile offenders.

## POLICY CONTEXT<sup>1</sup>

West Virginia's elected officials and criminal justice professionals face much the same policy environment found in other states: there is a widespread notion that juvenile crime rates are on the increase and that the best way to deal with this problem is through the use of correctional facilities. Most experts in the field of juvenile corrections, however, will attest that incarceration should be only one aspect of a crime control strategy. Commitment and confinement should not be seen as an all-purpose solution to juvenile crime.

Institutional confinement should be reserved for the most severe cases in which a youth's behavior has shown him or her to be an actual danger to the community. Other, less severe cases should be handled as often as possible in community-based, and preferably smaller programs. This approach to the juvenile crime problem offers the greatest potential for maximizing the cost-effectiveness of the juvenile justice system. It restricts costly incarceration to the most serious proportion of the juvenile offender population.

This approach is also advocated by more than two decades of federal policy. The federal Juvenile Justice and Delinquency Prevention Act,<sup>2</sup> for example, encourages states to deinstitutionalize status offenders (i.e., runaways, school truants, youths in

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1. Some of this discussion is adapted directly from previous risk assessment studies conducted by the authors in other states. Since many issues related to risk assessment are present in every state, introductory and explanatory material may resemble earlier studies. All findings, conclusions, and recommendations, however, are based solely upon the information and data gathered in West Virginia.

2. P.L. 93-415, 42 U.S.C. § 5601 et seq. as amended (1980 & 1988).

conflict with their parents, etc.),<sup>3</sup> eliminate the jailing of juveniles in adult facilities,<sup>4</sup> and develop community-based alternatives for non-violent and non-chronic delinquent youths.<sup>5</sup> The U.S. Congress has repeatedly asserted that although training schools are an essential component of the continuum of services in youth corrections, institutional confinement should be used primarily for violent and chronic juvenile law violators.<sup>6</sup>

Juvenile justice standards developed by the Institute for Judicial Administration/American Bar Association also recommend that "[i]n choosing among statutorily permissible options, the court should employ the least restrictive category and duration of disposition that is appropriate to the seriousness of the offense, as modified by the degree of culpability indicated by the circumstances of the particular case, and by the age and prior record of the juvenile."<sup>7</sup> Whenever possible, juvenile courts should maintain a juvenile at home: "Removal from home is the most severe disposition authorized for adjudicated juveniles. As such, it should be reserved for the most serious or repetitive offenses, and rarely, if ever, used for younger juveniles."<sup>8</sup>

The theoretical or conceptual consensus on this point is well established. It is basic, fiscal conservatism. Expensive institutional resources should be focused where they are most needed -- controlling violent and serious offenders who pose a risk to the

3. 42 U.S.C. § 5633(a)(2)(A).

4. *Id.* § 5633(a)(14).

5. *Id.* § 5633(a)(12)(B).

6. Hearings Before the Subcomm. to Investigate Juv. Delinq. of the Senate Comm. on the Judiciary, 94th Cong., 1st Sess. 4 (1975).

7. Institute for Judicial Administration/American Bar Association, *Standards Relating to Dispositions* at 34 (1980).

8. *Id.* at 62.



community. Implementation can be more elusive. Who is to decide what constitutes a serious offender, or when a youth poses a significant risk to the community? Which offenses are by themselves serious enough to demand incarceration?

Youths who have committed violent crimes (such as murder or rape) require a strong, perhaps even punitive response from the justice system. What about less serious, non-violent offenses? When does a pattern of property offenses become a danger to the community? How do we distinguish between the actual harm done by an individual act and the larger social problem represented by that act -- e.g., the sale of drugs? Obviously, the proper use of juvenile institutions becomes more ambiguous once we go beyond conceptual frameworks. The only way to manage this ambiguity is to adhere as closely as possible to objective standards in making dispositional decisions about individual juveniles.

### How Many Beds?

Despite the general consensus that secure confinement should be reserved for violent and serious offenders, policy makers frequently confront pressures for more juvenile corrections beds. The question commonly asked at such times is, "how many institutional beds do we need?" The answer to this question ought to be derivable from: 1) detailed population projections and crime rate analyses that predict the number and type of future juvenile offenders in the state, and 2) a classification and placement system that determines the particular services needed for every type of delinquent offender likely to appear in the court system. Projections of this sort, however, are always confounded by technical factors and are inevitably prone to error.

Even if population projections and classification matrices were technically feasible and statistically reliable, public juvenile justice systems would still rarely be able to predict the demand for correctional beds. The social and political forces underlying the use of incarceration make it nearly impossible to say how many juvenile correctional beds will be "needed" in a particular state. It seems the juvenile corrections system can fill almost any number of beds made available to it.

A more answerable question can be asked: "Do currently available institutional resources seem to be used appropriately?" This is the question addressed by risk assessment. In other words, given current knowledge about juvenile offenders and corrections, are the youths in West Virginia's juvenile institutions the type who should end up in secure confinement? If it seems that many are not, the clear implication is that the system needs to examine its configuration of services and place more emphasis on developing and using alternative programs.

## **THE STUDY**

This study assesses West Virginia's use of commitment and institutional placement for delinquent youths. The purpose of the study is to help state policy makers analyze West Virginia's current use of juvenile corrections facilities and plan its future juvenile corrections needs. A number of other states including New Hampshire, Arkansas, Nebraska, and Alabama, have recently conducted similar studies. Using a relatively straightforward methodology, these studies construct risk profiles based upon the legal and demographic characteristics of delinquent, institutionalized

youths.<sup>9</sup> The risk profiles place each juvenile along a continuum which estimates their risk to the public safety.

Obviously, the public needs to be protected from violent and serious delinquent offenders. In order to do so effectively and efficiently, the juvenile justice system must distinguish the type of juvenile who needs to be controlled in a secure or institutional setting from the type who could be supervised in a non-institutional environment. Risk assessment offers an objective method which can begin to segment the offender population of a juvenile correctional system into relatively low-risk, and relatively high-risk groups so that this distinction can be made more efficiently.

There are several specific areas in which risk-based decision making can aid juvenile corrections policy makers:

1. Identifying the most serious offenders in order to target residential and non-residential program resources on appropriate groups.
2. Developing consistent placement guidelines in order to insure that youths who have high service needs but are low risks to the public safety do not consume institutional resources needed for more serious offenders.
3. Providing a consistent framework within which a diversified juvenile justice system can be designed that both protects the public safety and addresses the varying needs of delinquent youths.

### Methodology

The authors toured the two juvenile correctional facilities operated by the State of West Virginia, met with staff, and supervised the collection of data about the youths in the study sample. The study sample was defined as all youths released from the two

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9. These studies are available on request from the authors



facilities between February 1, 1989 and May 14, 1990. This resulted in a group or "cohort" of delinquent offenders that can be taken as representative of the youths being served by the two facilities. There is no particular significance to the definition of the study population, other than the fact that a 15-month cohort produced a reasonable sample size ( $n=180$ ) for data analysis. There is also no reason to believe that the youths released during the study period were significantly different from youths in any other recent period.

The case records of the youths in the study sample were examined and a set of variables was retrieved from the files using a standardized data collection instrument designed by the authors and used in a number of previous studies. (See the data collection instrument in Appendix I.) Once a data collection form had been completed for each youth in the study sample, the data were coded and analyzed by the authors using a standard statistical software package.

### Risk Scores

The data collection instrument is designed to obtain three kinds of information on each committed youth:

1. Demographic -- age, sex, ethnicity, committing county, etc.
2. Background Information -- living situation, history of drug use, etc.
3. Formal records of juvenile court adjudications and commitments.

The risk scores that are the focus of this study are based upon each youth's history of juvenile court involvement -- i.e., adjudications and commitments. The best indicators of risk for future arrest and adjudication are the recency, severity, and chronicity of prior offending, and also how early an individual becomes formally involved

in the justice system (i.e., age at onset). These factors should comprise the core of a risk assessment analysis.<sup>10</sup>

Although information on other factors (particularly those related to treatment needs) would be of interest to many people, the risk assessment is restricted to the most salient risk factors in order to reduce measurement error and keep missing data to a minimum. One of the more common errors in classification and risk assessment studies is to incorporate data on such a wide range of factors that compiling the information becomes highly complex. When this happens, the quality of the risk assessment is not greatly improved, the information that goes into the analysis becomes more subjective, and the outcome is less reliable.

## THE POPULATION

Several characteristics of the study youths are portrayed in Table 1. Each characteristic is presented separately for the Industrial Home and the Davis facility. During the 15-month study period, there were 98 youths released from the Industrial Home and 82 from Davis. The releases from WWIHY included 18 females. All but a few youths released from each facility were White or Caucasian. By definition of having met the criteria for transfer to the Davis Center, the youths there were older upon admission, mostly 16 and 17 years of age.<sup>11</sup> Youths released from the Industrial Home were younger upon admission; nearly 30 percent were under the age of 16.

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10. BAIRD, CLASSIFICATION OF JUVENILES: A MODEL SYSTEMS APPROACH. (1984); Also see reviews in GOTTFREDSON & TONFY, PREDICTION AND CLASSIFICATION: CRIMINAL JUSTICE DECISION MAKING (1987).

11. All youths at the Davis Center are first processed through the WWIHY. Only older, relatively compliant males are eligible for transfer to Davis.

TABLE 1  
Characteristics of Youths

	Placement			
	Industrial Home		Davis Center	
	n	Pct.	n	Pct.
Male	80	82%	82	100%
Female	18	18%	0	0%
White	82	90%	76	95%
Non-White	9	10%	4	5%
<b>Age At Admission</b>				
Under 15	16	16%	0	0%
15	13	13%	5	6%
16	23	23%	17	21%
17	38	39%	44	54%
Over 17	8	8%	16	20%
<b>On Probation Before?</b>				
No/DK	38	39%	27	33%
Yes	60	61%	55	67%
<b>Previous Use of Drugs?</b>				
No/DK	43	44%	38	46%
Yes	55	56%	44	54%
<b>Drugs Related to Offense?</b>				
No/DK	85	87%	72	88%
Yes	13	13%	10	12%
<b>Involvement With Weapons?</b>				
No/DK	78	80%	77	94%
Yes	20	20%	5	6%
<b>Total</b>	98	100%	82	100%

DK = Don't Know.

Note: Totals may not add due to missing data.

About a third of the youths released from the Davis Center, and almost 40 percent of those released from the Industrial Home had never been on probation before being committed to the youth facilities, according to their case records.<sup>12</sup>

Over half of all the juveniles had been known to use drugs other than alcohol.<sup>13</sup> This study made no attempt to assess the degree to which drug use had caused problems in each youth's life. The limited information present in a typical case record permitted only a yes or no answer to whether drug use was mentioned anywhere in the files. In a few cases (just over 10 percent), drug use was directly related to the commission of the youth's most recent offense. This was noted separately.

Twenty percent of the WVIHY youths and 6 percent of those released from the Davis Center had been involved with the use of weapons in some way -- i.e., known to have used or threatened the use of a weapon in the past.

Table 2 depicts the study youths according to their counties of origin, or where the case record indicated the youth was living just prior to the most recent offense. As shown in Table 2, five counties (Berkeley, Cabell, Kanawha, Marion and Wood) accounted for a substantial proportion of the youths in both facilities. Out of all 180 youths released from either facility during the study period, 79 (44 percent) were from these five counties.

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12. This is only an estimate since local court records were not reviewed for this study. Still, a sizeable number of the youths' files made no mention of probation.

13. Alcohol was excluded from the drug use question because the study had to estimate drug involvement without the luxury of personal interviews and clinical assessments. Known use of "illegal" drugs (including inhalants and marijuana) was thought to be a reliable indicator given limited information. Using agency case records to make distinctions about "normal" versus "dysfunctional" alcohol use would be difficult since the use of alcohol is so pervasive among adjudicated delinquents.

TABLE 2  
Number of Youths by County, by Placement

Committing county	Total		Placement			
	n	Pct.	Industrial Home		Davis Center	
			n	Pct.	n	Pct.
Counties with Over 5 Commitments						
Berkeley	9	5%	5	5%	4	5%
Cabell	23	13%	12	12%	11	13%
Kanawha	15	8%	8	8%	7	9%
Marion	11	6%	9	9%	2	2%
Wood	21	12%	13	13%	8	10%
Counties with 5 or Fewer Commitments						
Boone	4	2%	2	2%	2	2%
Brooke	1	1%	1	1%	0	0%
Calhoun	3	2%	2	2%	1	1%
Clay	1	1%	1	1%	0	0%
Doddridge	2	1%	1	1%	1	1%
Fayette	5	3%	3	3%	2	2%
Gilmer	2	1%	2	2%	0	0%
Grant	2	1%	0	0%	2	2%
Greenbrier	2	1%	2	2%	0	0%
Hancock	4	2%	2	2%	2	2%
Harrison	1	1%	1	1%	0	0%
Jackson	3	2%	3	3%	0	0%
Jefferson	4	2%	1	1%	3	4%
Lewis	2	1%	0	0%	2	2%
Lincoln	2	1%	2	2%	0	0%
Logan	5	3%	0	0%	5	6%
Marshall	5	3%	1	1%	4	5%
Mercer	1	1%	1	1%	0	0%
Mineral	4	2%	2	2%	2	2%
Mingo	5	3%	2	2%	3	4%
Morgan	1	1%	1	1%	0	0%
Nicholas	5	3%	4	4%	1	1%
Ohio	3	2%	1	1%	2	2%
Preston	2	1%	1	1%	1	1%
Putnam	2	1%	0	0%	2	2%

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TABLE 2  
Number of Youths by County, by Placement

	Total		Placement			
	n	Pct.	Industrial Home		Davis Center	
			n	Pct.	n	Pct.
Raleigh	5	3%	3	3%	2	2%
Randolph	4	2%	2	2%	2	2%
Ritchie	3	2%	1	1%	2	2%
Roane	3	2%	2	2%	1	1%
Summers	2	1%	2	2%	0	0%
Tucker	2	1%	0	0%	2	2%
Upshur	5	3%	1	1%	4	5%
Wayne	2	1%	1	1%	1	1%
Webster	2	1%	1	1%	1	1%
Wetzel	1	1%	1	1%	0	0%
Wyoming	1	1%	1	1%	0	0%
<b>Total</b>	<b>180</b>	<b>100%</b>	<b>98</b>	<b>100%</b>	<b>82</b>	<b>100%</b>

Not surprisingly, the five high-commitment counties were among the highest ranking counties in the state for the volume of juvenile petitions filed during late 1989 and early 1990.<sup>14</sup> Interestingly, however, two other counties that rank high in terms of petition volume, had relatively few youths in the study sample. Fayette and Logan counties have more than twice the petition volume of Marion and Wood counties. Yet, while Marion and Wood counties accounted for 11 and 21 youths each, Fayette and Logan accounted for just 5 youths each.

In other words, given their volume of juvenile petitions, one would have expected more of the study youths to be from Fayette and Logan counties, and fewer to be from Marion and Wood. This especially applies to Wood County which accounted for nearly

14. Juvenile Justice Committee, *Aspects of Juvenile Delinquency in West Virginia Counties: Petitions, Secure Detention, and Detention Rate at 5* (1990).

as many institutionalized youths as Cabell County (21 versus 23) though its volume of juvenile petitions was less than a third of Cabell County's (98 versus 328). State officials should explore the reasons why Fayette and Logan counties are apparently more successful at handling their delinquency caseloads locally.

The adjudicated offense which resulted in each youth's most recent period of confinement is referred to as the youth's "commitment offense." Information about the youths' offense histories was at times very difficult to compile. Each youth's case record was examined for evidence of court proceedings resulting in an adjudication for a delinquent act. Sometimes, actual court documents were present. More often, adjudications had to be inferred from a combination of court records and departmental or institutional reports. In order to ensure that all adjudications were included, the study accepted as valid any indication in the case record that a particular charge had resulted in an adjudication. Only in cases where the record clearly stated that charges had been dismissed or adjusted informally was an adjudication not accepted as valid.

The various commitment offenses of the study youths have been categorized into 8 groups as shown in Table 3. The most serious of these offenses are violent felonies (murder, sexual assault, etc.), and "other serious" charges, most of which are felonies (e.g., Non-aggravated robbery, child sexual abuse, delivery of narcotics). Next in the order of seriousness would be property felonies such as burglary and grand larceny, followed by misdemeanors (one group for those directed at persons, another for those directed at property). The last three offense groups contain "other minor charges," violations of probation, and status offenses. These groupings were designed to follow West Virginia statutes relatively closely.

TABLE 3  
Commitment (Most Recent) Offense by Placement

Offense Categories	Placement			
	Industrial Home		Davis Center	
	n	Pct.	n	Pct.
<b>Violent Felonies</b>				
Murder 1	1	1%	0	0%
Sex Assault 1	2	2%	0	0%
Sex Assault 2	2	2%	0	0%
Aggravated Robbery	6	6%	4	5%
Murder 2	1	1%	0	0%
Malicious Assault	1	1%	2	2%
Sex Abuse 1	2	2%	0	0%
<b>Other Serious/ Felonies</b>				
Robbery Nonaggravated	1	1%	0	0%
Child Sex Abuse	1	1%	0	0%
Delivery of Narcotics	0	0%	1	1%
Arson 1	2	2%	0	0%
Burglary Night	1	1%	0	0%
<b>Property Felonies</b>				
Burglary	1	1%	4	5%
B & E	12	12%	14	17%
Grand Larceny	3	3%	10	12%
Grand Larc Auto	14	14%	6	7%
Fraud	1	1%	0	0%
Forgery	1	1%	0	0%
Arson 4	1	1%	0	0%
<b>Misdemeanors (Person)</b>				
Assault Unspec	4	4%	0	0%
Battery	7	7%	2	2%
DUI 2nd	1	1%	1	1%
Brandish Weapon	1	1%	0	0%
Telephone Harass	1	1%	0	0%
Simple Assault	2	2%	0	0%
DUI	1	1%	1	1%
Sex Abuse 3rd	1	1%	0	0%
Reckless Driving	0	0%	1	1%

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TABLE 3  
Commitment (Most Recent) Offense by Placement

	Placement			
	Industrial Home		Davis Center	
	n	Pct.	n	Pct.
<b>Misdemeanors (Property)</b>				
Destruct Property	0	0%	7	9%
Petit Larceny	7	7%	3	4%
Receive Stolen Prop	1	1%	0	0%
B & E Auto	1	1%	2	2%
Enter w/o Breaking	2	2%	1	1%
Bad Checks	1	1%	1	1%
Joyriding	4	4%	3	4%
Trespassing	0	0%	1	1%
<b>Other Minor</b>				
Possess Weapon	2	2%	1	1%
Obstruct Officer	2	2%	0	0%
Possess Marijuana	0	0%	1	1%
Public Intox	0	0%	1	1%
Traffic	0	0%	1	1%
<b>Violations</b>				
Viol Probation/Parole	1	1%	10	12%
Capias	1	1%	0	0%
<b>Status Offenses</b>				
Incorrigible	1	1%	0	0%
Runaway	3	3%	2	2%
Truancy	1	1%	2	2%
<b>Total</b>	98	100%	32	100%

As shown in Table 3, 15 percent (15 out of 98) of the youths released from the Industrial Home during the study period were committed for violent offenses (e.g., murder, sexual assault, aggravated robbery). Six youths (7%) released from Davis had been committed for violent felonies -- aggravated robbery or malicious assault. Four

other WVIHY youths and one youth from the Davis Center had been committed for other serious felonies. The largest number of youths in both facilities had been committed for property offenses -- mostly breaking and entering or grand larceny.

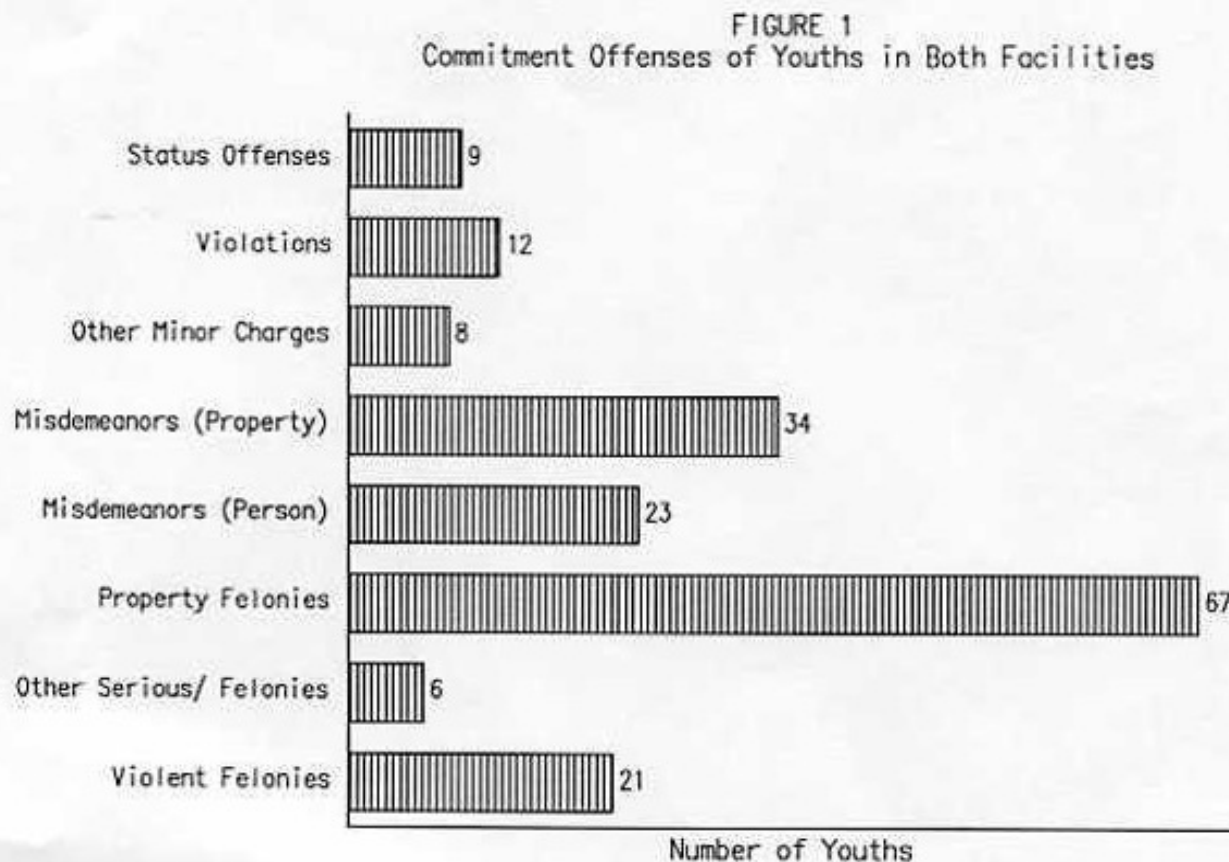


Figure 1 shows that 27 (or 15 percent) of the youths in the entire study sample had been committed for either violent (21) or other serious felonies (6). Sixty-seven youths (37%) had been committed for property felonies. Another 67 youths had been committed for misdemeanors, either property (34), or person misdemeanors (23). Nine youths were committed for status offenses, 12 for violations of probation or parole or capias orders, and 8 youths had been committed for other minor charges such as possession of a weapon or obstructing an officer.



Commitment offenses provide only some of the information needed to evaluate the severity of an offender's behavior. Perhaps many of the youths committed for status offenses and misdemeanors had been previously adjudicated for serious crimes such that any new infraction was thought to present substantial risk to the community.

TABLE 4  
Most Serious Prior Offense by Placement

	Placement				Total	
	Industrial Home		Davis Center		n	Pct.
	n	Pct.	n	Pct.		
<b>Most Serious Prior Offense</b>						
Violent Felonies	4	4%	2	2%	6	3%
Other Serious/ Felonies	3	3%	3	4%	6	3%
Property Felonies	25	26%	34	42%	59	33%
Misdmenrs (Person)	9	9%	4	5%	13	7%
Misdmenrs (Property)	18	18%	13	16%	31	17%
Other Minor	3	3%	1	1%	4	2%
Status Offenses	6	6%	7	9%	13	7%
No Priors	30	31%	17	21%	47	26%
<b>Total</b>	<b>98</b>	<b>100%</b>	<b>81</b>	<b>100%</b>	<b>179</b>	<b>100%</b>

Note: Table totals may vary due to missing or incomplete data.

Table 4 contains the most serious prior offenses ever charged against the study youths. For 107 youths, or 60 percent of the total, the most serious prior charge was either a property felony (33%), misdemeanor (25%), or other minor offense (2%). Sixty youths, or 33 percent, had no prior offenses at all or only status offenses prior to being institutionalized. Among all youths in the study sample, only 12 (7%) had a violent felony or other serious charge on their record prior to commitment.

## RISK SCORES

Even looking at the most serious prior offense in combination with the commitment offense cannot completely characterize an offender for the purpose of judging risk. There are other factors that should be acknowledged, such as the overall number of prior offenses and the age at which they began. Bringing more elements into the equation makes cross-tabular analysis increasingly less useful. Therefore, we now turn to the calculation of risk scores.

Simple, additive risk scores were calculated using a number of factors from each youth's case record and combining all the factors into one number. As depicted in Figure 2, points were assigned to each youth's commitment offense, and his or her most serious prior offense. For example, a youth would receive 10 points if his or her commitment offense was a violent felony. If the same youth's most serious prior offense was also a violent felony, 7 more points would be added to the score. Prior offenses receive fewer points since the best indicator of future risk is a youth's most recent behavior. If there were no prior offenses in the youth's record, only the commitment offense contributed points to the score.

More points were added if a youth appeared to be a chronic offender. Two or three prior adjudications earned two additional points. Four or more prior adjudications resulted in another three points, for a total of five. Points were also added for an early "onset" of court involvement. An adjudication before the age of 14 resulted in one point. Another point was added if the youth had any prior out-of-home placements due to delinquent behavior.

**FIGURE 2:**  
**Scoring of Risk Assessment Instrument**

**POINTS FOR OFFENSES (Range 0 to 17)**

	<u>Commitment</u>	<u>Offense + Most Serious Prior</u>
Violent Felonies	10	7
Other Serious Felonies	8	5
Property Felonies	6	3
Misdemeanors (Person)	4	2
Misdemeanors (Property)	2	1
Other Minor	2	0
Status Offenses	0	0
Violations	3	1
No Priors	0	0

**POINTS FOR NUMBER OF PRIOR ADJUDICATIONS (Range 0 to 5)**

0 or 1.....	0
2 or 3.....	2
4 or More.....	5

**POINTS FOR AGE OF ONSET (Range 0 or 1)**

Under 14.....	1
14 or Older.....	0

**POINTS FOR PREVIOUS PLACEMENTS (Range 0 or 1)**

Any Delinquency Placements.....	1
Prior to Current Commitment	

**POINTS FOR KNOWN DRUG USE (Range 0 or 1)**

Any Drug Use Noted in Record...	1
or	
Drug Use Related to Offense....	1

**POINTS FOR WEAPON USE (Range 0 or 1)**

Any Use (or Threatened Use)	
of Weapon Noted in Record....	1

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**Total Range** **= 0 to 26**

If the youth's record contained any indications of drug use (other than alcohol), or if drugs were directly related to the commission of the most recent offense (e.g., if they committed the offense under the influence, or with the intent of obtaining or selling illicit drugs), another point was added to the score. Finally, one point was added whenever the record indicated the youth had been involved with the use of weapons in any way.

The combination (addition) of all the factors and associated points produces a range of scores. The lowest possible score would be zero. For example, if a youth with no prior offenses or placements was adjudicated for a status offense, at age 16, and was not known to be a drug user or be involved with weapons, his or her score would be 0.

The highest possible score, on the other hand, would be 26. This would result from a youth whose commitment offense and most serious prior offense were both violent felonies (10 and 7 points respectively), who had more than 3 previous adjudications (5 points) including one before the age of 14 (1 point), who had a previous out-of-home placement due to delinquency (1 point), had used weapons in the past (1 point), and who was known to have used drugs (1 point).

In most states, juvenile offenders who score ten or more points on this risk assessment would be considered appropriate for secure, or institutional care.<sup>15</sup> An inspection of Figure 2 shows the many ways in which a youth can accumulate ten points. Youths committed for serious, violent crimes (i.e., those scored as 10 points) would be automatically eligible for secure care. Youths with a history of serious property crime

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15. Some states would probably use a more stringent standard. Massachusetts and Utah, for example, maximize the use of community-based programs before institutional commitment is considered for juvenile offenders. In these states, the threshold for secure care on the risk assessment instrument could be several points higher.

would also be eligible for secure care as combinations of their offenses and other factors would easily surpass ten points. Scores over ten are called "high" risk scores in the following analysis.

On the other hand, youths who score six points or less -- having committed only minor offenses or perhaps status offenses -- are referred to as "low" risks. Such youths should not be committed to institutional placements, but should be served through community-based programs.

Youths in the middle of the continuum, those scoring from seven to nine points, are said to have "medium" risk scores. It is likely that such youths would need special services and supervision. However, they should also be handled through non-institutional programs whenever possible. Only after the specific circumstances of a case have been reviewed should a medium risk offender be committed to secure care.

### Interpretation of Risk Scores

The reader is cautioned not to think of the risk scores in this study as predictions in the purely statistical sense. Predicting future delinquency is just as problematic as any other exercise in predicting human behavior. Considerable research, however, has shown that these factors can generally distinguish repeat, chronic offenders from other juveniles who will most likely desist from crime earlier and engage in less serious criminal behavior before they do.

The risk assessment scores offer a guiding framework for commitment and placement decisions. The scores measure the severity of each youths' behavior, not the



totality of his or her treatment needs. Thus, the risk assessment methodology should not be seen as an exact placement tool. Commitment and placement decisions involve several factors in addition to public safety. Risk to the public, however, is a central focus of any criminal justice agency. The degree to which incarceration decisions are consistent with a public safety standard is a fundamental barometer of the effectiveness and efficiency of the juvenile justice system.

### Risk Score Results

Table 5 contains the frequency and percentage distribution of the risk scores for both facilities. Because risk scores represent a combination of many variables, and because a number of case records did not contain complete information, the remaining tables do not add to 180.

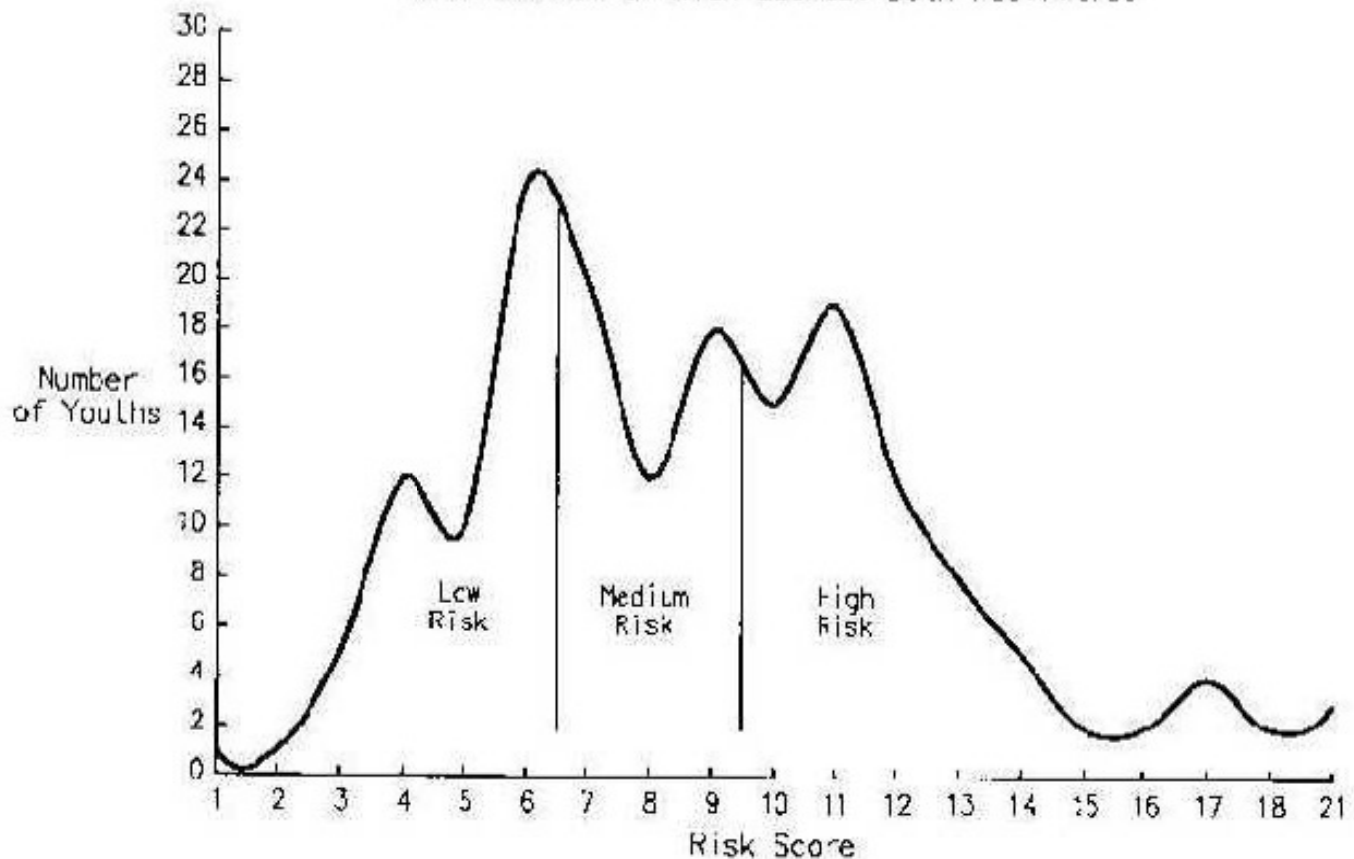
The scores of the youths range from a low of 1 point to a high of 21 points. The modal (most common) score was 6. Twenty-four youths had this score. The distribution of the youths into low, medium, and high risk categories is displayed at the bottom of Table 5. A substantial proportion of the youths in both facilities scored in the low risk category (27 and 34 percent). Thirty percent of the youths released from the Industrial Home and 27 percent of those from Davis scored between 7 and 9 points, placing them in the medium risk range. High risk scores comprised 43 percent of the WVIHY releases and 39 percent of those from the Davis Center. Overall, 30 percent of the youths scored as low risks, and 29 percent were in the medium risk category.

TABLE 5  
Risk Scores by Placement

	Placement				Total	
	Industrial Home		Davis Center		n	Pct.
	n	Pct.	n	Pct.		
<b>Risk Scores</b>						
1	1	1%	0	0%	1	1%
2	0	0%	1	1%	1	1%
3	2	2%	3	4%	5	3%
4	5	5%	7	9%	12	7%
5	6	6%	4	5%	10	6%
6	12	13%	12	15%	24	14%
7	13	14%	7	9%	20	11%
8	8	8%	4	5%	12	7%
9	8	8%	10	13%	18	10%
10	9	9%	6	8%	15	9%
11	7	7%	12	15%	19	11%
12	6	6%	6	8%	12	7%
13	6	6%	2	3%	8	5%
14	3	3%	2	3%	5	3%
15	1	1%	1	1%	2	1%
16	1	1%	1	1%	2	1%
17	4	4%	0	0%	4	2%
18	1	1%	1	1%	2	1%
21	3	3%	0	0%	3	2%
<b>Grouped Scores</b>						
Low (0 - 6)	26	27%	27	34%	53	30%
Medium (7 - 9)	29	30%	21	27%	50	29%
High (10 +)	41	43%	31	39%	72	41%
<b>Total</b>	96	100%	79	100%	175	100%

Note: Scores could not be calculated for all cases due to missing information on critical variables.

FIGURE 3  
Distribution of Risk Scores: Both Facilities



A frequency distribution of the risk scores is depicted in Figure 3. The area under the plot is divided into low, medium, and high and portrays the proportion of the study sample in each risk level. Clearly, a significant number of youths from both facilities scored in the lower ranges. In fact, these results suggest that over half of the youths committed to the two facilities should have been considered for non-institutional programs instead.

TABLE 6  
Risk Scores by Gender and County Group

	n	Pct.
<b>Males</b>		
Low	46	29½
Medium	41	23½
High	70	45½
<b>Females</b>		
Low	7	39½
Medium	9	50½
High	2	11½
<b>Counties with Over 5 Youths in Sample</b>		
Low	25	32½
Medium	24	31½
High	28	36½
<b>Counties with 5 or Fewer Youths in Sample</b>		
Low	28	29½
Medium	26	27½
High	44	45½
<b>TOTAL</b>	<b>175</b>	<b>100½</b>

Table 6 presents the risk scores according to gender and whether the youth was from one of the high-commitment counties. The data in Table 6 demonstrate two points. First, the scores of the females in the study sample were far lower than those of the males. There were 18 females released from the two facilities during the study period. Only two scored over 9 points on the risk assessment. Second, juveniles from the 5 high-commitment counties (Berkeley, Cabell, Kanawha, Marion, and Wood), had slightly lower scores than youths from other West Virginia Counties. Thirty-six percent of the youths from the five high-commitment counties scored 10 points or more on the risk assessment. Among the youths from all other counties, 45 percent scored high.

## Individual Case Histories

Thus far, the youths released from both facilities have been portrayed by demographic characteristics and computed risk scores. What do these numbers mean? What do "low risk" youths look like, and how are they different from "high risk" youths? As a final look at the population, the following case summaries are presented. Each summary contains the facts from a case record which was reviewed for the risk assessment. The names of the youths are fictitious.

### Low Risk Cases

Tony was 14 years old when he was committed for misdemeanor battery. This was his first adjudication. The incident involved his mother. Tony and his mother had an argument and he threatened her with a baseball bat, holding it up and acting like he would swing at her. She ordered him to put it down, which he did. Tony's mother then picked up the bat and struck him on the legs. Tony had been placed out of his mother's home once before. He was not known to use drugs. **Score 5.**

Robert was 15 years old when he was adjudicated for the second time. Robert had been placed out of his home on several prior occasions for mental health reasons, and he had been known to use drugs. His prior adjudications, however, were both status offenses -- incorrigibility. His commitment to the Industrial Home stemmed from an incident in which he vandalized a public fountain and was in possession of a hunting knife when arrested. He was also intoxicated at the time. He was charged with possession of a weapon and destruction of property. **Score 4.**

Russell was 14 when he was committed for attempted arson, breaking and entering, and destruction of property. All these charges stemmed from one incident in which Russell apparently "attacked" his mother's mobile home. This was his first adjudication. He had never been removed from home before and was not known to use drugs. **Score 6.**

### Medium Risk Cases

Bill was about to turn 13 years old when he was committed for grand larceny (auto). He had been adjudicated once already for joyriding -- just 3 months prior to his commitment offense. Bill was not known to be involved with drugs. He had been placed out of his parents' home, however, on several occasions. He had also been on probation following his first adjudication. **Score 9.**



Marty was sent to the Industrial Home after what was apparently his first adjudication. At the age of 17, he and a couple of friends broke into a school building and stole some computer equipment. Marty was charged with breaking and entering, a felony. There was no record of any prior out-of-home placements, although Marty had been known to use drugs. **Score 7.**

Frank was committed for third degree sexual abuse at the age of 17. He had been adjudicated about a year before for battery. Frank was thought to have been involved in several sexual assaults upon his siblings. His battery charge involved an altercation with a teacher. He had two prior out-of-home placements. **Score 7.**

### High Risk Cases

Joan had just turned 16 when she was committed to the Industrial Home for her first offense, aggravated robbery. Apparently on an impulse, Joan took a large kitchen knife from her parents' home, walked into the neighborhood store and demanded money from the frightened cashier. After leaving the store, Joan tossed the knife and the money into a trash can and walked back home. She had no contact with the courts prior to this offense. **Score 11.**

Merle was committed just before his 18th birthday for breaking and entering. He had been adjudicated at least twice before, beginning at the age of 14. His most serious offense was felony burglary of a dwelling (unforced). Merle had been removed from his parents' home on several occasions and placed through child welfare or mental health agencies. He had also been placed on probation. Merle's drug use was directly related to his most recent offense. **Score 12.**

Bubba was sent to the Industrial Home for grand larceny and destruction of property. He was 17 years old at the time of his commitment, but had been getting into trouble since the age of 15. He was adjudicated on two prior occasions, his most serious charge was breaking and entering. Bubba had been placed out of his home at least three times before for delinquent behavior and had been on probation. **Score 12.**

These case histories document the fact that many committed youths have high treatment needs and chaotic home environments. Only some, however, have a history of dangerous behavior. In other states, some of these youths may have even been handled as status offenders (e.g., "Tony" and "Robert"). A few have been adjudicated for relatively serious offenses, although even some of these could be primarily cases of emotional trouble and deprivation (e.g., "Russell", "Bill" and "Joan"). Others appeared to

be relatively minor, almost "normal" adolescent risk takers (e.g., "Marty"). These 9 examples, drawn from the study data, support the argument that West Virginia should implement tighter controls over admissions to its juvenile corrections facilities in order to develop and make greater use of alternative programs.

## **IMPLICATIONS AND CONCLUSIONS**

- \* Based upon the risk assessment methodology which combines information about past delinquent behaviors with other factors related to public safety, up to 59 percent of the youths recently committed to West Virginia juvenile correctional facilities could have been handled in less expensive, alternative programs. The state should move to reduce its reliance on secure care for non-violent, non-chronic youthful offenders.
- \* Five West Virginia counties accounted for over 40 percent of the youths released from the Industrial Home and the Davis Center during the study period. Other counties with equally large court caseloads seem to commit far fewer delinquents to the state. These differences should be examined by state officials; successful approaches in one part of the state should be expanded to other jurisdictions.
- \* Although there were only 18 females released from the Industrial Home during the study period, all but 2 of these youths scored as low or medium risks on the risk assessment instrument. The state should actively explore placement options for delinquent girls as the behavior of those committed to the Industrial Home did not appear to warrant secure care.
- \* One-third of all the committed youths in the study had never been on probation prior to being institutionalized. This finding should be verified by state officials, and there should be an immediate effort to eliminate the use of institutional confinement as a first response to delinquent behavior.

The major finding of this study -- that a significant number of the youths committed to West Virginia institutions should be handled in other settings -- suggests that the state needs to do at least four things:

- 1) Implement better controls over the use of institutional placement in order to prevent future admissions of low and medium risk youths;
- 2) Move to diversity the range of placement options available for all delinquent offenders;
- 3) Proceed immediately to transfer all of the low-risk and most of the medium-risk youths now in the institutions to alternative programs; and,
- 4) Establish an external review procedure to examine all cases in which youths scoring Under 10 points are still thought to be appropriate for institutional placement.

State officials should use the risk assessment instrument presented in this study (or another instrument like it) to conduct reviews on all the youths currently in placement at the WVIHY and the Davis facility. A treatment plan should be devised for each youth identified as a candidate for transfer, and the staff at each facility should work with agencies from the youth's home community to arrange appropriate services. Any obstacles to arranging such services should be documented and reviewed by an external body. Routine risk assessment analyses should facilitate the state's efforts to monitor the appropriateness of institutional placements in the future. (See Appendix II for a discussion of how this could be done.)

This study does not pretend to answer every question facing the juvenile justice system in West Virginia. There will be ambiguities and difficult choices in any attempt to reform juvenile corrections, and these ambiguities cannot always be resolved by bigger and better risk assessments or classification systems. The best path to improving the cost-effectiveness of juvenile corrections, however, is to introduce a higher level of objectivity into commitment and placement decisions.

The locus of decision-making over institutional placements in juvenile justice is an inherently political issue. Advocates of incarceration argue that the public demands

protection from violent youths and that young criminals need a "taste" of incarceration to set them straight. Public opinion polls, on the other hand, reveal widespread support for emphasizing rehabilitation in juvenile corrections.<sup>16</sup> The available research evidence also indicates that although secure confinement is often three times as expensive as alternatives such as intensive probation and tracking programs, it is not more effective in terms of rehabilitation.<sup>17</sup>

State officials should exercise more control over how juvenile corrections facilities are used. The level of security recommended for an individual offender should be closely tied to the risk he or she presents to the public safety. Other factors, such as need for treatment, should be considered when deciding which particular agency to use for a youth, or whether to focus services on vocational, educational, or psychological goals. *The decision whether to incarcerate should be based upon risk to the public.* Vigilant adherence to this principle will enhance the cost-effectiveness of the juvenile justice system in West Virginia.

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16. SCHWARTZ & ABRFY, 1990 MICHIGAN JUVENILE CRIME SURVEY: SUMMARY REPORT # 1 (1990); Steinhan, *California Opinion Poll: Public Attitudes on Youth Crime*, NCCD FOCUS at p. 7 (1988); Galvin & Polk, *Juvenile Justice: Time for New Direction?*, 29 CRIME & DELINQ. at p. 330 (1985).

17. Gendreau & Ross, *Revivification of Rehabilitation: Evidence From the 1980s*, 4 JUST. QUART. at 349 (1987); McCarthy, INTERMEDIATE PUNISHMENTS: INTENSIVE SUPERVISION, HOME CONFINEMENT AND ELECTRONIC SURVEILLANCE (1987); Nat'l Coun. on Crime and Delinq., UNLOCKING JUVENILE CORRECTIONS (1989); Austin, Joe, Kriesberg, & Steele, *The Impact of Juvenile Court Sanctions: A Court that Works*, NCCD FOCUS (March, 1990); Barton & Butts, *Viable Options: Intensive Supervision Programs for Juvenile Delinquents*, 36 CRIME & DELINQ. at 238 (1990).



# **APPENDIX I: RISK ASSESSMENT INSTRUMENT**

FACILITY \_\_\_\_\_ DATA COLLECTOR (Initials) \_\_\_\_\_

YOUTH'S NAME \_\_\_\_\_ D.O.B. \_\_\_\_\_

COMMITTING COURT/COUNTY \_\_\_\_\_ COMMITTING JUDGE \_\_\_\_\_

SFX: Male Female RACE: White Black Hispanic Native/Amer Asian Other *(Circle Answers)*

COMMITMENT OFFENSE (Most Recent Adjudication) \_\_\_\_\_

DATE OF (RE)COMMITMENT \_\_\_\_\_ DATE OF FIRST DELQ. ADJUDICATION \_\_\_\_\_

MOST SERIOUS ADJUDICATED OFFENSE PRIOR TO COMMITMENT OFFENSE \_\_\_\_\_

NUMBER OF INCIDENTS LEADING TO ADJUDICATION IN PAST THREE YEARS  
(i.e., not the number of separate charges or counts) \_\_\_\_\_

NUMBER OF <u>PREVIOUS</u> PLACEMENTS	Child Welfare (e.g., foster care)	0	1	2	3-
	Mental Health (e.g., resid. care)	0	1	2	3+
	Delinquency (if by Court order)	0	1	2	3-

EVER ON PROBATION PRIOR TO COMMITMENT? Yes No Don't Know

DOES RECORD INDICATE ANY USE OF WEAPONS? Yes No Don't Know

DOES RECORD INDICATE ANY DRUG USE (Other Than Alcohol)? Yes No Don't Know

WAS DRUG USE RELATED TO COMMISSION OF CURRENT OFFENSE?  
(Answer Yes Only if *Directly* Related) Yes No Don't Know

WAS YOUTH ATTENDING SCHOOL AT TIME OF COMMITMENT? Yes No Don't Know

*Comments:*



## APPENDIX II: IMPLEMENTING AND EVALUATING POPULATION CONTROLS

Using the findings of this study as a guide, it can be estimated that up to 59 percent (i.e., the combined proportion of low- and medium-risk cases) of all recommended admissions into both of West Virginia's juvenile correctional facilities could be handled in alternative programs in the future. Even if a portion of the medium-risk youths are, upon external review, found to be suitable for institutionalization due to special circumstances, the overall proportion of inappropriate admissions is likely to be no less than 45 percent.

Let us assume that the rate of inappropriate admissions into the Industrial Home is, in fact, 45 percent. Thus, of all recommended admissions, about 55 percent will be truly appropriate for secure care. Let us also assume that, without controls, there will be 100 recommended admissions in 1990.<sup>18</sup> This suggests that if population controls were implemented, the number of admissions would decline to approximately 55 per year (i.e., *100 expected annual admissions X .55 appropriateness rate*). This information, combined with the average length of stay (ALOS) of Industrial Home youths allows us to project the average daily population (ADP) of the facility.

As shown in Table A-1, the average daily population can be projected by multiplying the number of annual admissions by the ALOS (in months) and dividing by 12.<sup>19</sup> We have estimated there will be 55 appropriate WVJHY admissions per year. The

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18. This will not be the actual number, but 100 makes the example easier to follow.

19. If ALOS is in days, divide by 365.

ALOS of WVIHY youths is about 7 months.<sup>20</sup> Finding the row for 55 admissions in Table A-1, and following it over to the column for 7 months, we can see that under these assumptions the average daily population over the course of a year will be 32 juveniles.

TABLE A-1  
Projection of Average Daily Population (ADP)\*

		Average Length of Stay (in Months)										
		4	5	6	7	8	9	10	11	12	15	18
Annual Admissions	20	7	8	10	12	13	15	17	18	20	25	30
	30	10	13	15	18	20	23	25	28	30	38	45
	35	12	15	18	20	23	26	29	32	35	44	53
	40	13	17	20	23	27	30	33	37	40	50	60
	45	15	19	23	26	30	34	38	41	45	56	68
	50	17	21	25	29	33	38	42	46	50	63	75
	55	18	23	28	32	37	41	46	50	55	69	83
	60	20	25	30	35	40	45	50	55	60	75	90
	65	22	27	33	38	43	49	54	60	65	81	98
	70	23	29	35	41	47	53	58	64	70	88	105
	75	25	31	38	44	50	56	63	69	75	94	113
	80	27	33	40	47	53	60	67	73	80	100	120
90	30	38	45	53	60	68	75	83	90	113	135	
100	33	42	50	58	67	75	83	92	100	125	150	

\* ADP = (Annual Admissions X Average Months Stay) : 12

20. According to the data collected for the risk assessment.

Of course, if different conditions and assumptions are used, the resulting ADP will be different. The assumptions used here are intended as an example only. State officials should modify these assumptions to reflect the actual pattern of admissions to both facilities. This example, however, is relatively simple and can be used as a model to develop a mechanism for evaluating the state's progress in addressing the problems identified in this report.

One logical variation from the assumptions used above would be to use different lengths of stay for different types of offenders. Currently, the actual ALOS at both facilities does not vary with the severity of the juveniles' offense history. A modification could be that youths scoring more than a certain number of points on the risk assessment would have longer stays. Say, for example, of the 55 expected admissions, 20 juveniles would stay an average of 12 months while the remaining 35 would have an ALOS of 6 months. Under these conditions, the ADP would be the sum of 20 admissions with a 12-month ALOS (or  $ADP = 20$ ), and 35 admissions with an ALOS of 6 ( $ADP = 18$ ). Obviously, this policy would increase the ADP from 32 to 38 (i.e.,  $20 + 18 = 38$ ).

Whatever assumptions are used, an agreed-upon ADP should be set as a target population for each institution. Their actual populations will fluctuate throughout the year, but on average, they should stabilize around the target ADP if adequate population controls are implemented. The effectiveness of the controls should be evaluated by the state for a period of years. Their success could be measured as in Figure A-1.

Normal events such as the start of the school year and the onset of warm weather typically produce surges in juvenile justice activity. Thus, some fluctuation around the target ADP should be expected. The size of the fluctuation should be restricted to no more than 15 or 20 percent above the target for any one month. Any time the ADP for

the month exceeds 120% of the target, immediate action should be taken such as risk-based case reviews to determine candidates for transfer to other programs.

FIGURE A-1  
Monitoring Institutional Populations:  
An Example Using Hypothetical Data

