

A TECHNICAL REPORT  
ON  
A DEMOGRAPHIC ANALYSIS OF JUVENILES  
WITH AND WITHOUT SUBSEQUENT REFERRALS TO THE  
MARION COUNTY JUVENILE DEPARTMENT  
IN 1974 AND 1975

Prepared by the  
OREGON LAW ENFORCEMENT COUNCIL

KEITH A. STUBBLEFIELD  
ADMINISTRATOR

A DEMOGRAPHIC ANALYSIS OF JUVENILES  
WITH AND WITHOUT SUBSEQUENT REFERRALS TO THE  
MARION COUNTY JUVENILE DEPARTMENT

In 1974 and 1975

Principal Investigator

Richard A. Jones  
Senior Statistical Analyst  
Planning and Data Analysis Unit

November 14, 1977

This report was supported in part under Grant No. 77-SS-10-0003 and Grant No. 77-ED-10-0003 from the Law Enforcement Assistance Administration of the U.S. Department of Justice. Points of view or opinions stated are those of the author and do not necessarily represent the official position of the U.S. Department of Justice.

NCJRS

MAY 15 1979

ACQUISITIONS

## PREFACE

The purpose of analyzing this data on juvenile referrals is to provide statistical support to the Oregon Law Enforcement Council in the area of juvenile justice system effectiveness. Such statistical information is intended to supplement the Council's planning process of identifying juvenile justice problems, establishing priorities, and evaluating various programmatic approaches to curb delinquency and improve the juvenile justice system.

Special appreciation is extended to the Honorable Albin W. Norblad of the Marion County Circuit Court for authorizing access to the data and to his staff for providing assistance in the interpretation of the raw data during the early stages of this analysis.

Appreciation is also extended to the following who contributed by their review, comments and helpful suggestions: Dr. Donna F. Cruse, William H. Deist, Pamela E. Gervais, Dr. James P. Heuser, Robert D. Lockridge and Gail F. Stradley.

Agency staff who assisted in the analysis and production of this report were William H. Hickok, Statistical Systems Analyst; and LeeAnn Pugh, Secretary.

## EXECUTIVE SUMMARY

The purpose of this statistical analysis was to examine the demographic characteristics of juveniles with one referral and those with subsequent referrals. Those who had no further referrals and those with subsequent referrals were compared to determine differences in age, sex, race and reason for referral. In addition, the reason for the second referral and the elapsed time between the first and second referral were examined.

The data analyzed had been originally collected at intake by the juvenile department in Marion County, Oregon during 1974 and 1975. The reasons for referral were collapsed into seven major categories. Four of these categories were comprised of referrals for offenses applicable to both juveniles and adults (Criminal Law Violations). These four were: Persons, Property, Drugs, and Other. There were two categories for the offenses applicable only to juveniles: Status, and Neglect, Abuse, Dependency and Special Proceedings (NAD). The seventh category Traffic included all traffic, DUI, and bicycle violations.

### Demographic Characteristics of Juveniles First Referred

The typical juvenile first referred during 1974 and 1975 was found to be a white, male around fifteen years of age.

The number of juveniles first referred for Criminal Violations was approximately the same as the number first referred for Status/NAD. The fewest referrals were in the Persons category which made up less than two percent of all first referred. The category with the most referrals was Property, followed by Status, NAD, and then Traffic. The Drug and Other categories each accounted for less than four percent of the total first referred.

Forty-nine percent of those first referred were fifteen years of age or older. The race distribution was ninety-four percent White.

### Demographic Characteristics of Juveniles With Subsequent Referrals

Juveniles first referred for Status offenses and NAD were re-referred at higher rates than juveniles first referred for Criminal Violations.

Juveniles classified as White were subsequently re-referred more often than juveniles classified as a minority. Age was not found to be related to subsequent referrals. The median age at first referral was essentially the same for both those with and those without subsequent referrals. Although the small difference was inferred to be not statistically significant, the percentage of males with subsequent referral was slightly higher than that for females.

### Reasons for Second Referral

In order to examine the reason for the second referral, relative to the first, all reasons for referral except Traffic were first combined into two groups of Criminal Law Violations and Status/NAD. Over two-thirds of the second referrals were found to have been within the same group of reasons as the first referral. However, juveniles first referred for Criminal Law Violations and subsequently referred for Status/NAD were greater in number than were juveniles first referred for Status/NAD and subsequently referred for Criminal Law Violation.

### Months to Second Referral

In order to describe the re-referrals over specific periods of time, the days between the first and second referrals were collapsed into twelve thirty-day months. The data showed that more second referrals occurred during the first month following the first referral than any other month. Generally, fewer and fewer juveniles were re-referred with each additional month. Over seventy percent of the juveniles with second referrals were found to have been re-referred within six months of the first referral.

There was a problem with this finding in that multiple related referrals could not be distinguished from subsequent referrals. A number of second referrals occurred on the same day as the first. However, it appeared that if those same day referrals had been excluded, the above findings would not have been appreciably altered.

### Conclusions

A study revealed only minor differences between juveniles with only one referral and those with subsequent referrals. Juveniles who were first referred for a Status offense or NAD were more frequently re-referred than those first referred for a Criminal Violation. Whites were more often re-referred than those classified as belonging to a minority race or ethnic origin. The ethnic minorities were primarily Spanish surname, Native American, and Russian.

In examining the circumstances of re-referral, two major findings resulted. First, juveniles who had second referrals were more frequently re-referred for the same general group of reasons. This suggests that juveniles tend to be re-referred for similar reasons. Second, it was found that if a juvenile had a second referral, it most often occurred within a few months.

## ABSTRACT

This analysis investigated potential differences in the age, sex, race, and reason for referral between those first referred juveniles who were and those who were not subsequently referred. The data has been originally collected at intake by the juvenile department of the court of jurisdiction in Marion County, Oregon during 1974 and 1975. The elapsed months between the first and second referrals were also compiled and an analysis was performed on the extent to which the first and second referrals were of a similar nature.

Juveniles first referred for the offenses applicable only to juveniles were re-referred at higher rates than juveniles first referred for violations of criminal law. Juveniles classified as White were subsequently referred more often than were the juveniles classified as a minority.

Neither age nor sex was found related to subsequent referrals. The median age at first referral was essentially the same for both those with and those without subsequent referrals. Although the percentage of males with subsequent referrals was slightly higher than that for females, the small difference was inferred to be not significant.

The juveniles who had been re-referred within twelve thirty-day months were found more often to have been re-referred within the first month of their first referral than any other month. Over 70 percent of these second referrals were found to have occurred within six months. Based upon the frequency distributions of the reasons for first referral, a tendency to be re-referred for reasons of a similar nature was demonstrated and found greatest for Traffic offenses and least for offenses involving property.

A DEMOGRAPHIC ANALYSIS OF JUVENILES WITH AND WITHOUT SUBSEQUENT REFERRALS TO THE MARION COUNTY JUVENILE DEPARTMENT IN 1974 AND 1975.

Oregon's state and local juvenile justice planning bodies facing the task of developing plans for improvements are severely limited in the kinds and amounts of relevant statistics. Statistical information, if it is to provide an empirical basis for comprehensive planning, must encompass all relevant aspects of the juvenile justice system, including the juveniles, the community, the juvenile court, and the treatment and custodial placements.

Statistics on the reported apprehensions of juveniles by Oregon's law enforcement agencies for acts that would have been criminal if committed by an adult are readily compiled and disseminated by the Oregon Uniform Crime Reporting system. Statistics on the kinds and numbers of referrals received by the juvenile departments are forwarded to and disseminated by the Childrens Services Division of the Department of Human Resources. These two statistical systems primarily measure workloads by counting the kinds of cases and activities that law enforcement agencies and juvenile courts address. Neither of these systems, however, counts the number of juveniles or compiles information on their subsequent referrals.

If the solutions to alleviating delinquency and improving the system are to include treatments and services which seek to redirect the juveniles and overcome their problems, then some measurements reflecting the systems success in these areas are needed in addition to the counts of referrals and apprehensions. A quantification of the extent to which juveniles once referred are subsequently re-referred measures the end product of the efforts of all parties involved.

Without statistics on the systems past effectiveness, it would be impossible to document the extent of any resultant improvements and even the most nominal information on the nature of subsequent referrals may be of value. For instance, in evaluating a proposed revision of the system to further separate one class of referrals from another, such as the status offenders from the juveniles referred for law violations, some consideration could be given to the demonstrated degree that the two groups continue to be re-referred.

Demographic statistics on re-referrals could also have implications within a juvenile court. For instance, although a juvenile referred for theft, in comparison to a runaway, may warrant a different immediate response, the long range welfare of the juveniles must also be considered in developing the disposition. Included within the deliberations could be the likelihood that the behavior or conditions instrumental to the referral will continue. If juveniles described by their age, sex, race, and reasons for referral are shown to have different rates of re-referral, then such findings could provide an empirical basis for differential treatment.

The focus of this effort is the juvenile offenders who were first referred to the court of jurisdiction in Marion County, Oregon during 1974 and 1975. These first referred juveniles were tracked through the subsequent records of referral to compile the statistics on their subsequent referrals. The data analyzed had been initially recorded at intake by the Juvenile Department of the Marion County Circuit Court and transcribed onto machine readable form each month by a city/county data processing facility. Statistics on referrals were in turn produced each month by the facility and served as the basis for the Department's annual report. The Juvenile Department reviews the monthly returns for accuracy making corrections in their counts for known errors. Errors in the data maintained by the facility may or may not have been corrected and a few errors are known to exist as may be expected. Consequently, the various totals and subtotals of certain variables do not always agree.

For purposes of this study, 98 possible specific reasons for referral within the Marion County classification system were collapsed into seven major categories. Four of these categories were comprised of referrals for offenses applicable to both juveniles and adults and not including traffic (Law Violations): 1) Persons; which includes such law violations as murder, assault, and sex crimes; 2) Property; including thefts, burglaries, robberies, and fraud; 3) Drugs; including use, possession, and sale; and 4) Other; which includes all other law violations such as firearms, disorderly conduct, escapes, and etc. Offenses applicable only to juveniles were grouped into two categories; 1) Status; which includes runaway, curfew, beyond control, truancy, alcohol, probation/parole, and other status offenses such as endangering the morals of self or others, association with immoral persons, and engaging in an occupation dangerous to life or limb; and 2) Neglect, Abuse, and Dependency (NAD); which includes neglect, abuse, dependency, custody, and special proceedings such as hearings, motions, and transfers. The Traffic category includes all traffic, DUII, and bicycle violations.

#### FIRST REFERRALS

The typical juvenile first referred to the Marion County Juvenile Department in the calendar years 1974 and 1975 was a white, male around fifteen years old. The first referred juveniles appeared to differ little from the juveniles involved in all referrals based upon the county's annual statistics (Page 1 of Oregon RS-45) forwarded to the Childrens Services Division of the Department of Human Resources. The ages of the first referred were slightly younger than the ages of the juveniles involved with all referrals. The percentage of all referrals that involved juveniles fifteen years of age or older was 58.9 percent, while in comparison, the percentage of the first referred juveniles that were fifteen years or older was 49.3 percent. A larger proportion of all referrals were male at 69.1 percent and with 62.3 percent of the first referred being male. The race distributions were essentially the same when rounded to the nearest whole percent at 94 percent white.



Table 1. Reasons for First Referral

Reason Categories	1974 Total	% Distribution of Total	1975 Total	% Distribution of Total
Persons	32	01.4%	36	01.8%
Property	746	33.8%	713	35.9%
Drug	85	03.8%	41	02.1%
Other	89	04.0%	75	03.8%
Subtotal	952	43.1%	866	43.6%
Status	633	28.7%	532	26.8%
NAD	428	19.3%	331	16.7%
Subtotal	1,061	48.1%	863	43.5%
Traffic	195	08.8%	256	12.9%
Total	2,208	100.0%	1,985	100.0%

According to this analysis, there were 1,985 juveniles referred for the first time in Marion County during 1975 and 2,208 referred for the first time in 1974, as shown in Table 1. Over both years, the number of juveniles first referred for Law Violations was approximately the same as the number first referred for offenses applicable only to juveniles. The fewest referrals for both years were in the Persons category which made up less than 2 percent of all first referrals. The most frequent category of referral was Property, followed by Status, NAD, and then Traffic. The Drug and Other categories each accounted for 4 percent or less of the total first referrals.

Although the percentage distributions of the categories of the first referral differed little year to year, there were rather substantial changes in the numbers of juveniles first referred for a couple of categories. In 1975, the number of juveniles first referred for Drug decreased 51.8 percent of the 1974 figure while the number referred for Traffic increased 31.3 percent.

Over three-fourths (76 percent) of the juveniles first referred were teenagers. The ages at first referral were for both sexes distributed in a similar fashion increasing in frequency up to the age interval of fifteen, after which the frequencies of occurrence dropped particularly for females. The younger age groups were quite infrequent and noticeably increased at around age eight or nine as illustrated in Figure 1, which plots the age at first referral for males and females both years combined.

Juveniles First Referral

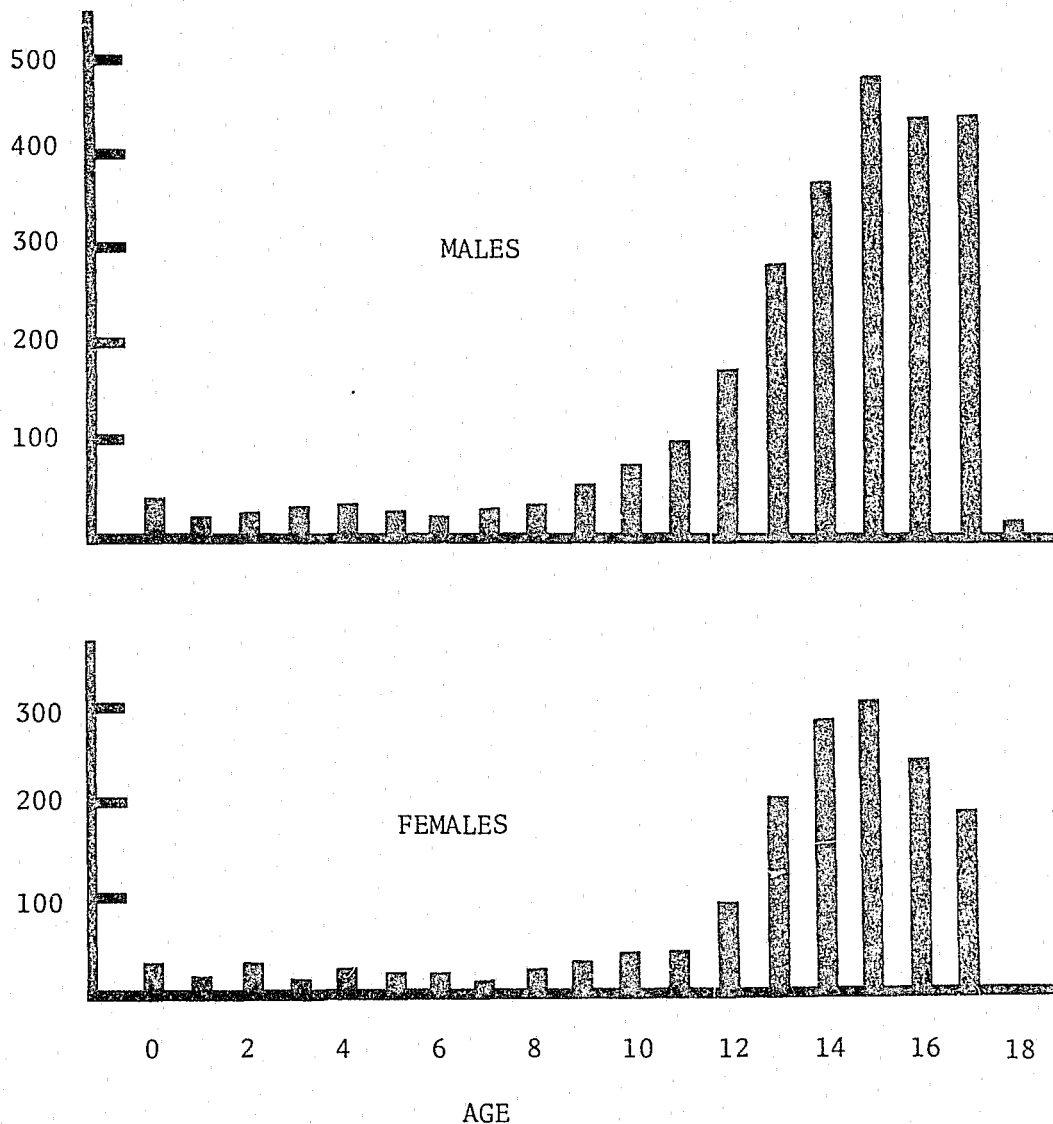


Figure 1. Age at First Referral by Sex.

The percentage distribution of the first referred females fifteen years or older was about 46 percent of a total 1,555 first referred females. Overall, the first referred males were slightly older with about 52 percent of a total 2,637 having been fifteen years or more of age. The reason that the average age of males was slightly older appears to be mostly due to the disproportionate fewer females aged sixteen and seventeen relative to the males. There were as many males aged seventeen as males aged sixteen although females aged seventeen were less frequent than females ages sixteen.

Out of the 4,192 juveniles first referred over the two-year period, there were 2,637 males (62.9 percent) and 1,555 females (37.1 percent) as shown in Table 2. The greater number of males first referred was found almost solely attributable to reasons involving Law Violations and Traffic. The first referrals for the offenses applicable only to juveniles had nearly equal number of males and females. However, the Law Violations subtotal was composed of 70.2 percent males and only 29.8 percent females with both Persons and other being around 85 percent male. The first referrals for Traffic were composed of 83.4 percent males and 16.6 percent females.

SUBSEQUENT REFERRALS

Subsequent referrals were tallied only when the juveniles name, as represented by a number, date of birth, sex, and race matched the known first referrals. A subsequent referral of a juvenile first referred in 1975 indicated that the juvenile had been referred on a following occasion within the 1975 calendar year. All juveniles first referred in 1975 then had one year or less in which to have been re-referred. A subsequent referral of a juvenile first referred in 1974 indicated that the juvenile had been referred on a following occasion sometime in either 1974 or 1975. All juveniles first referred in 1974 then had at least one year and none had more than two years in which to have been re-referred.

Table 2. Reason for First Referral by Sex

Reason Categories	Total	Male	Female	% Male	% Female
Persons	68	58	10	85.3%	14.7%
Property	1,459	992	467	68.0%	32.0%
Drug	126	86	40	68.3%	31.7%
Other	164	140	24	85.4%	14.6%
Subtotal	1,817	1,276	541	70.2%	29.8%
Status	1,165	607	558	52.1%	47.9%
NAD	759	378	381	49.8%	50.2%
Subtotal	1,924	985	939	51.2%	48.8%
Traffic	451	376	75	83.4%	16.6%
Total	4,192	2,637	1,555	62.9%	37.1%

Assuming that the juveniles were referred in an approximate uniform manner each year, the 1975 juveniles would have had an approximate average of six months in which to have been re-referred, and the 1974 juveniles would have had an approximate average of 18 months in which to have been re-referred. If the number of juveniles first referred had been equal both years, then the approximate average time in which to have been re-referred would have been one year. However, there were more juveniles first referred in 1974 than in 1975; and therefore, the overall approximate average should have been slightly over one year.

By the end of the calendar year 1975, the 1,985 juveniles first referred in 1975 had accumulated 535 subsequent referrals and the juveniles first referred in 1974 had accumulated 1,571 subsequent referrals. Out of the total 4,197 first referred juveniles, there were 990 juveniles with 2,106 total subsequent referrals.

Race and Ethnic Origin. On a state and national basis, statistics on referrals according to race classification have been collected for "White", "Negro", "Indian", and "Other". In addition, the Marion County Juvenile Department included within their coding scheme two ethnic classifications of "Spanish Surname" and "Russian". Juveniles first referred, those with and without subsequent referrals, and the percentage of first referred with subsequent referrals are presented in Table 3. by these classifications over the two-year period. Of a total 4,197 first referred juveniles, only 237 were of a minority race or of one of the two ethnic origins. These minorities constituted less than 6 percent of all juveniles first referred. The three race classifications accounted for about 2 percent of the total which was also the approximate distribution of these races in Marion County during the 1970 census.

There were 990 first referred juveniles who by the end of this two-year period had one or more subsequent referrals. Twenty-four and one tenth percent of the "White" juveniles were subsequently referred while only 14.8 percent of the minority classifications were subsequently referred. Although the frequencies of the re-referrals were sufficiently small so as to weaken conclusions about the specific minorities, the combining of the minority classifications results in a large enough frequency to suggest with some confidence that "Whites" had been more likely to have been re-referred than minorities.

Age at First Referral. If juveniles with subsequent referrals had average ages at first referral that were different than the juveniles without subsequent referrals, then this could support a theory that certain age groups have been more likely to be re-referred than another. These data failed to support such a theory. Of the juveniles first referred in 1974, there were 1,546 without subsequent referrals, 579 with one to four subsequent referrals, and 87 with five or more subsequent referrals. The median ages of these groups were respectively 14.5, 14.3, and 14.3 years. Of the juveniles first referred in 1975, there were 1,661 without subsequent referrals, 312 with one to four subsequent referrals, and 12 with five or more subsequent referrals.

Table 3. Race and Ethnic Origin of Juveniles With and Without Subsequent Referrals.

Race and Ethnic Origin	First Referred Juveniles			
	Total Referred	Without Subsequent Referrals	With Subsequent Referrals	% With Subsequent Referrals
Black	16	13	3	18.8%
Nat. American	63	54	9	14.3%
Spanish Surname	105	95	10	09.6%
Russian	48	35	13	27.1%
Other	5	5	0	---
Subtotal	237	202	35	14.8%
White	3,960	3,005	955	24.1%
Total	4,197	3,207	990	23.6%

Their median ages were 14.3, 14.7, and 14.0 years respectively. All mean ages were also within one year and as with the medians the differences were not in a consistent direction. Based upon these statistics, it would be doubtful that even a larger sample would have shown juveniles with subsequent referrals being in a different age group than juveniles without subsequent referrals.

The ages of the first referred juveniles with and without subsequent referrals were also compiled for each of the categories of reasons for referral. Although no differences in the average ages of the juveniles with and without subsequent referrals were apparent, there were major differences in the median ages of the juveniles between categories.

Combining both years, the reason category with the oldest juveniles was Drug with a median age of almost 16, and with Status, Other, and Traffic all around 15 years. The category Persons had a median age between 14 and 15 with the Property category at 14 years. The custody and special proceedings category, NAD, had the youngest juveniles with a median age between 9 and 10 years. An interesting aside finding was that the ages of the NAD juveniles were distributed in a fairly uniform manner and not skewed as were the other categories. There is, therefore, support for concluding that the referrals for NAD were not related to age.

Sex. Although a slightly larger percentage of males were found to have had subsequent referrals than females at 24.4 percent and 22.2 percent respectively, the percentage difference was not substantial. The percentage distributions by sex for juveniles first referred were 62.9 percent males and 37.1 percent females, whereas, the percentage

of distributions of juveniles with subsequent referrals by sex were 65.1 percent males and 34.9 percent females. The subsequent referrals by sex for each year, presented in Table 4., were also split into two groups of one to four and five or more subsequent referrals. The statistics were fairly consistent for both years, but the small difference was not considered large enough to reach statistical significance.

Reasons for First Referral. The relationships between the reasons for first referral and subsequent referrals were substantial in comparison to age and sex. In Table 5., the percentage of juveniles with subsequent referrals by reason categories shows that 19.9 percent of all juveniles first referred for Law Violations had subsequent referrals while a considerably larger percentage, 26.3 percent, of those first referred for offenses applicable only to juveniles had subsequent referrals. The table, which breaks down the first referred by sex, also suggests that the source of the slightly higher rate of subsequent referrals for males was attributable to the Law Violations categories. Of the males first referred for Law Violations, 22.8 percent had subsequent referrals while only 13.1 percent of the females first referred for Law Violations were subsequently referred. Both sexes were re-referred at about the same rate for the offenses applicable only to juveniles.

Table 4. Juveniles Without Subsequent Referrals, One to Four and Five or More Subsequent Referrals by Sex.

	First Referred Juveniles	Without Subsequent Referrals	One to Four Subsequent Referrals	Five or More Subsequent Referrals
1974				
Males	1,390	955	374	61
% Males	62.8%	61.7%	64.6%	70.1%
Females	823	592	205	26
% Females	37.2%	38.3%	35.4%	29.9%
1975				
Males	1,249	1,040	201	8
% Males	63.0%	62.7%	64.4%	66.7%
Females	735	620	111	4
% Females	37.0%	37.3%	35.6%	33.3%

Females first referred in the Persons, Drug, and Other categories were subsequently referred at such low frequencies so as to question the precision of the percent with subsequent referrals for their specific Law Violation categories, yet their combined re-referrals were reasonably large enough to conclude that males approached being twice as likely to have been subsequently referred for the Law Violations. Although the Drug category had the highest rate of juveniles subsequently referred regardless of sex, this high rate was clearly due to the high number of males subsequently referred.

The comparisons of age, sex, race, and categories of reasons for first referral have used as the principle variable the percentage of juveniles with subsequent referrals. Another collateral measure of some interest was the average number of subsequent referrals for each juvenile that was re-referred. These statistics are presented in Table 6. by the categories of reason for referral and by the year of first referral.

The percentage of all juveniles first referred in 1975 with subsequent referrals was 16.3 percent. These re-referred juveniles also had an average of 1.7 subsequent referrals by the close of the calendar year 1975. In comparison, the percentage of juveniles first referred in 1974 with subsequent referrals was 30.1 percent with these juveniles having an average of 2.4 subsequent referrals by the end of the calendar year 1975. Therefore, the 1974 juveniles, which had average of 18 months in which to have been re-referred, had both more juveniles with subsequent referrals and more subsequent referrals per re-referred juvenile than did the 1975 juveniles with the approximate average of six months in which to have been re-referred.

Table 5. Juveniles with Subsequent Referrals by Reasons for First Referral and Sex.

Reason Categories	First Referred Juveniles With Subsequent Referrals		Percent of First Referred With Subsequent Referrals		
	Males	Females	Males	Females	Total
Persons	8	1	13.8%	10.0%	13.2%
Property	218	61	22.0%	13.8%	19.1%
Drug	33	7	38.4%	17.5%	31.7%
Other	32	2	22.9%	08.3%	20.7%
Subtotal	291	71	22.8%	13.1%	19.9%
Status	162	159	26.7%	28.5%	27.6%
NAD	94	100	24.9%	26.2%	25.6%
Subtotal	256	259	26.3%	28.1%	26.3%
Traffic	96	16	25.5%	21.3%	24.8%
Total	643	347	24.4%	22.3%	23.6%

Table 6. Subsequent Referrals Per Juvenile by Reasons For First Referral.

Reason Categories	First Referred Juveniles		Subsequent Referrals	
	With Subsequent Referrals	% With Subsequent Referrals	Total	Per Juvenile
1974				
Persons	7	21.8%	18	2.6
Property	201	26.9%	423	2.1
Drug	27	31.8%	56	2.0
Other	26	29.2%	49	1.9
Subtotal	261	27.4%	546	2.1
Status	218	34.4%	646	3.0
NAD	137	32.0%	283	2.1
Subtotal	355	33.5%	929	2.6
Traffic	49	25.1%	96	2.0
Total	665	30.1%	1,571	2.4
1975				
Persons	2	05.6%	6	3.0
Property	78	10.9%	143	1.8
Drug	13	31.7%	17	1.4
Other	8	10.7%	10	1.3
Subtotal	101	11.7%	116	1.7
Status	103	19.4%	172	1.7
NAD	57	17.2%	104	1.8
Subtotal	160	18.5%	276	1.7
Traffic	63	24.6%	83	1.3
Total	324	16.3%	535	1.7



The juveniles who were first referred for status offenses in 1974 and who were re-referred had an average of 3.0 subsequent referrals by the close of the 1975 year. All of the remaining categories of first referral, except Persons, had an average of around two subsequent referrals for those juveniles who were re-referred. The frequencies of the juveniles with subsequent referrals for the Persons categories were sufficiently small for both years that the particularly high rate of 3.0 and 2.6 subsequent referrals per re-referred juvenile in 1974 and 1975 respectively could have, to a great extent, been due to chance.

The two categories Drug and Traffic had more subsequent referrals per re-referred juvenile in 1974 than in 1975 as would be expected with the additional time for re-referral for the 1974 juveniles. However, these two categories had the highest percentages of juveniles with subsequent referrals of the categories of juveniles first referred in 1975 and these percentages were the same for those first referred in 1975 as those first referred in 1974.

Comparing the rates of subsequent referrals by the year of first referral shows that the juveniles first referred in 1974 for status had the largest share of juveniles with subsequent referrals, and had more subsequent referrals per juvenile re-referred than the other categories. The Law Violations, dominated by the Property, had a rate of subsequent referrals that was the same as the Status for the juveniles first referred in 1975 but did not increase as much as Status for the longer time period for the juveniles first referred in 1974.

#### REASONS FOR SECOND REFERRAL

In order to describe the nature of the reason for the second referral relative to the first, all referrals except Traffic were collapsed into the two groups of Law Violations and offenses applicable only to juveniles (OAOJ). Juveniles with first and second referrals in these two groups totaled 817 over the two years combined. As shown in Table 7., the juveniles first referred for Law Violations with second referrals totaled 332 and with 60.8 percent of their second referrals being for another reason within the Law Violations group. In comparison, there were 485 juveniles first referred within the OAOJ group with second referrals and with 76.9 percent of these being re-referred within the OAOJ group.

Combining both groups, over two-thirds (70.4 percent) of the juveniles with second referrals had been subsequently referred within the same group with less than one-third (29.6 percent) being referred for the other group of reasons. However, juveniles who had been first referred for a Law Violation and subsequently referred within the OAOJ group were greater in number than juveniles first referred within the OAOJ group and subsequently referred for a Law Violation. The greater tendency for both groups to have been referred on the second referral within the OAOJ group appears reasonable considering that this group includes matters of custody and control.

Table 7. Reasons for First and Second Referral in Groups of Law Violations and Offenses Applicable Only to Juveniles.

First Referral Group	Second Referral		
	Same Group	Other Group	Total
Law Violations	202	130	332
Percent	60.8%	39.2%	100.0%
Offenses Applicable Only to Juveniles	373	112	485
Percent	76.9%	23.1%	100.0%
Combined	575	242	817
Percent	70.4%	29.6%	100.0%

A comparison of juveniles re-referred within the same category was also made using five categories of reason for referral; the major results of which are presented in Table 8. Similar First and Second Referrals by Reason Categories. The five categories included: Traffic, the two OAOJ categories of Status and NAD, and two Law Violation categories of Property and all Other Law violations. By including the Traffic referrals, there were 4,194 first referred for both years with 986 having at least a second additional referral.

If there had been no relationships between the first and second referrals, then it would have been expected that the percentage of juveniles re-referred within the same category on a second referral would have been approximately the same as the distributions of the first referrals. There were 10.7 percent of all first referrals that were for reasons within the Traffic category. However, of these juveniles who were re-referred, the proportion of all their second referrals that were also Traffic was 64.9 percent rather than the 10.7 percent expected. Therefore, there were over six times (607 percent) as many re-referred within the same category as would have been expected had there been no tendency to be re-referred within the same category. Based upon these likelihood ratios, the category that had the least tendency to be re-referred within the same category was the Property which had made up 34.8 percent of all first referrals and had 43.0 percent of all their second referrals also within Property (124 percent of that expected). In comparison, the Other Law violations made up 08.6 percent of all first referrals

Table 8. Similiar First and Second Referrals by Reason Categories.

Reason Category	First Referred Total	With Second Referrals	First & Second Referral in Same Category	% in Same Category
Property	1,461	277	120	43.0%
% Distribution	34.8%	28.1%		
Other Law	359	83	24	28.9%
% Distribution	08.6%	08.4%		
Status	1,165	321	183	57.0%
% Distribution	27.8%	32.6%		
NAD	759	194	130	67.0%
% Distribution	18.1%	19.7%		
Traffic	450	111	72	64.9%
% Distribution	10.7%	11.3%		
Total	4,194	986	529	53.7%

and 28.9 percent of their second referrals were also within this category being 336 percent of that expected. The increases in the observed frequencies for re-referrals within the same category for Status and NAD were respectively 205 percent and 370 percent of that expected. The five categories in order of this increasing tendency to be re-referred within the same category were: Property, Status, Other Law, NAD, and then Traffic.

For each of the five categories, interpreting the analysis of the numbers of juveniles re-referred for categories other than the initial category becomes quite complex. The distributions of the juveniles re-referred in the remaining categories appeared to be in about the frequencies expected except that none of the juveniles first referred for Traffic were later re-referred for NAD and only one juvenile first referred for NAD was later re-referred for Traffic.

## MONTHS TO SECOND REFERRAL

The combining of both years data on re-referrals resulted in a percentage of juveniles (23.6 percent) with subsequent referrals over an approximate average length of time of one year. In order to describe the re-referrals over more specific periods of time, the days between the first and second referrals were compiled into twelve thirty-day months for all juveniles who had been first referred in 1974.

In Table 9. Months to Second Referral by Reasons for First Referral., an obvious declining rate of referrals per month are represented both by the total and by each of the major categories. Due to their smaller frequencies of occurrence, the categories of Persons, Drug, and Other law violations were collapsed into a new category of Other Law. There was a disturbing number of juveniles with their second referrals recorded as being on the same day as their first. Consequently, the second referrals that occurred during the first month were also broken down by mid-month and same day.

Table 9. Months to Second Referral by Reasons for First Referral.

	Juveniles Re-referred					Total
	Property	Other Law	Status	NAD	Traffic	
Same Day	51	17	52	11	23	154
1-15 Days	18	3	29	10	2	62
15-30 Days	13	2	16	10	1	42
30 Day Months						
1	82	22	97	31	36	258
2	14	3	18	12	8	55
3	13	5	29	13	0	60
4	9	3	7	13	4	36
5	16	5	13	1	3	38
6	6	3	6	8	0	23
7	12	3	4	7	1	27
8	8	3	6	6	2	25
9	7	0	4	4	0	15
10	4	1	3	11	0	19
11	4	0	4	5	1	14
12	2	2	7	7	1	19
Total	177	50	198	118	46	589

All in all, there were 154 same-day second referrals. Fifty percent of the second referrals for the Traffic category were recorded as occurring on the same day as their first, while only 9 percent of the NAD second referrals were recorded as occurring on the same day. The effect of excluding these same day referrals from the total results in the percentage of juveniles with second referrals within twelve 30-day months dropping from 26.7 percent to 19.7 percent. Excluding these same day re-referrals does not alter the fact that more juveniles were re-referred during the first month following their first referral than any other month. The categories that had their greatest share of re-referred within the first month, and excluding the same day, were Property and Status which both had more than 30 percent of the second referrals occurring within this first month.

In order to illustrate the effect of the declining monthly re-referrals, the cumulative percentage of juveniles with second referrals was plotted and is shown in Figure 2., by the twelve 30-day months. The juveniles re-referred on the same day, which involved 7.0 percent of the 1974 juveniles or 26.1 percent of their 589 second referrals, are shown at zero months. Over the last six months of the twelve-month period following the first referral, the percentage of the 2,208 juveniles that had second referrals was 5.4 percent, while the percentage that had their second referrals during the first six months and excluding the same day was 14.3 percent. Put in slightly different terms and excluding the same day re-referrals, there were 435 second referrals within the twelve 30-day months with 316 or about 73 percent of these having occurred within the first six months.

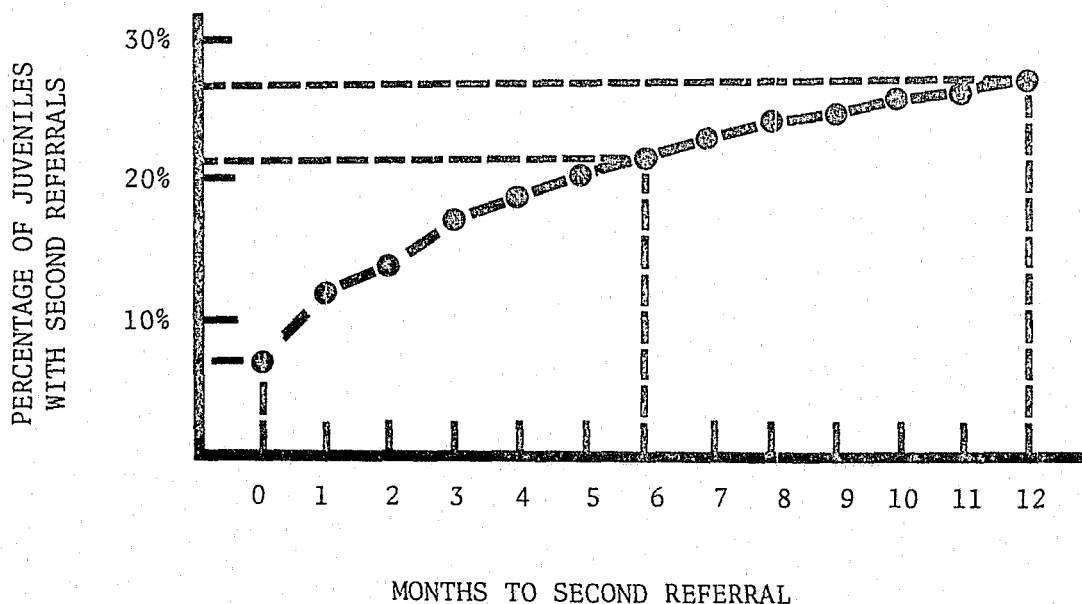


Figure 2. Cumulative Percentage of Juveniles With Second Referrals by 30-Day Months.

## DISCUSSION AND CONCLUSIONS

This statistical analysis of re-referred juveniles has circumvented dissimilarities between the adult criminal and the juvenile justice systems. According to these statistics, more than half of the referrals did not involve that which corresponds to criminal violations of law. To have restricted the scope of this effort to a corollary of adult criminal behavior would have excluded the majority of the juveniles first referred in this county.

The inclusion of all reasons for referral, however, adds to the complexity of the interpretation. The dispositions of the first referrals could, for instance, have been affecting re-referrals and confounding the results particularly for the comparisons by reasons for referral. It would not be unreasonable to have found that more of the juveniles referred for law violations were institutionalized or placed under other constraints than the juveniles referred for Traffic or offenses applicable only to juveniles. Further, it does not seem unreasonable to propose that while the juveniles were under different conditions of constraint, the likelihood of a re-referral could have been affected.

The reasons for re-referral may also be relevant in interpreting these findings. For instance, the majority of the juveniles referred for Traffic with second referrals were found to have been most often referred for another reason involving Traffic. A juvenile whose first and second referral were both for reasons involving Traffic may be looked upon under a different light, depending on the context, than the juvenile with two referrals for offenses against persons.

Although no differences in the average age at first referral were apparent for the juveniles with and without subsequent referrals, the differences in the average ages at first referral between the reasons for referral also makes the interpretation of these findings difficult. Many of these juveniles had been sixteen and seventeen at first referral and many, therefore, would have become eighteen sometime during the two-year period. The juveniles first referred in the Drug category had a median age at around sixteen; and many more of these juveniles should have become eighteen than the juveniles first referred for NAD which had a median age between nine and ten.

Although this study has shown a relation between rates of subsequent referral and reasons for first referral, it has not been able to add much clarity to the relation or the interactions with the other variables. Suggestions for an improved analytical design include balancing the age and sex of the juveniles between reasons for referral and somehow controlling for the possibility of major differences in the conditions of constraint imposed as a result of the initial referral.

The findings that minorities were subsequently referred at lower rates than whites may have been due to several factors. In as much as most of the juveniles are referred to the Department by someone in the community,

differences between communities could be of major influence in referrals. The minorities within the county are believed to be distributed more in rural areas than in the core city. In Oregon, the incidence of crime and type of offenses typical of the cities, particularly the larger metropolitan areas, are not generally representative of the rural areas. The theory that minorities have greater family unity may also have applicability. With additional data, greater frequencies of re-referrals, some theories could be subject to further analysis, but based upon this limited data, it is difficult to lend support to any particular theory being responsible for the observed relation.

This analysis has demonstrated that race and ethnic origin, reason for referral, and elapsed time since first referral were each related to subsequent referrals. With over 70 percent of the juveniles re-referred within a year having had their second referrals during the first six months, the elapsed time since first referral bears the strongest relation to subsequent referrals. These findings also have shown that more juveniles were re-referred within the first 30-day period than any other 30-day period. This particular characteristic could reflect an initial high level of detection. Other factors which may also contribute to this finding are that some would have become eighteen and some may have moved out of the jurisdiction. Both of these factors would be expected to contribute in somewhat of a constant manner over time; and therefore, would not fully explain the accelerated decline.

A slight flaw exists in comparing directly the numbers of re-referrals occurring in the first six months with those occurring in the second six months. During the second six months, there were fewer juveniles without subsequent referrals due to those that had been re-referred in the first six months. Correcting for the shrinking population of juveniles without subsequent referrals would not alter appreciably the finding and would result in an increase from 5.4 percent to less than 7.0 percent which remains a sizable difference from the rate of 14.3 percent for the first six months.

The compilation of the elapsed time between the first and second referrals revealed a disturbing number of juveniles, 154 out of 539, that had been re-referred on the same day as their first referral. The data suggests that the occurrence of the same day re-referrals may have been related to the reason for referral in as much as 50 percent of the 1974 juveniles first referred for Traffic, and re-referred within a year, had been re-referred on the same day. The 1974 juveniles first referred for the NAD and re-referred within one year had 10 percent of their second referrals occurring on the same day as the first. The net result is that conclusions concerning the comparisons of the major categories of reasons for referral, particularly Traffic, must be further watered down.

In comparing the reasons for the first and second referrals, the juveniles first referred for Traffic exhibited the greatest tendency to be re-referred for a reason of similar nature with nearly 65 percent of their second referrals, also for Traffic. Coupling re-referrals being for similar reasons

with 50 percent of the above Traffic re-referrals occurring on the same day does not preclude speculating that the juveniles were simply referred for two related reasons involving Traffic.

If all same day second referrals were to be considered something other than a separate unrelated subsequent referral and excluded from the analysis, the differences in the subsequent referral rates between the juveniles first referred for Law Violations and the juveniles first referred for offenses applicable only to juveniles would be further increased. Of the juveniles first referred in 1974 and re-referred within a year, those first referred for Law Violations had 30 percent of their second referrals occurring on the same day while those first referred for offenses applicable only to juveniles had 20 percent of their second referrals on the same day. Subtracting the same day re-referrals from these two groups would have resulted in the re-referral rate for the juveniles referred for Law Violations being lowered more than the re-referral rate for the offenses applicable only to juveniles. Therefore, this provides additional support for the conclusion that the juveniles first referred for Law Violations have had lower rates of re-referral than juveniles first referred for offenses applicable only to juveniles.

The failure to find a significant relation overall between the sex of the juveniles and their subsequent referrals may appear disordered by the showing that within a few of the Law Violation categories of reason for referral, the males had higher rates of subsequent referrals than females. This may simply result from males and females having been referred for different reasons within the major categories. If within the major categories there were differences in the distributions of the sexes for the specific reasons of referral, and if the specific reasons for referral were shown to have had different rates of re-referral as was the case with the major categories, then the reasons for referral could fully account for this apparent discrepancy.

\* \* \*



APPENDIX I

Reason for First Referral by  
Reason for Second Referral

	Reason Categories					Total †
	Property	Other Law	Status	NAD	Traffic	
First Referral	1,461	359	1,165	759	450	4,194
Percent	34.8%	8.6%	27.8%	18.1%	10.7%	100.0%
Reason Category of Second Referral						
Property	120	22	62	14	17	235
Percent	43.3%	26.5%	19.3%	7.2%	15.3%	23.8%
Other Law	36	24	28	8	7	103
Percent	13.0%	28.9%	8.7%	4.1%	6.3%	10.4%
Status	82	24	183	41	15	345
Percent	29.6%	28.9%	57.0%	21.1%	13.5%	35.0%
NAD	18	6	19	130	0	173
Percent	6.5%	7.2%	5.9%	67.0%	-	17.5%
Traffic	21	7	29	1	72	130
Percent	7.6%	8.4%	9.0%	0.5%	64.9%	13.2%
Total Percent	100.0%	99.9%	99.9%	99.9%	100.0%	99.9%
Total Second Referral	277	83	321	194	111	986
Percent	28.1%	8.4%	32.6%	19.7%	11.3%	100.1%

APPENDIX II

Chi-square Values for Tests of Independence

Table 3. Race and Ethnic Origin of Juveniles With and Without Subsequent Referrals.

$$\chi^2 (\text{whites, minorities}) = 10.8419 (P. < .001, 1 \text{ d.f.})$$

Table 4. Juveniles Without Subsequent Referrals, One to Four and Five or More Subsequent Referrals by Sex.

$$\chi^2 (\text{Male, female; with, without}) = 2.6192 (P. > .05, 1 \text{ d.f.})$$

Table 5. Juveniles with Subsequent Referrals by Reasons for First Referral and Sex.

$$\chi^2 (\text{Law, OAOJ}) = 15.1622 (P. < .001, 1 \text{ d.f.})$$

Table 7. Reasons for First and Second Referral in Groups of Law Violations and Offenses Applicable only to Juveniles.

$$\chi^2 (\text{Law, OAOJ}) = 15.1622 (P. < .001, 1 \text{ d.f.})$$

57306

**END**