

**ALAMEDA COUNTY PLACEMENT RISK  
ASSESSMENT VALIDATION**

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**NATIONAL COUNCIL ON CRIME AND DELINQUENCY**

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## Introduction

Alameda County is California's seventh most populous county, a region of enormous scope and diversity. Its 1.3 million residents are spread across 821 square miles, with 26 law enforcement jurisdictions policing 14 incorporated cities. It is estimated that about 139,000 youth between the ages of 10 and 17 resided in the County in 1995. Socio-economically, the County is diverse, reflecting the high-tech boom of the San Francisco Bay area and those people left behind.

The Alameda County Probation Department was awarded a grant from the National Institute of Justice in 1998 to develop a risk assessment for probation placement cases. The project was a follow-up to a process that began in 1996 when the Department contracted with the National Council on Crime and Delinquency (NCCD) to construct a five-year plan to improve the effectiveness and efficiency of their Juvenile Services Division. NCCD was instrumental in developing the planning approach for graduated sanctions for the Office of Juvenile Justice and Delinquency Prevention's *Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders*. In August of 1996, the Department adopted this strategy as its official governing policy for all system design and policy decisions. Part of this plan was to develop a risk assessment instrument for placement of adjudicated juveniles.

The goal of the project was to implement a system-wide classification and placement system that would address the public concern for safety and effectiveness in dealing with juvenile crime. It would use a structured process that would assess the risk of future recidivism in combination with the severity of the current offense. This risk assessment project would develop a scientific and rational basis for making classification and placement decisions. It would ensure that extra-legal factors were not used in classification and decision making. Further, it would structure the process such that juveniles would be held accountable for delinquent behavior.

The plan for the Department's decision making was shaped by four criteria: validity, reliability, equity, and utility:

- Validity: Does the system measure what it purports to measure? Does it accomplish its goals?
- Reliability: Do similar cases receive similar recommendations for placement services?
- Equity: Is the system fair to various groups?
- Utility: Is the system useful to practitioners? Is it simple to implement?

To begin the development process, NCCD worked with a committee of Probation Unit Supervisors and assisted in the adaptation of a risk assessment instrument from an existing instrument that had been used and validated on probationers in California. This instrument would only address the relative risk of recidivism of the youth and would not take into account the severity of the current offense. That factor would be included in a structured decision-making system that would be developed after the completion of the risk assessment instrument.

For the validation study, Alameda County adopted the sample risk level cut-off scores. Previous studies had found that these scores were accurate in distinguishing between groups of offenders that had significantly different rates of re-offending. Youths classified as medium-risk were twice as likely to re-offend than youths classified as low-risk. Similarly, high-risk youth were twice as likely to re-offend than medium-risk youth.

The initial data collection process showed a disturbing picture of Alameda's court-involved youth. While the youths on field supervision, in general, had little prior involvement with the juvenile justice system, 29 percent used alcohol and drugs occasionally, and 14 percent were chronic abusers of alcohol and drugs. The research further found that almost three-quarters of these youths had inadequate parental supervision. About half of these youth were also involved in negative school behavior and had truancy problems, and more than 90 percent had delinquent peer influences. These youth clearly needed intervention programming that would combat the risk factors that threatened their healthy, pro-social development.

Prior research found that 525 of the 1,334 youth who were placed on field supervision fell into the lowest risk category and could have been handled with less restrictive sanctions. Of this group were also 202 who needed more restrictive sanctions, such as out-of-home placement or intensive probation supervision. These youth were generally charged with serious property or drug crimes and were at moderate or high-risk to recidivate.

### **Data Collection**

Nine probation officers (deputies and supervisors) were trained in the use of the draft instrument. Because of their current involvement in the system, all coders were familiar with the case files. The first phase of data collection involved a random sample of 500 cases that received field supervision as a disposition in 1996. Field supervision refers to a sanction in which the youth was maintained and supervised in the community with the aid of weekend programming, community service, restitution, electronic monitoring, or day reporting. The second data collection phase involved a random sample of 500 cases that received a placement order in 1996. Placement refers to any sanction in which the youth is placed out of home (e.g., a group home,

camp, or residential treatment). From these populations it was possible to extrapolate to the total population of youths on field supervision (n=1,334) and the total population of youth in placement (n=774). Further, it was possible to determine the profile of the total population of youth under probation supervision (n=2,108). A number of data elements were collected on each child, and outcomes for each child were tracked for a year after disposition.

After the data were cleaned, the total sample yielded 954 probation cases that were evaluated by the risk assessment instrument and followed through one year for intake actions, petitions filed, and petitions sustained. Three cases with zero scores were initially excluded as they were thought to be data collection errors. However, these cases were later confirmed and added back to the database for the total of 954. With these data, NCCD refined the risk assessment instrument, collapsing certain categories in which there was little difference in recidivism.

### **Refining the instrument**

When the instrument was first examined, it did not adequately distinguish the risk of recidivism for youth classified as low-, medium-, and high-risk. As Table 1 shows, about half of the high-risk youth had a new sustained petition after one year, but almost a quarter of the low-risk youth did as well (Table 1).

**Table 1\***  
**Percent and number of youth with a sustained petition after one year**

	Youth with a sustained petition	Total youth in sample	Rate of recidivism
Low	136	587	23.1%
Medium	91	225	40.4%
High	76	142	53.5%
Percent of total sample	303	954	31.8%

\*The final scale was used to calculate these values.

The goal of the work described in this section was to further distinguish the categories: low-risk youth should have a lower level of recidivism while high-risk youth should have a higher one.

The first adjustment that was made to the instrument was to simplify the risk assessment questions so that the process would be easier to use. In the first section of this document, utility was listed as one of the goals of the risk assessment. Thus in order for the instrument to be effective, it must be easy for practitioners to use. These changes simplified the coding without

changing the relative recidivism of the groups, and in some cases increased the difference in recidivism among the groups.

The draft instrument’s values for the first question remained in three categories: “16 or older,” “14 or 15,” and “13 or younger.” The second question was re-scored from four categories to three: “no prior arrests,” “prior arrest record, no petition sustained” and “prior petition sustained” with values of 0, 1 and 2. The consideration of whether the offense was assaultive was deleted. The questions about drug and alcohol use were simplified into two possible answers. The “strong delinquent peer group” of question eight was changed to “gang.”

After these adjustments, rates of recidivism were examined (Table 2).

**Table 2**  
**Percent and number of youth with a sustained petition after one year**

	Youth with a sustained petition	Total youth in sample	Rate of recidivism
Low	5	57	8.8%
Medium	105	467	22.5%
High	193	430	44.9%
Percent of total sample	303	954	31.8%

\*The final scale was used to calculate these values.

These changes greatly affected the efficacy of the scale. The rate of recidivism for the low-risk dropped from 23.1 percent to 8.8 percent. On the other hand, the rate for high-risk youth decreased from 53.5 percent to 44.9 percent.

This scale did not work as well for girls as it did for boys (Table 3). By next changing the categories for question eight, peer relations, there was a much clearer delineation of recidivism for the two genders (Table 4).

**Table 3\***  
**Percent and number of youth with a sustained petition after one year by gender prior to adjustment**

	Male			Female			Total		
	#	Total	%	#	Total	%	#	Total	%
Low	3	26	11.5%	2	31	6.5%	5	57	8.8%
Medium	83	319	26.0%	22	148	14.9%	105	467	22.5%
High	160	339	47.2%	33	91	36.3%	193	430	44.9%
Percent of total sample	246	684	36.0%	57	270	21.1%	303	954	31.8%

\*The final scale was used to calculate these values.

**Table 4\***  
**Percent and number of youth with a sustained petition after one year by gender after adjustment**

	Male			Female			Total		
	#	total	%	#	Total	%	#	total	%
Low	7	58	12.1%	3	49	6.1%	10	107	9.3%
Medium	134	438	30.6%	31	171	18.1%	165	609	27.1%
High	105	188	55.9%	23	50	46.0%	128	238	53.8%
Percent of total sample	246	684	36.0%	57	270	21.1%	303	954	31.8%

\*The final scale was used to calculate these values.

This adjustment greatly increased females in the high-risk category who re-offended. It also increased the overall percent of youth in the high-risk category who re-offended.

For the third step in refining the instrument, the total values for “low,” “medium,” and “high” risk were adjusted to increase the instrument’s predictive capacity. Two different scales were produced, one of which would put more of the cases into the low-risk category.

<u>Scale 1:</u> Low	0-4	<u>Scale 2:</u> Low	0-6
Medium	5-12	Medium	7-12
High	13+	High	13+

Using the first scale (which has been used in the previous analyses in this document) the instrument found that just over half of high-risk youth recidivated, while under 10 percent of the low-risk youth did (Table 5):

**Table 5**  
**Percent and number of youth with a sustained petition after one year**  
**using scale 1**

	Youth with a sustained petition	Total youth in sample	Rate of recidivism
Low	10	107	9.3%
Medium	165	609	27.1%
High	128	238	53.8%
Percent of total sample	303	954	31.8%

The second scale, which placed many more youth in the low-risk category, also increased the rate of recidivism for that group (Table 6). The rate of recidivism for the high-risk group remained the same:

**Table 6**  
**Percent and number of youth with a sustained petition after one year**  
**using scale 2**

	Youth with a sustained petition	Total youth in sample	Rate of recidivism
Low	34	244	13.9%
Medium	141	472	29.9%
High	128	238	53.8%
Percent of total sample	303	954	31.8%

A comparison of the recidivism results of the two groups found that scale 2 assigned too many recidivating youth into the low-risk category, so scale 1 was adopted. The results of the final risk assessment instrument are outlined below.

**Demographic Results**

The sample of 954 cases was predominantly male, with only 28.3 percent (n=270) being female. Table 7 shows the distribution of the sample by ethnicity. Most of the sample consisted of African-American youth, which reflects the juvenile justice population in Alameda County.

**Table 7**  
**Percent and number of youth by race in sample**

Race	Percent and number in sample
African-American	52.4% (n=466)
American Indian	1.0% (n=10)
Asian	11.3% (n=101)
Hispanic	17.1% (n=152)
White	18.0% (n=160)
<b>Total</b>	<b>99.8% (n=889)*</b>

\*Data were missing on 65 cases. Total does not add to 100.0% because of rounding.

Youth between the ages of 14 and 15 were the largest age group in the sample (45.2 percent, n=431) with youth 16 or older (36.5 percent, n=348) and 13 or younger (18.3 percent, n=175) following.

There was about an even split in the disposition outcomes for the sample, with youth going to field supervision (50 percent, n=480) slightly higher than the number going to placement (49.6 percent, n=474). This split is relatively reflective of the general probation population in Alameda County. A 1995 study showed that 56.7 percent of youth went to field supervision, while 43.3 percent went to placement (including camp, n=1,610).

Each question can also be examined for its demographics (Tables 8, 9):



**Table 8**  
**Percent of females and males by risk assessment question**

	Female	Male	Total
1. Age at first finding			
16 or older	48.8%	33.2%	36.5%
14 or 15	40.4%	47.1%	45.2%
13 or younger	14.8%	19.7%	18.3%
2. Prior criminal history			
No prior arrests	39.6%	21.1%	26.3%
Prior arrests, no sustained	33.0%	31.9%	32.2%
One or more petitions	27.4%	47.1%	41.5%
3. Institutional commitments			
None	85.9%	78.8%	80.0%
One	7.8%	10.8%	10.0%
Two or more	6.3%	10.4%	9.2%
4. Drug/chemical use			
No known use or	35.1%	31.7%	32.7%
Some disruption or	64.9%	68.3%	67.3%
5. Alcohol use			
No known use or	38.4%	40.4%	39.8%
Some disruption or	61.6%	59.6%	60.2%
6. Parental skills			
Generally constructive	16.6%	15.7%	15.9%
Inconsistent	38.1%	51.9%	48.0%
Little or none	45.3%	32.4%	36.0%
7. School problems			
Attending, graduated	13.6%	6.2%	8.3%
Problems handled at	25.3%	27.3%	26.8%
Severe truancy, expelled	61.1%	66.4%	64.9%
8. Peer relationships			
Good support	7.1%	4.3%	5.1%
Negative influence	85.4%	79.4%	81.1%
Gang member	7.5%	16.3%	13.9%

There were some interesting differences between males and females on the final risk assessment score. Females tended to be older, had parents with better skill levels, and had fewer school problems. Males had more extensive criminal backgrounds and more institutional commitments. More females tended to have negative peers, but there were more gang members among the males.

The questions were also examined by race and ethnicity (Table 9):

**Table 9**  
**Percent of each race by risk assessment question**

	African-American	American Indian	Asian	Hispanic	White	Total
1. Age at first finding						
16 or older	35.0%	50.0%	33.75	34.9%	46.9%	36.5%
14 or 15	41.4%	40.0%	58.4%	49.3%	40.6%	42.2%
13 or younger	23.6%	10.0%	7.9%	15.8%	12.5%	18.3%
2. Prior criminal history						
No prior arrests	21.0%	20.0%	39.6%	28.9%	33.1%	26.3%
Prior arrests, no sustained	34.8%	50.0%	22.8%	25.7%	36.9%	32.2%
One or more petitions	44.2%	30.0%	37.6%	45.4%	30.0%	41.5%
3. Institutional commitments						
None	77.4%	100.0%	92.1%	84.1%	82.5%	80.0%
One	10.3%	--	5.9%	7.9%	9.4%	10.0%
Two or more	12.3%	--	2.0%	7.9%	8.1%	9.2%
4. Drug/chemical use						
No known use or	33.3%	16.7%	61.1%	25.9%	21.8%	32.7%
Some disruption or	66.7%	83.3%	38.9%	74.1%	78.2%	67.3%
5. Alcohol use						
No known use or	46.7%	16.7%	56.3%	26.2%	23.6%	39.8%
Some disruption or	53.3%	83.3%	43.8%	73.8%	76.4%	60.2%
6. Parental skills						
Generally constructive	12.9%	20.0%	32.3%	15.4%	16.2%	15.9%
Inconsistent	45.0%	70.0%	42.4%	57.0%	49.4%	48.0%
Little or none	42.0%	10.0%	25.3%	27.5%	34.4%	36.0%
7. School problems						
Attending, graduated	6.3%	20.0%	19.4%	4.7%	10.3%	8.3%
Problems handled at	22.0%	50.0%	29.6%	26.7%	40.0%	26.8%
Severe truancy, expelled	71.7%	30.0%	51.0%	68.7%	49.7%	64.9%
8. Peer relationships						
Good support	6.1%	--	3.0%	2.7%	4.8%	5.1%
Negative influence	91.2%	88.9%	53.5%	65.5%	85.5%	81.1%
Gang member	2.7%	11.1%	43.6%	31.8%	9.7%	13.9%

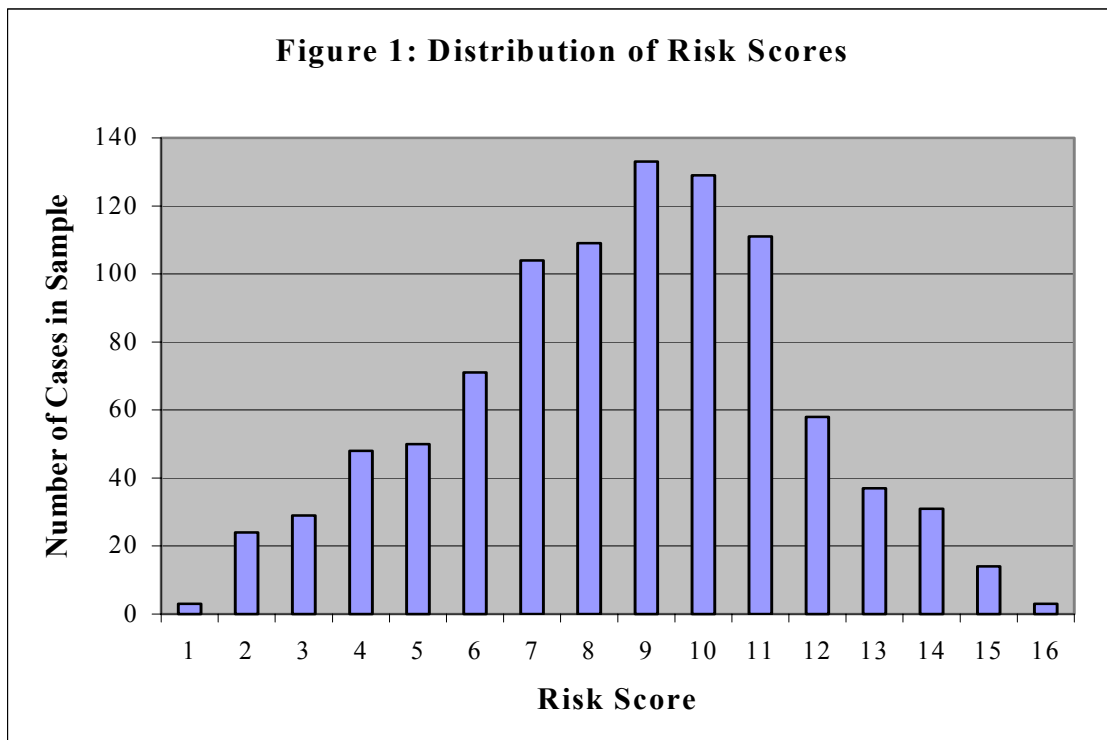
\* Table excludes missing data.

The data in this table regarding Asians and American Indians was skewed by small numbers in the sample. Whites were older and had lower rates of criminal history than other groups, but higher rates of drug and alcohol use. African-Americans were younger than the overall average, had more institutional commitments, and lower rates of drug and alcohol use. The rate of African-American youth with parents lacking skills was higher than for other groups. They also had the highest rate of severe truancy. Hispanics had higher rates of constructive parenting, but the lowest rate of school attendance. They also had considerably higher rates of gang membership than other groups.

Results of an analysis of the risk assessment questions also show that the problems of these youth were interrelated. For youth with little or no parental support, only 4 percent were attending school. The majority of these youth (85 percent) had severe truancy problems or had been expelled. More than half of these youth were involved with drugs, compared with only 30

percent of those with constructive parenting. Drug use was also related to school performance. Only about 30 percent of those with good school records reported drug use, but almost 60 percent of those with serious problems in school had used drugs or had a problem with drugs. (Alcohol use was low among the entire population.) The majority of youth in the sample had delinquent peers, regardless of the skill level of their parents.

Total risk scores ranged from 0 to fifteen, with the majority of the cases falling between seven and nine (Figure 1):



When these scores were grouped in risk categories, most of the cases in the sample fell into the “medium” risk category (Table 10). A quarter fell into the high-risk category, and only about 11 percent fell into the low-risk category:

**Table 10**  
**Percent of youth in low-, medium-, and high-risk categories**

Risk category	Percent of sample in each risk category*
Low	11.2% (n=107)
Medium	63.8% (n=609)
High	24.9% (n=238)
<b>Total</b>	<b>99.9% (n=954)</b>

\*Total does not add to 100% due to rounding.

**Validity**

Again, the goal of a validation study of a risk assessment instrument is to determine if the instrument is predictive of aggregate rates of recidivism. Youth in the sample who scored in the higher risk categories should have higher rates of recidivism than youth in the lower risk categories. It should be noted that while youth who score in the higher categories in the risk assessment might have higher rates of recidivism, the rates might not be as high as expected. Even though no risk assessment was in use at the time that placement decisions were made, it is reasonable that the good judgment of probation officers would cause higher risk youth to be sent to secure settings or assigned to intensive levels of supervision. As a result, those youth would have less opportunity to recidivate than the lower risk youth, who would be more likely to be placed on less intensive probation supervision.

The tables below show the results of the risk assessment for three measures of recidivism: intake actions, petitions filed, and petitions sustained one year after the placement decision was made. Table 11 shows the percent and number of youth who had an intake action within one year of disposition. An intake action was defined as an arrest.

**Table 11**  
**Percent and number of youth with an arrest after one year**

Risk level	Youth with an arrest	Total youth in sample	Rate of recidivism
Low	27	107	25.2%
Medium	355	609	58.3%
High	188	238	79.0%
<b>Percent of total sample</b>	<b>570</b>	<b>954</b>	<b>59.7%</b>

Only about 60 percent of the total sample had another arrest after one year. Given that these youth are on probation supervision, and that the occurrence of an arrest is a relatively low threshold, this rate was surprisingly low. These data clearly showed the difference in rates of recidivism among the low, medium, and high-risk levels. While only a quarter of the low-risk youth had an arrest after one year, more than three-quarters of high-risk youth did. The rate of recidivism for the medium-risk category was about the average for the total sample. The next measure of recidivism that was examined was the rate of youth with a petition filed after one year (Table 12).

**Table 12**  
**Percent and number of youth with a petition filed after one year**

	Youth with a petition filed	Total youth in sample	Rate of recidivism
Low	21	107	19.6%
Medium	301	609	49.4%
High	180	238	75.6%
Percent of total sample	502	954	52.6%

Again, the data showed that youth in the lower levels of risk were much less likely than youth in the higher levels of risk to have a petition filed after one year. Three quarters of the high-risk youth had a new filed petition, while only about 20 percent of the low-risk youth did. The rate of recidivism of the medium-risk category is again about the same as the total sample.

The next measure – petitions sustained -- is probably the best measure of recidivism of the four measures. As opposed to an arrest or the filing of a petition, a sustained petition means that there has been an actual finding that the youth has committed an additional crime. The number of youth with at least one sustained petition was tracked through one year after original disposition (Table 13).

**Table 13**  
**Percent and number of youth with a sustained petition after one year**

	Youth with a sustained petition	Total youth in sample	Rate of recidivism
Low	10	107	9.3%
Medium	165	609	27.1%
High	128	238	53.8%
Percent of total sample	303	954	31.8%

High-risk youth were more than five times as likely as low-risk youth to have a sustained petition one year after disposition. The rate of recidivism for the medium-risk offenders was just slightly lower than the overall average.

As was shown in this section, the risk assessment instrument was effective in predicting which youth were more likely to be arrested, have a petition filed, and have a petition sustained. Thus, the instrument is valid in predicting risk of recidivating.

### **Risk assessment questions**

The reliability of the risk assessment instrument was also examined by each of the instrument’s questions. It would be expected that low-risk youth would score low on the instrument’s eight factors and high-risk youth would score high on each point. If on one of the questions low-risk youth had high rates of recidivism, then there would be reason to question the instrument’s validity.

Table 14 shows the rates of youth with a petition sustained after one year by how they scored on the first question regarding age at first finding (Table 14).

**Table 14\***  
**Percent and number of youth with a sustained petition after one year by age at first finding**

	13 or younger	14 or 15	16 or older
Low	---	40.0% (n=4)	60.00% (n=6)
Medium	14.5% (n=24)	51.5% (n=85)	33.9% (n=56)
High	46.9% (n=60)	48.4% (n=62)	4.7% (n=6)

\*Percentages represent the percent of youth within that risk level who fell into each question’s answer.

Younger youth were mostly classified as high-risk offenders. This finding is consonant with research on juvenile recidivism, which shows that the earlier a child starts criminal activity, the more likely he or she is to continue into the future. On the other hand, there was an equal split in the high-risk category between the 13 and younger population and the 14 or 15 year olds, even though more of the older group fell into the medium-risk classification. None of the youngest grouping were classified as low-risk offenders, and only six of the oldest category were high-risk youth.

Next, the factor of prior criminal behavior was examined (Table 15).

**Table 15**  
**Percent and number of youth with a sustained petition after one year by**  
**prior criminal behavior**

	No prior arrests	Prior arrest record, no petitions sustained	Prior petitions sustained
Low	80.0% (n=8)	20.0% (n=2)	--
Medium	20.0% (n=33)	33.9% (n=56)	46.1% (n=76)
High	.8% (n=1)	5.5% (n=7)	93.8% (n=120)

Research shows that youth with a limited prior criminal history are unlikely to re-offend, while those who have extensive involvement in the system are more likely to become re-involved. The results of the risk assessment showed that youth who score into the low-risk category had limited criminal histories; no youth with the prior sustained petition was assigned to a low level of supervision. On the high-risk end, only eight youth with limited involvement were placed in that ranking, while the rest had prior petitions sustained.

A separate but related question was that regarding the number of institutional commitments (Table 16). Youth who have previous commitments are more likely to return to the criminal justice system.

**Table 16**  
**Percent and number of youth with a sustained petition after one year by**  
**number of previous institutional commitments**

	None*	One	Two or more
Low	100.0% (n=10)	--	--
Medium	92.7% (n=152)	6.7% (n=11)	.6% (n=1)
High	35.2% (n=45)	25.0% (n=32)	39.8% (n=51)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Most of the youth in the sample had no previous institutional commitments, so the results of this question were somewhat skewed. The only youth who were classified as low-risk were those with no previous institutional commitments. However, these youth with little contact with the system in the past made up most of the youth in the medium-risk category, and a good part of those in the high-risk category. These findings occurred because of the low numbers of youth with serious previous criminal justice history.

The next factor on the risk assessment instrument accounted for drug use (Table 17):

**Table 17**  
**Percent and number of youth with a sustained petition after one year by drug use**

	No known use*	Use, some disruption of functioning
Low	66.7% (n=4)	33.3% (n=2)
Medium	41.9 (n=49)	58.1% (n=68)
High	2.6% (n=3)	97.4% (n=111)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Youth who use drugs and alcohol are at greater risk for involvement in criminal behavior. The youth falling into the high-risk category on the risk assessment were almost entirely drug users or those with disruption of functioning. Very few youth were classified as low-risk in this area. The youth in the medium-risk category were almost evenly split between drug users and non-users.

A related factor, alcohol use, was considered next (Table 18):

**Table 18**  
**Percent and number of youth with a sustained petition after one year by alcohol use**

	No known use*	Use, some disruption of functioning
Low	100.0% (n=5)	--
Medium	40.8% (n=42)	59.2% (n=61)
High	14.3% (n=14)	85.7 (n=84)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Again, the only youth to be classified as low-risk on alcohol use had no known use. In the medium and the high-risk categories, most of the youth had some use or disruption in functioning.

The next question on the risk assessment was regarding the parenting skills of the youth's parents (Table 19):



**Table 19**  
**Percent and number of youth with a sustained petition after one year by**  
**parental skills**

	Generally constructive*	Inconsistent	Little or none
Low	75.0% (n=6)	25.0% (n=2)	--
Medium	12.7% (n=21)	53.9% (n=89)	33.3% (n=55)
High	2.3% (n=3)	37.5% (n=48)	60.2% (n=77)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Research shows that the influence of parents in a youth's life is a large factor in involvement in crime. Youth with parents with more parenting skills were more likely to fall into the low-risk category. No youth with parents with little or no skills were classified as low-risk. On the other hand, the majority of the youth that were classified as high-risk had parents with little or no skills. Those youth who fell into the medium-risk classification mostly had inconsistent parenting, but some of those youth had constructive parents and some had parents with little or no skills.

School problems was the next factor to be analyzed (Table 20):

**Table 20**  
**Percent and number of youth with a sustained petition after one year by**  
**school problems**

	Attending or graduated, GED*	Problems handled at the school level	Severe behavioral problem, truancy, expelled, dropped
Low	33.3% (n=3)	66.7% (n=6)	--
Medium	3.7% (n=6)	26.1% (n=42)	70.2% (n=113)
High	---	15.6% (n=20)	84.4% (n=108)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Research shows that youth who have problems in school, especially truancy or expulsion, have a greater likelihood of being involved in crime. Very few youth fell into the low-risk category on this factor. However, youth with school problems were predominantly classified as medium- or high-risk.

**Table 21**  
**Percent and number of youth with a sustained petition after one year by peer relations**

	Good support*	Delinquent peers	Gang member
Low	37.5% (n=3)	62.5% (n=5)	---
Medium	4.5% (n=7)	83.3% (n=130)	12.2% (n=19)
High	--	83.5% (n=106)	16.5% (n=21)

\*Percentages represent the percent of youth within that risk level who fell into each question's answer.

Table 21 shows the same pattern of validity for peer relations. Research shows that youth with low levels of support from their friends or high degrees of criminality are at higher risk for criminal behavior themselves. The few youth who fell into the low-risk category had supportive or delinquent peers, but no gang members were low-risk. In the high-risk category, youth either had delinquent peers or were gang members.

### **Reliability and Equity**

The first section of this document outlined how any assessment of an instrument must consider more than its aggregate validity. The analysis must also show that similar cases receive similar treatment under the system. This section will examine a number of factors to determine whether the instrument is reliable and fair.

Table 22 shows that most of the youth, both male and female, fell into the medium category at equal rates. Males were more likely to score in the high-risk level than females.

**Table 22**  
**Percent and number of gender within risk levels**

Gender	Low	Medium	High
Female	17.2% (46)	64.0% (171)	18.7% (50)
Male	8.5% (58)	64.0% (438)	27.5% (188)
Total	10.9% (104)	64.0% (609)	25.0% (238)

As noted earlier, males scored higher than females on the factors of age (females were older), criminal history (males had more extensive criminal backgrounds), institutional commitments (males had more commitments), and peer relations (more males were in a gang). On the other hand, females scored higher on the measure of lack of parental skills.

The risk assessment must also be examined for the fairness of the outcomes by risk level. In other words, do different groups of youth in the same risk levels re-offend at the same rates? This analysis would demonstrate if the risk assessment is more effective or less effective for various groups. Table 23 shows petitions sustained through one year by gender and risk levels.

**Table 23**  
**Petitions sustained through one year by gender within risk levels**

Gender	Low	Medium	High
Female	6.1% (n=3)	18.1% (n=31)	46.0% (n=23)
Male	12.1% (n=7)	30.6% (n=134)	55.9% (n=105)

\*Total does not add to 100.0% due to rounding.

Rates of petitions sustained after a year were higher for males than females, but high-risk youth were far more likely than low-risk youth to have a sustained petition: females eight times as likely and males almost five times as likely.

Table 24 shows how the risk assessment rated youth by race and ethnicity. The instrument should treat each group of youth the same, so it would be expected that cases would be distributed in a similar pattern regardless of race.

**Table 24**  
**Percent and number of youth by race/ethnicity within risk levels**

Race/ethnicity	Low	Medium	High	Total
African-American	8.6% (n=40)	64.8% (n=302)	26.6% (n=124)	100.0% (n=466)
American Indian	10.0% (n=1)	90.0% (n=9)	--	100.0% (n=10)
Asian	22.8% (n=23)	64.4% (n=65)	12.9% (n=13)	100.1% (n=101)
Hispanic	11.2% (n=17)	56.6% (n=86)	32.2% (n=49)	100.0% (n=152)
White	13.8% (n=22)	67.5% (n=108)	18.8% (n=30)	100.1% (n=160)

\*Totals do not add to 100.0% because of rounding. Data were missing on 65 cases. These have not been included in the table.

The table shows that more African-American and Hispanic youth fell into the high-risk category than did White youth. A third of Hispanic youth and 27 percent of Black youth were classified as high-risk, as compared with 19 percent of White youth. Although there were few Asians in the study, a greater percentage fell into the low-risk group than other races.

An analysis of each of the risk assessment questions revealed the factors that contributed to the variance among races. African-Americans were generally younger, had more extensive prior criminal records, more institutional commitments, parents who were lacking skills, and

records of suspensions and expulsions from school. On the other hand, African-Americans were rated as having fewer problems with drugs and alcohol than the other races. Hispanics scored higher on the criminal history and school problem measures (Table 25).

**Table 25**  
**Petitions sustained by race/ethnicity within risk levels**

Race/ethnicity	Low	Medium	High
African-American	12.5% (n=5)	31.8% (n=96)	61.3% (n=76)
American Indian	--	44.4% (n=4)	--
Asian	8.7% (n=2)	18.5% (n=12)	30.8% (n=4)
Hispanic	5.9% (n=1)	23.3% (n=20)	42.9% (n=21)
White	9.1% (n=2)	17.6% (n=19)	60.0% (n=18)

\*Data were missing on 22 cases. These have not been included in the table.

The numbers in this analysis were very low, but the data showed that for all racial groups high-risk youth were far more likely than low-risk youth to have a sustained petition. The recidivism rates for African Americans and Whites were higher than that for Hispanics.

As was indicated earlier in this document, the sample was tracked by disposition. It would be expected that probation officers' judgment should be generally in line with the direction of the risk assessment. Further, youth classified as higher risk and assigned to more intensive levels of supervision should have higher recidivism rates than those assigned to lower levels of supervision (Table 26).

**Table 26**  
**Percent and number of youth by disposition within risk levels**

Disposition	Low	Medium	High	Total
Field supervision	20.8% (n=100)	66.0% (n=317)	13.1 (n=63)	100.0% (n=480)
Placement	1.5% (n=7)	61.6% (n=292)	36.9% (n=175)	100.0% (n=474)

Table 26 shows that probation officers were making placements that were similar to those that would be indicated by the risk assessment. Only a small percent of cases fell into the low-risk category and were sent to placement; likewise, a small percent of cases in the high-risk category were placed on field supervision. Table 27 shows the recidivism rates for these variables.

**Table 27**  
**Petitions sustained through one year by disposition within risk levels**

Disposition	Low	Medium	High
Field supervision	9.0% (n=9)	25.9% (n=82)	65.1% (n=41)
Placement	14.3% (n=1)	28.4% (n=83)	49.7% (n=87)

Data show that the rate of recidivism for youth on field supervision increased dramatically among the low, medium, and high levels of supervision. High-risk youth were six times more likely to have a sustained petition within one year than low-risk youth, and more than twice as likely as medium-risk youth. The pattern was the same for placement cases.

**Next steps**

NCCD presented these findings on April 18, 2000 to a meeting of juvenile court judges, probation supervisors, and other County staff. The consensus of the meeting was that this instrument would be of help in making placement decisions. Probation officers will be completing the risk assessment form and submitting the score to the judge as part of their recommendations for placement. At a later date, the risk assessment score may be included in a placement matrix with severity of offense to indicate appropriate placements.

This risk assessment study of Alameda County probationers not only yielded a validated instrument that could assist staff in making placement decisions, it directed the County toward areas of need. As was addressed in the first section of this document, the County was involved in implementing a continually-changing juvenile justice action plan. The results of the data collection effort for this grant were so revealing that new projects were proposed.

First, the County came to realize how many youth on probation had severe truancy problems, and how strongly truancy was linked to other problems in youths’ lives. They used the study to propose to use Juvenile Accountability Incentive Block Grant funds for a truancy prevention project. The lead to that proposal states:

Truancy is notably one of the highest predictors of chronic juvenile crime. According to a 1996 sample study [the risk assessment data collection effort] 35 percent of those on probation in Alameda County are exhibiting severe truancy or behavior problems. Factors that appear to be correlated with poor attendance in school are poor parenting skills, poor peer support and influence, and drug and alcohol use. For example, among those exhibiting severe truancy or behavior problems in school, or have graduated or received a GED certificate, for whom 54 percent have parents with “generally constructive” parenting skills. Only 3 percent of probationers exhibiting chronic truancy behavior have “good” and “supportive” peer relationships. By contrast, 17 percent of

those who are regularly attending school, or have graduated or received a GED certificate have “good” and “supportive” peer relations.

The proposal, which was funded, is a model truancy prevention strategy in two schools to improve attendance among youth on probation. The program includes child accountability, quick response to truancy, intensive family work, and a multi-disciplinary approach to case management.

The project also led the County to examine the risk assessment that is used for intake to detention. The focus of the study was to determine the needs and risks of these youths such that they can receive better probation services and be prevented from offending. The results of this study were presented to the County on August 25, 2000.

Finally, the placement risk assessment project caused probation leaders to think about how resources are being spent in the department. Are probation efforts focused on those youth with the highest likelihood of re-offending, or are funds spread evenly across wards? This 10-month study will look at workload standards, the number of staff necessary for adequate supervision, and the time that needs to be allocated to each youth. This study will help the Department develop standards for probation work and deploy resources more effectively. The workload project will adopt the placement risk assessment categories of risk in setting these time standards. For example, how many probation hours should a low-risk offender require as opposed to a high-risk offender?

### **Conclusion**

This analysis has shown that the placement risk assessment developed by Alameda County was valid, reliable, and fair for that juvenile justice population. Therefore, the instrument can be useful for staff who are making informed placement decisions. No risk instrument should take the place of the good judgement of probation officers and judges. However, this risk assessment offers a way to consider eight relevant factors in making that decision. These factors have been supported by juvenile justice research as being indicators of the risk of recidivism.



## Alameda County Juvenile Risk Assessment Form

1. Age at First Finding
  - 0 16 or older
  - 2 14 or 15
  - 4 13 or younger
  
2. Prior Criminal History
  - 0 No prior arrests
  - 2 Prior arrest record, no petitions sustained
  - 4 One or more petitions sustained
  
3. Institutional Commitments or Placements of 30 Consecutive Days or More
  - 0 None
  - 2 One
  - 4 Two or More
  
4. Drug/Chemical Use
  - 0 No known use or disruption of functioning
  - 2 Some disruption of functioning, and/or chronic abuse or dependency
  
5. Alcohol Use
  - 0 No known use or disruption of functioning
  - 1 Some disruption of functioning, and/or chronic abuse or dependency
  
6. Parental Skills
  - 0 Generally constructive
  - 1 Inconsistent
  - 2 Little or none
  
7. School Disciplinary Problems
  - 0 Attending, graduated, GED equivalence
  - 1 Problems handled at the school level
  - 2 Severe truancy or behavioral problems, or not attending/expelled
  
8. Peer Relationships
  - 0 Good support and influence
  - 1 Negative influence, companions involved in delinquent behavior
  - 2 Gang member

<p><b>Risk Classification: Low-risk (0-4)</b> <b>Moderate Risk (5-12)</b> <b>High-risk (13+)</b></p>
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