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FACTORS THAT INFLUENCE PROBATION FEE REVENUES

Including a Method for Setting Fee Revenue Goals Based on Agency Policies and Demographic Data

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EXECUTIVE SUMMARY

This paper identifies factors that were found to influence rates of fee collection in probation agencies and also provides a method for projecting likely amounts of fee revenue.

The basic findings of this study are:

- Policies and procedures (controllable factors) impact on revenues more than local economic conditions (non controllable factors).
- As fee rates for supervision increase, the amount collected decreases. The optimal fee level appears to be $15-$17 per month.
- Local unemployment rates and percentage of families living below the poverty level are related to fee revenues. As unemployment and poverty increase, collections decline.
- There is no significant relationship between caseload size and fee collections.
- When agencies have direct access to and control over the use of fee revenues, collections increase. This trend was evident for all size agencies, but particularly evident in large agencies.
- Agencies that send out regular billings and late payment notices tend to collect more fees.
- The courts involvement in fee determination appears adviseable. When the court sets the amount of the fee, collections increase.
- Maintaining some degree of probation officer involvement (i.e. reminding probationers to pay) appears adviseable. When probation officers are removed completely from the process, collections decline.
- The higher priority fees are given in relation to other financial obligations (fines, restitution, court costs), results in increased fee revenue.
- The ability to impose sanctions for non payment results in increased collections.

Many agencies are becoming more dependent on fee revenues and less dependent on general funding appropriations. Increasing reliance on fees creates the need for more accurate projections and realistic goal setting to avoid budget deficits. When utilizing any type of projection method, readers should be aware that there are both strengths and potential pitfalls of statistical techniques. For many jurisdictions, projection methods provide more accurate estimates and eliminate a "guesswork" approach since projections are based on normative data. The pitfalls of such techniques are that these methods produce only an estimate, which may vary greatly from actual collections if agency policies, practices and offender population are significantly different than the norm.

Although statistically based and somewhat technical in nature, this paper is written in layman's terms and in an easy to understand fashion. The

projection method (page 26) can be easily applied by probation administrators and practitioners to assist in setting goals. It is a straight forward, five step process focusing on access to fee revenue, likely sanctions for non payment, amount of the fee, and the local unemployment rate. It should only be used by agencies with five or more probation officers.

For agencies that do not wish to use projection techniques, this paper provides valuable data based insights into the fee process that can assist agencies with policy development and implementation of fee programs. Readers that desire a broad analysis of fees as an economic sanction, pros and cons of the issue, and implementation options and strategies should consult the policy brief, "Fees for Probation Services", which is available at no cost from the National Institute of Corrections' Information Center in Boulder, Colorado.

CHAPTER 1

INTRODUCTION

PURPOSE OF THE STUDY

In 1985, The National Council on Crime and Delinquency (NCCD) received a grant from the National Institute of Corrections (NIC) to conduct an analysis and write a policy brief on "Fees for Probation Services." That effort included an extensive survey of over 200 probation agencies followed by a workshop with twenty-six administrators to identify various philosophical perspectives and operational issues that impact on fee programs. The survey, workshop and additional investigation led to NCCD's detailed policy brief on "Fees for Probation Services" published by NIC in January 1986. Readers desiring a broad discussion of the fee issue should consult this policy brief which is available from the NIC Information Center in Boulder, Colorado.

The data base assembled for the policy study, coupled with growing interest in the subject of fees, provided both the opportunity and incentive to further study fee issues. NCCD proposed further study that would:

(a) augment the data base assembled for the initial study by adding economic data from each jurisdiction in the sample and then;

(b) analyze relationships between fee generated revenues, policy and procedures, economic data, and agency characteristics (i.e., caseloads, number of officers, county or state agency, etc.) in an attempt to develop a statistical method that could be used to project fee revenues.

Such a method could serve probation in two ways. First, in jurisdictions where a new fee program is proposed, decisionmakers could set realistic revenue goals based on normative data. Second, agencies that propose changes in their fee programs could more accurately estimate the impact of these changes. The

ability to estimate the effects of various policies and procedures on revenues could help avoid costly errors and maximize the return to county or state treasuries.

On the surface, the fee issue appears fairly straightforward. However, like all economic strategies, many complexities impact on revenues generated and on fee policies that are adopted. Some factors are "controllable" -- that is within the decision-making power of legislatures, county boards and probation administrators. Other factors that potentially affect the amount of money generated by user fees are basically outside the policy-makers realm of control. Still, in estimating funds required for probation operations, it is important to be able to assess both controllable and non-controllable factors and accurately estimate the effects of changes in employment rates, personal income, the percentage of people living below the poverty level and other economic indicators on fee generated revenues.

As the cost of corrections has risen, so has the pressure for accurate projection techiques. The result has been a proliferation of population projection models and workload measurement techniques. Administrators are aware that reliance on fee programs for needed revenues is quite different and can pose greater risks, than reliance on the general fund. While some fee programs are decades old, there is precious little known about the relationships between agency policies, procedures, community economics, amount of fees charged, and the priority fees have in relation to fines, restitution or court costs. Any or all of these factors might significantly impact collection rates. Once reliance on fees is established - either to augment or fund basic probation services - a decline in revenues can produce serious consequences. Hence, quantitative methods for projecting revenues could soon assume an importance similar to that of population projections or workload

budgeting techniques. Already, fees collected account for more than 50% of the budgets in a number of state and county probation departments.

Historical Background

The practice of assessing user fees for probation services has expanded rapidly in recent years as many jurisdictions sought to develop alternative funding strategies in a time of increasing budget constraints. In recent years, the so-called "taxpayer revolt" and subsequent changes in many funding formulas have resulted in a general expansion of the practice of charging user fees for government services. The user of the service, in this case the probationer, is assessed a fee for services rendered, which helps to offset the government's cost of providing the service. The intent of such programs is to shift the economic burden from the general public to the user of the service.

User fees for probation services began in the 1930s and 1940s in the states of Michigan and Colorado, and, by 1980, agencies in 10 states were assessing fees. However, in the past seven years, the practice of collecting fees has gained more widespread acceptance and expanded rapidly. Today, probation agencies in 24 states are assessing fees for services and enabling legislation is pending in other states.

The total cost of probation agency operations significantly exceeds the amount of fees that can realistically be collected. However, user fees may directly or indirectly represent a significant portion of an agency's revenue base. User fees either supplement or supplant general appropriations for agency operations. Agencies that rely on fee revenues for programs or staff are most dependent on accurate projection methods.

Issues

NCCD's policy analysis identified many factors that administrators believed contributed to the relative success of fee programs. Basically, these factors fell into the following four categories:

1. Fee Assessment
2. Collection Options
3. Sanctions for Non Payment
4. Distribution/Use of Fee Revenue

1. Assessment issues included:

a) What services should be subject to fees?

b) What priority should fees have relative to other financial obligations?

c) Who should determine the appropriate fee?

d) How should fee amounts be determined? and

e) Should fees be waived due to indigency?

Recently, agencies have begun to expand the assessment of fees beyond traditional fees for supervision or fees for residential facilities. Increasingly, agencies are assessing fees for presentence investigations and reports, bail studies, various offender programs, and even Juvenile Probation services. The probationer may now be subject to a variety of fees in addition to other court ordered financial obligations such as restitution, court fines, and child support. If the probationer has an ability to pay a limited amount of money at a given time toward all financial obligations, what priority do fees have? How are decisions made to apply monies collected to various financial obligations?

In most jurisdictions, fees are determined and ordered by the court, frequently based upon an investigation and recommendation by the probation department. Enabling legislation or policy usually determines the amount of

fees that can be assessed. Typical fees for supervision are between $10 - $50 per month and between $75 - $300 per presentence investigation report. Amounts of fees vary greatly and are usually designed to offset the government's cost of providing the service. Frequently, the probation department or court determines the probationer's ability to pay and the fee is set somewhere within a prescribed range. Many agencies waive fees based on indigency, although numerous jurisdictions allow no possibility for waiver and assess a flat fee for every offender.

Fees have withstood legal challenges and courts have supported the concept of fee assessment, provided that fees are not assessed capriciously and are implemented with sound policies and procedures.

2. Collection issues included:

a) Who will collect fees?

b) What methods will be used for collection?

c) What types of payments are accepted?

The basic distinction in collections is whether the probation agency or another entity is responsible for collections. Usually, the probation agency maintains control of the collection process utilizing clerks or a collections division to handle payments and recordkeeping. Some agencies broker out the collections responsibility to private agencies or a separate state or county collections department. In other instances, fee collections are a delegated function of the clerk of the court. The degree of probation officer involvement in collections varies tremendously. In some jurisdictions, probation officers collect payments directly from probationers, while in other jurisdictions probation officers simply direct that payments be made to the appropriate work station or department.

Methods of collection also vary significantly. Some jurisdictions utilize sophisticated, automated, billing systems that are efficient and impersonalize

the transaction. Other jurisdictions use the probation officer to collect payments in the field while contacting the probationer at home or work. This may lead to role conflict as it expands the officer role to handling money; it also increases chances for theft and can result in a poor audit trail. Certified checks or money orders are the most preferred type of payment, although personal checks and cash are accepted by many jurisdictions.

3. Sanction issues included:

   a) What type of sanction should be imposed for non payment?

   b) Should sanctions be imposed if the probationer is indigent?

   c) Should the probation department or court determine and impose sanctions?

In all states except California, fees can be enforced in the same manner as any other condition of probation and possible sanctions may include incarceration. In California, enabling legislation prohibits incarceration or violation of probation for failure to pay fees. California's recourse is through a civil court process and can include civil court remedies such as garnishment of wages not tied to the term of probation. Sanctions actually applied vary throughout the country. Some jurisdictions lack judicial support of sanctions and make no attempt to apply sanctions for non payment. Other jurisdictions aggresively pursue collections and use the threat of violation and incarceration to insure compliance. Sixteen percent of reporting agencies indicate that incarceration is the most likely sanction imposed. Other jurisdictions utilize public service work, extention of probation, or "reprimands" as usual sanctions for non payment of fees.

4. Distribution and use of fee revenue issues included:

   a) How will fee revenue be distributed?

   b) How will fee revenue be used?

One hundred nine agencies reported collecting almost $30 million or an average of $270,000 per agency last fiscal year. The vast majority expect to collect more fee revenue in the coming years. Fees comprise between 1% to 60% of agency budgets and many jurisdictions are increasing fee rates in the hope of generating additional revenue. Forty-one percent of agencies distribute fees to a "general fund" and do not have direct access to fee revenue while 48% have direct access to fee revenue. The remaining 11% split disbursement between general and department funds. Most often, fee revenue is not tied to specific programs, but is applied to general operations. Increasingly, cutbacks are forcing agencies to use fees to supplant, rather than supplement, general budget appropriations. For these agencies, the ability to accurately project fee revenue becomes essential to organizational survival. If agencies cannot accurately project fee revenue, they are placed in a worse financial position, relying on an uncertain revenue base while being forced to dedicate existing internal resources to solicitation, collections, and accounting.

Summary

In sum, agencies increasing reliance on fee revenue creates the need to more accurately project revenues to avoid budget deficits. Differences in agency operations and policies regarding assessment, collections, sanctions, and distribution/use of fee revenue could have a major impact on collection rates. Economic differences between jurisdictions (e.g. unemployment rates, percent of population below poverty levels, etc.), coupled with these operational and policy differences, may additionally affect collection rates.

NCCD's analyses reveals that operational, policy and economic differences do impact on collection rates throughout the United States. The remainder of this paper describes the methodology, results, and implications of the study.

CHAPTER 2

THE DATA SET

In total, data were collected on 121 fee collecting agencies representng fourteen states. The information gathered by survey (see Appendix A for a copy of the questionnaire) was supplemented by agency related data collected by phone and a review of several government publications that report economic statistics by county.[1] The data elements selected for initial study included the following:

Agency Variables

- o Agency type (state judicial, county, state executive)
- o Number of officers
- o Existence of an Intensive Supervision Program (ISP)
- o Average caseload
- o Average ISP caseload
- o Agency budget

Fee Determination

- o Type of fees charged
  - For investigations
  - For supervision
  - For programs
- o Amount charged or range of charges for each of the above
- o Types of cases on which fees are assessed
- o Types of cases where waiver of fee is allowed
- o Who determines the amount of the fee

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[1] "County and City Data Book, 1983," U. S. Department of Commerce, Bureau of The Census. 1984.
"Employment and Earnings," U. S. Department of Labor, Bureau of Labor Statistics, March 1986.

Fee Collection

- Types of collection methods utilized (e.g., billings, garnishment, etc.)
- Who solicits collection of fees
- Who actually collects fees
- Possible penalties for non-payment
- Most likely penalty for non-payment
- Priority given fee collection relative to other financial obligations

Revenue/Cost Variables

- Total amount collected (last 12 months)
- Total amount levied (last 12 months)
- Percentage of fees collected
- Annual cost of fee collection operations

Economic Indicators

- Unemployment rate for jurisdiction
- Median family income for jurisdiction
- Percent of households with annual income under $10,000
- Percent of families below poverty level
- Percent of persons below poverty level

While 121 jurisdictions were represented in the data set, only 90 had enough information available to be used in the construction of the model. The average fee collected annually by these 90 agencies was $75.56 per probationer with a large standard deviation ($79.09) which indicated averages vary widely among agencies. The average monthly fee charged was $16.36 with a standard deviation of $13.90.

Of the 90 agencies used to construct the fee revenue model, 41 (46%) employed less than five officers, while 18 (20%) employed 20 or more line staff. The remaining 34% reported five to nineteen officers.

The smaller offices proved to be the most ideosyncratic, and thus, relationships between fee processes, economics and fee generated revenues were difficult to establish. In smaller, rural agencies the average fee assessed tended to be less and variations in total amounts collected per case were greater. While disaggregating other groups of agencies (based on size) for separate analyses generally resulted in significantly better results (relative to those attained for the entire sample), only marginal improvements resulted from a separate analysis of small agencies.

Of the 121 agencies in the sample, 104 are county probation departments. Nearly 60% of the agencies were fairly small, supervising less than 1000 adult cases; 27.2% supervised 1000 to 5000 cases and only 14.6% reported more than 5000 people on probation. Fees for services were usually assessed on all types of offenders -- felon, misdemeanant, drunk driving (DUI) cases -- although 17.5% of agencies collect fees on DUI cases only. Table 1 outlines the general characteristics of fee processes reported by departments in the sample.

TABLE 1

CHARACTERISTICS OF FEE PROGRAMS

N = 90

	PERCENTAGE OF AGENCIES
Fees assessed on:	
All cases	59.7%
DUI cases only	17.6%
Felons only	8.4%
Other (e.g. Investigations only, special cases)	14.3%
Likely Penalty for Non Payments:	
Secure Detention	14.1%
Other Criminal Court Action	36.4%
Other Administrative Action	35.4%
No Response	14.1%
Who Determines Fee Amount:	
Judge	85.8%
Probation Officer	5.8%
Other	8.4%
Who Solicits Payments:	
Probation Officer	67.5%
Clerk	10.0%
Other	22.5%
Disbursements of Funds:	
Totally accessible by Probation	48.7%
Partially accessible by Probation	6.1%
Not accessible by Probation	45.2%

Only 11.7% of the agencies sampled assign higher priority to fees than to restitution or fine collections, while 45.8% consciously give less priority to

fees. Forty percent of agencies sampled regularly send out billings to probationers and nearly two thirds send out late payment notices. The use of billing statements in particular often means that agencies have automated their fee collection systems.

TABLE 2

COLLECTION METHODS AND PRIORITIES

Garnish Wages	12.5%
Billing Statements Routinely Sent Out	40.0%
Late Payment Notices Sent Out	64.2%
Priority Assigned to Fee Collections:	
Higher than restitution, fines	11.7%
Equal to restitution, fines	42.5%
Lower than restitution, fines	45.8%

Economically, the sample appeared to be less well off than the country is as a whole. This is due to heavy representation from the Midwest and Texas where economic conditions have been quite depressed for the last few years. Only 11% of the sample jurisdictions reported unemployment rates under 6%. At the other extreme, in nearly 21% of the sample jurisdictions, unemployment exceeded 14%. A complete breakdown of rates is presented in Table 3.

TABLE 3

UNEMPLOYMENT RATES

RATE	NUMBER OF JURISDICTIONS	PERCENTAGE
Under 6%	13	10.9%
6 - 7.9%	21	17.7%
8 - 9.9%	16	13.4%
10 - 11.9%	24	20.2%
12 - 13.9%	21	17.7%
Over 14%	25	20.8%

CHAPTER 3

RESULTS OF THE RESEARCH

METHODOLOGY

The attempt to ascertain relationships between policies, procedures, economic indicators, caseloads and fee revenues began with simple bivariate analyses, including cross tabulations and correlations. Factors showing any appreciable relationship to either the percentage of fees collected or to the average amount of fees collected per case were then included in a series of multiple regression analyses.

While bivariate techniques measure relationships between two factors, multivariate analyses are used to "sort out" relationships between all variables entered in an equation and measure the combined ability of factors to influence the dependent variable.

Regression analysis is one of the most common and most powerful multivariate techniques used in projection development. Regression attempts to <u>explain</u> variance in one measure (termed the dependent variable) through variances in other factors (independent variables). For example, one might assume that the average fee collected over a years' time will vary based on the average amount ordered per case. The natural assumption would be that as the amount ordered increases so does the average amount collected. However, if at the same time the unemployment rates differ significantly, the actual amount collected may also vary. Regression allows the relative influence of each of these factors to be measured. When regression is done in stepwise fashion, independent variables enter the analysis in order, based on the amount of additional variance explained in the dependent factor.

Many projection methods are based on time series information, where past data from a single agency are used to predict future events. The cross

jurisdictional approach used in this study however, offers several advantages. Most importantly, it allows for a thorough analysis of the affects of various policies and procedures found in different agencies. In addition, it allows for inclusion of many more data points than are typically available in time series studies. Because many statistical procedures, including regression, are very sensitive to changes in sample sizes, this advantage often leads to far more credible results. Finally, cross jurisdictional studies are less subject to errors caused by serial correlation, a major concern in time series analysis.

THE DEPENDENT VARIABLES

The dependent variable selected for the primary analysis was the average amount of fees collected per case eligible to pay fees. This allowed data from agencies to be entered into the analysis without regard to size. However, because agencies represented ranged from one officer operations to State systems with several hundred staff, separate analyses were also conducted for the following subgroups:

Agency Size:	1 to 4 officers
	5 or more officers
	5 to 20 officers
	20 or more officers

This was done in recognition of the fact that <u>operations</u> of small agencies are often substantially different than those of large organizations. Indeed, the analyses indicated that different relationships between factors were found in agencies of different sizes.

To augment the findings of the above analyses, the percentage of fees collected also served as a dependent variable. While this analysis is not reflected in the projection model recommended, comparisons of results for each

of the two dependent factors analyzed provide interesting insights to the dynamics of fee collection. The percentage of fees collected was not chosen as the dependent variable for the primary analysis because most agencies simply were not able to precisely state aggregate amounts ordered. Their data systems were able to produce precise amounts of collections, but for projection purposes, we were hesitant to compare this to imprecise estimates of amounts ordered. Therefore, the average amount of fees collected per case eligible to pay fees was chosen as the dependent variable for the primary analysis.

GENERAL FINDINGS

The results of these analyses provide considerable insight to the dynamics of fee collections. It is quite evident that policies and procedures instituted within jurisdictions impact on revenues generated much more than general economic conditions. Thus, the amount of revenue generated by fee programs is, to a significant extent, within the control of decision makers. General results of the study are outlined below for each type of factor analyzed.

Fees Ordered

The analysis conducted indicates clearly that fees are subject to the economic law of diminishing returns. Overall, the average fee ordered was negatively correlated with the amount collected per client annually. Simply stated, fees above a certain dollar amount result in lower total revenues, as collection rates decline. For example, when the average fee charged exceeds $17 a month, total fees per case exceeded $100 in less than 14% of the agencies sampled. In contrast, when the average fee ordered was less than $17 per month, the total annual collections per probationer exceeded $100 in 29% of the cases analyzed. The optimal fee level appears to be in the $15 to $17 range.

In agencies within this range, nearly 50% had collections exceeding $100 per case with 24% collecting $150 or more per probationer.

One exception to the phenomenom of diminishing returns was noted. When fees are charged for investigations in addition to supervision, average collections do increase. This occurs for two reasons: the amount charged is fairly high (often $100 to $200) and rates of collection for investigations are also relatively high.

Economic Factors

Of all the economic indicators tested, only the unemployment rate and the percentage of families living below the poverty level in each jurisdiction demonstrated any significant relationship to fee revenues. The correlation between these measures and collections was moderately strong and in the expected direction. In short, as unemployment and poverty increase, collections decline.

Categorizing the unemployment rate into ranges increased its predictive ability somewhat and also should serve to smooth the effects of minor fluctuations caused by temporary changes in economic conditions.

Caseloads

Somewhat unexpectedly, there appears to be no appreciable relationship between collections and caseload size. This may well be due to the fact that most agencies that collect fees do so out of economic necessity. Therefore, due to cutbacks in general appropriations that have occurred over the last decade, caseloads are already at very high levels and differences between 100, 150 or 200 cases produce little in the way of appreciable results in collection rates.

In addition, in many agencies, collections have become a function of clerks and not a responsiblity of probation officers. Hence, they are not subject to the pressures of high caseloads.

Use of Fee Revenues

The relative degree of accessibility of fee generated revenues to probation agencies demonstrated the greatest impact of any of the variables tested on amounts collected. When agencies have direct access to fee revenues, collections increase. This trend was evident in every phase of the analysis, but particularly strong for larger agencies. Small agencies - 1 to 4 officers - very likely have less identity as probation departments separate from other court and justice functions. Hence, disbursement of fee revenues is, in all probability, less of an issue in these agencies. In other jurisdictions, a direct link between fee collections and the funding of agency operations impacts amounts collected. For the largest agencies in the sample, the relationship between collections and disbursement of funds was very strong.

Collection Methods

The methods used to solicit payment of fees also impacted on amounts collected. In general, agencies that send out regular billings and late payment notices tend to collect more fees per probationer. Such agencies have developed systematic approaches to collections, often using automated accounting systems or account clerks to assist probation officers.

The ability to garnish wages also increases collection rates. In fact, this method of coercing payments appears to be at least as effective as the ability to use relatively heavy penalties (revocation, jail time, etc.) for non payment. Despite a strong relationship to amounts collected, the ability to garnish wages is not represented in the final model. This is due to considerable multicolinearity between this factor and other independent

variables and that garnishment is used by only 12.5% of the agencies in the sample.

Finally, although automated billing systems and use of clerks to solicit, collect and track payments increases amounts collected, keeping probation officers at least minimally involved in soliciting payment is also important. The analysis indicated that when agencies remove officers entirely from the collection process, revenues tend to decline.

Sanctions For Non Payment

Penalties used for non payment were moderately correlated with total amounts collected. An ability to impose relatively serious sanctions for non payment results in higher overall collections. However, use of these sanctions, particularly secure detention, is not without cost - both human and economic. Even ignoring ethical considerations, on economic terms alone agencies should carefully weigh the costs and benefits of using incarceration before advocating such penalities for non payment of fees.

Priority Given Fees

Fees are generally only one of several types of collections for which probation agencies are responsible. Others include restitution, fines, and sometimes court costs. The higher the priority fees receive in relationship to other payments, the more money is collected. Fees rarely exceed restitution payments in priority (this was the case in only 12% of agencies sampled) but many agencies accord equal status to fees (43% of agencies sampled).

RESULTS OF REGRESSION

As noted earlier, the principal type of analysis employed was stepwise linear regression. Regression equations were computed for the entire sample and for subsamples based on number of probation officers employed.

Statistical measurements R, R^2, and F Ratio are used in the next set of tables. Before describing the results, a brief explanation of terms is provided. Pearsons R serves a dual purpose. Besides its role as an indicator of the goodness of fit of the linear regression, it is a measure of association indicating the strength of the linear relationship between two variables. The closer the value of R approaches +1.0 or -1.0, the stronger the linear relationship. When Pearsons R is squared (R^2), it yields a measure of the proportion of variance in one variable that is explained by the other. R^2 can be a more easily interpreted measure of association when concern is with the strength of relationship rather than direction. It ranges from a minimum of 0 to a maximum of 1.0. The F Ratio is a test of statistical significance that views the goodness of fit plus the sample size to determine if a meaningful relationship exists.

The overall analysis explained 25% of the variance in the average fee collected per case among sample jurisdictions. Only four factors met the required level of significance for entry into the analysis. These factors are presented in Table 4.

TABLE 4

RESULTS OF REGRESSION
(ENTIRE SAMPLE)

N = 90

VARIABLE ENTERED	R	R^2	F RATIO
Ability of Probation Agencies to Use Fee Revenues	.364	.133	
Priority Given Fee Collection	.431	.186	
Use of Late Payment Notices	.468	.219	
Most Likely Sanction for Non Payment	.500	.250	6.15*

*Significant at the .01 level

Omitting agencies that employed less than five full time probation officers increased the explanatory power of the independent variables substantially. At one point in the analysis, the explanation attained (R^2) exceeded 50%. However, two factors included in this equation were later omitted from the analysis due to a lack of confidence in their relationships to fee payments (based on very low correlations). As a result, the final equation derived explained 47% of the variance in the average fee collected per case across jurisdictions and again utilized only four factors. These results are outlined in Table 5.

TABLE 5

RESULTS OF REGRESSION
(AGENCIES WITH FIVE OR MORE OFFICERS)

N = 49

VARIABLE ENTERED	R	R^2	F RATIO
Ability of Probation Departments to Use Fee Revenues	.577	.333	
Most Likely Sanction for Non Payment	.619	.383	
Average Fee Charged	.663	.440	
Unemployment Rate	.688	.473	7.87*

*Significant at the .01 level.

Further selections to attain more homogeneous groups of agencies for separate analysis further increased the ability of the independent variables to explain variances in collections. However, the smaller sample sizes decreased confidence in the results. As noted in an earlier section, regression analysis is very sensitive to sample size, and high R^2 can be attained fairly easily for small sample sizes. Results of analyses of agencies with 5 to 20 officers and those with over 20 officers are presented in Tables 6 and 7 respectively. It appears that the larger the agency, the more important the fee collection system becomes.

TABLE 6

RESULTS OF REGRESSION
(AGENCIES WITH 5 TO 20 OFFICERS)

N = 31

VARIABLE ENTERED	R	R^2	F RATIO
Ability of Probation Departments to Use Fee Revenue	.475	.226	
PO/Clerk Advisement of Fees Due	.645	.415	
Most Likely Sanction for Non Payment	.764	.583	
Routine Billings Sent Out	.796	.633	6.71*

*Significant at the .01 level.

TABLE 7

RESULTS OF REGRESSION
(AGENCIES WITH 20 OR MORE OFFICERS)

N = 18

VARIABLE ENTERED	R	R^2	F RATIO
Ability of Probation Departments to Use Fee Revenue	.745	.555	
Officer or Clerk Solicitation of Payment	.831	.690	
ISP Present	.907	.822	
Priority Given Fees	.948	.899	
Unemployment Rate of Jurisdiction	.971	.944	
Range of Services Assessed (Investigations, Programs, Supervision)	.992	.983	70.21*

*Significant at the .01 level.

Percentage of Fees Collected

When percentage of fees collected was utilized as the dependent variable, a different set of factors emerged as predictors. Basically, the level of involvement of the court and the actual collection processes employed tend to have greater impact on collection rates than on amounts collected. When the court, rather than probation officer, establishes the amount of the fee to be paid, collection rates increase. Use of routine billing statements, late notices and the ability to garnish wages also increase collection rates. Correlations between each of these factors and percentage of fees collected were significantly higher than those found between these items and amount collected per case.

Results of the analysis for agencies employing five or more officers are presented in Table 8. Additional regressions were completed for the entire sample and the same subsamples used in analyzing average fees collected per case. The results in every instance were quite similar to those presented in Table 8.

TABLE 8

RESULTS OF REGRESSION
PERCENT OF FEES ACTUALLY COLLECTED

N = 49

VARIABLE ENTERED	R	R^2	F RATIO
Who Determines Fee Amount (Judge or Probation Officer)	.428	.183	
Unemployment Rate in Jurisdiction	.507	.257	
Methods Used to Collect Fees#	.569	.324	
Most Likely Sanction for Non Payment of Fees	.608	.369	
Use of Late Payment Notices	.646	.417	3.87**

#Combined measure of routine billings, late notices, ability to garnish.

**Significant at the .01 level.

CHAPTER 4

FEE PROJECTION METHOD

The regression equation derived for agencies with five or more officers produced a significant degree of explanation of variance in average fees collected per case and was based on a large enough sample size to assure some stability in relationships between factors. Projections for smaller departments proved much more difficult, as collections did not exhibit strong relationships to any of the factors analyzed. The analysis completed on the largest agencies in the sample produced the highest level of explanation of any of the regressions. However, it is felt that the sample size (18) is simply too small to produce the degree of stability required for model development. Hence, the method presented is based on the analysis of agencies with five or more officers. It should not be used to project fee revenues for smaller departments.

Statistically, the projection model is represented by the following equation:

$$Y = 27.5 + 22.5\ A + 18.5\ S - .9\ F - 7.7\ U$$

where - Y = Fees Collected Annually Per Case Supervised

A = Ability of Probation Department to use Fee Revenue to Fund Operations

S = Most Likely Sanction for Non Payment

F = Average Fee Charged

U = Unemployment Rate (within ranges)

Application

To simplify agency use of the projection method, the following steps are presented. These steps combine the constant (27.5) with the first variable and present actual values that would be derived from multiplying potential values of each factor by its associated Beta weight (with the exception of Step 3).

To derive projected annual fee income, each agency will need to complete a five step process:

Step 1:

If 100% of fee revenues directly fund probation agency operations, enter	+95
If some fee revenues, but less than 100%, directly fund probation operations, enter	+72.5
If no fee revenue is directly used to fund probation operations, enter	+50

Step 2:

If the most likely sanction for non payment is secure detention, enter	+55.5
If the most likely sanction for non payment is a criminal court penalty short of secure detention, enter	+37
If the most likely sanction does not involve criminal court action or secure detention, enter	+18.5

Step 3:

Multiply the average monthly fee charged each probationer by -0.9. If a range of possible fees exists, use the midpoint of the range available. Also include any one time payments divided by 12 to prorate payments to a monthly basis. Common monthly amounts are presented below for the user's convenience:

Fee Charged		Enter
$ 5.00 X -.9	=	$-4.50
$10.00 X -.9	=	$-9.00
$15.00 X -.9	=	$-13.50
$17.50 X -.9	=	$-15.75
$20.00 X -.9	=	$-18.00
$22.50 X -.9	=	$-20.25
$25.00 X -.9	=	$-22.50
$27.50 X -.9	=	$-24.75
$30.00 X -.9	=	$-27.00
$40.00 X -.9	=	$-36.00
$50.00 X -.9	=	$-45.00

Step 4:

Enter a value which corresponds to the existing unemployment rate based on the following schedule:

Unemployment Rate		Value
0 - 5.9%	enter	$ -7.70
6.0 - 7.9%	enter	$-15.40
8.0 - 9.9%	enter	$-23.10
10.0 - 11.9%	enter	$-30.80
12.0 - 14.9%	enter	$-38.50
15.0% or higher	enter	$-46.20

Step 5:

Combine all of the above entries and multiply by the number of persons on probation. The result is the projection of fee revenue to be generated for the next fiscal year.

If population projections are available, use population figures at the midpoint of the next year, rather than the existing caseload.

Example

To further illustrate use of the fee projection model, the following example is presented:

o Jefferson County retains 100% of fees collected	+$95.00
o The most likely sanction for non payment is conversion by the court of fees to community service hours	+ 37.00
o A uniform fee of $15 is charged to all probationers	- 13.50
o The unemployment rate is currently 9.6%	- 23.10
Total per case	$95.40
Population projections estimate 2450 individuals will be on probation at the midpoint of the next fiscal year	X 2450
Total projected revenue	$233,730

Validation

To further ascertain the accuracy of the projection method, data from nine county agencies not included in the construction sample were obtained.* Agencies sampled were from Indiana and Texas. They were selected at random from state directories of probation agencies. The only selection criterion used was size -- each agency had to employ five or more officers. Data from the last 12 month fiscal period were used.

Comparisons of projected fee revenues and actual amount collected for last year are presented in Table 9.

*Ten agencies were originally included in the telephone survey, but one was unable to provide caseload data and thus could not be used to validate the model.

TABLE 9

COMPARISONS OF ACTUAL AND PROJECTED FEE REVENUES

COUNTY	ACTUAL COLLECTIONS	PROJECTED COLLECTIONS	DIFFERENCE
1 (Texas)	$653,523	$664,000	+1.6%
2 (Texas)	$2,310,206	$2,371,300	+2.6%
3 (Indiana)	$22,600	$21,624	-4.4%
4 (Indiana)	$240,000	$244,555	+1.8%
5 (Texas)	$370,000	$403,160	+8.9%
6 (Texas)	$321,830	$276,308	-8.6%
7 (Texas)	$340,000	$349,716	+2.8%
8 (Texas)	$383,662	$388,991	+1.3%
9 (Texas)	$315,000	$188,480	-40.2%

Projected amounts were within 3% of actual collections in five of the nine agencies in the validation sample and with 10% in 8 of 9 cases tested. In the other agency, collections were substantially above projected amounts. In this case, the average amount collected per probationer was far above the average of the construction sample as well as averages reported for the remaining eight agencies tested. In this agency (Nacogdoches County, Texas), actual collections averaged $203 per case. While projections per case for Nacogdoches were higher than any other agency in the small validation sample ($121), they were still far under actual amounts collected. The above average collection rate in this instance demonstrates what is possible if collection is greatly emphasized or techniques are improved. The Texas Adult Probation Commission indicates that Nacogdoches County pursues collections much more aggresively than other counties in the state, hence, increased collections.

It is also possible to obtain negative projections if an agency 1) has no direct access to fees; 2) imposes limited or no sanctions; 3) charges high fee

rates; and 4) has high unemployment. A negative projection simply means that given these circumstances, fees will generate very little in revenues.

CHAPTER 5

CONCLUSION

There are strengths and potential pitfalls fo statistical projection techniques. For many jurisdictions, projection methods can provide more accurate estimates, eliminate a "guesswork" approach, and enable more realistic goal setting. Pitfalls of projections are that these methods produce only an estimate, which may vary greatly from actual experience if policies, practices and offender populations are significantly different than the norm.

The projection method developed in this study performed very well; 89% of the agencies in the validation sample projected revenues within 10% of actual collections. On a case by case basis, most were within a few dollars of actual collections.

No projection technique can incorporate all of the factors that influence collection rates. Increased emphasis on fees and greater aggressiveness in pursuing collections, coupled with sound collection methods, such as automated billing systems and close monitoring, can increase collection rates.

The most significant finding of this study may be that agencies are the master of their own destiny in regard to fee revenue. Clearly, collection rates are driven largely by factors within a county or state's control (e.g. not raising fees to levels that overburden probationers; returning fee revenue to the probation agency; and using court action as a sanction for failure to pay).

Our basic findings can be summarized as follows:

- Policies and procedures (controllable factors) impact on revenues more than local economic conditions (non controllable factors).
- As fee rates for supervision increase, the amount collected decreases. The optimal fee level appears to be $15-$17 per month.

- Local unemployment rates and percentage of families living below the poverty level are related to fee revenues. As unemployment and poverty increase, collections decline.

- There is no significant relationship between caseload size and fee collections.

- When agencies have direct access to and control over the use of fee revenues, collections increase. This trend was evident for all size agencies, but particularly evident in large agencies.

- Agencies that send out regular billings and late payment notices tend to collect more fees.

- The courts involvement in fee determination appears adviseable. When the court sets the amount of the fee, collections increase.

- Maintaining some degree of probation officer involvement (i.e. reminding probationers to pay) appears adviseable. When probation officers are removed completely from the process, collections decline.

- The higher priority fees are given in relation to other financial obligations (fines, restitution, court costs), results in increased fee revenue.

- The ability to impose sanctions for non payment results in increased collections.

Developing and implementing a fee system raises a host of important questions and issues to be considered. Agencies contemplating entry into the fee arena or those seeking to revise fee systems, should also refer to the policy brief "Fees for Probation Services", for a broad analysis of the issues and options regarding fees. The publication is available at no cost from the National Institute of Corrections' Information Center in Boulder, Colorado.