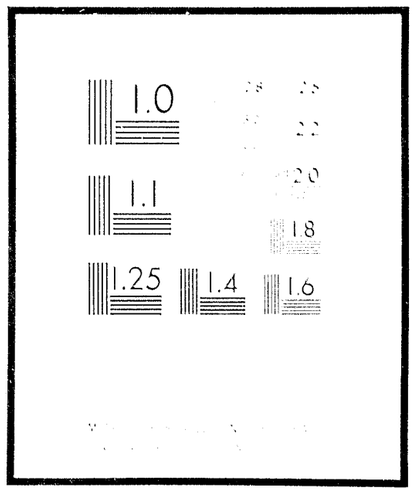

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CORRECTIONS
DIVISION OF PROBATION AND PAROLE SERVICES

Client Profiles In Two Probation And Parole Districts

March, 1976

DIVISION OF PROBATION AND PAROLE SERVICES

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INTRODUCTION

The analyses contained in this report were compiled by Ms. Bonnie Koontz of the Planning program of this agency's Program Development Services component, from data which was collected by two District Probation and Parole Offices in the Commonwealth of Virginia; namely District 9 (Charlottesville) and District 19 (Newport News/Hampton).

Statistical Tracking Retrieval Analysis Planning (STRAP) was a pilot project conducted by the Virginia Division of Probation and Parole Services in conjunction with the Virginia Division of Drug Abuse Control to generate drug abuse and socioeconomic patterns of clients in two Probation and Parole Districts. These client profiles were derived from frequency disbributions and cross tabulations.

The reader of this report is cautioned that generalizations to other districts in Virginia can not be made from the data herein presented.

R. J. Polisky
Assistant Director
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3/1/76

ANALYSIS OF SELECTED POPULATION CHARACTERISTICS IN DISTRICT #9

INTRODUCTION

For both management and planning purposes, a basic understanding of the characteristics of each district's population is essential. Statistical Tracking Retrieval Analysis Planning is a pilot program that was generated by the Division of Probation and Parole Services in conjunction with the Virginia Division of Drug Abuse Control to gather and record information relating to drug abuse and socio-economic characteristics of clients in Districts 1, 9, and 19. Theoretically, the information captured by the system would provide typologies of client characteristics which in turn would depict actual and potential problem areas. The responsibility for collecting and coding the data has been delegated to the Probation and Parole Officers in these three districts. They, in turn, have submitted the data to VDAC for computer analysis.

The report represents a sample of the types of analysis that can be obtained from the STRAP program. Selected descriptive data on clients in Districts #9 are utilized. No attempt to analyze all of the information captured in STRAP system was made. In addition, the report discusses some of the problems related to the manner in which the system was set up and some of the problems related to the types of data that have been collected.

Since this report was composed from a planning perspective, the types of information examined are social background factors, criminal status variables, and social adjustment variables. The sample under consideration includes all clients under active supervision in District #9 between January 1, 1975, and March 1, 1975. By assuming that this sample is representative of the traits and events of District 9's population through differing time spans, the data

analysis will provide some useful information regarding District #9's true population.

The first type of data analysis presented is frequency distributions. Measures of central tendency and measures of dispersion also are given on variables that meet the assumptions of the measure. These types of statistics describe the sample's distribution on a single variable and relate them to the interpretation of one value or category of the variable. Social background factors, criminal status variables, and social adjustment variables are examined respectively.

SOCIAL BACKGROUND FACTORS

A. Age - Due to the large range of values on this variable, age will be presented as grouped data rather than reporting the actual incidence of each value. The following statistics, however, relate to the actual value of age:

Mean = 28.203 years	Standard Deviation = 11.4 years
Median = 24.222 years	Interquartile Range = 20 to 31 years
Mode = 20 years	Range = 51 years with 18 years as lower limit

Since the age of 50 percent of the clients falls between 19 and 26 years of age, the interquartile range is a better indicator of the amount of dispersion than the standard deviation. Likewise, because of the skewed distribution, the median is a better indicator of central tendency than is the mean. The sample indicates that the bulk of the population in District 9 is young adults. The distribution for grouped age data is as follows:

Age	Absolute Frequency	Relative Frequency
20 yrs. and below	79	25%
21 to 25 yrs.	95	30%
26 to 30 yrs.	47	15%
31 to 35 yrs.	29	9%
36 yrs. and above	65	11%
TOTAL	315	100%

The age of one client was not obtained. The table indicates that 55 percent of the clients are 25 years of age or younger.

B. Race - The racial distribution for the 315 clients in District #9 is as follows:

Race	Absolute Frequency	Relative Frequency
White	199	63%
Black	115	37%
Other defined racial or ethnic groupings	1	00%
TOTAL	315	100%

The race or ethnic grouping for 1 (0.3%) client was not known. As the chart shows, white clients outnumber black clients by approximately 2 to 1.

C. Sex - The sample distribution regarding sex for the clients is enumerated below:

Sex	Absolute Frequency	Relative Frequency
Male	288	92%
Female	26	8%
TOTAL	314	100%

The sex of 2 (.6%) of the clients was not obtained. As can be seen from the relative frequency, males under supervision outnumber females by over 9 to one.

CRIMINAL STATUS VARIABLES

A. Supervisory Classification - The distrubtion of the supervisory classification is as follows:

Classification	Absolute Frequency	Relative Frequency
Probation	230	73%
Parole	83	26%
Pardon	1	1%
TOTAL	314	100%

The supervisory classification was not ascertained on 2 (.6%) of the clients. The chart indicates that there is a ratio of 3 probation clients to every one parole client.

B. Prior Drug Offenses - The distribution of the number of clients with previous drug convictions is depicted below:

Charge	Absolute Frequency	Relative Frequency
None	265	84%
Misdemeanant	12	4%
Felony	13	4%
Section 54-524.101.3	26	8%
TOTAL	316	100%

Of the 51 clients with previous drug offenses, information concerning the sentencing for the offense was obtained on 48 of them. Of these 51 clients, 5 (10%) were jailed, 4 (8%) were sentenced to State correctional facilities, 35 (71%) were continued on probation or parole, and 6 (12%) received some other kind of sentence.

C. Arrests During Sample Period - The distribution of arrest charges for clients between January 1, 1975, and March 31, 1975, is enumerated below:

Arrest Charges	Absolute Frequency	Relative Frequency
No arrest charges	278	88%
Misdemeanant charges	14	4%
Felony charges	7	6%
Traffic violations	7	2%
TOTAL	316	100%

Arrest charges were brought against 12 percent of the clients during the sampling period. Of the 21 arrests on felony and misdemeanant charges, 5 (42%) were drug related charges.

D. Convictions During the Sample Period - The distribution of charges for which clients were convicted is cited below:

Charges	Absolute Frequency	Relative Frequency
No charges	289	91%
Misdemeanant charges	13	4%
Felon charges	8	3%
Adjudication Withheld	6	2%
TOTAL	316	100%

Of the 27 clients who were convicted, 7 (26%) were on drug related charges. In addition, 4 (17%) of the convicted clients were jailed, 3 (13%) were sentenced to a State correctional facility, 13 (54%) were continued on probation or parole, 4 (17%) received some other form of sentence. No information was obtained on the remaining 2 clients.

SOCIAL ADJUSTMENT VARIABLES

A. Employment Status - The employment status of the clients in District #9 is as follows:

Employment Status	Absolute Frequency	Relative Frequency
Employment	99	31%
Irregular Employment	47	54%
No Employment	170	15%
TOTAL	316	100%

B. Vocational Rehabilitation Status - Participation in vocational education programs is enumerated below:

Vocational Education	Absolute Frequency	Relative Frequency
No participation	312	98.7%
Part time participation	3	.9%
Full time participation	1	.3%
TOTAL	316	100.0%

C. Academic Education - Participation in academic educational programs of clients in District #9 is as follows:

Academic Education	Absolute Frequency	Relative Frequency
No participation	303	95.9%
Part time participation	10	3.2%
Full time participation	3	.9%
TOTAL	316	100.0%

D. Actual Education Level - The grade level of clients in District #9 is as follows:

Grade Level	Absolute Frequency
9	1
12	2
College Level	
Freshman	3
Sophomore	5
Junior	1
Senior	1
TOTAL	13
MISSING VALUES	303

The relative frequency is not shown because there is no way to assess whether or not it is a true characteristic of the educational distribution in District #9. The value was not recorded on 303 clients. Thus, the little information that was gathered on this variable is virtually useless.

The second type of data analysis presented is correlational analysis. Correlation coefficients describe the relationship between two or more variables,

or the extent to which the values of the variables vary concomitantly. While correlations measure the degree of covariance between two or more variables, they are merely descriptive and in no way can one infer from correlations that one variable is causally dependent upon another.

Correlation coefficients have been computed between only those variables that meet the assumptions for ordinal data. An ordinal level of measurement assumes that the values of the variables can be categorized as larger or smaller, better or worse, etc. The correlation coefficient computed is gamma, an ordinal measure of association. Gamma was selected because of its suitability for ordinal data and its proportional reduction in error interpretation. Gamma is based on pairs of cases and their order relative to each other on each of two variables rather than individual scores. Any reported gamma represents the degree to which one can reduce the error in predicting the order of the value of one variable from knowledge of the order on a second variable over mere guessing. The following tables denote the relationship between selected variables.

Age	No Employment	Irregular Employment	Employment	Total
20 yrs. & under	34	10	35	79
20 to 25 yrs.	29	12	54	95
25.1 to 30 yrs.	11	14	22	47
30.1 to 35 yrs.	7	5	17	29
35.1 yrs. & over	18	6	41	65
TOTAL	99	47	169	315

Gamma = .160

Thus, there is virtually no relationship between the age of a client and his respective employment status. Young clients are just as likely as older clients to be employed, unemployed, or irregularly employed.

EMPLOYMENT STATUS BY RACE

Race	No Employment	Irregular Employment	Employment	Total
White	62	26	111	199
Black	37	21	57	115
TOTAL	98	47	168	314

Missing values on 12 clients

Gamma = .085

Once again, there is no relationship between the race of clients and their employment status. Blacks are as likely as whites to be either employed, irregularly employed, or unemployed.

AGE BY RACE

Race	20 Yrs. & Under	20.01 to 25 Yrs.	25.01 to 30 Yrs.	30.01 to 35 Yrs.	35.01 Yrs. & Over	TOTAL
White	55	63	25	22	35	200
Black	23	31	22	9	30	115
TOTAL	78	94	47	31	65	315

Missing values on 12 clients

Gamma = .172

There is virtually no degree of association between race and age as indicated by the value of gamma. Both black and white clients appear to be evenly distributed throughout the various age categories.

AGE BY REPORTED DRUG USAGE

Drug Usage	20 Yrs. & Under	20.01 to 25 Yrs.	25.01 to 30 Yrs.	30.01 to 35 Yrs.	35.01 Yrs. & Over	TOTAL
None	38	54	22	13	28	155
Alcohol	14	15	17	13	35	94
Marijuana	25	18	2	1	0	46
Hard drugs	2	7	6	2	2	19
TOTAL	79	94	47	29	65	314

Missing values on 6 clients.

Gamma = -.054

Once again, there is virtually no association between drug usage of clients and the age of clients. Older clients are just as likely to use drugs as younger clients.

SUMMARY OF THE DISTRIBUTION
OF AGE, RACE, SEX, AND EMPLOYMENT
TRAITS OF CLIENTS IN DISTRICT 9

	No Employment				Regular Employment				Irregular Employment				Totals
	Male		Female		Male		Female		Male		Female		
Age	White	Black	White	Black	White	Black	White	Black	white	Black	White	Black	
Under 20 Yrs.	13	11	7	2	26	7	1	1	8	2	0	0	78
20.1 to 25 Yrs.	16	9	2	2	34	15	4	0	7	5	0	0	94
25.1 to 30 Yrs.	7	4	0	0	12	9	1	0	5	8	0	1	47
30.1 to 35 Yrs.	3	3	0	1	13	3	1	0	3	2	0	0	29
Over 35.1 Yrs.	13	5	0	0	18	21	1	1	3	2	0	1	65
Total	52	32	9	5	103	55	8	2	26	19	0	2	313

The following tables represent cross tabulations of two variables. Gamma was not calculated for these particular distributions because of the larger number of zero cells. When a large number of zero cells are present, the obtained gamma grossly overestimates the degree of association between the variables.

DRUG USAGE BY TYPES OF ARREST DURING
THE SAMPLE PERIOD

Drug Use	No Arrest	Traffic Violation	Misdemeanor	Felony	Total
No Use	137	5	9	4	155 (49.1)
Alcohol	83	5	3	3	94 (27.7)
Marijuana	40	4	4	0	48 (15.2)
Hard drugs	18	0	1	0	19 (6.0)
Total	278 (88.0)	14 (4.4)	17 (5.4)	7 (2.2)	316 (100.0)

DRUG USAGE BY TYPES OF CONVICTIONS
DURING THE SAMPLING PERIOD

Drug Use	None	Misdemeanor	Felony	Adjudication Withheld	Total
None	143	6	6	0	155 (49.1)
Alcohol	89	4	0	1	94 (27.7)
Marijuana	39	2	2	5	48 (15.2)
Hard drugs	18	1	0	0	19 (6.0)
Total	289 (91.5)	13 (4.1)	8 (2.5)	6 (1.9)	316 (100.0)

PROBLEMS

Though useful types of information can be retrieved from the STRAP system, there are some "bugs" and problems due to the way in which the system was set up. The major difficulties are related to the coding system. For most of the items, zero represents an actual response with a referent. However, no number has been assigned to represent no response or no information. As a result, there is no way to differentiate whether a zero really represents a true response or missing data. For example, zero was recorded for 501 clients for educational level. It is unrealistic to assume that 501 clients out of 524 have not even completed the first grade! The figure apparently indicates the number of clients for whom their educational level was not recorded.

Using zero for a response also affects the type of analysis that can be done. When arithmetic computations are going to be performed, all of the zeros must be recoded to assure that the measure will not be nonsense. Setting

up recoding procedure cards is a process that should not have to be done every time the user wishes to perform an arithmetic computation.

Another coding problem that needs to be mentioned is the intermingling of alpha-numeric and numeric codes on the same item. Though this intermingling saves card space, the procedure for unscrambling the codes and putting them in usable order is hectic. The benefit of saving time by not having to unscramble a code outweighs the card space saved.

Other problems involve the conceptual definitions of the data collected. The data collected are informative as they now are, but adding other qualitative types of data would greatly enhance the interpretation of the data. Employment status will be used as an example. The categories for employment status are employed, irregularly employed, and unemployed. At first glance, one might interpret irregular employment as inability to stick with one job. Another interpretation is that the clients with irregular employment do some kind of seasonal work such as construction, picking crops, etc. If occupational titles were obtained, we could tell which interpretation on any given client was correct. The same holds true for arrests and convictions. We would have a much better depiction of the population and individual clients if we knew what the actual offense was rather than using the broad categories of "misdemeanant" or "felon" charges.

SUMMARY

The report has described some of the types of analysis that can be obtained from the STRAP system, and provided a statistical analysis of some client characteristics of District 9's population. Though no statistically

significant associations were found among client characteristic variables, the lack of such associations are just as meaningful. Also, the report has pointed out some of the difficulties that exist with the STRAP program.

ANALYSIS OF SELECTED POPULATION CHARACTERISTICS IN DISTRICT #19

INTRODUCTION

For both management and planning purposes, a basic understanding of the characteristics of each district's population is essential. Statistical Tracking Retrieval Analysis Planning is a pilot program that was generated by the Division of Probation and Parole Services in conjunction with the Virginia Division of Drug Abuse Control to gather and record information relating to drug abuse and socio-economic characteristics of clients in Districts 1, 9, and 19. Theoretically, the information captured by the system would provide typologies of client characteristics which in turn would depict actual and potential problem areas. The responsibility for collecting and coding the data has been delegated to the Probation and Parole Officers in these three districts. They, in turn, have submitted the data to VDAC for computer analysis.

This report represents a sample of the types of analysis that can be obtained from the STRAP program. Selected descriptive data on clients in District #19 are utilized. No attempt to analyze all of the information captured in STRAP system was made. In addition, the report discusses some of the problems related to the manner in which the system was set up and some of the problems related to the types of data that have been collected.

Since this report was composed from a planning perspective, the types of information examined are social background factors, criminal status variables, and social adjustment variables. The sample under investigation included all probationers and parolees under

active supervision in District #19 between January 1, 1975 and March 1, 1975. By assuming that this sample is representative of the traits and events of District #19's population through differing time spans, the data analysis will provide some useful information regarding District #19's true population.

The first type of data analysis presented is frequency distributions. Measures of central tendancy and measures of dispersion also are given on variables that meet the assumptions of the measure. These types of statistics describe the sample's distribution on a single variable and relate them to the interpretation of one value or category of the variable. Social background factors, criminal status variables, and social adjustment variables are examined respectively.

SOCIAL BACKGROUND FACTORS

A. Age - Due to the large range of values on this variable, age will be presented as grouped data rather than reporting the actual incidence of each value. The following statistics, however, relate to the actual value of age:

Mean = 24.96	Standard Deviation = 8.3 years
Median = 21 years of age	Interquartile Range = 19 to 26 years of age
Mode = 20 years of age	Range = 54 years with 16 years of age as lower limit

Since the age of 50% of the clients falls between 19 and 26 years of age, the interquartile range is a better indicator of the amount of dispersion than the standard deviation. Likewise, because of the skewed distribution, the median is a better indicator of central tendancy than is the mean. The sample indicates that the bulk of the population is District #19 is young adults. The distribution for

grouped age data is as follows:

AGE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
20 yr. and below	176	33%
21 to 25 yr.	193	37%
26 to 30 yr.	62	12%
31 to 35 yr.	34	7%
36 yr. and above	55	11%
TOTAL	520	100%

The age of 4 of the 524 clients was not obtained. The table indicates that 70% of the clients are 25 years of age or younger.

B. Race - The racial distribution for the 524 clients in District #19 is as follows:

RACE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
White	295	57%
Black	224	43%
Other defined racial or ethnic groupings	0	0%
TOTAL	517	100%

The race or ethnic grouping for 6(1.1%) of the clients was not known. As the chart shows, the racial distribution for whites and blacks is practically evenly distributed.

C. SEX - The sample distribution regarding sex for the clients is enumerated below:

SEX	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
Male	470	91%
Female	47	9%
TOTAL	417	100%

The sex of 7 (1.3%) of the clients was not obtained. As can be seen from the relative frequency, males under supervision out number females by over 9 to 1.

CRIMINAL STATUS VARIABLES

A. SUPERVISORY CLASSIFICATION - The distribution of the supervisory classification is as follows:

CLASSIFICATION	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
Probation	431	82%
Parole	92	18%
Pardon	0	0%
TOTAL	523	100%

The supervisory classification was not ascertained on one client. The chart indicates that there is a ratio of 4 probation clients to every one parole client.

B. PRIOR DRUG OFFENSES - The distribution of the number of clients with previous drug convictions is depicted below:

CHARGE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
None	456	87.0%
Misdemeanant	39	7.4%
Felony	27	5.2%
Section 54-524.101.3	2	.4%
TOTAL	524	100%

Of the 78 clients with previous drug offenses, information concerning the sentencing for the offense was obtained on only 38 of them. Of these 38 clients, 4 (11%) were jailed, 4 (11%) were sentenced to State correctional facilities, 15 (39%) were placed on probation or parole, and 15 (39%) received some other kind of sentence.

C. ARRESTS DURING THE SAMPLE PERIOD - The distribution of arrest charges for clients between January 1, 1975, and March 31, 1975 is enumerated below:

ARREST CHARGES	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
No Arrest Charges	479	91.4%
Misdemeanant Charges	18	3.4%
Felony Charges	14	2.7%
Traffic Violation	13	2.5%
TOTAL	524	100%

Arrests charges were brought against 8.6% of the clients during the sampling period. Of the 32 arrests on felon and misdeameanant charges, 8 (25%) were drug related charges.

D. CONVICTIONS DURING THE SAMPLE PERIOD - The distribution of charges for which clients were convicted is cited below:

CHARGES	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
No Charges	494	94.3%
Misdemeanant Charges	21	4.0%
Felon Charges	6	1.1%
Adjudication Withheld	3	.6%
TOTAL	524	100.0%

Of the 30 clients who were convicted, 6 (20%) were on drug related charges. In addition, 6 (20%) of the convicted clients were jailed, 1 (3.3%) was sentenced to a State correctional facility, 2 (6.7%) were continued on probation or parole, 12 (40%) received some other form of sentence, and no information was obtained on the remaining 9 (30%).

SOCIAL ADJUSTMENT VARIABLES

A. EMPLOYMENT STATUS - The employment status of the clients in District #19 is as follows:

EMPLOYMENT STATUS	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
Employment	303	59%
Irregular Employment	106	21%
No Employment	105	20%
TOTAL	514	100%

Data was not obtained on 12 (2%) of the clients.

B. VOCATIONAL REHABILITATION STATUS - Participation in vocational educational programs is numerated below:

VOCATIONAL EDUCATION	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
No Participation	513	97.9%
Part Time Participation	5	1.0%
Full Time Participation	6	1.1%
TOTAL	524	100.0%

C. ACADEMIC EDUCATION - Participation in academic educational programs of clients in District #19 is as follows:

ACADEMIC EDUCATION	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
No Participation	494	94.3%
Part Time Participation	6	1.1%
Full Time Participation	24	4.6%

D. ACTUAL EDUCATIONAL LEVEL - The grade level of clients in District #19 is as follows:

GRADE LEVEL	ABSOLUTE FREQUENCY
2	1
8	1
9	3
10	1
12	3
COLLEGE Level	
13	4
14	4
15	1
16	5
TOTAL	23
MISSING VALUES	501

The relative frequency was not shown because there is no way to assess whether or not it is a true characteristic of the educational distribution in District #19. The value was not recorded on 501 clients. Thus the little information that was gathered on this variable is virtually useless.

The second type of data analysis presented is correlational analysis. Correlation coefficients describe the relationship between two or more variables, or the extent to which the values of the variables

vary concomitantly. While correlations measure the degree of covariance between two or mare variables, they are merely descriptive and in no way can one infer from correlations that one variable is casually dependent upon another.

Correlation coefficients have been computed between only those variables that meet the assumptions for ordinal data. An ordinal level of measurement assumes that the values of the variables can be categorized as larger or smaller, better or worse, etc. The correlation coefficient computed is gamma, an ordinal measure of association. Gamma was selected because of its suitability for ordinal data and its proportional reduction in error interpretation. Gamma is based on pairs of cases and their order relative to each other on each of two variables rather than individual scores. Any reported gamma represents the degree to which one can reduce the error in predicting the order of the value of one variable from knowledge of the order on a second variable over mere guessing. The following tables denote the relationship between selected variables. When a moderate degree of association was obtained between two variables the Chi Square Test of significance was computed to see whether the distributions could have occurred by chance alone. The actual χ^2 is reported along with the appropriate level of significance achieved.

EMPLOYMENT

AGE	NO EMPLOYMENT	IRREGULAR EMPLOYMENT	EMPLOYMENT	TOTAL
20 Yr. and below	38	38	100	176 (34%)
25 to 25 yr.	41	41	108	193 (37%)
25.1 to 30 Yr.	13	18	31	62 (12%)
30.1 to 35 Yr.	4	3	27	34 (07%)
35.1 and over	10	6	39	55 (11%)
TOTAL	106 (20%)	109 (21%)	305 (59%)	520 (100%)

Gamma = .09

Thus, there is virtually no relationship between the age of a client and their respective employment statuses. Young clients are just as likely as older clients to be employed, unemployed, or irregularly employed.

EMPLOYMENT STATUS BY RACE

EMPLOYMENT STATUS

RACE	NO EMPLOYMENT	IRREGULAR EMPLOYMENT	EMPLOYMENT	TOTAL
White	56	59	180	296 (57%)
Black	49	47	123	219 (43%)
TOTAL	105 (20%)	106 (21%)	303 (59%)	514 (100%)

Missing Values on 12 Clients

Gamma = .09

Once again, there is no relationship between the race of clients and their employment statuses. Blacks are as likely as whites to be either employed, irregularly employed, or unemployed.

AGE BY RACE

AGE

RACE	20 Yr.& YOUNGER	20.01 to 25 Yr.	25.01 to 30 Yr.	30.01 to 35 Yr.	35.01 Yr. & Over	TOTAL
White	135	113	24	9	14	295 (57%)
Black	41	78	37	25	38	219 (43%)
TOTAL	176 (34%)	191 (37%)	61 (12%)	34 (7%)	52 (10%)	514 (100%)

Missing Values on 12 Clients

Gamma = .53

χ^2 = 71.17 Significant at the .01 level df=4

There is a moderate degree of association between race and age as indicated by the value of gamma. Thus we can reduce the error in predicting race from the ordering of age by 53%.

AGE BY REPORTED DRUG USAGE

Drug Usage	Age					
	20 Yr.& Younger	20.01 to 25 Yr.	25.01 to 30 Yr.	30.01 to 35 Yr.	35.01 Yr & Older	Total
No Drug Use	36	40	28	22	22	158 (30%)
Alcohol	13	20	5	11	22	71(14%)
Marijuana	116	104	19	1	0	240 (46%)
Hard Drugs	11	29	10	0	1	51 (10%)
Total	176 (34%)	193 (37%)	62 (12%)	34 (7%)	55 (10%)	520(100%)

Missing Values on 6 clients

Gamma = .39

Significant at the .01 level χ^2 = 159.73 with 12 df

With knowledge of a probationer or parolees age ordering, we can reduce the error of predicting drug usage by 39% over guessing.

SUMMARY OF THE DISTRIBUTION OF AGE, RACE, SEX, AND EMPLOYMENT TRAITS OF CLIENTS IN DISTRICT 19

	No Employment				Regular Employment				Irregular Employment				Totals
	Male		Female		Male		Female		Male		Female		
	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black	
Below 20 years of age	25	9	4	0	71	21	6	2	27	6	2	3	176
Between 20.1 & 25 years of age	20	17	1	3	70	34	1	3	19	20	2	1	191
Between 25.1 & 30 years of age	2	6	2	3	12	15	2	2	6	11	0	0	61
Between 30.1 & 35 years of age	0	3	1	0	4	21	0	0	2	0	0	1	34
Over 35.1 years of age	1	7	0	1	11	21	1	4	1	5	0	0	52
Total	48	42	8	7	168	112	12	11	55	42	4	5	514

The following tables represent cross tabulations of two variables. Gamma was not calculated for these particular distributions because of the larger number of zero cells. When a large number of zero cells are present, the obtained gamma grossly over estimates the degree of association between the variables.

DRUG USAGE BY TYPES OF ARREST DURING THE SAMPLE PERIOD

DRUG USE	TYPES OF ARRESTS				
	NO ARREST	TRAFFIC VIOLATION	MISDEMEANOR	FELONY	TOTAL
No Use	139	7	5	8	159 (30.2%)
Alcohol	64	2	5	2	73 (13.9%)
Marijuana	229	4	7	3	243 (46.2%)
Hard Drugs	47	0	2	2	51 (9.7%)
TOTAL	479 (91.1%	13 (2.5%)	19 (3.6%)	15 (2.9%)	526 (100.0%)

DRUG USAGE BY TYPES OF CONVICTIONS DURING THE SAMPLING PERIOD

DRUG USAGE	NONE	MISDEMEANOR	FELONY	ADJUDICATION WITHHELD	TOTAL
None	146	7	6	0	159 (30.2%)
Alcohol	66	7	0	0	73 (13.9%)
Marijuana	233	7	0	3	243 (46.2%)
Hard Drugs	50	0	1	0	51 (9.7%)
TOTAL	495 (94.1%)	21 (4.0%)	7 (1.3%)	3 (0.6%)	526 (100.0%)

PROBLEMS

Though useful types of information can be retrieved from the STRAP system there are some bugs and problems due to the way in which the system was set up. The major difficulties are related to the coding system. For most of the items, zero represents an actual response with a referent. However, no number has been assigned to represent no response or no information. As a result, there is no way to differentiate whether a zero really represents a true response or missing data. For example, zero was recorded for 501 clients for educational level. It is unrealistic to assume that 501 clients out of 524 have not even completed the first grade! The figure apparently indicates the number of clients for whom their educational level was not recorded.

Using zero for a response also affects the type of analysis that can be done. When arithmetic computations are going to be performed, all of the zeros must be recoded to assure that the measure will not be nonsense. Setting up recoding procedure cards is a process that should not have to be done everytime the user wishes to perform an arithmetic computation.

Another coding problem that needs to be mentioned is the intermingling of alpha-numeric and numeric codes on the same item. Though this intermingling saves card space, the procedure for unscrambling the codes and putting them in usable order is hectic. The benefit of saving time by not having to unscramble a code out-weighs the card space saved.

Other problems involve the conceptual definitions of the data collected. The data collected are informative as they now are,

but adding other qualitative types of data would greatly enhance the interpretation of the data. Employment status will be used as an example. The categories for employment status are employed, irregularly employed, and unemployed. At first glance, one might interpret irregular employment as inability to stick with one job. Another interpretation is that the clients with irregular employment do some kind of seasonal work such as construction, picking crops, etc. If occupational titles were obtained, we could tell which interpretation on any given client was correct. The same holds true for arrests and convictions. We would have a much better depiction of the population and individual clients if we knew what the actual offense was rather than using the broad categories of misdemeanant or felon charges.

SUMMARY

The report has described some of the types of analysis that can be obtained from the STRAP system, and provided a statistical analysis of some client characteristics of District #19's population. Also, the report has pointed out some of the difficulties that exist with the STRAP program.