EVALUATION REPORT

NATIONAL YOUTH PROJECT USING MINIBIKES (NYPUM)

FUNDING YEAR FOUR:- JANUARY 1975 TO DECEMBER 31, 1975

Evaluation Team

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APRIL 30, 1976

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SUMMARY OF FINDINGS

A. UNITS AND PARTICIPANTS

The stated goals of NYPUM for FY-4 included the following standards of performance:

Number of units in operation:

75 new units to be established

225 already established units

Number of Youth referred into the program and participating:

Adjudicated youth:

550 in newly established NYPUMS

1700 in already established NYPUMS

Other referred delinquency-prone youth:

350 in newly established NYPUMS

2800 in already established NYPUMS

The data submitted indicates that all of these goals were met or exceeded by NYPUM in 1975.

B. ARRESTS DURING PROGRAM

Based upon the data from the Guarantee Sample (which was found to be representative of all NYPUMS), 32.8% of those arrested prior to NYPUM were re-arrested during NYPUM. In addition, 8.8% of those who had not been arrested prior (but were referred into the program as "delinquency-prone") were arrested during NYPUM. To express it positively, 67.2% of those who had been arrested prior and 91.2% who had not been arrested prior but identified as delinquency-prone were <u>not</u> arrested during their participation in NYPUM.

Number of persons re-arrested is one way to calculate recidivism. The evaluation team prefers another method, however, which includes not only numbers of persons, but also numbers of arrests within a constant time frame. This figure, average number of arrests per month, gives a more accurate picture of the improvement made by NYPUM participants during the program.

Taken as a whole, all previous offenders (first offenders, second offenders, multiple offenders) showed improvement during NYPUM. As would be expected, however, the second and multiple offenders had a higher average number of arrests per month during NYPUM than did the first offenders. It was also found that the longer a person remained in NYPUM, the lower the average number of arrests per month. One conclusion which can be drawn is that participants in NYPUM should be encouraged to remain in the program for at least 6 months.

When those with prior arrests were analyzed in terms of number of prior arrests by seriousness of prior offense, all categories showed improvement during NYPUM except second offender felons against persons. The average monthly re-arrest rate for all felons against persons was more than double that of the next most frequent category (vandalism). This raised the question as to whether or not those who have committed felonies against persons should be referred into the NYPUM program. Relative to the other types of offenders, these youth show the least improvement in NYPUM.

C. ARRESTS AFTER LEAVING PROGRAM

Although there is a smaller number of participants for whom arrest records were available after the program than during the program, the evidence is that the improvement in behavior continues for at least six months after leaving NYPUM.

Only 17% of those arrested prior to NYPUM were also arrested after, while 26% of those arrested during NYPUM were arrested after. To put it positively, 89% of NYPUM alumni were not arrested in the six months period after NYPUM, and of these 44% had been arrested prior to NYPUM and 21% had been arrested during NYPUM.

D. SCHOOL PERFORMANCE AND TRUANCY

Most NYPUM participants either remained the same or improved in school performance (which includes academic performance, relations with teachers and school authorities, and relations with other students). The number who improved averaged three times the number who did worse. For example, in relationships with teachers and school authorities, 33.5% of the participants improved during NYPUM, 10.3% did worse, and 56.1% remained the same.

The most improvement was made in truancy. Of those with more than six months tenure in NYPUM, 47.7% improved, 46.9% remained the same, and only 5.7% did worse.

If the total sample is divided into three categories:

(1) Multiple Arrests for Three Most Serious Offenses

(2) All With Prior Arrests

(3) No Prior Arrests

then differences appear between the three groups. All Arrested and Not Arrested show improvements in all categories of school performance and truancy. The All Arrest youth show more improvement in academic performance, while the Not Arrested show more improvement in relations with teachers and school authorities, and with other students. The Multiple Offenders for Serious Offenses moved backwards in the three categories of school performance, but showed the biggest improvement of all in truancy with 77.9% improving during NYPUM.

E. OTHER RELATIONSHIPS DERIVED FROM THE DATA

Less serious offenders are not contaminated by mixing in NYPUM with more serious offenders. There is clear evidence that the most likely re-arrest for a youth is for the same offense as his/her most serious prior offense. Many offenses, particularly drug/alcohol abuse, had negative correlations with other types of offenses.

Although truancy has a modest correlation with both school performance and with arrests, school performance is relatively independent of arrest performance. Indeed, all arrested youth showed more improvement in academic performance than did the not arrested youth, and also had a higher absolute level of performance.

The Family Information Test was able to successfully divide the NYPUM population into two groups, one of which had significantly fewer prior arrests and also had fewer arrests during NYPUM. These findings were in the expected direction.

Whites in NYPUM had weaker family relationships, more prior arrests, and more during arrests than did Blacks. This runs counter to popular expectations, and raises many interesting questions which are beyond the scope of this report.

Conditions of program revealed some relationships that are difficult to explain. The youth who were arrested during NYPUM, compared with those not arrested during, had a higher bike/non-bike time ratio and also spent more actual hours per month on the bikes. They belonged to groups which had more leaders per participant, and had more hours of training per leader. Although one could speculate that the reason for these findings is that the more serious offenders are referred to groups that have better leadership, this remains only a speculation.

F. COMPARISON OF NYPUM TO OTHER PROGRAMS

Establishing NYPUM's track record in regard to recidivism, school performance, and truancy still leaves unanswered the question of whether NYPUM met its goal of achieving records "...which will be significantly lower than the comparable records of equivalent offenders in that community."

Since comparable data were not available in most communities, a special study was made of Hennepin County, Minnesota, comparing NYPUM adjudicated participants over the past two years with other juveniles processed by that court system over the past four years. The NYPUM group was matched with a sample of the non-NYPUM juvenile offenders in terms of background characteristics. It was found that the before program arrest rates of NYPUM youth were much higher than those of the non-NYPUM Matched Sample, indicating a more trouble-prone youth being referred into NYPUM. Still, the NYPUM after/prior arrest ratio was dramatically lower than that of the Matched Sample on all offenses except alcohol/drug abuse and "attempt."

A comparison was also made of NYPUM with six other treatment programs in Hennepin County, as well as with the matched sample from all offenders. NYPUM was relatively more effective with some offenders than with others. NYPUM was the least effective of all the programs in dealing with alcohol/drug offenders. NYPUM was very effective with major and minor property offenses and with status offenders. With both major and minor crimes against property, NYPUM participants had a prior arrest rate that was more than double of any other group. Yet the After/Prior Arrest Ratio was second to lowest for major property crimes, and next to lowest for minor property crimes. With status offenders, NYPUM had the next to lowest After/Prior Arrest Ratio.

The conclusion from the Hennepin County comparative data is that NYPUM did meet its goal of having better re-arrest records than equivalent offenders, as defined by the Non-NYPUM Matched Sample of other adjudicated offenders. When compared to other treatment programs, the Minneapolis NYPUM program had a poor record with alcohol/drug offenders, but had one of the best records with major and minor property offenders and with status offenders. Given the relatively low cost of NYPUM, especially when compared to institutional treatment programs, these results are encouraging.

Besides the study of Hennepin County, comparisons could be made of NYPUM's recidivism record with other studies of recidivism. Unfortunately, there are no nationally gathered figures, using agreed upon definitions, which would provide a norm against which NYPUM could be compared.

There have been many local or state-wide studies, each using its own definitions and coming up with different sets of recidivism figures, usually in the range of 50% to 85%. One example is contained in a report by the Oregon Law Enforcement Council:

> "The initial probability of a youth being apprehended and referred to the court is only 6%. However, once a youth has been referred to the court, the probability of a second referral increases more than ten-fold to 65%, and after a second offense, the probability of a youth coming to the attention of the court for subsequent offenses (third, fourth and fifth) increases to approximately 80%." [1]

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[1] Criminal Justice Goals for 1975, Oregon Law Enforcement Council, State of Oregon, Salem, Oregon: 1974.

As has been noted earlier, the experience of the NYPUM sample is in the same direction: that is, second and multiple offenders have higher average arrests per month than do first offenders. However, when calculated by number of prior offenders re-arrested, the NYPUM rates of 33% for first offenders, 30% for second offenders, and 33% for multiple offenders are much lower than those reported by the Oregon Law Enforcement Council.

The lack of using a common data base or identical definitions limits the value of such comparisons, however. The comparative data from Hennepin County are more trustworthy, since the NYPUM and comparison data were drawn from the same data base of the official juvenile court records.

CHART 1

RECIDIVISM: RE-ARRESTS FOR THOSE ENTERING NYPUM WITH PRIOR ARRESTS

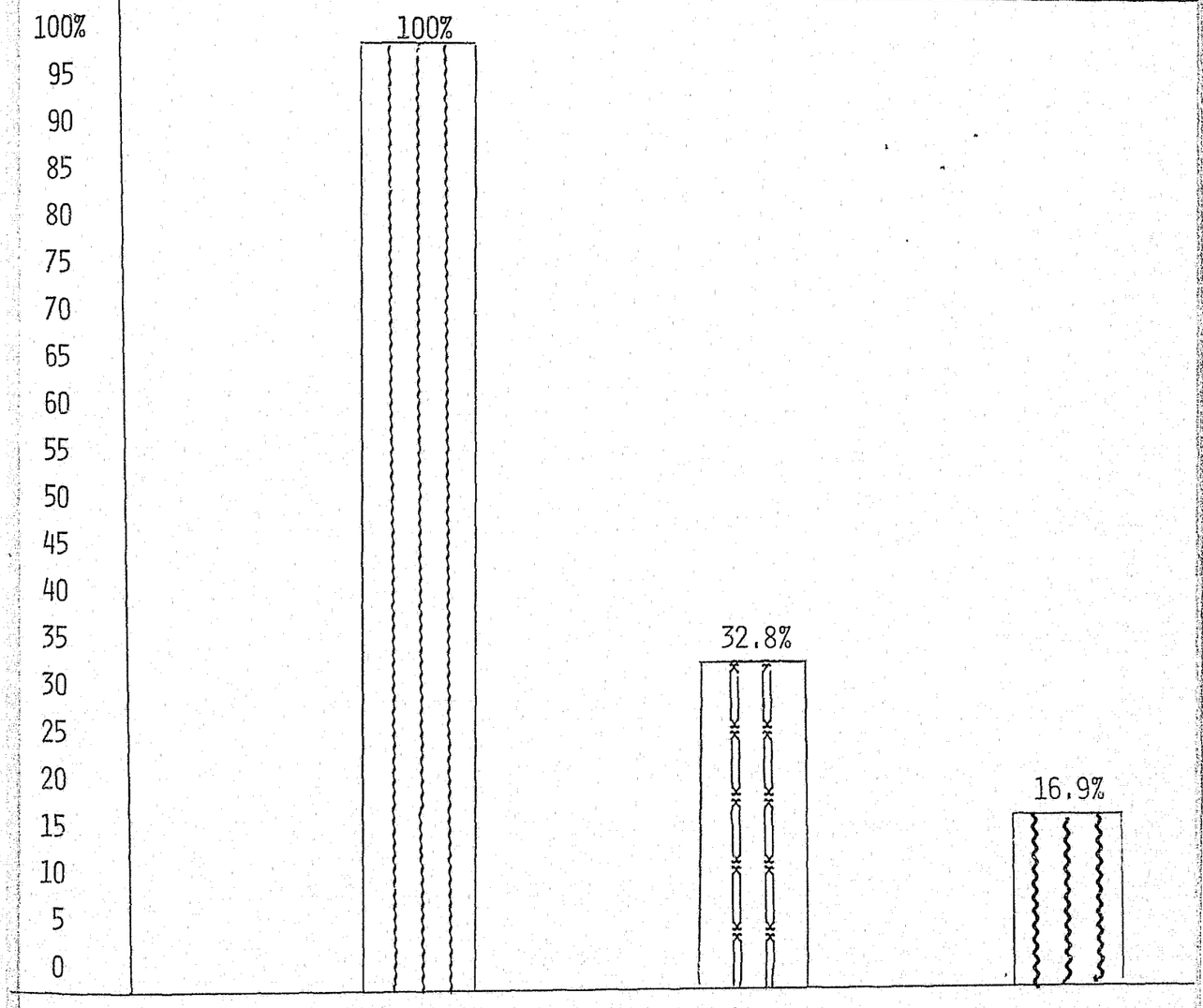


CHART 2

SHIFT IN SERIOUSNESS OF OFFENSE FOR THOSE ARRESTED BOTH PRIOR TO AND DURING NYPUM

ARRESTS DURING NYPUM WERE:

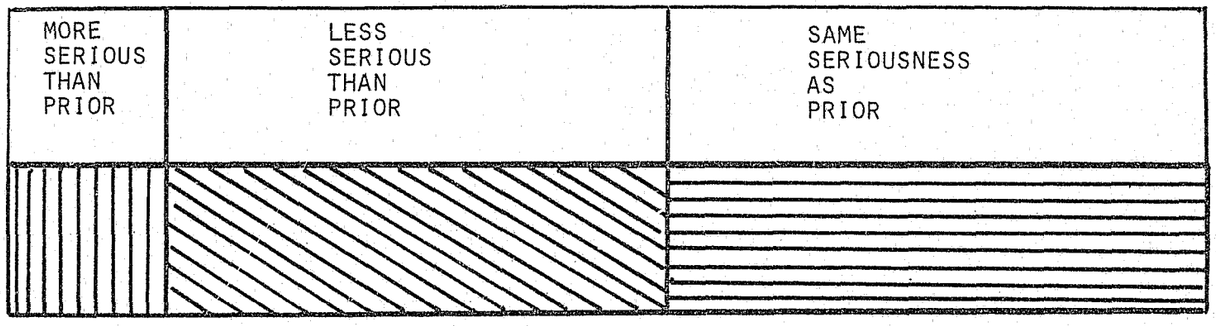


CHART 3

YOUTH ARRESTED PRIOR TO NYPUM: SHIFTS IN SCHOOL PERFORMANCE DURING NYPUM

ACADEMIC PERFORMANCE

IMPROVED	WORSE	NO CHANGE
36.8%	16.2%	47.0%

RELATIONSHIPS WITH TEACHERS AND SCHOOL AUTHORITIES

IMPROVED	WORSE	NO CHANGE
36.3%	18.9%	44.8%

RELATIONSHIPS WITH OTHER STUDENTS

IMPROVED	WORSE	NO CHANGE
28.3%	20.1%	51.5%

TRUANCY

IMPROVED	WORSE	NO CHANGE
63.2%	8.7%	28.1%

I. PERFORMANCE STANDARDS AND METHODOLOGY

A. PERFORMANCE STANDARDS

The stated goals of NYPUM for FY-4 included the following standards of performance:

Number of units in operation:

75 new units to be established

225 already established units

Number of youth referred into the program and participating:

Adjudicated youth:

550 in newly established NYPUMS

1700 in already established NYPUMS

Other referred delinquency-prone youth:

350 in newly established NYPUMS

2800 in already established NYPUMS

Impact upon the youth participants:

"To achieve truancy and arrest records which will be significantly lower than the comparable records for equivalent offenders in that community."

Succeeding chapters of this report will deal with each of these performance standards, presenting the findings for:

Number of Operating Units and Participants

Arrests During Program: By Number of Persons Arrested

Arrests During Program: By Average Number of Arrests Per Month

Arrests After Leaving Program

School Performance and Truancy

Comparison of NYPUM to Other Programs

B. REPORTING FORMS

The evaluation plan for 1975 provided each NYPUM operation with a basic record-keeping and reporting system that required preparation and filing of three separate reports each quarter during the year. The reporting forms were:

The Group Roster, which provided base line data against which to measure progress for each participant. Individual participants were identified by a code number in order to protect privacy. The Roster recorded two types of information -- descriptive and behavioral:

Descriptive included: Age, Sex, Race/Ethnic Origin, Date of Entry, and source of referral.

Behavioral included: Participant record for the six months prior to entry for:

Arrests (both seriousness and frequency);
School performance (academic performance, relations with teachers, relations with other students);
Truancy.

The Quarterly Report updated descriptive and behavioral data each quarter.

Descriptive included: Whether or not participant was still in program;
Date of termination for those leaving;
Participation level while in program.

Behavioral included: The same arrest and school performance categories as in The Roster with provision for reporting current levels of behavior as well as shifts during the past three months. Behavior reported both while in program and for six months after leaving.

Total Operation Report provided operational information on the status of NYPUM groups, program costs, funding sources, accidents, insurance claims, and the condition of the bikes.

Sample copies of all three reporting forms are contained in Appendix A.

C. THE TEN PER CENT GUARANTEE SAMPLE

Ideally, the findings of this evaluation would be based upon an analysis of the reporting forms, submitted faithfully each quarter by 100% of the NYPUM operations. As any program researcher knows, however, this is not an ideal world. Prior experience with NYPUM had demonstrated that a reporting system dependent upon the response of more than 300 local program directors, each with varying experience and degrees of commitment to program evaluation, would yield very uneven results in terms of both quantity and quality of data reported.

In order to provide a solid data base for the evaluation, a ten per cent sample of NYPUM operations was selected for special treatment. These operations were chosen in such a way as to provide as nearly as possible a stratified random sample of the entire population of operations. Sampling procedures were compromised only to the extent that each operation in the sample would have the kind of relationship with police, courts and schools required to provide the behavioral data. A report describing the Characteristics of the Guarantee Sample is included as Appendix B-1.

In addition to using careful sampling procedures to select the guarantee sample, the data reported by the guarantee sample during 1975 were checked against the data reported by all NYPUMS to see if there were statistically significant differences. A discriminate analysis was used to compare 34 variables (group, leader and participant characteristics) between all NYPUMS and the guarantee sample. The conclusion reached was: "In conclusion then the 10% guaranteed sample appears to have fulfilled its role by providing representative and complete data for evaluation of the NYPUM program." The complete analysis, "A Comparison of the 10% Sample with the Other Reporting Groups," is contained in Appendix B-2.

Three steps were taken to increase the prospect that required records would be kept and reported accurately by the sample operations.

Step One: A contract was negotiated with each operation, agreeing to pay up to $50.00 per quarter for each completed set of reports for all groups in the program. This payment was to cover any additional expense incurred in obtaining data from original sources. Rather than rely upon the testimony of participants and/or the estimates of NYPUM leaders, it was determined that data reported by the Guarantee Sample had to be obtained from original sources, i.e. police, courts, pro-

bation officers, and schools.

Step Two: The contracted director from each sample operation was required to participate in a two-day Evaluation Briefing Workshop for the purpose of reviewing the reporting system, agreeing upon operational definitions, and exploring with local sources the problems of data production to be overcome.

Step Three: Each operation in the sample was visited during the year by a member of the evaluation team for the purpose of verifying with original sources the accuracy of data reported. A report of those visits is contained in Appendix B-3.

Despite these steps and for reasons beyond our control, it became necessary to make some mid-stream substitutions in the sample. The chief problem encountered was the factor of local staff turn-over. Of the 31 contracted directors who participated in briefing workshops at the beginning of the year, 20 were in the same position at year's end. This does not mean that all operations with staff changes failed to function. Staff replacements in several instances followed through effectively. In four instances, alternate operations failed to report, despite repeated assurances and promises.

The roster of NYPUM Operations in Guarantee Sample at the end of the year is contained in Appendix B-4.

II. FINDINGS: NUMBER OF OPERATING UNITS AND PARTICIPANTS

A. NEW UNITS

The stated goals for NYPUM for FY-4 (1975) include the following commitments to expansion of operations and participants:

75 new units to be established
550 adjudicated youth participating in these units
350 other referral delinquency-prone youth participating in these units

The sum of gains throughout the national NYPUM system indicates that these goals were exceeded on all dimensions. The eight NYPUM Regions reported a total of 80 new units during 1975. (An additional 16 units were organized during January 1976. January 31 was the official termination of FY-4.)

Sixty-nine of the 80 new operations (86.3%) have provided an actual head-count of new participants in three categories as follows:

- 1,090 participants referred by adjudication, 198% of the stated goal,
- 1,080 other referrals, 309% of the stated goal, and
- 562 other participants, not referred. (There was no stated goal for this category of participants.)

The proportion of referred participants, combining "adjudicated" and "other referrals" is 79.4%, slightly above the National NYPUM Guideline of 75%.

In addition to the actual headcount of participants reported by 69 units, an estimated additional enrollment of 206 by adjudication, 174 other referrals, and 102 non-referred might be added. (The estimated additional is based upon an extrapolation of the average participants per operation for those reporting.)

The distribution of new operations and participants, by regions, is contained in Appendix C-1.

B. ALREADY ESTABLISHED UNITS

FY-4 also had as a goal that there would be 225 already established units in operation, involving 1700 adjudicated youth and 2800 referred delinquency-prone youth. The figures shown in Table 1 indicate that these goals were met.

Since the reporting from all of the operating NYPUM units was far from complete, the figures in Table 1 include extrapolations based upon the data provided by the 309 NYPUM program groups representing 167 operating units that did report. The projected totals show that NYPUM exceeded all of its goals. The number of continuing operating units was 258, exceeding the 225 goal by 15%. Adjudicated youth participating in these programs totaled 1757, exceeding the 1700 goal by 3%. Other referred delinquency-prone youth totaled 4263, exceeding the 2800 goal by 52%. The total number of youth participating was 6762, with 89% being referrals, exceeding the NYPUM guidelines of 75%.

TABLE 1

ACTIVE NYPUM OPERATIONS AND PARTICIPANTS

JANUARY 1 - DECEMBER 31, 1975

	ALREADY ESTABLISHED UNITS		NEW UNITS		ALL UNITS	
	Goal	Achieved	Goal	Achieved	Goal	Achieved
UNITS OPERATING	225	258	75	80	300	338
PARTICIPANTS						
ADJUDICATED YOUTH:						
Count		863		1,090		1,953
**Estimate*		894		206		1,100
Total	1,700	1,757	550	1,296	2,250	3,053
OTHER REFERRED DELINQUENCY-PRONE YOUTH:						
Count		1,686		1,080		2,766
**Estimate*		2,577		174		2,751
Total	2,800	4,263	350	1,254	3,150	5,517
NON-REFERRED YOUTH:						
Count		371		562		933
**Estimate*		371		102		473
Total	None	742	None	664	None	1,406
TOTAL—ALL YOUTH:						
Count		2,920		2,732		5,652
**Estimate*		3,842		482		4,324
Total		6,762		3,214		9,976
% REFERRED:						
Count	75%	87.3%	75%	79.4%	75%	83.5%
**Estimate*	75%	90.3%	75%	78.8%	75%	89.1%
Total	75%	89.0%	75%	79.3%	75%	85.9%

**Based on extrapolation of distribution of participants from operations that did report.*

III. FINDINGS: ARRESTS DURING PROGRAM: BY NUMBER OF PERSONS ARRESTED

Arrest figures during the program will be analyzed in two ways. In Chapter III, the figures will be given in terms of numbers of persons arrested and re-arrested. This is being done in order to provide data which are in the same format and comparable with many other studies, including part of the FY-3 evaluation of NYPUM.

In the opinion of the present evaluation team, however, this is not the most accurate way to present arrest figures, since the frequency of arrests in a constant time frame gives a more accurate picture than simply the number of persons arrested. Therefore in Chapter IV, the figures will be given in terms of average arrests per month. Both chapters will display figures by seriousness of prior offense, by number of prior arrests, and by tenure in NYPUM.

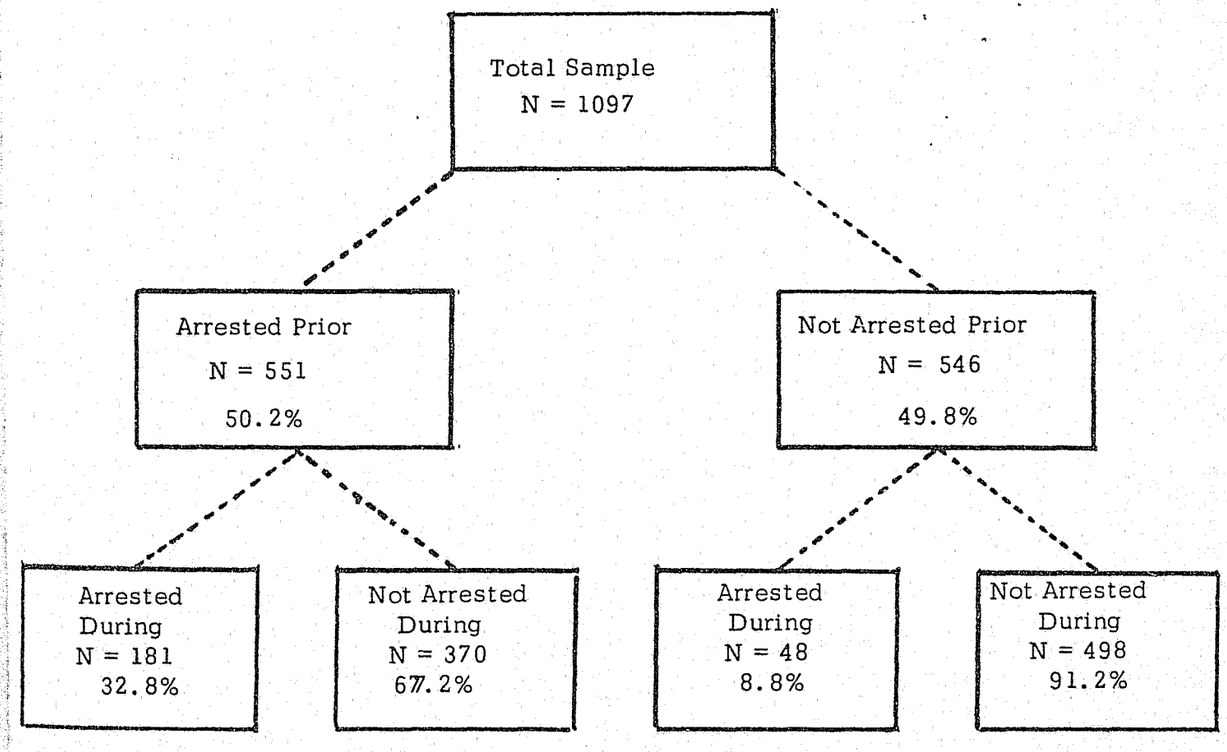
A. TOTAL SAMPLE

All of the following analyses of arrest information are based upon the reports of the 10% guarantee sample. Table 2 gives the overall results during the program.

Of the 1,097 participants in the sample, just over half (551) had been arrested in the six months prior to NYPUM entry. Of this group, 181 or 32.8% were arrested at least once at some time during their NYPUM membership. This is a global recidivism rate that makes no allowance for seriousness or frequency of arrest or the duration of program participation. Subsequent analyses will take a closer look at these.

TABLE 2

ARRESTS OF TOTAL GUARANTEE SAMPLE



There were 546 (49.8%) of the participants who had not been arrested in the six months prior to membership. Of this group, 48 (8.8%) were arrested during their participation in NYPUM.

In all, 67.2% of those who had been arrested prior and 91.2% of those who had not been arrested prior were not arrested during their participation in NYPUM. A total of 229 youth, which is 20.9% of the 1,097 youth in the sample, were arrested during their participation in NYPUM.

B. RECIDIVISM RATE FOR THOSE ARRESTED PRIOR

By Most Serious Prior Offense

Table 3 gives a recidivism analysis for the 551 youth who had been arrested prior to NYPUM. The left hand columns give an unduplicated count, with each youth appearing only once, on the line of his/her most serious prior offense.

The table is read as follows: on the first line there were 50 youth who had been arrested prior to NYPUM for a felony against a person. Of these 50, 16 or 32% were re-arrested during NYPUM. Of these 16 arrested during NYPUM, there were 8 arrested for felonies against persons (which is 50% of the 16); 8 were arrested for felonies against property; 5 were arrested for shoplifting and petty theft, 2 for vandalism, 1 for drug/alcohol abuse, 3 for runaway, and 4 for other offenses. Because of multiple offenses, the sum of the percentages exceeds 100% and the total arrested exceeds 16.

TABLE 3

RECIDIVISM: YOUTH ARRESTED PRIOR TO AND DURING NYPUM

(BY MOST SERIOUS PRIOR OFFENSE)

(EACH YOUTH LISTED ONLY ONCE)

NUMBER ARRESTED DURING NYPUM
(Multiple Arrests Included)

PRIOR — MOST SERIOUS PRIOR OFFENSE	(N=)	DURING YES No.	%	DURING NO No.	%	Felonies Against Persons No.	%	Felonies Against Property No.	%	Shoplifting And Petty Theft No.	%	Vandalism No.	%	Drug/Alcohol Abuse No.	%	Run-Away No.	%	Other Offenses No.	%	All Offenses No.	%
Felonies Against Persons	(50)	16	32	34	68	8	50	8	50	5	31	2	13	1	6	3	19	4	25	31	194
Felonies Against Property	(127)	44	35	83	65	1	2	26	59	13	30	7	16	2	5	7	16	11	25	67	152
Shoplifting And Petty Theft	(116)	42	36	74	64	1	2	8	19	24	57	4	10	3	7	5	12	16	38	61	145
Vandalism	(39)	14	36	25	64	0	0	3	21	1	7	4	29	3	21	4	29	4	29	19	136
Drug/Alcohol Abuse	(15)	6	40	9	60	0	0	0	0	1	17	2	33	5	83	0	0	2	33	10	167
Run-Away	(39)	14	36	25	64	0	0	1	7	2	14	0	0	0	0	11	79	4	29	18	129
Other Offenses	(165)	45	27	120	73	1	2	0	0	4	9	6	13	0	0	4	9	37	82	52	116
Total:All Offenses	(551)	181	33	370	67	11	6	46	25	50	28	25	14	14	8	34	19	78	43	258	143

Number arrested for most serious previous offense = 115, which is 44.6% of 258

For all offenses combined, the recidivism rate was 33%, with 181 of the 551 who had prior arrests being re-arrested. The lowest recidivism rate was 27%, which was for those whose most serious previous offense was "Other Offenses," i.e. status offenses and traffic offenses. The highest rate was 40%, which was for those whose most serious previous offense was drug/alcohol abuse.

It should also be noted that of the 258 arrested during the program for all offenses, 115 or 44.6% were re-arrested for the same offense as their most serious prior offense. This means that the most likely re-arrest offense was the same offense as the most serious prior arrest.

By Number of Prior Arrests and NYPUM Tenure

Table 4 gives recidivism figures displayed by number of prior arrests and tenure in NYPUM. There were 434 first offenders, which is 78.8% of all those in the sample with prior arrests. Of these, 144 or 33% were re-arrested during NYPUM, with the most frequent re-arrest categories being felonies against property, shoplifting/petty theft, and other "Other Offenses."

A similar pattern is seen with those with 3 or more prior arrests, of whom 33% were re-arrested during NYPUM. The most frequent re-arrest categories were felonies against property and shoplifting/petty theft.

Youth with two prior arrests show a different pattern. Although their recidivism rate is lower, with 30% being re-arrested during NYPUM, of those 20 youth who were re-arrested, 8 had arrests for felonies against persons and 7

TABLE 4

RECIDIVISM: YOUTH ARRESTED PRIOR AND DURING NYPUM

(BY NUMBER OF PREVIOUS OFFENSES AND BY TENURE IN PROGRAM)

(EACH YOUTH LISTED ONLY ONCE)

PRIOR — MOST SERIOUS PRIOR OFFENSE	DURING: YES		DURING: NO		NUMBER ARRESTED DURING NYPUM (Multiple Arrests Included): Felonies Against Persons		Felonies Against Property		Shoplifting And Petty Theft		Vandalism		Drug/Alcohol Abuse		Run-Away		Other Offenses		All Offenses	
(N=)	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
NUMBER OR PRIOR ARRESTS																				
One.....(434)	144	33	290	67	19	13	50	35	50	35	18	13	10	7	10	7	44	31	201	140
Two.....(66)	20	30	46	70	8	40	7	35	4	20	1	5	0	0	4	20	5	25	29	145
Three or More.....(51)	17	33	34	67	4	24	10	59	7	41	0	0	0	0	4	24	3	18	28	165
TENURE IN NYPUM																				
Less Than 6 Months.....(196)	54	28	142	72	19	35	17	31	15	28	12	22	2	4	6	11	13	24	84	156
6 to 12 Months.....(180)	77	43	103	57	6	8	37	48	22	29	6	8	6	8	11	14	21	27	109	142
More Than 12 Months....(175)	50	29	125	71	6	12	13	26	24	48	1	2	2	4	1	2	18	36	65	130
TOTAL.....(551)	181	33	370	67	31	17	67	37	61	34	19	10	10	6	18	10	52	29	258	143

had arrests for felonies against property. There were 14 arrested for all other categories of offenses.

The bottom part of Table 4 shows recidivism displayed by tenure in NYPUM. Note that 43% of those with prior arrests who were in NYPUM for 6 to 12 months were re-arrested during NYPUM. This is the single highest recidivism rate, higher than that of any seriousness of offense category or number of prior arrests category.

This is a good example of where reporting only the numbers re-arrested can be misleading. Table 4 indicates that those with tenure of 6 to 12 months have a higher recidivism rate than those with less than 6 months tenure. On Table 7, however, which reports recidivism in terms of average number of arrests per month, the recidivism for those with 6 to 12 months tenure is 46% lower than that of those with less than 6 months tenure: .091 arrests per month compared to .169 arrests per month average. The question of tenure will be discussed in more detail in Chapters IV and VII.

By Shifts in Seriousness of Offense

The previous two sections of this chapter have dealt with numbers arrested and re-arrested. If 551 youth were arrested prior to NYPUM and only 181 were arrested during NYPUM, this is one kind of progress. Another kind of progress, however, is shift in seriousness of offense. If a youth were arrested prior to the program for a felony against a person (murder, rape, assault, etc.) and is re-arrested during NYPUM for an "Other Offense" such as curfew violation, the shift towards much less serious crime could also be counted as a type of progress. These shifts will be documented in this section.

There are two different approaches to assessing the shift of re-arrested prior offenders on the seriousness of offense scale. One way is to simply tabulate the number of arrests during NYPUM which were:

a. Less Serious Than
b. More Serious Than
c. Same As

the participant's most serious prior offense. This has been done in the chart below for the 258 youth arrested during NYPUM who also had prior arrests.

Category of Prior Offense	ARRESTS DURING, COMPARED TO PRIOR, WERE FOR: More Serious Offense		Same Offense		Less Serious Offense		Total
	No.	%	No.	%	No.	%	
Felonies/Persons	0	0	8	26	23	74	31
Felonies/Property	1	1	26	39	40	60	67
Shoplifting/Petty Theft	9	15	24	39	28	46	61
Vandalism	4	21	4	21	11	58	19
Drugs/Alcohol	5	50	3	30	2	20	10
Runaway	3	17	11	61	4	22	18
Other Offenses	15	29	37	71	0	0	52
Total: All Offenses	35	13.6	115	44.6	108	41.9	258

This method, while it shows definite movement by the sample in the direction toward Less Serious offenses (41.9% as opposed to 13.6% for More Serious) does not indicate the degree or extent of movement on the scale. The degree of movement, however, can be determined by assigning Weighted

Seriousness Values to each category of offense as follows:*

Category	Weighted Seriousness Value
Felonies/Persons	7
Felonies/Property	6
Shoplifting/Petty Theft	5
Vandalism	4
Drugs/Alcohol	3
Runaway	2
Other	1

(* It could be argued that seriousness interval between each category is not equal; i.e. that the degree of seriousness between "Felonies/Persons" and "Felonies/Property" is greater (or less) than the degree of seriousness between "Runaway" and "Other." A more sophisticated procedure would be to have the categories weighted by a panel of criminal justice experts. However, in the interest of simplicity, the weighting as indicated will illustrate the movement of NYPUM participants.)

Applying these weighted values to the sample of Prior Offenders, we derive a Prior Seriousness score for each category of offenders and for the total as follows:

Category of Offense	No. of Arrests	X	Weighted Value	=	Prior Seriousness Score
Felonies/Persons	50	X	7	=	350
Felonies/Property	127	X	6	=	762
Shoplifting/Petty Theft	116	X	5	=	580
Vandalism	39	X	4	=	156
Drugs/Alcohol	15	X	3	=	45
Runaway	39	X	2	=	78
Other	165	X	1	=	165
Total	551				2,136*

(* Since only most serious prior offense was employed to categorize the sample, the Prior Seriousness Scores are somewhat smaller than actual.)

Applying the same weighted values to the number of arrests for each category of offense during, we derive a During Seriousness Score as follows:

Example: Most Serious Prior Offense: Felonies/Persons

During	No. of Arrests	X	Weighted Value	=	During Seriousness Score
Felonies/Persons	8	X	7	=	56
Felonies/Property	8	X	6	=	48
Shoplifting/Petty Theft	5	X	5	=	25
Vandalism	2	X	4	=	8
Drugs/Alcohol	1	X	3	=	3
Runaway	3	X	2	=	6
Other	4	X	1	=	4
Total	31				150

Then following the same procedure for each sub-sample of Prior Offenders we get:

	Prior Seriousness Score	During Seriousness Score	% Reduction of Seriousness Score
Felonies/Persons	350	150	57
Felonies/Property	762	267	65
Shoplifting/Petty Theft	580	226	61
Vandalism	156	60	62
Drugs/Alcohol	45	30	33
Runaway	78	42	46
Other	165	96	42
Total	2,136	871	59

Summary

Of the 551 youth arrested prior to NYPUM, 181 or 33% were re-arrested during NYPUM. This means that 67% of the previously arrested youth were not re-arrested, showing the hoped for improvement in behavior.

But even the 181 youth re-arrested cannot be dismissed as complete failures for the NYPUM program. If shifts in seriousness of arrest are calculated, then it can be determined that only 13.6% of the re-arrest offenses were more serious than the most serious prior arrest, while 41.9% of the re-arrest offenses were less serious than the most serious prior arrest. This shift is in the hoped for direction.

IV. FINDINGS: ARRESTS DURING PROGRAM: BY AVERAGE NUMBER OF ARRESTS PER MONTH

A. TOTAL SAMPLE

Table 5 shows the average arrests per month during the program for the entire sample of 1097, which includes both those with and without prior arrests. The averages are displayed by seriousness of offense and by tenure in the NYPUM program.

Two trends in the data can be seen. One is that the longer the youth is in the NYPUM program, the lower the average arrests rate per month. The monthly average for at least one arrest in any category is .101 for those in the program less than 6 months, is approximately halved to .058 for those in 6 to 12 months, and is more than halved again to .020 for those in the program more than 12 months.

The second trend is in the types of crimes committed. The Total Column reveals that the most frequent arrests during the program of NYPUM participants are, in priority order, for: Shoplifting/Petty Theft, "Other Offenses," and for Felonies Against Property.

Table 6 gives similar information for the youth who had no arrests prior to NYPUM. Of these, approximately 80% were referred into the program by school or police officials as "delinquency-prone" youth, and 20% were non-referrals. Of these 546 youths, 48 or 8.8% were arrested during NYPUM, and Table 6 provides an analysis of these arrests.

Again, there is a strong difference by tenure. Those in the program less than 6 months have an average monthly arrest rate of .007, while those in the program for more than 6 months have an average monthly arrest rate of only .001. Most frequent arrests are for Shoplifting/Petty Theft, Felonies Against Property, and Felonies Against Persons.

TABLE 5

AVERAGE ARRESTS PER MONTH DURING PROGRAM: TOTAL SAMPLE

Tenure (Months)			
< 6	6–12	> 12	TOTAL
413	316	368	1097

AVERAGE ARRESTS PER MONTH DURING PROGRAM
Tenure (Months)

ARREST CATEGORY	< 6	6–12	> 12	TOTAL
Felonies – Person	.012	.005	.0	.006
Felonies – Property	.017	.011	.004	.011
Shoplifting/Petty Theft	.026	.011	.006	.015
Vandalism	.008	.006	.003	.006
Drug/Alcohol Abuse	.005	.002	.001	.003
Runaway	.014	.007	.001	.008
Other	.019	.017	.006	.014
At Least 1 Arrest In The Above Categories	.101	.058	.020	.061

TABLE 6

AVERAGE ARRESTS PER MONTH DURING PROGRAM: NOT ARRESTED PRIOR

Tenure (Months)

< 6	6 – 12	> 12	TOTAL
217	136	193	546

AVERAGE ARRESTS PER MONTH DURING PROGRAM
Tenure (Months)

ARREST CATEGORY	< 6	6 – 12	> 12	TOTAL
Felonies – Person	.006	.007	.0	.004
Felonies – Property	.009	.004	.0	.005
Shoplifting/Petty Theft	.010	.002	.005	.006
Vandalism	.003	.0	.001	.002
Drug/Alcohol Abuse	.0	.0	.0	.0
Runaway	.007	.001	.0	.003
Other	.007	.001	.001	.003

B. RECIDIVISM RATE FOR THOSE ARRESTED PRIOR

Table 7 illustrates the format in which detailed information is available for those who were arrested both prior to and during NYPUM, displaying the data for all 551 youth who were arrested prior to NYPUM for any offense. The top table gives the distribution by number of prior arrests and by tenure in the program of the 551 youth arrested prior to NYPUM. The two tables in the middle of the page show the average arrests per month during NYPUM for the 181 who were re-arrested during the program, shown by tenure and by number of prior arrests. The two tables at the bottom of the page show the number of youth arrested for each type of crime during NYPUM, shown by tenure and number of prior arrests. The same youth can appear on more than one line. The last line, "At Least 1 Arrest in The Above Categories," gives an unduplicated count of the youth who were re-arrested during NYPUM, showing their distribution by tenure and by number of prior arrests.

There are several conclusions which can be drawn from a study of Table 7. The average arrests per month tables reveal that arrests per month decrease with tenure in NYPUM and increase with higher numbers of prior arrests. Neither of these is surprising. One would expect that the helpful impact of a program would be greater on a youth who had participated for 9 months than on one who had participated for only 3 months. Also one would expect a lower re-arrest rate for first offenders than for multiple offenders. There is a very practical conclusion which can be derived, however, and that is that participation in NYPUM should be encouraged to remain in the program for at least 6 months.

TABLE 7

AVERAGE ARRESTS PER MONTH DURING PROGRAM: ALL PRIOR OFFENDERS

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	141	143	150	434
2	31	20	15	66
3 or more	24	17	10	51
TOTAL	196	180	175	551

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.020	.004	.0	.008	.005	.025	.010	.008
Felonies – Property	.026	.016	.007	.017	.018	.020	.016	.017
Shoplifting/Petty Theft	.045	.018	.007	.024	.016	.038	.072	.024
Vandalism	.014	.010	.004	.010	.010	.006	.014	.010
Drug/Alcohol Abuse	.010	.003	.001	.005	.005	.0	.007	.005
Runaway	.021	.011	.002	.012	.009	.027	.018	.012
Other	.032	.029	.012	.025	.025	.027	.016	.025
At Least 1 Arrest In The Above Categories	.168	.091	.034	.094	.087	.144	.153	.094

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	6	5	0	11	7	3	1	11
Felonies – Property	13	21	12	46	39	3	4	46
Shoplifting/Petty Theft	19	19	12	50	32	9	9	50
Vandalism	7	13	5	25	21	2	2	25
Drug/Alcohol Abuse	7	5	2	14	13	0	1	14
Runaway	15	13	6	34	24	6	4	34
Other	17	33	28	78	65	6	7	78
At Least 1 Arrest In The Above Categories	54	77	50	181	144	20	17	181

A second conclusion is that all types of prior offenders show improvement. Since prior arrest records are given for a period of six months, it is possible to compute the average monthly arrest record prior to NYPUM and compare it with the average monthly arrest record during NYPUM. The figures are given in the following chart:

	AVERAGE ARRESTS PER MONTH		
Six Months Prior	Prior	During	Difference
One Prior Offense	.167	.087	-.080
Two Prior Offenses	.333	.144	-.189
Three Prior Offenses	.500	.153	-.347

Table 7 gives data on average arrests per month during the program for all of the youth who were arrested prior to NYPUM. Appendices D-1 through D-7 give average arrests per month during NYPUM for each of the seven levels of most serious prior offenses. The figures from these appendices for "At Least 1 Arrest in The Above Categories" for each level of seriousness of offense are displayed in Table 8.

In examining Table 8, it becomes clear that certain categories of previously arrested youth have improved more during NYPUM than have others. In terms of numbers of prior arrests, those with the worst re-arrest rates during NYPUM are second offender Felonies Against Persons with .643, multiple offender Runaways with .403, multiple offender Felonies Against Persons with .292, and multiple offender Shoplifting/Petty Theft with .261. Remembering that the average monthly prior arrest rate for three arrests during the six months prior to NYPUM is .500, then all of the last three rates for multiple offenders

TABLE 8

AVERAGE ARRESTS PER MONTH DURING PROGRAM FOR ANY OFFENSE

BY MOST SERIOUS PRIOR OFFENSE
AND
BY NUMBER OF PRIOR ARRESTS AND TENURE

MOST SERIOUS PRIOR ARRESTS CATEGORY	NUMBER OF PRIOR ARRESTS 1	2	>2	Total
Felonies - Person	.128	.643	.292	.213
Felonies - Property	.114	.040	.126	.103
Shoplifting/Petty Theft	.076	.153	.261	.096
Vandalism	.126	.036	0	.107
Drug/Alcohol Abuse	.097	0	0	.084
Runaway	.059	.139	.403	.091
Other	.065	.125	.027	.068

MOST SERIOUS PRIOR ARREST CATEGORY	TENURE (MONTHS) <6	6-12	>12	Total
Felonies - Person	.381	.086	.056	.213
Felonies - Property	.162	.094	.037	.103
Shoplifting/Petty Theft	.133	.081	.070	.096
Vandalism	.214	.050	.006	.107
Drug/Alcohol Abuse	.083	.121	.029	.084
Runaway	.060	.161	.022	.091
Other	.143	.085	.017	.068

represent a net improvement when compared to the prior rate. That is not true with the second offenders for Felonies Against Persons, who have an average monthly arrest rate prior to NYPUM of .333, compared to the during NYPUM rate of .643. There are only 7 youth in this category, however, so it would be dangerous to draw broad generalizations from such a small sample.

In terms of tenure in NYPUM, Table 8 shows that those with the worst re-arrest records are those who have been in NYPUM for less than six months with prior arrests for Felonies Against Persons (.381), Vandalism (.214), and Felonies Against Property (.162). Runaways in NYPUM for 6 to 12 months had a monthly re-arrest rate of .161.

The Total columns, giving the average monthly arrest records only by seriousness of prior offense, show that the re-arrest rate for those who had previously been arrested for Felonies Against Persons was .213, which is double that of the next highest category, Vandalism with .107. In light of these figures, it is doubtful whether NYPUM should accept Felons Against Persons into its program. Instead,the limited resources of time, money, leadership and bikes should be used with other adjudicated and referred youngsters who stand a better chance of being helped by the experience which the NYPUM program offers.

V. FINDINGS: ARRESTS AFTER LEAVING PROGRAM

Most evaluators agree that longitudinal data is highly desirable, particularly if it can show what happened to program participants after they left the program. Yet such data are difficult to come by.

NYPUM is no exception. Although strenuous efforts were made to obtain complete reporting on all NYPUM participants for 6 months after leaving the program, there are far fewer NYPUM alumni records than there are NYPUM participant records.

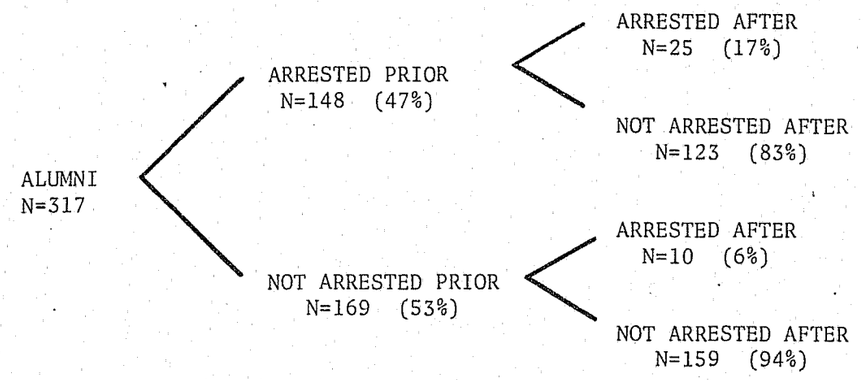
Still, the Guarantee Sample did succeed in providing a substantial data base. Although the number of participants on whom there are adequate records drops from 1097 during the program to 317 who have left the program, still there are some clear trends discernable. Table 9 summarizes the arrest records of NYPUM alumni prior, during and after NYPUM. Only 17% of youth who had been arrested prior to NYPUM were re-arrested after, while 26% of those who were arrested during NYPUM were re-arrested after. Of the 317 NYPUM alumni, 282 (89%) were <u>not</u> arrested after the program, and of these, 123 (44%) had been arrested prior to NYPUM and 58 (21%) had been arrested during NYPUM.

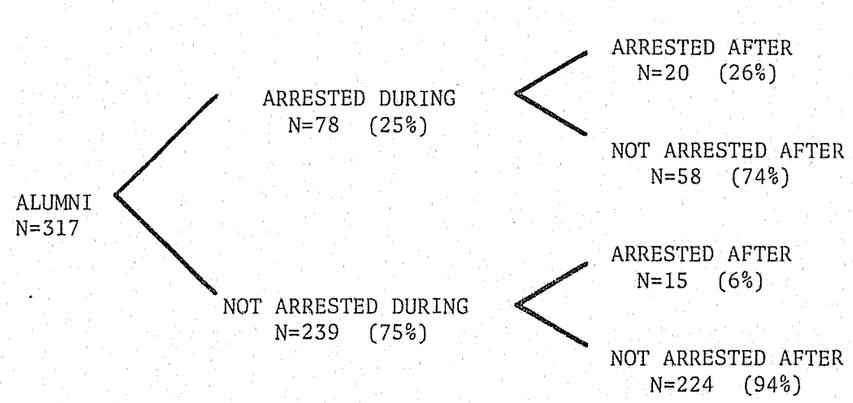
Table 10 shows an analysis of arrest records for NYPUM alumni by months out of the program. The most encouraging figures are for the 155 NYPUM participants who have been out of the program for more than 6 months. Only 10% have been arrested since leaving NYPUM, despite the fact that 52% had been arrested prior to NYPUM and 22% had been arrested during NYPUM.

This same trend is evident for all NYPUM alumni. The re-arrest records of those with prior arrests declines during NYPUM and continues to decline after the participant has left the NYPUM program.

TABLE 9

ARREST RECORDS OF NYPUM ALUMNI: PRIOR, DURING AND AFTER PROGRAM





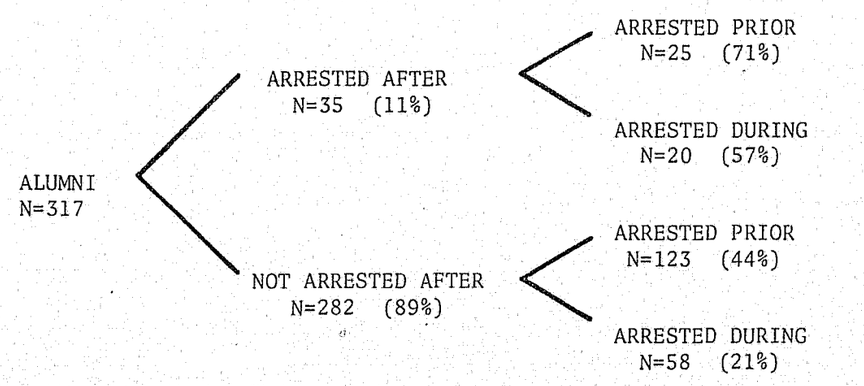


TABLE 10

ARREST RECORDS OF NYPUM ALUMNI: BY MONTHS OUT OF PROGRAM

	OUT OF NYPUM							
	Under 3 Months		3-6 Months		More Than 6 Months		All Alumni	
	N	%	N	%	N	%	N	%
TOTAL NUMBER OF ALUMNI	70		92		155		317	
ARRESTED PRIOR TO NYPUM	31		36		81		148	
% of Total		44		39		52		47
ARRESTED DURING NYPUM	14		30		34		78	
% of Total		20		33		22		25
ARRESTED AFTER LEAVING NYPUM	8		11		16		35	
% of Total		11		12		10		11

VI. FINDINGS: SCHOOL PERFORMANCE AND TRUANCY

A. BY PROGRAM TENURE

Table 11 shows the shifts in school performance and truancy which took place during 1975. It summarizes Appendices E-1 through E-4, showing not only the number and percentage of NYPUM participants who improved or did worse, but also a score, which includes both number of participants and amount of shift in performance. (A detailed explanation of the procedures used is contained in Appendix E.)

Inspection of Table 11 reveals that most NYPUM participants either remained the same or else made improvements in all categories of school performance and truancy. The number who improved averages about three times as many as those who did worse. For example, in relationships with teachers and other school officials, 33.5% of all the participants improved, while only 10.3% did worse.

The most improvement was made in truancy. Of those with more than 6 months tenure in NYPUM, 47.4% improved, 46.9% remained the same, and 5.7% did worse. The next best area was relationships with teachers and school officials. Of those with 6 months or less tenure in NYPUM, 38.1% improved, while 12.3% did worse. In academic performance, 32.1% improved and 10.6% did worse. The least improvement was shown in relations to other students, in which 25.4% improved and 8.8% did worse.

In the score columns, which is derived by multiplying the number of participants by the size of the shift in perfromance, improvement in relationships with teachers and school authorities is slightly better than improvement in truancy. If the net figure (Improved minus Worse) is used, then truancy has the best record.

TABLE 11

SHIFTS IN SCHOOL PERFORMANCE AND TRUANCY

BY TENURE IN PROGRAM

	IMPROVED			WORSE			SAME		NET: Improved Minus Worse		
	N	%	SCORE	N	%	SCORE	N	%	N	%	SCORE
ACADEMIC PERFORMANCE											
≤6 Months	110	33.3	186	36	10.9	56	184	55.8	74	22.4	130
>6 Months	188	31.5	313	62	10.4	98	347	58.1	126	21.1	215
Total	298	32.1	499	98	10.6	154	531	57.3	200	21.6	345
RELATIONSHIPS WITH TEACHERS AND SCHOOL AUTHORITIES											
≤6 Months	127	38.1	217	41	12.3	62	165	49.5	86	25.8	155
>6 Months	185	31.0	342	55	9.2	82	357	59.8	130	21.8	260
Total	312	33.5	559	96	10.3	144	522	56.1	216	23.2	415
RELATIONSHIPS WITH OTHER STUDENTS											
≤6 Months	83	24.9	141	32	9.6	43	218	65.5	51	15.3	98
>6 Months	154	25.7	268	50	8.4	73	395	65.9	104	17.4	195
Total	237	25.4	409	82	8.8	116	613	65.8	155	16.6	293
TRUANCY											
≤6 Months	146	45.3	207	20	6.2	22	156	48.4	126	39.1	185
>6 Months	258	47.4	349	31	5.7	35	255	46.9	227	41.7	314
Total	404	46.7	556	51	5.9	57	411	47.5	353	40.8	499

There is no consistent pattern in terms of tenure. Those with tenure of more than 6 months show more improvement in truancy and relationships to other students, but less improvement in academic performance and relations with teachers and school authorities. This last category shows the biggest differential between the two tenure groups, with a full four point spread on the net score between the more than 6 months and 6 months or less groups.

B. BY SERIOUSNESS OF OFFENSE

Analysis by tenure in program did not reveal striking differences between groups, but analysis by seriousness of previous offense does show very strong differences. Table 12 shows that not only are there differences between the NYPUM participants with and without prior arrests, but also within the arrested group the sub-group of multiple serious offenders has different characteristics.

The biggest difference is in academic performance, in which the net for multiple serious offenders was minus 12.6%, while the net for all arrested was plus 20.7%. The non-arrested were plus 13.2%. In all of the first three categories, the multiple offenders had a negative net shift, meaning that more did worse during NYPUM than did better. All arrested and not arrested youths, however, showed positive net shifts in these three categories.

In the final category of truancy, however, the multiple serious offenders show the biggest net positive impact: 74.7%, compared with 54.4% for all arrested, and 22.9% for not arrested.

In summary, all arrested and not arrested show improvement in all categories, with more arrested youth showing improvement in academic performance, while more of the not arrested showed improvement in relations with teachers and school

CONTINUED

1 OF 3

TABLE 12

SHIFTS IN SCHOOL PERFORMANCE

BY SERIOUSNESS OF PRIOR OFFENSE

	Multiple Arrests for Three Most Serious Offenses N = 95		All Arrests N = 551		No Prior Arrest N = 546	
	No.	%	No.	%	No.	%
ACADEMIC PERF.						
-Better	28	29.4	203	36.8	171	31.3
-No Change	27	28.4	259	47.0	276	50.5
- Worse	40	42.1	89	16.2	99	18.1
- *Net:Better Minus Worse*	- 12	-12.6	114	20.7	72	13.2
RELATIONS W/ TEACHERS						
- Better	32	33.7	200	36.3	192	35.2
- No Change	24	25.3	247	44.8	260	47.6
- Worse	39	41.1	104	18.9	94	17.2
- *Net:Better Minus Worse*	-7	- 7.4	96	17.4	98	17.9
RELATIONS W/ STUDENTS						
- Better	21	22.1	156	28.3	162	29.7
- No Change	32	33.7	284	51.5	310	56.8
- Worse	42	44.2	111	20.1	74	13.6
- *Net: Better Minus Worse*	-21	-22.1	45	8.2	88	16.1
TRUANCY						
- Better	74	77.9	348	63.2	219	40.1
- No Change	18	18.9	155	28.1	233	42.7
- Worse	3	3.2	48	8.7	94	17.2
- *Net: Better Minus Worse*	71	74.7	300	54.4	125	22.9

authorities, and relations to other students. More multiple serious offenders did worse in the first three categories than improved, but 77.9% showed improvement in truancy.

VII. OTHER RELATIONSHIPS DERIVED FROM THE DATA

So far, it has been established that both arrest and school performance records improve during NYPUM. Some of the potentially most useful relationships, however, still have yet to be explored. A variety of statistical techniques were used to test the relationships among several categories of data.

A. RELATIONSHIP BETWEEN PRIOR AND DURING NYPUM ARRESTS

The evaluation team felt that one question on which it was important to gather data was whether or not the less serious youth, those with no prior arrest record or with arrests for only less serious offenses, were negatively affected by being placed in the same program with more serious offenders. The evidence is reassuring, and does not support the contamination of less serious offenders with more serious offenders when mixed in the same program.

It is true that Table 2 indicates that the 546 participants in the Guarantee Sample who came into NYPUM with no prior arrest, 48 or 8.8% were arrested during the program. As has already been pointed out, however, 80% of those not arrested prior to NYPUM had been referred into the program by school or police officials as "delinquency-prone" youth, so it is not surprising that 8.8% of them lived up to their reputation.

Table 13 presents even stronger evidence that contamination does not occur. The correlation matrix indicates that the single best predictor of the offense to be committed during the program is the one for which the participant was arrested prior. Reading the correlations in the table diagonally, from upper left to lower right, we observe that the highest positive correlation for each category of prior offense is with the same category of offense during.

TABLE 13

CORRELATION MATRIX OF PRIOR ARRESTS WITH ARRESTS DURING PROGRAM

NUMBER OF ARRESTS DURING PROGRAM	NUMBER OF ARRESTS PRIOR TO PROGRAM						
	Felonies — Person	Felonies — Property	Shop-lifting	Vandalism	Drug Abuse	Runaway	Other Offenses
Felonies — Person	0.336	0.030	0.104	−0.024	−0.031	0.015	−0.053
Felonies — Property	0.094	0.144	0.090	−0.011	−0.040	−0.010	−0.141
Shoplifting/Petty Theft	0.060	0.009	0.400	0.076	−0.046	0.011	−0.080
Vandalism	0.001	0.046	0.064	0.247	−0.011	0.005	−0.015
Drug/Alcohol Abuse	−0.021	0.010	−0.025	0.065	0.183	0.054	−0.077
Runaway	0.009	−0.018	−0.035	−0.013	−0.040	0.366	−0.045
Other Offenses	−0.050	−0.070	−0.002	−0.062	−0.051	0.010	0.124

Correlations greater than .02 in either direction are statistically significantly different from 0 at the 95% confidence level.

Negative correlations in the matrix provide substantial evidence of no participant contamination. The sharpest illustration is that group with prior arrests for "Alcohol/Drug Abuse." Correlations with all other categories of offense are negative and with a single exception (Vandalism) exceed the stated level of significance. The same pattern prevails for those whose prior arrests were for "Other" Offenses. Correlations with all other categories are negative and again with the exception of Vandalism exceed the level of significance.

There are, however, other likelihoods related to each category of prior arrest worth noting. In the tabulation below, those categories listed under the column headed "Exceeds Level of Significance: Positively" are the ones most likely to occur during the program; those listed under "Negatively" are least likely to occur. Where relationships are not significant in either direction, they have been omitted. (Correlation scores are in parentheses.)

Prior Arrest Categories	Arrested During Categories Exceeds Level of Significance: Positively	Negatively
Felonies Vs Persons	Felonies vs Persons (.336) Felonies vs Property (.094) Shoplftg/Petty Theft (.060)	Drugs/Alcohol (-.021) Other Offenses (-.050)
Felonies Vs Property	Felonies vs Property (.144) Vandalism (.046) Felonies vs Persons (.030)	Other Offenses (-.070)
Shoplifting/Petty Theft	Shoplftg/Petty Theft (.400) Felonies vs Persons (.104) Felonies vs Property (.090) Vandalism (.064)	Run-Away (-.035) Drug/Alcohol (-.025)
Vandalism	Vandalism (.247) Shoplftg/Petty Theft (.076) Drug/Alcohol (.065)	Other Offenses (-.062) Felonies vs Persons (-.024)
Drug/Alcohol Abuse	Drug/Alcohol (.183)	Other Offenses (-.051) Shplftg/Petty Thft (-.046) Run-Away (-.040) Felonies vs Property (-.040) Felonies vs Persons (-.031)
Run-Away	Run-Away (.366) Drug/Alcohol Abuse (.054)	
Other Offenses	Other Offenses (.124)	Felonies vs Property (-.141) Shplftg/Petty Theft (-.080) Drug/Alcohol (-.077) Felonies vs Persons (-.053) Run-Away (-.045)

B. FACTOR ANALYSIS OF BEHAVIOR

Table 14 presents the results of a factor analysis of participant behavior. A factor analysis determines mathematically the factors which account for the greatest variance, and the loading co-efficient of each factor with the variables.

The first factor for the NYPUM sample, accounting for 24% of the total variance, is focused upon school. It has high co-efficients with academic performance, relations with teachers, and relations with other students. It has a moderate co-efficient with truancy. It is important to note that it does not have a high co-efficient with any arrest category.

The second factor, accounting for 13% of the variance, has high co-efficients with serious crimes (person and property felonies and shoplifting/petty theft) and a modest co-efficient with truancy. (The minus signs can be ignored, since they occur on all of the variables in this factor.)

The third and fourth factors, each accounting for 12% of the variance, both have high co-efficients with crimes.

The major conclusion to be drawn from this factor analysis is that school performance (including academic performance, relationships with teachers, and relationships with other students) is quite independent of arrests for any offense. Truancy is moderately related to school performance and modestly related to more serious crimes. But none of the items of school performance has a high co-efficient with arrest for any offense, or vice versa.

TABLE 14

FACTOR ANALYSIS OF BEHAVIOR

FACTOR	Coefficient	% Cumulative Variance	% Factor Variance
Academic Performance	.86	.24	.24
Relations with Teachers	.93		
Relations with Students	.92		
Truancy	.44		
Felonies Against Person(s)	– .55	.37	.13
Felonies Against Property	– .73		
Shoplifting/Petty Theft	– .71		
Truancy	– .25		
Vandalism	.69	.49	.12
Drug/Alcohol Abuse	.62		
Runaway	.49		
Truancy	.31		
Felonies Against Person(s)	– .63	.61	.12
Runaway	– .54		
Other Offenses	– .82		

C. CHARACTERISTICS ASSOCIATED WITH DIFFERENCES IN ARREST PERFORMANCE

Are there characteristics either of participants or of the programs which are associated consistently with differences in arrest performance? If these characteristics could be identified, they could help determine which youth would profit most or least from involvement in NYPUM, and could also identify which are the key parts of the NYPUM program which seem to be contributing most to the positive impact.

To identify characteristics associated with differences in arrest performance, discriminate analyses were performed to compare a series of sub-group pairs. The results, similar to an F test, were then tested for statistical significance. The full set of tests is contained in Appendix F.

The sub-groups tested were:

1.	Total Sample:	Those Arrested Prior vs Those Not Arrested Prior
2.	Those Arrested Prior:	Those Arrested During vs Those Not Arrested During
3.	Those Not Arrested Prior:	Those Arrested During vs Those Not Arrested During
4.	Those Arrested During:	Those Arrested Prior vs Those Not Arrested Prior
5.	Those Not Arrested During:	Those Arrested Prior vs Those Not Arrested Prior
6.	Those Arrested During:	Those with High Arrest Rates vs Those with Low Arrest Rates
7.	Alumni:	Those Arrested After vs Those Not Arrested After

On each of the preceding pairs of sub-groups, differences were tested on each of the following variables:

NINE PARTICIPANT VARIABLES:

1. Participant tenure (months)
2. Participant Age (Years)
3. Percentage Male
4. Asian Origin
5. Blacks
6. Hispanic Origin
7. American Indian
8. White
9. Other Races

FOUR VARIABLES RELATED TO CHANGES IN SCHOOL PERFORMANCE AND TRUANCY DURING THE YEAR:

10. Academic Performance
11. Relations with Teachers
12. Relations With Other Students
13. Truancy

FOUR VARIABLES RELATED TO ABSOLUTE LEVELS OF SCHOOL PERFORMANCE AND TRUANCY AT THE END OF THE YEAR:

14. Academic Performance
15. Relations With Teachers
16. Relations With Other Students
17. Truancy

THREE VARIABLES RELATED TO BIKE-TIME AND NON-BIKE TIME:

18. Ratio of Bike/Non-Bike Hours
19. Bike-Related Hours Per Month
20. Non-Bike Related Hours Per month

FOUR LEADERSHIP VARIABLES:

21. Number of Leaders Per Participant
22. Actual Number of Leaders
23. Number of Leader Training Sessions Attended
24. Leader Tenure (Months)

D. THE FAMILY INFORMATION TEST

One other pair of sub-groups was tested for significant differences on the above variables: Those with High Scores vs Those with Low Scores on the Family Information Test.

The search for a way to determine in advance which youth would be most helped and least helped by participation in NYPUM led to the Family Information Test (FIT). Developed by Dr. Peter Venezia, Associate Director of the Research Center of the National Council on Crime and Delinquency, the FIT seemed appropriate to use with the NYPUM population for several reasons:

- the test was developed and validated with a similar youth population.
- the test is not dependent upon reading-comprehension skills.
- it is administered in a non-threatening interview setting.
- it is easy to administer and score (an important feature since we were dependent upon administration and scoring by local NYPUM directors with a variety of background).

In Venezia's study of delinquent boys in a residential treatment center, he found:

"Delinquent boys possessed significantly less family information than the non-delinquent controls.

Sixteen non-delinquent brothers of experimental subjects possessed significantly more family information that the latter, and significantly less than sixteen matched non-delinquent non-siblings.

Of all the variables studied, FIT Scores, Delinquency Classifications, and Treatment Prognoses, (FIT scores) demonstrated the highest correlations with Treatment Outcomes." 1.

The NYPUM evaluation design called for administration of the FIT to each participant in the Guaranteed Ten Percent Sample. We failed to reach this objective because of mid-stream substitutions of some operations and failure of others to report. We did, however, receive 413 usable test scores. For purposes of analysis, these were grouped by thirds -- the lowest one-third (scores of 7 or lower), the highest third (scores of 12 or higher), with the other third falling within the mid-range. (NOTE: Low FIT scores reflect more family information and High FIT scores reflect less family information.)

The Low FIT Group and the High FIT Group were compared using a Discriminant Analysis with the following results:

- Findings are consistent with Venezia's in that a significantly greater proportion of the High FIT group had been arrested prior to NYPUM.
- A significantly greater proportion of the Low FIT group were still in the program.
- A higher proportion of the High FIT group were arrested during the program, but the difference is not significant.
- The Low FIT group has greater tenure (11.4 months) as compared to 9.6 months for the High FIT group.
- The proportion of Blacks is significantly greater in the Low FIT group; conversely the proportion of Whites is greater in the High FIT group.

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1. For additional interpretation and findings of this study, see: Venezia, Peter S., "Delinquency As A Function of Intrafamily Relationships," Journal of Research in Crime and Delinquency: July, 1968.

- The High FIT group shows significantly more improvement on all three dimensions of school performance and a better absolute rating of Academic Performance at the end of the year.
- Leaders of the High FIT group have attended more training sessions and have significantly longer tenure (11.4 months) as compared to 7.4 months for the Low FIT Group.

E. FINDINGS ON CHARACTERISTICS

Differences between the paired sub-groups are summarized by categories of dependent variables:

Participant Characteristics

School Performance (Change and Absolute Level)

Bike-Related and Non-Bike Time

Leadership

Only those differences which are statistically significant at the .05 level or better are reported here, although all results are presented in Appendix F.

PARTICIPANT CHARACTERISTICS

Participant Tenure

- Considering the Total Sample...

  ... those Not Arrested Prior have longer tenure than those Arrested Prior.

- Considering only the FIT Sample...

  ... the Low FIT (more family information) group has greater tenure than the High FIT group.

Age

- Only one comparison yields a significant difference. Considering only the Alumni Sample...

  ... those Arrested After Leaving are older (13.8 years) as compared to 13.3 years for those Not Arrested After.

Race of Ethnic Origin

- Considering the Total Sample...
  - ... those Not Arrested Prior include a higher proportion of Blacks.
  - ... those Arrested Prior include a higher proportion of Hispanics and American Indians.
- Considering only those Arrested Prior...
  - ... Hispanics are a higher proportion of those Not Arrested During.
  - ... Whites are a higher proportion of those that are Arrested During.
- Considering only those Arrested During...
  - ... there is a higher proportion of Blacks in the group with No Prior Arrest.
  - ... the proportion of Whites and Others is higher in the group of those Arrested Prior.
- Considering only those Not Arrested During...
  - ... Blacks are a higher proportion of those with No Prior Arrest.
  - ... Hispanics, American Indians and Others are a greater proportion of Arrested Prior.
- Considering only the FIT Sample...
  - ... the proportion of Blacks is greater in the Low FIT group
  - ... the proportion of Whites is greater in the High FIT group.

These data raise interesting, and perhaps important, questions about the processes of participant referral. Regardless of the comparison made, Blacks are consistently a higher proportion of the group with no prior arrest. Once in the program, Blacks arrested prior are no more likely to be arrested than they are not to be arrested. Only whites with prior arrests are more likely to be arrested than not.

These findings run counter to popular assumptions regarding family disintegration (note that Blacks are more likely to have more family information) and the incidence of crime in Black communities. Is it possible that police, probation officers, courts and schools refer Blacks to the program merely because they are black? Is the mini-bike a stronger attractant to this group regardless of prior arrest record? Are community agencies, including the NYPUM sponsoring agency, color biased to the extent that they tend more frequently to view Black youth as "delinquency-prone?" Available data provide no clues to these questions, but the phenomena observed here warrant further exploration.

SCHOOL PERFORMANCE AND TRUANCY

The most surprising comparison is that involving the group With Prior Arrests. Of this group, those Arrested During show greater improvement in relationships and at the end of the year have better relationships with teachers and other students, although worse truancy records. Also, of those arrested during the year, those with High Arrest frequency recorded better year-end relationships than did the Low Arrest group.

It should be no surprise that prior arrestees, those arrested during, and the high FIT group show greater improvement. It stands to reason that many of these, if they made any movement at all, "had more room to move." Less obvious is the explanation as to why arrestees record better absolute ratings.

Further clarification of these data is achieved by dividing the group who were arrested during according to seriousness and frequency of offense. Table 12 in Chapter VI gives the school records of 95 participants with multiple arrests for one or more of the three most serious categories -- "Felonies Against Persons," "Felonies Against Property," and "Shoplifting/Petty Theft." When this distinctive group is lifted out of the sample and examined separately, we discover that their school per-

formance movement was significantly different from other arrestees and from those with no prior arrest. The most serious multiple-arrest group includes a higher proportion of those who did worse during the year than those who improved. This is true for Academic Performance, Relations With Teachers, and Relations With Students. With regard to truancy, however, this group shows a dramatic reversal of form, with 77.9% showing improvement. By contrast, the other two groups -- All Arrests and No Prior Arrests -- show improvement on all variables in greater proportion than they show regression. A significant feature of this observation is the evidence that the multiple-most serious group of 95 is the most volatile. That is,they showed more movement in one direction or another than did either of the other groups. Their No Change proportion is smaller on all dimensions.

BIKE-RELATED AND NON-BIKE TIME

- Considering the Total Sample...

  ...the ratio of Bike-Time/Non-Bike Time is greater for those with Prior Arrests.

  ... those with No Prior Arrests recorded more hours per month of Non-Bike Time.

- Considering only those Arrested Prior...

  ... those Arrested During have a higher ratio of Bike-Time/Non-Bike Time, and also recorded more hours per month on both Bike-Time and Non-Bike time.

- Considering only those Arrested During...

  ... those Arrested Prior had a higher ratio of Bike-Time/Non-Bike Time and more actual hours per month of Bike Time.

  ... the High Arrest group had a higher ratio of Bike-Time/Non-Bike Time and more actual hours per month of Bike-Time than did the Low Arrest group.

Those with higher arrest rates both prior to and during NYPUM spend more time on bikes than do those with lower arrest rates. This does not necessarily mean that bikes "contribute" to the likelihood of arrest. The more likely interpretation is that local directors tend to use the bike as a tool for capturing and holding the interest of arrestees than they are to use other program mechanisms. These data suggest that the principal function of the bike is as an attractant rather than as a treatment tool. There is no evidence here that participant behavior is affected positively by more time on the bike. If there were a bike-time-to-behavior relationship, it would be in the opposite direction.

NYPUM LEADERSHIP

Number of Leaders

- Considering those Arrested Prior...

  ... those Arrested During had more leaders and a higher ratio of leaders to participants.

- Considering only those Not Arrested Prior...

  .... those Arrested During had a higher ratio of leaders to participants.

- Considering only those Arrested During...

  ... those Not Arrested Prior had more leaders.

Regardless of prior record, those participants arrested during the program were exposed to more leaders than those who were Not Arrested during the program. The only firm conclusion to be drawn from these data is that the mere increase in the number of leaders does not in itself relate to fewer arrests by participants. Nor can the opposite conclusion -- that more leaders cause an increased frequency of arrest -- be supported. Further discussion of this and other leader-related comparisons will be discussed below.

Tenure of Leaders

- Considering the Total Sample...

  ... leaders of those with Prior Arrests have greater tenure than do those with No Prior Arrest.

- Considering only those with Prior Arrests...

  ... leaders of those Not Arrested During have greater tenure.

- Considering only those Not Arrested During

  ... leaders of those with Prior Arrests have greater tenure.

- Considering only NYPUM Alumni...

  ... leaders of those who have been Arrested After have greater tenure than leaders of those Not Arrested After

- Considering only the FIT Sample...

  ... leaders of the High FIT group (less family information) have greater tenure than leaders of the Low FIT group.

Training of Leaders

- Considering the Total Sample...

  ... leaders of those with No Prior Arrest have participated in more training sessions.

- Considering only those Arrested Prior

  ... leaders of those Arrested During have attended more training sessions than leaders of those Not Arrested During.

- Considering only those Arrested During...

  ... leaders of those with a High Arrest frequency have had more training exposure.

- Considering only those Not Arrested During...

  ... leaders of those Not Arrested Prior have attended more training sessions.

- Considering only the FIT Sample...

  ... leaders of the High FIT group have participated in more training sessions.

The discriminating group in the above summary is those Arrested During, and of these the ones with high arrest frequency and the High FIT group. Does this mean that more exposure to training causes more participant arrests? Not likely. Such a conclusion is naive and probably incorrect. It does mean that greater exposure to training in and of itself gives no assurance of improved participant behavior, i.e. fewer arrests during the program.

The consistency of data indicating that the high arrest groups either prior to or during the program have more time on bikes, more exposure to more leaders who have greater tenure and more training runs counter to impressionistic assumptions and in fact, counter to National NYPUM Guidelines. These findings are admittedly puzzling. Explaining them involves a considerable degree of speculation.

A possible explanation, only partially supported by external evidence, is that the "tougher kids" are being referred to the "better programs." We have testimony from one juvenile judge (in Hennepin County, Minnesota) that his regard for the NYPUM program in his community is such that he tends to refer to the program youngsters who

have not responded to other treatments. This is only one judge. There may or may not be others. This hypothesis is more substantially supported by findings of the 1974 NYPUM Evaluation. That design included on-site visitation to 16 NYPUM operations by an evaluation team and a multi-dimensional rating of the effectiveness of each. In the analysis of these ratings, it was found that the "Most Effective" operations consistently had a significantly higher proportion of Serious Offenders than did the "Least Effective" operations.

There may be other explanations related to such uncontrolled variables as:

- the differences in "style of leadership."
- readiness of leaders for training.
- relevance of training content and method to the leadership requirements of participants, and
- others.

At this point, however, we are without the evidence to support or repute any of these speculations. We would suggest that any subsequent evaluation of NYPUM explore these issues in greater depth and with greater precision than has been possible here.

VIII. FINDINGS: COMPARISON OF NYPUM TO OTHER PROGRAMS

A. INTRODUCTION

As part of the total analysis plan of the NYPUM program, an in-depth study of the program has been done utilizing detailed information from Minneapolis. The objective of this study was to compare the participants in the NYPUM Program who were referred into it by the Minneapolis Juvenile Court system with a matched sample of other court processed juveniles who were referred into other programs or put on probation.

Method

The Hennepin County court system provided a computer file containing all the background, arrest and referral information on all of the approximately 40,000 juveniles who have been processed by the court system during the last four years. The NYPUM group leaders were asked to provide the names of people in their groups during the last two years. These participants, if they had been processed through the court system, were identified in the data base and became the focal point for the analysis. The initial research plan also called for the identification of matched samples from the other programs to compare with the NYPUM participants. Limitations of the data base, however, prevented a full analysis of this sort.

The 79 NYPUM participants who were identifiable in the data were quite atypical of the arrested Minneapolis juvenile. Particularly in property related crimes, they appeared to be much more frequent offenders than other juveniles. Also most of the juveniles in the data base had either been through multiple programs (which made evaluating the effect of any single program impossible) or only appeared on the court records for such a short period of time that any

realistic evaluation was impossible. Therefore the original objective of drawing matched samples for each of the other programs was dropped in favor of drawing a matched sample based only on early arrest history and background characteristics and did not include the program into which they were referred.

A program comparison was done by identifying juveniles who had only been in an alternative program once so that a clear distinction could be made between the juveniles' arrest records prior to and after the specific program. In this way the analysis was not confounded by the effects of multiple applications of the same program or overlapping effects of other programs. Sample sizes prevented any sub-sampling beyond this to further identify matched subsamples with prior arrest records and background characteristics equivalent to the NYPUM participants.

Changes also had to be made in the manner in which the matched sample was drawn. Initially it had been planned to study the relationships between background characteristics and arrests. If strong correlations were found, the samples would be matched only on the background characteristics and not on the prior arrest records. It was already known that the best predictor of a person's next arrest is his previous arrest record. Therefore, since the analysis was going to be done on the relationship of arrest records prior to and after the programs, it was feared that the introduction of an analysis variable into the set of matching criteria would negate the differences between the groups being compared.

Analysis

The first step in the analysis was to identify whether or not the background variables (age at first arrest, race, sex, parents' marital status) correlated strongly with the juveniles' arrest records; and also to identify the types of intercorrelations

which exist. This type of question is best addressed with a technique known as canonical correlation. This is a method which is a combination of correlation analysis and factor analysis which operates on two sets of measurements. It simultaneously searches for internal correlations within each set of variables and also searches for groupings (linear combinations) of the variables in the two sets which correlate with each other. Formally stated, it is performing a factor analysis on each of the two sets of variables and simultaneously trying to match the factors in the two sets so that the i th factor of the first set maximally correlates with the i th factor of the second set.

Table 15 shows the results of the canonical correlation in which the first set of variables are the rate at which the juveniles are arrested for each of the most frequent arrest categories and the second set of variables are the juveniles' background characteristics. Not all of the arrest categories were used in the analysis because the low incidence categories would have only added noise to the data. A sample of 800 randomly selected juveniles were used in the analysis.

Three significant (α= .95) canonical variables were identified and these were tested and found to be stable by repeating the analysis for another set of 800 juveniles. The first finding is the existence of these canonical variables. This shows that there is a very strong relationship between the background characteristics and the rate at which juveniles commit the different crimes. The first canonical variable demonstrates the relationship between crimes against persons, and crime against property and the juveniles' age, race, and parents' marital status. It shows that as the juveniles grow older they commit fewer of these crimes; that blacks are slightly more likely to commit them and whites slightly less likely, and that juveniles from married homes are much less likely to commit them.

TABLE 15

HENNEPIN COUNTY:
CANONICAL CORRELATION RESULTS

	FACTOR LOADINGS		
	1**	2**	3**
ARREST CATEGORIES			
Major Crimes Against Persons	0.55*	–0.44	–0.28
Minor Crimes Against Persons	0.56*	–0.23	–0.19
Major Crimes Against Property	0.67*	–0.16	0.54
Minor Crimes Against Property	0.74*	0.02	–0.09
Crimes Involving Drugs/Alcohol	–0.04	–0.01	0.69*
Status Offenses	0.40	0.84*	–0.16
Attempt	0.35	–0.18	0.11
BACKGROUND CHARACTERISTICS			
Age	–0.75*	–0.32	0.17
Sex (% female)	0.18	–0.43*	0.74*
White	–0.46*	0.40	0.32
Black	0.50*	–0.65*	–0.43*
Indian	0.11	0.04	0.04
Spanish	–0.06	–0.05	0.09
Oriental	0.06	–0.02	0.16
Other race	0.06	0.27	–0.12
Unknown race	–0.01	0.12	–0.05
Father Married	–0.57*	–0.25	–0.15
Father Single	0.08	0.08	0.38*
Father Separated	0.38	0.28	–0.15
Mother Married	–0.56*	–0.23	–0.13
Mother Single	0.13	0.10	0.41*
Mother Separated	0.40	0.15	–0.21

*Variables of interest discussed in this report
**Significant ($\alpha >$ .95) Canonical Variables

The second canonical variable shows that males are much more likely to commit status offenses then females and also that the rate of this crime decreases with age. The third canonical variable demonstrates that major crimes against persons are negatively correlated with drug and alcohol related arrests and that blacks are more likely to have been arrested for the serious crimes against persons and less likely to have been arrested for the drug related crimes.

Matched Sample

Two methods were used in selecting the matched sample to compare with the NYPUM participants. They differed only in terms of the data which was used to do the matching. Both methods are described here because the reason for the failure of the first helps to illustrate the type of individual who has been referred into the NYPUM program in Minneapolis: a "hard core" individual whose arrest profile is rather atypical of other juveniles with the same background characteristics.

The 79 NYPUM participants were first separated into four census tract groups which were judged a priori to be similar types of neighborhoods. Then, within each census area, a random sample of approximately 20 times the number of NYPUM participants was identified in the master data file. These were offenders who had been tracked long enough in the data base to allow a meaningful comparison to be made between them and the NYPUM participants. A multivariate clustering algorithm was used to select a subsample of approximately twice the size of the NYPUM sample whose characteristics best matched those of the NYPUM participants.

In the first attempt the variables used in the matching sample consisted only of the background variables since the canonical correlation analysis had implied a strong relationship between these variables and the juveniles' arrest records. The result, however, was that the arrest profile of the matched sample was not at

all similar to the NYPUM participants. The rate at which they were committing crimes was only 10% of the NYPUM sample rate. This showed that the NYPUM participants were quite atypical, and that a strong selection bias was evident in the manner in which people were being referred into the NYPUM program.

To solve this problem it was decided to supplement the data on which the matched sample was being based to include not only the background characteristics but also each person's early arrest history. A length of time typical of that which was available for a NYPUM participant prior to his entering NYPUM was used to compute a comparable "prior arrest" profile for each of the non-NYPUM juveniles. The arrest rates for each of the ten arrest categories were then used along with the background characteristics to choose matched samples in each of the four census areas. As the following tables show, the sample is not a perfect match but apparently is as close as can be accomplished within the limitation of the available sample. Note that no attempt has been made to control the matched sample for any specific alternative programs. The sample was drawn randomly so that it is representative of the spectrum of possible referrals available in Minneapolis.

Alternative Programs

There were not enough juveniles in the data base to simultaneously identify people who had only been in a single program and to also match their characteristics to the NYPUM participants. Therefore in order to compare the alternative programs, individuals were identified who had only been in a single program and who had also only been referred to that program once. This allowed an unambiguous definition of before versus after treatment periods, with one exception: that while it was possible to identify the starting date, the data did not reveal when an individual left the program. Therefore a period of 6 months was arbitrarily taken to be the length of time over which the program had an effect and any arrests after this period

were included in the after arrest analysis. Table 16 presents the background characteristics to the alternative program participants.

Data Format

It is the feeling of this research team that the current measures of recidivism (whether or not a person has been rearrested and how many times) are totally inadequate to scientifically determine the relative effects of different programs. Typical statements such as "10% of the sample was rearrested for crime X" are meaningless unless all the people in the sample are tracked in the same manner for identical lengths of time. Therefore to remove this problem the measure used in the analysis of this data was "average number of arrests per month" in each of the predefined arrest categories. This was computed by prespecifying for each individual a period of time (prior to program, during program, after program); counting the number of arrests which occured in each category and dividing by the number of months for the period in question. These "arrest rates" were computed on an individual basis for every juvenile studied in the analysis and the results for particular groups are always the weighted averages of the individual results. The weights for each individual are the number of months over which his data was collected.

TABLE 16

BACKGROUND CHARACTERISTICS OF

COMPARISON GROUPS

BACKGROUND CHARACTERISTICS	NYPUM	Non-NYPUM Matched	County Home School	Family Counseling	Group Counseling	One to One (Probation)	Residential Treatment Center	Treatment Group Home
	N = 79	N = 294	N = 288	N = 231	N = 136	N = 300	N = 166	N = 194
Age at first arrest	13.0	13.3	13.9	14.4	13.9	14.8	13.1	14.1
Percentage Male	92	87	69	58	82	85	63	52
Race (Percentage)								
White	72	67	74	67	57	76	64	69
Black	23	22	16	20	29	13	19	16
Spanish-American	4	9	8	10	12	9	11	10
Oriental	0	1	1	1	0	1	0	1
Other	1	1	1	2	2	1	4	3
Unknown	0	0	0	0	0	0	2	1
Marital Status of Parents								
Father								
Single	8	16	20	19	11	50	10	13
Married	33	31	33	39	38	21	22	32
Divorced	44	38	32	29	36	20	51	34
Mother								
Single	10	15	19	20	14	51	7	13
Married	39	37	38	42	42	23	27	38
Divorced	40	36	32	27	34	20	49	34

B. A COMPARISON OF NYPUM AND THE NON-NYPUM MATCHED SAMPLE

As seen in Table 17, the before program arrest rates of the NYPUM participants are higher than those of the Non-NYPUM matched sample. In several categories (major crimes against property, minor crimes against property and status offenses) the NYPUM arrest rates are two to four times greater than the matched sample. Despite these significantly higher arrest rates, indicating a more trouble-prone offender being assigned to the program, the NYPUM after/prior arrest rate ratio is dramatically lower than that of the matched sample (with the exception of crimes involving alcohol or drugs, and attempt.)

Major crimes against persons declined 33% for the NYPUM participants to 67% of its before program rate. This is in comparison to a drop of only 3% (to 97% of the before program rate) for the matched sample. Similarly, minor crimes against persons declined 37% to 63% of its former level while the matched sample dropped only 19% (to 81%).

The category of major crimes against property, which had the highest arrest rate before the program, declined 68% to 32% of its former rate for the NYPUM participants as compared to a 47% decrease (to 53%) for the matched sample. Minor crimes against property, another category with a very high before program arrest rate for the NYPUM participants, decreased 77% (to 23% of its former rate) while the matched sample rate decreased 51% (to 49%).

Status offenses declined nearly 90% to 12% of their before (NYPUM) program arrest rate, as compared to a 65% reduction for the matched sample (to 35%). The arrest figures for the last three categories, traffic offenses, unknown and attempt, while shown for the sake of completeness, are really too small to allow any meaningful statistical statements to be made.

TABLE 17

A COMPARISON OF ARRESTS OF
NYPUM AND THE NON-NYPUM MATCHED SAMPLE

ARREST CATEGORIES	NYPUM PARTICIPANTS N = 79				NON-NYPUM Matched Sample N = 294			
	Before	During	After	Ratio	Before	During	After	Ratio
1. Major crimes against persons	13.4	17.7	8.8	.66	9.8	9.1	9.5	.97
2. Minor crimes against persons	21.9	32.1	14.1	.64	16.8	17.9	13.6	.81
3. Major crimes against property	232.8	122.8	75.2	.32	67.0	50.2	35.5	.53
4. Minor crimes against property	145.9	66.1	32.9	.23	35.6	23.0	17.3	.49
5. Crimes involving drugs or alcohol	18.1	22.3	22.0	1.22	7.7	5.8	6.9	.90
6. Status offenses	104.4	38.6	12.7	.12	50.5	28.2	17.8	.35
7. Traffic offenses	5.7	1.8	1.8	.32	0.2	0.0	1.3	6.5
8. Unknown	2.1	0.0	0.0	—	3.8	2.6	0.3	.08
9. Attempt	7.0	9.9	5.9	.84	5.4	6.1	1.6	.30
Length of time tracked (months)	14.5	6.5	16.8	—	15.1	6.9	20.4	—

From the declines in the after/prior program arrest rates it seems clear that the NYPUM program is extremely effective in decreasing the arrest rates of its participants and is significantly more effective than those programs or methods of treatment from which the matched sample offenders are drawn. This is particularly true for major and minor crimes against property and status offenses.

C. A COMPARISON OF NYPUM AND ALTERNATIVE PROGRAMS IN HENNEPIN COUNTY

The purpose of this analysis is to determine the relative effectiveness of the programs to which a juvenile offender can be assigned in Minneapolis. In addition to NYPUM (and the randomly constructed matched sample) there are six other programs:

1. County Home School
2. Family Counseling
3. Group Counseling
4. One to One (Probation)
5. Residential Treatment Center
6. Treatment Group Home

In Table 18,the Projected Arrest Rate is the average rate of arrests per month prior to the program multiplied by 1,000 people. The After/Prior Ratio is a measure of the average arrests per month after the program as compared to the average arrests per month prior to the program. The Projected NYPUM Rate gives a projection of the number of arrests among a group of 100 NYPUM participants over a twenty-four month period if they had been involved in the specified alternative program.

TABLE 18

A COMPARISON OF NYPUM AND ALTERNATIVE PROGRAMS

	NYPUM	Non-NYPUM Matched Sample	County Home School	Family Counseling	Group Counseling	One To One (Probation)	Residential Treatment Center	Treatment Group Home
Major Crimes Against Persons								
Prior Arrest Rate[1]	13.4	9.8	14.2	11.2	20.2	6.9	13.7	8.6
After/Prior Ratio[2]	66%	97%	70%	65%	69%	60%	40%	50%
Projected NYPUM Rate[3]	21.1	31.2	22.4	21.0	22.3	19.3	12.2	16.1
Minor Crimes Against Persons								
Prior Arrest Rate	21.9	16.8	23.7	36.3	19.1	13.9	25.9	15.7
After/Prior Ratio	64%	81%	51%	28%	89%	51%	29%	43%
Projected NYPUM Rate	33.8	42.5	26.6	14.8	46.8	26.7	15.0	22.8
Major Crimes Against Property								
Prior Arrest Rate	232.8	67.0	96.7	60.8	111.9	74.8	75.4	68.2
After/Prior Ratio	32%	53%	34%	44%	38%	17%	26%	37%
Projected NYPUM Rate	180.5	296.0	192.4	243.5	210.2	92.6	146.7	207.3
Minor Crimes Against Property								
Prior Arrest Rate	145.9	35.6	52.8	37.2	51.5	40.3	53.6	34.5
After/Prior Ratio	23%	49%	33%	32%	45%	18%	27%	43%
Projected NYPUM Rate	79.0	170.2	114.7	112.0	158.4	62.2	96.0	149.2
Crimes Involving Drugs/Alcohol								
Prior Arrest Rate	18.1	7.7	12.8	19.6	11.9	24.5	18.5	11.8
After/Prior Ratio	122%	90%	59%	40%	75%	20%	16%	14%
Projected NYPUM Rate	52.8	38.9	25.8	17.3	32.5	8.7	6.8	6.3
Status Offenses								
Prior Arrest Rate	104.4	50.5	123.2	125.9	79.0	60.8	154.7	169.0
After/Prior Ratio	12%	35%	13%	12%	14%	9%	20%	21%
Projected NYPUM Rate	30.5	88.3	32.9	29.5	35.2	21.4	50.2	51.6
Traffic Offenses								
Prior Arrest Rate	5.7	0.2	0.5	1.4	1.6	1.4	4.5	.8
After/Prior Ratio	32%	650%	260%	193%	25%	69%	64%	162%
Projected NYPUM Rate	4.3	88.9	35.6	26.4	3.4	9.5	8.8	22.2
Unknown								
Prior Arrest Rate	2.1	3.8	2.6	2.1	1.2	1.9	3.1	1.2
After/Prior Ratio	—	8%	—	—	—	—	5%	8%
Projected NYPUM Rate	—	.40	—	—	—	—	.23	.42
Attempt								
Prior Arrest Rate	7.0	5.4	6.6	5.8	6.8	14.2	3.5	2.5
After/Prior Ratio	84%	30%	30%	10%	34%	4%	11%	16%
Projected NYPUM Rate	14.2	5.0	5.1	1.7	5.7	.7	1.9	2.7

1 Average arrests per month prior to program x 1000.

2 $\frac{\text{Average arrests per month after program}}{\text{Average arrests per month prior to program}} \times 100$

3 Projected number of arrests for 100 typical NYPUM participants over a two year period given recidivism rates (per category) for each of the above juvenile programs.

$\frac{\text{Average arrests per month after program Y}}{\text{Average arrests per month prior to program Y}} \times \text{Average arrests per month prior to NYPUM} \times 24 \text{ months} \times 100 \text{ participants}$

Inspection of Table 18 reveals that NYPUM is not equally effective in dealing with all types of offenders. The After/Prior Ratio for NYPUM ranges from 12% for Status Offenses to 122% for crimes involving drugs and alcohol.

In comparing NYPUM with six other treatment programs, as well as a matched sample taken from all of the juvenile court records, it is clear that NYPUM is relatively more effective with some offenders than with others. NYPUM is least effective with drug and alcohol offenders. Starting with the fourth highest prior arrest rates, NYPUM shows the highest After/Prior Ratio and the highest Projected NYPUM rate of any of the eight groups.

NYPUM appears to be most effective with major and minor property offenders and with status offenders. With both major and minor crimes against property, NYPUM participants had a prior arrest rate that was more than double any other group. Yet the After/Prior Ratio for major property offenders was 32%, lower than any other program except Probation and the Residential Treatment Center. The After/Prior Ratio for minor property offenders was 23%, lower than any other program except Probation. With status offenders, NYPUM achieved an After/Prior Ratio of 12%, which was lower than all other programs than Probation, and tied with Family Counseling.

NYPUM appeared to be very effective in dealing with traffic offenders, and very ineffective in dealing with "Attempt" offenders. The samples were too small, however, to allow any meaningful conclusions to be drawn.

In summary, the NYPUM program in Minneapolis appears to have been effective in taking offenders with large prior arrest rates and reducing them substantially. This is especially true in the major crimes against property, minor crimes against property, and status offender categories.

When compared to other programs, NYPUM's record is especially encouraging in light of the cost factor. Table 19 compares the cost of NYPUM with three other treatment programs in Hennepin County for which participant cost estimates were available. NYPUM has by far the lowest total program cost per participant and monthly cost per participant of any of the programs listed.

TABLE 19

HENNEPIN COUNTY: COMPARATIVE COST OF TREATMENT PROGRAMS

Program	Average Participant Tenure (Months)	Average Cost	Per	Total Cost Per Participant	Monthly Cost per Participant
NYPUM	5.5	$108.00	Youth	$ 108.00	$ 19.64
Probation	5.3	625.00	Youth	625.00	117.92
Treatment Group Home	3.5	26.50	Day	2,782.50	795.00
Residential Treatment Center (County Home School)	5.0	55.00	Day	8,250.00	1,650.00

IX. APPENDICES

A. REPORTING FORMS

1. NYPUM GROUP ROSTER
2. QUARTERLY REPORT FORM
3. TOTAL OPERATION REPORT

B. TEN PERCENT SAMPLE

1. CHARACTERISTICS OF THE GUARANTEE SAMPLE
2. A COMPARISON OF THE 10% SAMPLE WITH THE OTHER REPORTING GROUPS
3. FINAL REPORT OF NYPUM AND VERIFICATION OF GUARANTEED SAMPLE
4. NYPUM OPERATION IN GUARANTEE SAMPLE (End of Year)

C. OPERATING UNITS AND PARTICIPANTS

1. NYPUM EXPANSION DURING 1975 (By Regions)

D. AVERAGE ARRESTS PER MONTH DURING PROGRAM: BY TENURE AND NUMBER OF PRIOR ARRESTS

1. MOST SERIOUS PRIOR ARREST: FELONIES AGAINST PERSONS
2. MOST SERIOUS PRIOR ARREST: FELONIES AGAINST PROPERTY
3. MOST SERIOUS PRIOR ARREST: SHOPLIFTING/PETTY THEFT
4. MOST SERIOUS PRIOR ARREST: VANDALISM
5. MOST SERIOUS PRIOR ARREST: DRUG/ALCOHOL ABUSE
6. MOST SERIOUS PRIOR ARREST: RUNAWAY
7. MOST SERIOUS PRIOR ARREST: OTHER OFFENSES

E. SHIFTS IN SCHOOL PERFORMANCE: BY TENURE IN PROGRAM

1. ACADEMIC PERFORMANCE
2. RELATIONSHIPS WITH TEACHERS AND SCHOOL AUTHORITIES
3. RELATIONSHIPS WITH OTHER STUDENTS
4. TRUANCY

F. DISCRIMINANT ANALYSIS OF ARREST PERFORMANCE

1.	TOTAL SAMPLE:	THOSE ARRESTED PRIOR VS THOSE NOT ARRESTED PRIOR
2.	THOSE ARRESTED PRIOR:	THOSE ARRESTED DURING VS THOSE NOT ARRESTED DURING
3.	THOSE NOT ARRESTED PRIOR:	THOSE ARRESTED DURING VS THOSE NOT ARRESTED DURING
4.	THOSE ARRESTED DURING:	THOSE ARRESTED PRIOR VS THOSE NOT ARRESTED PRIOR
5.	THOSE NOT ARRESTED DURING:	THOSE ARRESTED PRIOR VS THOSE NOT ARRESTED PRIOR
6.	THOSE ARRESTED DURING:	THOSE WITH HIGH ARREST RATES VS THOSE WITH LOW ARREST RATES
7.	ALUMNI:	THOSE ARRESTED AFTER VS THOSE NOT ARRESTED AFTER
8.	FAMILY INFORMATION TEST (FIT)	THOSE WITH LOW FIT SCORES VS THOSE WITH HIGH FIT SCORES

NAME

(ONLY ON LOCAL COPY)

GROUP ID CODE #

I. 1975 NYPUM GROUP ROSTER

GROUP NAME: _____

* FOR RACE OR ETHNIC ORIGIN, PLEASE USE THE FOLLOWING CODE:
1 = ASIAN (ORIENTAL)
2 = BLACK
3 = HISPANIC
4 = NATIVE AMERICAN (AMERICAN INDIAN)
5 = WHITE
6 = OTHER

II. PARTICIPANT INFORMATION AT TIME OF ENTRY

III. PARTICIPANT PRIOR ARREST RECORD

INDICATE BELOW THE NUMBER OF TIMES PARTICIPANT WAS ARRESTED FOR EACH OFFENSE DURING THE SIX MONTHS BEFORE ENTERING NYPUM.

IV. PARTICIPANT PRIOR SCHOOL RECORD

DURING THE SIX MONTHS BEFORE ENTERING NYPUM, INDICATE THE PARTICIPANT'S SCHOOL PERFORMANCE USING THE FOLLOWING SCALE:
5 = EXCELLENT
3 = SATISFACTORY
1 = UNSATISFACTORY

V. PARTICIPANT TRUANCY RECORD

DURING THE SIX MONTHS BEFORE ENTERING NYPUM, INDICATE THE PARTICIPANT'S AVERAGE MONTHLY TRUANCY RECORD WHILE SCHOOL WAS IN SESSION, USING THE FOLLOWING SCALE:
1 = NONE ..... (ZERO UNEXCUSED ABSENCES)
2 = OCCASIONALLY ..... (1 TO 3 TIMES PER MONTH)
3 = FREQUENTLY ..... (4 TO 6 TIMES PER MONTH)
4 = VERY FREQUENTLY (7 OR MORE TIMES PER MONTH)

PARTICIPANT ID CODE #	AGE	SEX	* RACE OR ETHNIC ORIGIN	DATE ENTERED NYPUM MO.	DATE ENTERED NYPUM YR.	REFERRAL SOURCE ADJUC.	REFERRAL SOURCE OTHER REF.	REFERRAL SOURCE NOT REFD.	FELONIES AGAINST PERSON(S)	FELONIES AGAINST PROPERTY	SHOPLIFTING OR PETTY THEFT	VANDALISM	POSSESSION OR USE DRUGS OR ALCOHOL	RUN-AWAY	OTHER OFFENSES	ACADEMIC PERFORMANCE	RELATIONS WITH TEACHERS AND SCHOOL AUTHORITIES	RELATIONS WITH OTHER STUDENTS
	01																	
	02																	
	03																	
	04																	
	05																	
	06																	
	07																	
	08																	
	09																	
	10																	
	11																	
	12																	
	13																	
	14																	
	15																	
	16																	

VI. ADULT WORKER INFORMATION

WORKER ID CODE #	AGE	SEX	RACE OR ETHNIC ORIGIN	OFFICIAL RELATIONSHIP TO NYPUM: VOLUNTEER	PAID PART-TIME	PAID FULL-TIME	PRIMARY ROLE IS: PROGRAM DIRECTOR	GROUP LEADER	ASST. GROUP LEADER	PROGRAM OR TECH. ASST.	A CERTIFIED NYPUM LEADER: YES	NO	BECAME LEADER, WHEN? MONTH	YEAR
81														
82														
83														
84														

QUARTERLY REPORT FOR EACH NYPUM GROUP

1. IF THIS IS A CONTINUING GROUP, WAS IT ACTIVE THROUGHOUT THE PAST THREE MONTHS? YES____ NO____
2. IF YOU ANSWERED "NO" TO THE PREVIOUS QUESTION, WAS THE GROUP...(A) TEMPORARILY INACTIVE?__OR (B) TERMINATED?____
3. IF THIS IS A NEW GROUP DURING THE PAST THREE MONTHS, INDICATE DATE GROUP BEGAN OPERATION. _____
4. IF GROUP WAS TERMINATED, HOW MANY PARTICIPANTS WERE TRANSFERRED TO OTHER GROUPS? _____
5. HOW MANY TOTAL HOURS DURING THE PAST THREE MONTHS DID THIS GROUP MEET? _____
   (A) RIDING AND BIKE-RELATED ACTIVITY?____HOURS
   (B) NON-BIKE RELATED ACTIVITY?____HOURS

PARTICIPANT'S ARREST RECORD

INDICATE BELOW THE NUMBER OF TIMES PARTICIPANT HAS BEEN ARRESTED FOR EACH TYPE OF OFFENSE LISTED BELOW DURING THE PAST THREE MONTHS.

PARTICIPANT'S SCHOOL RECORD

COMPARISON WITH 3 MONTHS AGO
THE PERFORMANCE OF PARTICIPANT NOW COMPARED WITH 3 MONTHS AGO IS:
9 = MUCH BETTER
7 = SOMEWHAT BETTER
5 = NO CHANGE
3 = SOMEWHAT WORSE
1 = MUCH WORSE

PRESENT LEVEL
THE PARTICIPANT'S SCHOOL PERFORMANCE IS NOW:
5 = EXCELLENT
3 = SATISFACTORY
1 = UNSATISFACTORY

TRUANCY
THE PARTICIPANT'S AVERAGE MONTHLY TRUANCY RECORD DURING THE PAST 3 MONTHS WAS:
1 = NONE - (ZERO UNEXCUSED ABSENCES)
2 = OCCASIONALLY (1 TO 3 TIMES PER MONTH)
3 = FREQUENTLY (4 TO 6 TIMES PER MONTH)
4 = VERY FREQUENTLY (7 OR MORE TIMES PER MONTH)

GROUP ID CODE #	PARTICIPANT ID CODE #	STILL IN NYPUM			IF NO: WHY LEFT		ESTIMATED HOURS PARTICIPANT SPENT IN NYPUM ACTIVITY		WHILE IN NYPUM							AFTER DROPPING OUT OF NYPUM							PARTICIPANT'S SCHOOL RECORD							
		YES	NO	MONTH LEFT	COURT DECISION	OTHER	BIKE RELATED	NON-BIKE RELATED	FELONIES AGAINST PERSON(S)	FELONIES AGAINST PROPERTY	SHOPLIFTING OR PETTY THEFT	VANDALISM	POSSESSION OR USE DRUGS OR ALCOHOL	RUN-AWAY	OTHER OFFENSES	FELONIES AGAINST PERSON(S)	FELONIES AGAINST PROPERTY	SHOPLIFTING OR PETTY THEFT	VANDALISM	POSSESSION OR USE DRUGS OR ALCOHOL	RUN-AWAY	OTHER OFFENSES	ACADEMIC PERFORMANCE	RELATIONS WITH TEACHERS AND SCHOOL AUTHORITIES	RELATIONS WITH OTHER STUDENTS	TRUANCY	ACADEMIC PERFORMANCE	RELATIONS WITH TEACHERS AND SCHOOL AUTHORITIES	RELATIONS WITH OTHER STUDENTS	TRUANCY
	01																												
	02																												
	03																												
	04																												
	05																												
	06																												
	07																												
	08																												
	09																												
	10																												
	11																												
	12																												
	13																												
	14																												
	15																												
	16																												

ADULT WORKER INFORMATION

WORKER ID CODE #	TRAINING EVENTS ATTENDED IN LAST 3 MONTHS					HOURS SPENT		TERMINATION IF TERMINATED, WHEN?	
	START-UP WORKSHOP	CLUSTER WORKSHOP	NAT. TRAIN. CENTER FOR OUTREACH WORKERS	OTHER YMCA TRAINING	OTHER NON-YMCA TRAINING	ON NYPUM THIS QUARTER	DIRECT CONTACT WITH PARTICIPANT THIS QUARTER	MONTH	YEAR
81									
82									
83									
84									

Operation
ID Code:_____

Quarterly Report
for
Total NYPUM Operation

1. If this is a continuing NYPUM Operation, was it active throughout the past three months?

   Yes_____ No_____

2. If you answered "No" to the previous question, was the operation...

   (a) ...temporarily inactive? _ __

   or

   (b) ...terminated? _____

3. If this is a new NYPUM Operation during the past three months, indicate the date program began.

   _____

4. What is the total number of bikes assigned to your program? _____

   Of this number, how many bikes are now...

   (a) ...operational and in use? _____

   (b) ...inoperable? _____

   (c) ...operable, but not in use? _____

5. What is the total number of bike-related accidents that occurred in your NYPUM Operation during the past three months?

   _____

6. How many insurance claims did you file during the past three months, resulting from...

   (a) ...injuries? _____

   (b) ...theft or property damage? _____

7. What is the total annual cost of operating your NYPUM Program? $ _____

   What part of this is covered by the Agency Budget? $_____

   What is the total dollar value of In-kind Contributions? $_____

   List other sources and amounts of support:

Sources	Amount
_____	$_____
_____	$_____
_____	$_____
_____	$_____

CHARACTERISTICS OF THE GUARANTEE SAMPLE

A. GEOGRAPHY

Regions	(1-1-75) Total Operations	% of Total	No. In Guarantee Sample	% of Guarantee Sample
Northeast	28	9.3	3	9.7
Middle Atlantic	20	6.7	2	6.5
Southeast	76	25.3	8	25.8
Great Lakes	21	7.0	2	6.5
Mid-America	65	21.7	7	22.6
Southwest	21	7.0	2	6.5
Pacific	69	23.0	7	22.6
TOTALS	300	100.0	31	100.2

B. SPONSORING AGENCIES

	YMCA Sponsored		Non-Y Sponsored		Totals	
	No.	%	No.	%	No.	%
All Operations	226	75.3	74	24.7	300	100
Guarantee Sample	24	77.4	7	22.6	31	100

Among the Non-YMCA Sponsors in the sample are: 2 local law enforcement agencies; 2 inter-agency youth service coalitions; 1 Boys' Club; 1 Partners, Inc. (A Big Brother Model); and 1 volunteer youth guidance agency.

C. SIZE OF COMMUNITY

	Under 75,000 Population		75-200,000 Population		200,000+ Population		Total	
	No.	%	No.	%	No.	%	No.	%
All Operations	95	31.7	135	45.0	70	23.3	300	100
Guarantee Sample	9	29.0	14	45.2	8	25.8	31	100

A COMPARISON OF THE 10% SAMPLE WITH THE OTHER REPORTING GROUPS

An analysis has been performed to compare the 10% sample with the remainder of the groups who reported during 1975 and to validate that the 10% sample was a representative subset of the total program. Since the final analysis of the program was to use the data from the 10% sample, everything possible was done prior to the selection of the groups to insure that it would indeed be representative. This 10% sample was drawn by filling quotas on as many variables as could be identified prior to the groups' initiation. It was hoped that at the end of the year, when data would be available for other variables which were not controllable, that these variables would also match. The results of these analyses have shown that very few differences existed between the 10% sample and the other groups, and that the group selection criteria used at the beginning of the year were successful.

The analysis was performed by comparing the two groups for significant differences on a list of 34 variables. These variables included a set of group characteristics:

- participants per quarter
- leaders per quarter
- leaders per participant
- bike related hours in the program
- non-bike related hours in the program
- ratio of bike to non-bike hours

a set of leader characteristics

- training sessions per leader per quarter
- tenure
- age
- percent certified

and a set of participant characteristics

- tenure
- age
- sex
- race
- referral source
- prior arrest record
- prior school record

The results of the analysis are summarized in table 1 which shows the means for the 34 variables. Only five variables show any significant differences as measured by the 0-level F test of the BMD 07M program. In terms of the racial composition, the 10% sample had a higher percentage of Asians (2.6% vs. 0.4%) and Blacks (33.6% vs. 21.0%) and had a lower percentage of Whites (54.7% vs. 66.5%). The 10% sample had fewer bike related hours (23.2 vs. 32.0) and its participants had slightly longer average tenures (10.1 months vs. 8.7 months). While visual differences do occur on some of the other variables, none of these differences are statistically significant.

The difference in the reported number of bike related hours may be due to the effect which led to the dropping of the other "during program" variables. That is, the 10% sample leaders were paid to keep better records, therefore, less confidence can be placed on the higher number reported for the rest of the programs. This is also apparent if one compares the sample standard deviations of the two groups on the bike related hours variable. It is 18.7 for the 10% sample and 27.3 for the rest of the groups. One explanation of this could easily be the quality of the record keeping. A closer examination of the data reveals that especially among the non 10% sample groups some of these data are very ambiguously recorded. The lack of consistency in the data and the failure of the bike and non-bike related hours to add to the total hours for the group implies that for some of these groups the leaders were making broad estimates for the numbers rather than referring to detailed records. On most of the other variables there is no difference in the standard deviations.

The differences in racial composition cannot be so easily explained. The data available for this analysis does not provide any direct clues. Fortunately it does not appear to have caused any other shifts in the 10% sample's composition. The other key variables such as size of group, number and training of leaders, and participants prior arrest and school records do not appear to have been significantly biased by the racial shift.

In conclusion, then, the 10% guaranteed sample appears to have fulfilled its role by providing representative and complete data for evaluation of the NYPUM program. Some minor selection bias apparently caused the inclusion of groups with a higher than expected proportion of Blacks. This does not appear to have affected the evaluations or conclusions. If, however, this evaluation were to be redone at a future date the cause of this bias should be identified and taken into account in future research designs.

TABLE 1

COMPARISON OF 10% SAMPLE WITH ALL OTHER GROUPS

		10% Sample	All Others	Significant Difference
	GROUP CHARACTERISTICS			
1.	Participants per quarter	12.2	13.1	
2.	Leaders per quarter	2.1	2.3	
3.	Leaders per participant	0.20	0.22	
4.	Bike related hours	23.2	32.0	
5.	Non-bike related hours	26.9	34.0	
6.	Ratio of bike to non-bike hours	1.81	1.60	
	LEADER CHARACTERISTICS			
7.	Training sessions per leader per quarter	0.86	0.82	
8.	Tenure (months)	9.65	8.61	
9.	Age (years)	24.8	25.6	
10.	Percent certified (%)	35.4	38.1	
	PARTICIPANT CHARACTERISTICS			
11.	Tenure (months)	10.1	8.7	
12.	Age (years)	13.4	12.8	
13.	Sex (% male)	83.0	84.7	
	Race (%)			
14.	Asian	2.6	0.4	
15.	Black	33.6	21.0	
16.	Hispanic	3.6	5.9	
17.	American Indian	2.3	3.2	
18.	White	54.7	66.5	
19.	Other	3.2	3.0	
	Referral Source (%)			
20.	Adjudicated	27.8	28.6	
21.	Other referral	54.6	52.7	
22.	No referred	12.0	13.4	
	Prior Arrest Record (% arrested)			
23.	Any category	47.4	50.5	
24.	Felony against persons	8.9	8.2	
25.	Felony against propery	34.8	27.5	
26.	Shoplifting/Petty theft	36.2	42.6	
27.	Vandalism	23.3	30.5	
28.	Drugs/Alcohol	12.5	18.2	
29.	Runaway	19.5	29.5	
30.	Other offenses	36.6	42.2	
	Prior School Record (1 = unsatisfactory 5 = excellent)			
31.	Academic performance	2.20	2.03	
32.	Relations with teachers	2.32	2.16	
33.	Relations with students	2.58	2.48	
34.	Truancy (1 = none 4 = 7 or more/month)	2.12	1.96	

M E M O R A N D U M

TO: Robert Soong, Dick Batchelder March 15, 1976

FROM: Marc Greenberg

RE: Final Report of NYPUM and Verification Guaranteed Sample

The data verification segment of the NYPUM study through its inception and implementation evolved into a broader vehicle by both planning and circumstance. If one were permitted to generalize on the subject of state of the art of criminal justice research, it would be noted that there are numerous defaults and shortcomings inherent in measuring those categories of data associated with criminal justice research; namely, accurate measures and report of crime, deterents, delinquency, improvements in socialization, etc. Add these categories to the obstacles of juvenile confidentiality, departmental regulations, closed policy systems, personnel changes, regional differences and other lesser problems, and one begins to get to feel of the forces working against cohesiveness of a national research project.

As a result of observations made during the first several visits to NYPUM operations, it was noted that the biggest problem in the Ten Percent Guaranteed Sample was apparently not that data was being falsified (in no cases) or being sloppily collected (to minor degrees in some instances) but rather that there were grossly varying misperceptions with regards to various definitions critical to the collection and reportage of the data. As a result of these initial observations, the structure of the remaining on-site visits changed somewhat, not only was data to be verified but first a thorough briefing was to be conducted by the interviewer to determine whether the data being collected fell within the parameters dictated by the design. Consequently, this brief briefing further served to re-educate the local NYPUM operator and/or data collector to insure his proper performance for the remainder of the study; thusly, setting a standard for all the reporting NYPUM operations to follow.

The bulk of the problems of definitions and data collection fell within the arrest data categories of the Group Rosters and Quarterly Reports. The nature of the problems were mainly two fold -- access and record keeping. The past several years have seen juveniles granted many of the constitutional protections and liabilities of adults in the criminal justice system. But because of the supposedly benevolent, non-criminal nature of juvenile proceedings, juvenile records are usually held by the various authorities as confidential. The degree that this is upheld and enforced differ from state to state, from agency to agency; this did, however, have a profound effect on both the design and implementation of the study. Although arrests are a more judicious way of measuring recidivism and progress, it by no means reflects an individual's behavior. A juvenile's apparent arrest record could be mitigated by his sophistication in criminal methods, his reputation, the policy agency's clearance rate and emphasis on juveniles as well as other psycho-social variables. Thus, a juvenile with a long arrest record may only indicate a youngster who is not as adept in committing successful crimes as his

friend with little or no police record. Therefore, a more accurate measure of juvenile criminal behavior might be to measure the number or quality of contacts that the juvenile has had with police. These contacts would represent incidents where the juvenile was picked up but not charged, where parental restitution preempts a criminal charge, or where sufficient evidence is not available to back up police or witness allegations. It has been the experience of those interviewers who have audited NYPUM operations with cooperating Police Departments who record such contacts that the number and nature of contacts as cited above were three to ten times greater than just the number of formal arrests noted on the Group Rosters and Quarterly Reports. Unfortunately, only a number of all police agencies keep records of such contacts and these records are not passed onto the probation departments where the bulk of arrest information was obtained in the present case. As a result, only "formal arrests (i.e. those in which a juvenile complaint was signed and the juvenile brought before some sort of authority vested with legal power) were recorded upon Group Rosters and Quarterly Reports. Note that convictions from the afore mentioned arrests were not a determinant in the recording of arrest data.

Paralleling the error of reportage of police contacts vis a vis arrests by some operations was over-reportage by group operators, based on personal ('street') knowledge. As many of the NYPUM leaders were street workers with good rapport and contact with the juveniles and adults in their communities, and also given that many of these communities were small in both area and population, these leaders were privy to reports on the behavior and criminal activity of their participants. Although when transcribed onto the Quarterly Reports this data represented a more accurate, albeit, informal and unverifiable measure, this type of input was also disallowed for the purpose of uniformity and accuracy.

The third type of error found in only a handful of individual reports were multiple-count entries. This type of error consisted of several charges placed against the juvenile for one criminal incident such as: one burglary charge compounded by two vandalism charges brought for one night's incident. In such cases only the more serious was recorded (the lesser offense notations were dropped). This is not the case, however, for those individuals who might have been charged once for a series of incidents ranging over a period of time.

As noted earlier, many police departments were, through lack of cooperation or rigid compliance to state law, unable to furnish required data. In those instances, the local probation department usually was conscripted to supply the necessary data. In those instances which accounted for roughly one-half of all operations, the data tended to be more complete and specific although the tendency for additional over-reporting based upon street knowledge was very much in evidence.

Lastly, one item for which no set definition or standardization was developed or adherred to was the 'other' category. Here fell various local ordinances and violations, some representing a greater degree of criminal activity (malicious mischief) than others (curfew violations). It also seemed to represent the category with the most errors, probably as a reflection that the minor nature of the offense while noted officially and/or unofficially, rarely resulted in formal arrests.

The validations of the school data proved to be a far earier task than the arrest data, although instead of being able to actually view hard recorded data, one had to rely on the subjective opinions of educators involved with the dissemination of data to the NYPUM operators. That is, all except for the category of grades which were universally accurate in all NYPUM reports. As for the other 'soft' data required, guidance counselors and principals were almost exclusively the data sources. These people were personally interviewed and the original data cross checked in both a blind and double blind fashion. In all cases, the school data checked out throoughly and data duplicating the original results were produced. The largest discrepencies were usually plus or minus one degree of variances (9 instead of 7 or vice-versa).

Truancy measures, however, proved to be a problem. Although all school systems define truancy as unexcused absences, the socal/economic environment to a greater or lesser extent determine both the impact and normative levels of truancy. Thus, in some economically deprived areas where children might, on occasion, have to stay home to watch younger siblings, thus requiring them to be truant, giving them a high but locally acceptable truancy rate, their middle class counterparts with a lower truancy record would be indicative of a more severe problem. These differences could not be reconciled and were left to stand subject to actual verification and correction.

MG/jf

CONTINUED

2 OF 3

NYPUM OPERATIONS IN GUARANTEE SAMPLE

(End of Year)

Northeast Region
- Malden, Mass. YMCA
- Springfield, Vt. YMCA
- Warwick, R.I. YMCA

Middle Atlantic
- Bethesda-Chevy Chase, Md. YMCA
- Pittsburgh, Pa/Hazelwood Outreach (Substituted at 2nd Quarter for Phoenixville, Pa. YMCA)

Southeast
- Baton Rouge, La./Baranco-Clark YMCA
- Cleveland County (Shelby, N.C.) Police
- Birmingham, Ala./Fourth St. YMCA
- Atlanta, Ga/Southeast Br. YMCA (Substituted at 3rd Quarter for Chattanooga, Tenn. Henry Br. YMCA)
- Jackson, Tenn. Police Dept.
- Norfolk, Va./Central Br. YMCA
- Ft. Pierce, Fla. Youth Guidance Volunteers
- New Orleans, La./Dryades St. YMCA (FAILED TO REPORT)

Great Lakes
- Akron, Ohio YMCA Extension
- Lima, Ohio YMCA

Mid-America
- Aberdeen, S.D. YMCA
- Denver, Col./Partners, Inc. (FAILED TO REPORT)
- Dixon, Ill. YMCA
- Kansas City, Mo. Youth Coalition
- Minneapolis, Minn./Urban-West Central YMCA
- Porter County (Valparaiso, Ind.) YMCA
- Ft. Totten, N.D. Cruse Memorial Boys Club

Southwest
- Amarillo, Texas YMCA
- Beaumont, Texas YMCA

Pacific
- Central Valley (Fresno, Cal.)YMCA
- Kauai, Hawaii YMCA
- Kern County (Bakersfield, Cal.) Comm. Action Agency (Substituted at 3rd Quarter for Kent-Auburn Youth Resources, Seattle, Wn.)
- Phoenix/Valley of the Sun YMCA (Substituted at 2nd Quarter for Reno, Nev.)
- Olympia, Wn. YMCA
- Riverside, Cal. YMCA
- Richmond, Cal. YMCA

NYPUM Expansion During 1975
(By Regions)

Regions	New NYPUMS	New Participants			
		Adjuctd	Other Referred	Not Referred	Total
Northeast					
- Actual Count	6	86	129	43	258
- Estimated Additional	-	0	0	0	0
- Northeast Total	6	86	129	43	258
Middle Atlantic					
- Actual Count	12	293	126	121	540
- Estimated Additional	-	98	42	40	180
- Middle Atlantic Total	12	391	168	161	720
Southeast					
- Actual Count	7	173	117	48	338
- Estimated Additional	-	29	20	8	57
- Southeast Total	7	202	137	56	395
Great Lakes					
- Actual Count	11	125	148	49	322
- Estimated Additional	-	0	0	0	0
- Great Lakes Total	11	125	148	49	322
Mid-America					
- Actual Count	15	96	161	69	326
- Estimated Additional	-	14	25	11	50
- Mid-America Total	15	110	186	80	376
Southwest					
- Actual Count	13	173	202	120	495
- Estimated Additional	-	14	17	10	41
- Southwest Total	13	187	219	130	536
Pacific:San Mateo					
- Actual Count	7	62	86	71	219
- Estimated Additional	-	10	14	12	36
- Pacific:SM Total	7	72	100	83	255
Pacific: Los Angeles					
- Actual Count	9	82	111	41	234
- Estimated Additional	-	41	56	21	118
- Pacific:LA Total	9	123	167	62	352
National					
- Actual Count (by 69 of 80)	80	1,090	1,080	562	2,732
- Estimated Additional	-	206	174	102	482
- National Total	80	1,296	1,254	664	3,214

MOST SERIOUS PRIOR ARREST: FELONIES AGAINST PERSON(S)

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	18	12	9	39
2	3	0	4	7
3 or more	2	1	1	4
TOTAL	23	13	14	50

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.109	.031	.0	.058	.019	.238	.125	.058
Felonies – Property	.093	.038	.010	.056	.042	.143	.042	.056
Shoplifting/Petty Theft	.138	.0	.0	.063	.034	.214	.083	.063
Vandalism	.0	.007	.022	.008	.010	.0	.0	.008
Drug/Alcohol Abuse	.011	.0	.0	.005	.006	.0	.0	.005
Runaway	.022	.0	.005	.012	.002	.048	.042	.012
Other	.009	.010	.019	.012	.015	.0	.0	.012
At Least 1 Arrest In The Above Categories	.381	.086	.056	.213	.128	.643	.292	.213

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	5	3	0	8	4	3	1	8
Felonies – Property	5	1	2	8	6	1	1	8
Shoplifting/Petty Theft	5	0	0	5	1	3	1	5
Vandalism	0	1	1	2	2	0	0	2
Drug/Alcohol Abuse	1	0	0	1	1	0	0	1
Runaway	2	0	1	3	1	1	1	3
Other	1	1	2	4	4	0	0	4
At Least 1 Arrest In The Above Categories	9	3	4	16	12	3	1	16

MOST SERIOUS PRIOR ARREST: FELONIES AGAINST PROPERTY

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

Tenure (Months)

PRIOR ARRESTS	< 6	6 – 12	> 12	TOTAL
1	23	32	23	78
2	8	7	8	23
3 or more	14	10	2	26
TOTAL	45	49	33	127

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months)				Number of Prior Arrests			
	< 6	6–12	> 12	TOTAL	1	2	> 2	TOTAL
Felonies – Person	.0	.002	.0	.001	.001	.0	.0	.001
Felonies – Property	.030	.042	.015	.031	.042	.015	.010	.031
Shoplifting/Petty Theft	.056	.014	.006	.027	.021	.009	.058	.027
Vandalism	.037	.013	.006	.020	.022	.005	.026	.020
Drug/Alcohol Abuse	.013	.0	.0	.005	.003	.0	.013	.005
Runaway	.021	.010	.003	.012	.015	.0	.013	.012
Other	.006	.012	.007	.009	.009	.010	.006	.009
At Least 1 Arrest In The Above Categories	.162	.094	.037	.103	.114	.040	.126	.103

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months)				Number of Prior Arrests			
	< 6	6–12	> 12	TOTAL	1	2	> 2	TOTAL
Felonies – Person	0	1	0	1	1	0	0	1
Felonies – Property	4	17	5	26	22	2	2	26
Shoplifting/Petty Theft	5	6	2	13	8	2	3	13
Vandalism	2	4	1	7	5	1	1	7
Drug/Alcohol Abuse	2	0	0	2	1	0	1	2
Runaway	3	3	1	7	6	0	1	7
Other	1	6	4	11	7	2	2	11
At Least 1 Arrest In The Above Categories	10	24	10	44	34	4	6	44

MOST SERIOUS PRIOR ARREST: SHOPLIFTING/PETTY THEFT
NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	34	35	30	99
2	3	5	0	8
3 or more	3	3	3	9
TOTAL	40	43	33	116

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) <6	6–12	>12	TOTAL	Number of Prior Arrests 1	2	>2	TOTAL
Felonies – Person	.0	.003	.0	.001	.001	.0	.0	.001
Felonies – Property	.036	.003	.016	.018	.017	.0	.044	.018
Shoplifting/Petty Theft	.061	.036	.032	.043	.026	.091	.187	.043
Vandalism	.005	.003	.004	.004	.004	.0	.007	.004
Drug/Alcohol Abuse	.004	.002	.002	.003	.003	.0	.0	.003
Runaway	.004	.004	.003	.004	.004	.0	.0	.004
Other	.022	.031	.011	.022	.019	.063	.022	.022
At Least 1 Arrest In The Above Categories	.133	.081	.070	.096	.076	.153	.261	.096

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	>12	TOTAL	Number of Prior Arrests 1	2	>2	TOTAL
Felonies – Person	0	1	0	1	1	0	0	1
Felonies – Property	3	1	4	8	7	0	1	8
Shoplifting/Petty Theft	6	8	10	24	17	3	4	24
Vandalism	1	1	2	4	3	0	1	4
Drug/Alcohol Abuse	1	1	1	3	3	0	0	3
Runaway	1	2	2	5	5	0	0	5
Other	3	8	5	16	14	1	1	16
At Least 1 Arrest In The Above Categories	11	16	15	42	33	4	5	42

MOST SERIOUS PRIOR ARREST: VANDALISM

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	13	10	8	31
2	2	4	1	7
3 or more	1	0	0	1
TOTAL	16	14	9	39

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.0	.0	.0	.0	.0	.0	.0	.0
Felonies – Property	.012	.017	.0	.011	.014	.0	.0	.011
Shoplifting/Petty Theft	.012	.0	.0	.005	.006	.0	.0	.005
Vandalism	.026	.017	.0	.017	.013	.036	.0	.017
Drug/Alcohol Abuse	.054	.007	.0	.025	.031	.0	.0	.025
Runaway	.054	.009	.0	.025	.032	.0	.0	.025
Other	.054	.0	.006	.024	.030	.0	.0	.024
At Least 1 Arrest In The Above Categories	.214	.050	.006	.107	.126	.036	.0	.107

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	0	0	0	0	0	0	0	0
Felonies – Property	1	2	0	3	3	0	0	3
Shoplifting/Petty Theft	1	0	0	1	1	0	0	1
Vandalism	2	2	0	4	3	1	0	4
Drug/Alcohol Abuse	2	1	0	3	3	0	0	3
Runaway	3	1	0	4	4	0	0	4
Other	3	0	1	4	4	0	0	4
At Least 1 Arrest In The Above Categories	8	5	1	14	13	1	0	14

MOST SERIOUS PRIOR ARREST: DRUG/ALCOHOL ABUSE

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	4	6	3	13
2	1	0	0	1
3 or more	0	0	1	1
TOTAL	5	6	4	15

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.0	.0	.0	.0	.0	.0	.0	.0
Felonies – Property	.0	.0	.0	.0	.0	.0	.0	.0
Shoplifting/Petty Theft	.050	.0	.0	.017	.019	.0	.0	.017
Vandalism	.0	.045	.0	.018	.021	.0	.0	.018
Drug/Alcohol Abuse	.033	.061	.015	.039	.045	.0	.0	.039
Runaway	.0	.0	.0	.0	.0	.0	.0	.0
Other	.0	.015	.015	.010	.012	.0	.0	.010
At Least 1 Arrest In The Above Categories	.083	.121	.029	.084	.097	.0	.0	.084

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	0	0	0	0	0	0	0	0
Felonies – Property	0	0	0	0	0	0	0	0
Shoplifting/Petty Theft	1	0	0	1	1	0	0	1
Vandalism	0	2	0	2	2	0	0	2
Drug/Alcohol Abuse	1	3	1	5	5	0	0	5
Runaway	0	0	0	0	0	0	0	0
Other	0	1	1	2	2	0	0	2
At Least 1 Arrest In The Above Categories	2	3	1	6	6	0	0	6

MOST SERIOUS PRIOR ARREST: RUNAWAY

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	19	8	3	30
2	4	3	0	7
3 or more	0	2	0	2
TOTAL	23	13	3	39

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.0	.0	.0	.0	.0	.0	.0	.0
Felonies – Property	.0	.0	.022	.002	.002	.0	.0	.002
Shoplifting/Petty Theft	.0	.019	.0	.006	.004	.0	.063	.006
Vandalism	.0	.0	.0	.0	.0	.0	.0	.0
Drug/Alcohol Abuse	.0	.0	.0	.0	.0	.0	.0	.0
Runaway	.053	.086	.0	.060	.031	.139	.216	.060
Other	.007	.056	.0	.023	.021	.0	.125	.023
At Least 1 Arrest In The Above Categories	.060	.161	.022	.091	.059	.139	.403	.091

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	0	0	0	0	0	0	0	0
Felonies – Property	0	0	1	1	1	0	0	1
Shoplifting/Petty Theft	0	2	0	2	1	0	1	2
Vandalism	0	0	0	0	0	0	0	0
Drug/Alcohol Abuse	0	0	0	0	0	0	0	0
Runaway	5	6	0	11	5	4	2	11
Other	1	3	0	4	3	0	1	4
At Least 1 Arrest In The Above Categories	5	8	1	14	8	4	2	14

MOST SERIOUS PRIOR ARREST: OTHER OFFENSES

NUMBER OF PEOPLE ARRESTED PRIOR TO PROGRAM

PRIOR ARRESTS	Tenure (Months) < 6	6 – 12	> 12	TOTAL
1	30	40	74	144
2	10	1	2	13
3 or more	4	1	3	8
TOTAL	44	42	79	165

AVERAGE ARRESTS PER MONTH DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	.030	.0	.0	.008	.009	.0	.0	.008
Felonies – Property	.0	.0	.0	.0	.0	.0	.0	.0
Shoplifting/Petty Theft	.005	.016	.0	.005	.006	.007	.0	.005
Vandalism	.010	.011	.001	.006	.007	.0	.0	.006
Drug/Alcohol Abuse	.0	.0	.0	.0	.0	.0	.0	.0
Runaway	.011	.003	.002	.005	.002	.038	.0	.005
Other	.087	.054	.014	.044	.042	.079	.027	.044
At Least 1 Arrest In The Above Categories	.143	.085	.017	.068	.065	.125	.027	.068

NUMBER OF PEOPLE ARRESTED DURING PROGRAM

ARREST CATEGORY	Tenure (Months) < 6	6–12	> 12	TOTAL	Number of Prior Arrests 1	2	> 2	TOTAL
Felonies – Person	1	0	0	1	1	0	0	1
Felonies – Property	0	0	0	0	0	0	0	0
Shoplifting/Petty Theft	1	3	0	4	3	1	0	4
Vandalism	2	3	1	6	6	0	0	6
Drug/Alcohol Abuse	0	0	0	0	0	0	0	0
Runaway	1	1	2	4	3	1	0	4
Other	8	14	15	37	31	3	3	37
At Least 1 Arrest In The Above Categories	9	18	18	45	38	4	3	45

APPENDIX E:
SHIFTS IN SCHOOL PERFORMANCE AND TRUANCY

Appendices E-1 through E-4 display in tabular form the shifts which took place during 1975 in the NYPUM participants' academic performance, relationships with teachers and other school authorities, relationships to other students, and truancy. The "During" scores are an average of scores submitted each quarter which are compared to the "Prior" score taken from the Roster when the participant entered NYPUM. The diagonal line in each table represents those participants who did not shift during the program, i.e., who remained in the same category during the program as they were prior to the program. For the first three tables, those who appear above the diagonal line are those who improved during the year; those below the diagonal line are those who did worse during the year. For the last table on truancy, the scale is reversed. A high number represents high truancy, which is undesirable. Therefore those who appear above the diagonal line are those who did worse during the year, and those below the line are those who improved.

The scores displayed in Table 11 are arrived at by multiplying the number of persons times the number of categories shifted. Thus, in the top table in Appendix E-1, the first line represents those who prior were in the 1.0-1.9 (Unsatisfactory) category. The 59 who remained there are not counted. The 25 who moved to 2.0-2.9 are multiplied by one; the 53 who moved to 3.0-3.9 are multiplied by two; the 4 who moved to 4.0.4-9 are multiplied by three; and the 3 who moved to 5.0 (Excellent) are multiplied by four. This procedure is followed to arrive at the total score above the line (those who improved) and below the line (those who did worse).

ACADEMIC PERFORMANCE

TENURE IN NYPUM: 6 MONTHS OR LESS *(N=330)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	59	25	53	4	3
2.0 - 2.9	4	11	11	0	0
3.0 - 3.9	5	15	109	8	6
4.0 - 4.9	0	0	1	1	0
5.0	0	0	11	4	4

Improved: 110 (33.3%) Worse: 36 (10.9%) Same: 184 (55.8%)

****

TENURE IN NYPUM: MORE THAN 6 MONTHS *(N=597)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	43	41	82	7	2
2.0 - 2.9	1	6	17	2	0
3.0 - 3.9	9	24	287	15	21
4.0 - 4.9	0	0	1	0	1
5.0	2	1	19	5	11

Improved: 188 (31.5%) Worse: 62 (10.4%) Same: 347 (58.1%)

****

SCALE: 5.0 = Excellent
3.0 = Satisfactory
1.0 = Unsatisfactory

RELATIONSHIPS WITH TEACHERS & SCHOOL AUTHORITIES

TENURE IN NYPUM: 6 MONTHS OR LESS *(N=333)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	35	24	64	3	3
2.0 - 2.9	2	9	16	2	1
3.0 - 3.9	3	13	116	7	7
4.0 - 4.9	0	0	1	0	0
5.0	0	0	18	4	5

Improved: 127 (38.1%) Worse: 41 (12.3%) Same: 165 (49.5%)

****

TENURE IN NYPUM: MORE THAN 6 MONTHS *(N=597)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	27	24	96	5	5
2.0 - 2.9	0	1	9	6	2
3.0 - 3.9	8	13	310	18	23
4.0 - 4.9	0	0	1	0	0
5.0	0	1	17	15	19

Improved: 185 (31.0%) Worse: 55 (9.2%) Same: 357 (59.8%)

****

SCALE: 5.0 = Excellent
3.0 = Satisfactory
1.0 = Unsatisfactory

RELATIONSHIPS WITH OTHER STUDENTS

TENURE IN NYPUM: 6 MONTHS OR LESS *(N=333)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	22	11	32	1	2
2.0 - 2.9	1	12	9	3	3
3.0 - 3.9	3	14	179	13	9
4.0 - 4.9	0	0	1	0	0
5.0	0	0	8	5	5

Improved: 83 (24.9%) Worse: 32 (9.6%) Same: 218 (65.5%)

****

TENURE IN NYPUM: MORE THAN 6 MONTHS *(N=599)*

PRIOR	DURING 1.0-1.0	2.0-2.9	3.0-3.9	4.0-4.9	5.0
1.0 - 1.9	13	16	58	3	4
2.0 - 2.9	1	1	15	2	0
3.0 - 3.9	6	10	360	20	36
4.0 - 4.9	1	0	1	1	0
5.0	0	0	18	13	20

Improved: 154 (25.7%) Worse: 50 (8.4%) Same: 395 (65.9%)

****

SCALE: 5.0 = Excellent
3.0 = Satisfactory
1.0 = Unsatisfactory

TRUANCY

TENURE IN NYPUM: 6 MONTHS OR LESS *(N=322)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0
1.0 - 1.9	60	9	2	0
2.0 - 2.9	45	68	7	0
3.0 - 3.9	13	37	11	2
4.0	16	16	19	17

Improved: 146 (45.3%) Worse: 20 (6.2%) Same: 156 (48.4%)

****

TENURE IN NYPUM: MORE THAN 6 MONTHS *(N=544)*

PRIOR	DURING 1.0-1.9	2.0-2.9	3.0-3.9	4.0
1.0 - 1.9	116	21	4	0
2.0 - 2.9	123	108	6	0
3.0 - 3.9	27	50	24	0
4.0	22	20	16	7

Improved: 258 (47.4%) Worse: 31 (5.7%) Same: 255 (46.9%)

****

SCALE: 1 = None (0 unexcused absences)
2 = Occasionally (1 to 3 times p/month)
3 = Frequently (4 to 6 times p/month)
4 = Very Frequently (7 or more times p/month)

TOTAL SAMPLE

A Comparison of Those Arrested Prior To The Program vs. Those Not Arrested Prior To The Program

N = 1097

VARIABLES	Arrested Prior (N=551)	Not Arrested Prior (N=546)
1. Tenure of Participant (Months)*	10.1	11.2
2. Age of Participant (Years)	13.5	13.1
3. Percentage Male	92.4	90.8
4. Percentage Asian	2.4	1.5
5. Percentage Black*	30.7	47.8
6. Percentage Hispanic*	8.7	2.9
7. Percentage American Indian*	2.0	0.5
8. Percentage White	48.3	43.6
9. Percentage Other (Race)	6.9	1.1
10. Academic Performance (Pre/During Change)	–0.308	–0.201
11. Relations with Teachers (Pre/During Change)	–0.227	–0.328
12. Relations with Students (Pre/During Change)*	0.011	–0.297
13. Truancy (Pre/During Change)*	0.918	0.350
14. Academic Performance (Absolute)*	2.36	2.59
15. Relations with Teachers (Absolute)*	2.51	2.83
16. Relations with Students (Absolute)*	2.64	2.90
17. Truancy (Absolute)*	1.55	1.44
18. Ratio of Bike/Non-Bike Hours*	1.47	1.23
19. Bike Related Hours Per Month	6.60	6.25
20. Non-Bike Related Hours Per Month*	6.21	7.26
21. Number of Leaders Per Participant	0.150	0.152
22. Number of Leaders	2.10	1.97
23. Number of Leaders Training Sessions*	0.635	0.73
24. Tenure of Leaders (Months)*	11.9	9.5

*Significant Difference

A Comparison of Those Who Were Arrested Prior To The Program and Arrested During vs. Those Who Were Arrested Prior To the Program and Not Arrested During

N = 551

VARIABLES	ARRESTED PRIOR: Arrested During (N=181)	ARRESTED PRIOR: Not Arrested During (N=370)
1. Tenure of Participant (Months)	9.9	10.2
2. Age of Participant (Years)	13.8	13.4
3. Percentage Male	97.8	89.7
4. Percentage Asian	1.1	3.0
5. Percentage Black	29.3	31.4
6. Percentage Hispanic *	5.0	10.5
7. Percentage American Indian	1.7	2.2
8. Percentage White *	55.2	44.9
9. Percentage Other (Race)	6.6	7.0
10. Academic Performance (Pre/During Change)	–0.469	–0.229
11. Relations with Teachers (Pre/During Change) *	–0.480	–0.103
12. Relations with Students (Pre/During Change) *	–0.209	0.118
13. Truancy (Pre/During Change)	0.826	0.963
14. Academic Performance (Absolute)	2.44	2.31
15. Relations with Teachers (Absolute) *	2.68	2.43
16. Relations with Students (Absolute) *	2.79	2.56
17. Truancy (Absolute) *	1.82	1.41
18. Ratio of Bike/Non-Bike Hours *	1.72	1.35
19. Bike Related Hours Per Month *	9.06	5.39
20. Non-Bike Related Hours Per Month *	7.71	5.48
21. Number of Leaders Per Participant *	0.170	0.140
22. Number of Leaders *	2.36	1.98
23. Number of Leaders Training Sessions *	0.823	0.543
24. Tenure of Leaders (Months) *	10.0	12.8
Prior Arrests: (Percentage)		
Felonies – Person	11.6	12.4
Felonies – Property	44.8	52.2
Shoplifting/Petty Theft*	49.2	30.3
Vandalism	26.0	20.5
Drug/Alcohol Abuse	13.3	18.6
Runaway*	25.4	15.1
Other Offenses	48.6	60.5

*Significant Difference

A Comparison of Those Not Arrested Prior To The Program and Arrested During vs. Those Not Arrested Prior To The Program and Not Arrested During

N = 546

VARIABLES	NOT ARRESTED PRIOR: Arrested During (N=48)	NOT ARRESTED PRIOR: Not Arrested During (N=498)
1. Tenure of Participant (Months)	11.2	11.2
2. Age of Participant (Years)	13.2	13.1
3. Percentage Male	95.8	90.4
4. Percentage Asian	2.1	1.4
5. Percentage Black	52.1	47.4
6. Percentage Hispanic	4.2	2.8
7. Percentage American Indian	0.0	0.6
8. Percentage White	37.5	44.2
9. Percentage Other (Race)	0.0	1.2
10. Academic Performance (Pre/During Change)	−0.424	−0.180
11. Relations with Teachers (Pre/During Change)	−0.552	−0.306
12. Relations with Students (Pre/During Change)	−0.351	−0.292
13. Truancy (Pre/During Change)	0.405	0.345
14. Academic Performance (Absolute)	2.28	2.62
15. Relations with Teachers (Absolute)	2.55	2.86
16. Relations with Students (Absolute)	2.77	2.91
17. Truancy (Absolute)	1.47	1.43
18. Ratio of Bike/Non-Bike Hours	1.11	1.24
19. Bike Related Hours Per Month	5.08	6.37
20. Non-Bike Related Hours Per Month	6.24	7.35
21. Number of Leaders Per Participant*	0.194	0.148
22. Number of Leaders*	2.76	1.89
23. Number of Leaders Training Sessions*	1.02	0.70
24. Tenure of Leaders (Months)	10.5	9.4

*Significant Difference

A Comparison of Those Arrested Prior To The Program and Arrested During vs. Those Not Arrested Prior To The Program and Arrested During

N = 229

VARIABLES	Arrested Prior/ Arrested During (N=181)	Not Arrested Prior/Arrested During (N=48)
1. Tenure of Participant (Months)	9.9	11.2
2. Age of Participant (Years)	13.8	13.2
3. Percentage Male	97.8	95.8
4. Percentage Asian	1.1	2.1
5. Percentage Black *	29.3	52.1
6. Percentage Hispanic	5.0	4.2
7. Percentage American Indian	1.7	0.0
8. Percentage White *	55.2	37.5
9. Percentage Other (Race) *	6.6	0.0
10. Academic Performance (Pre/During Change)	−0.469	−0.424
11. Relations with Teachers (Pre/During Change)	−0.480	−0.552
12. Relations with Students (Pre/During Change)	−0.209	−0.351
13. Truancy (Pre/During Change) *	0.826	0.405
14. Academic Performance (Absolute)	2.44	2.28
15. Relations with Teachers (Absolute)	2.68	2.55
16. Relations with Students (Absolute)	2.79	2.77
17. Truancy (Absolute)	1.82	1.47
18. Ratio of Bike/Non-Bike Hours *	1.72	1.11
19. Bike Related Hours Per Month *	9.06	5.08
20. Non-Bike Related Hours Per Month	7.71	6.24
21. Number of Leaders Per Participant	0.170	0.194
22. Number of Leaders *	2.36	2.76
23. Number of Leaders Training Sessions	0.823	1.02
24. Tenure of Leaders (Months)	10.0	10.5

*Significant Difference

THOSE NOT ARRESTED DURING THE PROGRAM

A Comparison of Those Arrested Prior To The Program and Not Arrested During vs. Those Not Arrested Prior To The Program and Not Arrested During

N = 868

VARIABLES	Arrested Prior/Not Arrested During (N=370)	Not Arrested Prior/Not Arrested During (N=498)
1. Tenure of Participant (Months)	10.2	11.2
2. Age of Participant (Years)	13.4	13.1
3. Percentage Male	89.7	90.4
4. Percentage Asian	3.0	1.4
5. Percentage Black *	31.4	47.4
6. Percentage Hispanic *	10.5	2.8
7. Percentage American Indian *	2.2	0.6
8. Percentage White	44.9	44.2
9. Percentage Other (Race) *	7.0	1.2
10. Academic Performance (Pre/During Change)	−0.229	−0.180
11. Relations with Teachers (Pre/During Change) *	−0.103	−0.306
12. Relations with Students (Pre/During Change) *	0.118	−0.292
13. Truancy (Pre/During Change) *	0.963	0.345
14. Academic Performance (Absolute)*	2.31	2.62
15. Relations with Teachers (Absolute) *	2.43	2.86
16. Relations with Students (Absolute) *	2.56	2.91
17. Truancy (Absolute)	1.41	1.43
18. Ratio of Bike/Non-Bike Hours	1.35	1.24
19. Bike Related Hours Per Month *	5.39	6.37
20. Non-Bike Related Hours Per Month *	5.48	7.35
21. Number of Leaders Per Participant	0.140	0.148
22. Number of Leaders	1.98	1.89
23. Number of Leaders Training Sessions *	0.543	0.701
24. Tenure of Leaders (Months) *	12.8	9.4

*Significant Difference

A Comparison of Those With Low Arrest Rates** During the Program vs. Those With High Arrest Rates During The Program

N = 229

	Low Arrests During (N=117)	High Arrests During (N = 112)
AVERAGE NUMBER OF ARRESTS PRIOR TO PROGRAM:		
Felonies Against Person(s)*	0.026	0.161
Felonies Against Property	0.282	0.429
Shoplifting/Petty Theft	0.308	0.473
Vandalism	0.162	0.250
Drug/Alcohol Abuse	0.128	0.080
Runaway	0.154	0.250
Other Offenses	0.453	0.312
PERCENTAGE OF ARRESTS PRIOR TO PROGRAM:		
Felonies Against Person(s)*	2.6	11.6
Felonies Against Property	20.5	23.2
Shoplifting/Petty Theft	24.8	27.7
Vandalism	15.4	18.8
Drug/Alcohol Abuse	6.0	8.0
Runaway	11.1	17.0
Other Offenses	37.6	26.8
Academic Performance (Change)	−0.462	−0.458
Relations With Teachers (Change)	−0.439	−0.554
Relations With Students (Change)	−0.342	−0.130
Truancy (Change)	0.845	0.626
Academic Performance (Absolute)	2.53	2.28
Relations With Teachers (Absolute)*	2.81	2.50
Relations With Students (Absolute)*	2.98	2.59
Truancy (Absolute)	1.63	1.87
Number Of Leaders	2.41	2.48
Number Of Leaders Training Sessions*	0.724	1.01
Tenure Of Leaders	10.3	9.9
Leaders Per Capita	0.168	0.182
Ratio Of Bike/Non-Bike Hours*	1.37	1.83
Bike Related Hours Per Month*	6.93	9.58
Non-Bike Related Hours Per Month	7.17	7.64
Percentage Asian	0.9	1.8
Percentage Black	29.1	39.3
Percentage Hispanic	6.0	3.6
Percentage American Indian	0.9	1.8
Percentage White	54.7	48.2
Percentage Other (Race)	7.7	2.7

*Significant Differences

**Low = below .167 arrests per month
High = above .167 arrests per month

ALUMNI

F-7

A Comparison of Those Who Have Left The Program and Have Not Been Arrested vs. Those Who Have Left The Program and Have Been Arrested

N = 317

HAVE LEFT PROGRAM

VARIABLES	Not Arrested After (N = 282)	Arrested After (N = 35)
1. Tenure of Participant (Months)	8.9	8.4
2. Age of Participant (Years)*	13.3	13.8
3. Percentage Male	85.5	88.6
4. Percentage Asian	2.1	0.0
5. Percentage Black	21.6	20.0
6. Percentage Hispanic	5.0	0.0
7. Percentage American Indian	1.8	2.9
8. Percentage White	64.9	68.6
9. Percentage Other (Race)*	1.8	8.6
10. Academic Performance (Pre/During Change)	−0.320	−0.376
11. Relations with Teachers (Pre/During Change)	−0.484	−0.274
12. Relations with Students (Pre/During Change)	−0.236	−0.090
13. Truancy (Pre/During Change)*	0.465	0.148
14. Academic Performance (Absolute)	2.46	2.15
15. Relations with Teachers (Absolute)*	2.71	2.25
16. Relations with Students (Absolute)	2.84	2.63
17. Truancy (Absolute)*	1.57	2.28
18. Ratio of Bike/Non-Bike Hours	1.52	1.31
19. Bike Related Hours Per Month	6.73	6.74
20. Non-Bike Related Hours Per Month	8.05	7.57
21. Number of Leaders Per Participant	0.171	0.193
22. Number of Leaders	2.14	2.40
23. Number of Leaders Training Sessions	0.601	0.668
24. Tenure of Leaders (Months) *	9.1	11.8
Percentage Arrested Prior*	43.6	71.4
Percentage Arrested During*	20.6	57.1

*Significant Difference

A Comparison of Those With Low Family Information Test (Fit**) Scores vs. Those With High Family Information Test Scores

N = 300

VARIABLES	Low Fit (N = 146)	High Fit (N = 154)
1. Tenure of Participant (Months) *	11.4	9.6
2. Age of Participant (Years)	13.7	14.0
3. Percentage Male	89.7	93.5
4. Percentage Asian	0.0	0.0
5. Percentage Black *	40.4	26.6
6. Percentage Hispanic	6.8	5.8
7. Percentage American Indian	0.7	1.3
8. Percentage White *	49.3	62.3
9. Percentage Other (Race)	0.0	0.0
10. Academic Performance (Pre/During Change) *	−0.248	−0.629
11. Relations with Teachers (Pre/During Change) *	−0.410	−0.802
12. Relations with Students (Pre/During Change) *	−0.183	−0.597
13. Truancy (Pre/During Change)	0.225	0.332
14. Academic Performance (Absolute) *	2.86	2.53
15. Relations with Teachers (Absolute)	3.02	2.94
16. Relations with Students (Absolute)	3.11	3.10
17. Truancy (Absolute)	1.77	1.75
18. Ratio of Bike/Non-Bike Hours	1.95	1.60
19. Bike Related Hours Per Month	8.72	8.75
20. Non-Bike Related Hours Per Month	8.11	8.05
21. Number of Leaders Per Participant	0.177	0.175
22. Number of Leaders *	2.41	2.02
23. Number of Leaders Training Sessions *	0.629	0.914
24. Tenure of Leaders (Months) *	7.4	11.4
Percentage Arrested Prior *	40.4	58.4
Percentage Arrested During	23.3	29.2
Percentage Still In Program *	65.1	51.3
Percentage Arrested Since Leaving	2.7	7.1

Significant Difference

**Low = 1–7 errors on test
High = 12 – 99 errors on test
The fewer errors, the more complete the subject's knowledge about his family.

END

7 attachments