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CASE WEIGHTING SYSTEMS

A Handbook For Budget Preparation

- MISD
- NON PROP
- VIOLENT
- PARTIAL
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THIS YEAR   NEXT YEAR
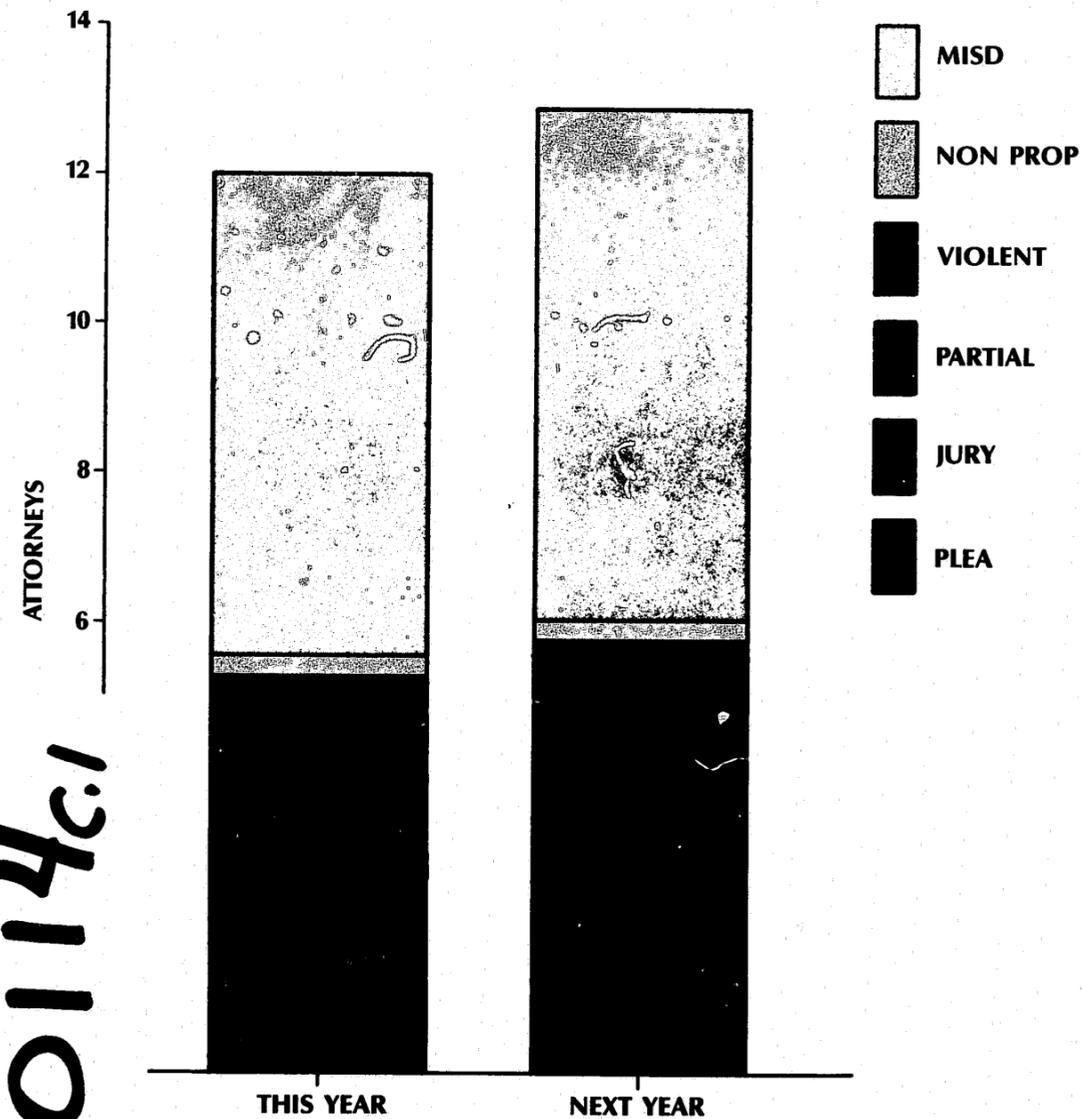
ational Legal Aid and Defender Association

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CASE WEIGHTING SYSTEMS FOR THE PUBLIC DEFENDER

A Handbook for Budget Preparation

Submitted to the National Legal Aid and Defender Association
by
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100114

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PREFACE

At least once a year, the lawyer in charge of a public defender office faces his most difficult opponent in the office's toughest and most serious case. This case, unfortunately, is not one for which the lawyer ever could have prepared in law school, but his position makes him feel particularly aware of the forces of government arrayed against the unpopular client. The client in this case, however, is not an individual charged with a serious offense. It occurs each year during submission of the office budget, and the "client" is the manager's staff, typically overworked and underpaid by any standard imaginable. The "opponent" is usually the city, county or state government, which is faced with increasingly shallow pockets and heavy demands from all sides for scarce public funds.

To prepare for his presentation to the funding source, the lawyer-manager can't turn to the familiar territory of trial preparation. Even though the process is somewhat akin to the combat of the adversarial system, the ground rules are a lot different. Time is usually just as short as it is in preparing for a trial, and the stress is at least as high. The lawyer wonders why any effort should be devoted to the task, since the funding authority usually ignores any rational argument, takes the previous year as a baseline, adds or subtracts a small percentage, and goes on to the next supplicant. The overwhelming feeling is that the funding authority refuses to face up to the real needs of the defender office, and that excessive caseloads and staff burnout are inevitable.

While this scenario is typically reenacted around the country in many defender offices, some defenders have become sophisticated at the art of effective budget presentation based on persuasive information about caseload projections and staffing needs. In a study conducted for the Justice Department in 1983, data on caseload standards in 22 defender programs was presented. The conclusion was that "the state of the art is extrememly low. Where standards do exist, many appear to be informal and based upon guesswork of the chief public defender." (Abt Associates, 1983:68-69).

The study also examined programs which appear to have established a successful track record of achieving adequate funding and a high level of staff satisfaction. The study found that successful approaches shared several important characteristics:

- Each office had developed a sound management information system;
- Each had developed a statistical reporting procedure whereby the funding source felt that they were receiving reliable data;
- Each program was well administered from the top;
- Each had carefully developed caseload standards which were directly tied into the budget request; and
- Each program was able to mobilize strong community support for its effort. (Abt Associates, 1983:73).

During the past year, with funds from the National Institute of Justice, NLADA has conducted research and collected data for the development of weighted caseload systems for public defender offices. The premise of this research has been to "narrow the gap" between the programs which successfully advocate for increased funding and those which do not effectively marshall their resources. At the same time, the research will advance the cost-efficiency of not only defender programs, but of the criminal justice system as a whole.

In the course of the research, NLADA extensively reviewed previous efforts to develop case weighting systems in the courts. In addition, we uncovered information regarding successful caseload controls used by public defender offices throughout the United States. This was combined with actual data collected by three public defender offices and a handbook for public defenders was developed.

This handbook is intended to present the defender-manager with a range of effective tools for the development of accurate data on caseloads, and for accurate staffing projections based

on the caseload data. Ultimately, the purpose of this handbook is to make it easy for those who manage public defender offices to understand, develop and implement a case weighting system in the office, using techniques described here, along with some common sense in the adoption of systems to their jurisdictions.

We, at NLADA, are pleased to contribute to improving the management and operations of defender agencies and to support the highest quality of services being provided by the public defender.

Richard J. Wilson
Director, Defender Division, NLADA

INTRODUCTION

A. Overview

Budgeting for public services traditionally has been hampered by a lack of measures which reflect the dynamics of an agency's operations, the effects of policy, and differences in the complexity of the work being performed. As a result, budgets generally rely on the volume of work processed by an agency, the time used, or a combination of each. In the criminal justice sector, and more specifically in the area of the courts, budgets are generally based on the number of cases processed, the number disposed, time to disposition, and some indications of effectiveness such as disposition or conviction rates and sentencing. These factors are essential for giving dimension and scope to the work in the court environment, but they are limited in their ability to take into account any changes in the nature of the caseload which increase (or decrease) the work involved in processing it.

The concept of work (or effort as we will call it) is a powerful one because it can show where resources, energy and emphasis are placed. In a public defender's office, personnel effort (and most importantly attorney effort) is of direct interest because salaries consume the largest proportion of a public defender's budget, varying from 70 to 80 percent of the total budget for the agency and 48 to 86 percent of state and local government expenditures for criminal justice employees. (Bureau of Justice Statistics, 1983:95).

One aspect of work which has eluded study so far is the range of variation in effort over time and place. Attention has been focussed on case processing times and comparative studies have examined differences in delay in the courts under different local environments (Church et al., 1978; Church, 1982; Cook et al., 1982; Feeney et al., 1982; and Grau and Shestein, 1982, to mention a few). But the concept of case processing time is too broad for management and policy analysis within an agency. This is because the amount of time spent on casework, as reflected by attorney effort, is overwhelmed by the amount of time spent waiting for work to be scheduled.

To illustrate, let us assume that it takes 153 days to dispose of a felony case from time of filing. This pool of case processing time is most likely to be divided between queuing time (waiting for an event to occur) and work time as follows:

Work Step	Calendar Time	Attorney Work Time	Total
Filing to preliminary hearing	5 da 5 hrs.	3 hrs	6 days
Prel. Hrg to Grand Jury	25 da 7.5 hrs	.5 hrs	26 days
Grand Jury to arraignment	7 da .25 hrs	.75 hrs	8 days
Arraignment to motions	30 da 4 hrs	8.5 hrs	31 days
Motions to Jury Trial	45 da 3 hrs	45 hrs	51 days
Disposition to Sentence	30 da 6 hrs	2 hrs	31 days
TOTALS	145 da .25 hrs	59.75 hrs	153 days

We need to separate work from case processing time and examine its dynamics and power. The focus of this study concerns the nature of these hours of work and their implications for the budgeting process. Attorney effort is a powerful indicator of agency performance. It can provide rich insights into the ordering of work and the agency's emphasis and priorities. As such, it has a legitimate role and should become part of the management information systems maintained by public defenders. As Richard Wilson of NLADA so aptly noted, ". . . effective use of the AMICUS System can provide defender offices with a sophisticated management tool which can help defenders make sound decisions on all relevant management and budgetary issues in the office. (NLADA, 1980:i)

B. Weighted Caseload Systems

Providing defense services in criminal cases is the primary function of the office of the public defender. It consumes the largest proportion of the defender's budget but unlike other public delivery systems, the services provided by public defenders varies greatly depending on the client, the case and the way it is disposed. Pleas of guilty to burglaries, for example, consume far less effort than a jury trial for a rape case. This variability has historically led to calls for caseload standards or better ways to relate workload to staffing requirements.

Since the early 1970's efforts have been directed at developing standards, workload measures or other indicators for evaluating the number of cases each attorney should carry. This ongoing need for statements about what constitutes acceptable representation and assistance of counsel reflects the difficulty of quantifying this abstract concept. To measure the gap between what exists and what is viewed as desirable, one can find operational standards based on the number of cases assigned per attorney, units of work, the number of hours spent on representation, the number or motions filed, or even whether acceptable levels of sanctioning were achieved. Other standards link the public defender's caseload to the number of judges or prosecutors. Outside the criminal justice system, indicators such as the size of the indigent population, or the population of the jurisdiction itself, or the crime rate have also served to define staffing requirements.

The tremendous diversity suggests that there is no single measure, a standard or norm that can (or should) be applied to every public defender system. The selection of what measures to use in evaluating adequate levels of caseload or justifying requests for increases in staff will vary considerably among jurisdictions. In many cases, they will reflect the local criminal justice system, its rules, court procedures, criminal workload, volume, resources, organization and jurisdiction. They will also reflect the structure of the public defender system; the extent of its autonomy recognizing that it is generally an unpopular agency in the funding world; and the nature of the caseload it should represent.

Not all offices will need or use the same indicators. This is especially true of case weights. Some offices may not have sufficient volume to undertake the effort involved in developing case weights; others may not have reporting systems which will support the development of case weights; others may simply not be interested in pursuing this line of activity or, may even be too overworked to move into this area in spite of their interest.

Case weights are estimates of the amount of effort (usually attorney effort) needed to bring cases to disposition. They reflect the different levels of effort associated with the type of offense and the dispositional route the case follows. They estimate the most variable part of the work in a public defender's office and that part which places significant demands on attorney resources.

Case weighting systems have had great appeal because conceptually they serve both operational and management purposes. They can assist, at the operational level, in making case assignments and evaluating attorney performance; and, at the management level, in budget planning, preparation and justification.

C. Case Weighting Handbook

This handbook has been developed for directors of public defender agencies or programs. Its purpose is to show the logic of case weights and how the development of a case weighting system can be used to improve budget and management planning. It also implicitly argues for the adoption of uniform statistical reporting systems as part of public defender's management tools. This report is not a "cookbook" in the sense that an agency can develop its own estimates after following a set of instructions. Rather, it describes the ingredients necessary for developing case weights so that the public defender will gain an understanding of the scope of the work involved in estimating weights and see how case weights can be incorporated into the budget process.

Case weights can be developed in a number of ways. Since they are estimates of attorney effort, they can be obtained from a consensus of attorney opinion about the typical levels of effort for different types of cases. (This approach is known as the Delphi method). They can

also be obtained by a survey which is either based on observation or self-reporting. In the former category, observers can time the effort spent by attorneys on different activities or cases. In the latter category, the attorneys report the effort in a fashion analogous to case billing in the private sector.

All surveys, whether based on observation or self-reporting, contain either errors or misstatements or both. Deviations produced by these errors tend to become more identifiable as the sample size increases and the measures of central tendency (such as averages) become more reliable. One method of controlling the incidence of error is to require that the data be analyzed and extreme deviations be identified so that the cause can be determined.

In the private sector, control is exercised by the client who will complain about excessive or unreasonable billings. In the public sector, analogous controls may be achieved by substituting the top level public defender for the client to ensure reasonably accurate reporting. If interest is maintained at the highest level in the office, such controls may be effective. Ultimately, the public will act as the client through the appropriations body which will demand justification of the estimates used.

Errors also tend to become more identifiable the more case weights are used over time. Unless there are significant changes in the court or criminal justice system, or unless the sample sizes are very small, one should see a gradual build up of stable and relatively constant estimates of effort. It is unfortunate, at this time, that so few estimates of case weights exist among jurisdictions. The work presented here is based on three sites, one of which supplied two years of data. Because of the paucity of experience with these weights, it is still too early to look for patterns which we would expect to emerge consistently across studies and which could be used as rough validators of the estimates from other studies. Until the use of case weights becomes more prevalent, tests for reliability will have to be based on the reasonableness of the estimates and their ability to forecast staffing needs.

In this handbook, case weights are estimated from data reported by attorneys using NLADA's AMICUS system. Case closing sheets representing a year's work were collected from three jurisdictions. The fact that the data represented here are based on cases closed in a year reduces another set of problems which could occur if the estimates had been based on data collected in a shorter time frame. Under those conditions, estimates of work could be biased by a "window" effect. For example, within a six week sample period, some cases closed early in the first week (producing low work estimates) and some were not yet closed in the last sample week (producing incomplete estimates). It is possible to control for this type of bias, however. Without going into greater detail here, the reader is referred to the Federal Judicial Center's study of Federal District Court time (Flanders: 1980) for their solution to this problem.

This handbook describes how case weighting systems can be incorporated into the public defender's budget planning process. Its presentation is to the public defender. Therefore, to the extent possible, statistical presentations and techniques have been translated into layman's language. A storybook approach has also been adopted: first, to link together what, superficially, may appear to be disparate chapters; and second, to try to make the rather dreary task of reading technical chapters more palatable.

The handbook describes how case weighting systems can be used for budgeting purposes. (It does not address the operational uses of case weights for case assignments since this introduces a different set of issues and requires more complicated techniques.) It contains a discussion of the types of information that need to be collected by an office, how case weights are developed and how a case weighting system can be incorporated into the public defender's budget planning and preparation process.

Case weights represent only one part of the total budgeting process. Defender agencies perform many other activities which are not necessarily represented by case weights. Case weights may estimate only adult felony criminal work ignoring misdemeanor and juvenile cases. They will not necessarily (but could) measure the amount of effort spent on other matters such as appeals or other post conviction remedies, involuntary commitments, family court matters, pro-

bates or marginal quasi-criminal activities in such areas as child support enforcement. They also will not describe effort spent on such activities as administration, conferences or training. As a result, even though they reflect the most variable part of attorney labor, they need to be fitted into the overall work and activity conducted by the office.

Case weighting systems do not by themselves solve the many and varied problems encountered by a public defender agency. They do not automatically allocate scarce attorney resources in the most efficient manner; nor do they automatically produce standards and norms for attorney performance. They merely provide the public defender with a powerful diagnostic tool which shows where attorney effort is being spent and in what proportions. Case weights shed light on the dimensions and magnitude of the work facing the public defender because they show the dynamics of work in the office; because of this, they play a small but vital role in articulating and quantifying the ebb and flow of cases.

Placed in perspective with other approaches to budgeting and other techniques for determining what adequate caseloads should be, case weights mirror the reality of work in an office. As a result, they have the potential for producing realistic and conservative budget estimates for personnel requirements.

D. Organization of the Handbook

This handbook looks at personnel costs, both attorney and nonattorney. Excluded from consideration is the estimation of capital or construction costs and other direct costs such as supplies, travel, equipment, consultant or contractual services, and so forth.

To illustrate the discussions, we present data from the three public defender agencies which participated in this study: Honolulu, Hawaii; Lincoln, Nebraska; and Nashville, Tennessee. The public defender in Lincoln provided two years of closed case data. As a result, we were able to look at the reproducibility of the case weights from one year to the next in this one jurisdiction.

The purpose of this handbook is to show defenders how case weighting systems can be developed and used in *parts* of the budget planning process and to give the reader support in applying these techniques to his or her own budget process. To do this, we have divided the handbook into the following sections:

Chapter 1 presents two scenarios to show how case weights can play a role in resolving some budget questions and introduce the public defender to the logic of case weights and how they shed light on work, resources and budget justification.

Chapter 2 moves the reader to the budget hearing room and illustrates how case weighting system can be applied to budget presentations. It also underscores the effect of criminal justice system changes, which often are beyond the control of the public defender, on the defender's workload.

Chapters 3 and **4** offer a look at the types of information needed to develop case weighting systems. Chapter 3 contains discussions of the derivation of case weights and the statistics which should be kept by the agency to support case weighting systems. It shows how case weights can be derived from NLADA's AMICUS system.

Chapter 4 describes the personnel information which needs to be collected in order to calculate what resources are currently available through the present budget and what resources remain to do the work after leave benefits from holidays, sick leave and annual leave are subtracted. Then the work hours are distributed over the different activities so that those which are related to criminal case processing can be isolated and used in the case weighting process.

The **epilogue** examines some of the questions which might arise at the budget examination and provides insights into the value and limitations of case weights.

A **bibliography** of selected readings relevant to case weights is appended.

A **statistical appendix** is attached which provides a very brief description of the methodology used to generate the case weights, and the results of the multiple regression analysis. It is recommended that before an office undertakes the development of case weighting systems, it should obtain statistical advice or assistance.

CHAPTER I
BUDGET PREPARATION

It is budget time. The annual chore is here again. Deadlines are set, records are gathered and budget preparation begins. Large or small, every defender's office struggles with planning for the next year, coping with reduced expenditures and forecasting the workload. Budget preparation can take any number of forms, ranging from simple politics or guesswork to a careful examination and evaluation of the agency's needs using sophisticated forecasting and budgeting techniques. Budgets themselves vary from line-item to zero-based to performance budgets. Nonetheless, despite the variety of forms or the mix of assumptions, somewhere in the midst of what is called the budget process is an underlying rationale which produces budgets and justifies requests for additional funds.

Budgets serve many purposes. The one considered here views a budget as a means of providing services based on a proper allocation of resources. In the public sector, the delivery of services is almost always an agency's primary function, and public defender agencies are no exception. As the Bureau of Justice Statistics noted in its 1983 *Report to the Nation on Crime and Justice* 80 percent of state and local justice dollars go for payroll. Budgeting for public service delivery systems is not a simple task. It is complicated by changes in the levels of service being provided and in the nature of the public being served. This means that the fixed budget emerging at the end of the budgeting process has to allow for change and uncertainty. No wonder problems exist! Yet budgets are a necessity; for without them, planning is impossible and without planning, agencies cannot act efficiently or effectively. In the public service sector, the balancing act between funding, personnel and the level of services is never so clearly exposed as in the budget preparation process.

John Smith, the public defender in a medium size office of 12 attorneys, is worried. Not only does crime appear to be increasing but the community is up in arms about it. Police are cracking down; the prosecutor has announced a no plea bargaining policy and the state legislature just passed mandatory minimum jail sentences for the use of guns in the commission of a crime. Caught in the middle of this anti-crime surge, he can only see more work for the office and little chance of increasing his staff. Even now his attorneys have caseloads larger than the numerical standards recommended by NLADA. The situation does not look good; but the real question is, how bad is it?

Last year the office processed 770 felony cases and 1600 misdemeanor cases. Based on recent trends, it looks as if these figures are rising, and the public defender would not be surprised to see the felony caseload rise to 800 cases with misdemeanors following a similar trend, up to about 1700. What would happen if this did come about? Would he have enough resources to handle just the increased workload disregarding the demands that potentially more jury trials would place on his staff because of the mandatory minimums? How can he figure it out?

This public defender is fortunate. Installed in the office is his agency's version of NLADA's AMICUS system and, using the information it generates, John Smith has some tools that will help him examine and analyze the situation.

Pulling out pencil, paper and a pocket calculator, he quickly makes some rough estimates which give him a preliminary diagnosis of the situation and a sense of direction about his options. First, he looks at the workload.

Because he has a case weighting system, he knows that certain types of cases are exceptional in that they impose either heavier or lighter demands on the attorneys. In his office, felony cases are classified by whether they are only partially serviced (because of conflicts or client ineligibility); disposed by jury trial; charged with a violent crime or with a felony that is not property or drug-related.

He lists these special categories on his pad along with the numbers of those cases which the office processed last year. Using his calculator, he projects what he believes will be the new caseload for next year by multiplying last year's percents by next year's totals.

	Last Year's Numbers	Last Year's Percents	Next Year's Numbers	Numerical Difference
FELONIES Total	770	100.0	800	30
Disposition				
partial service	141	18.3	146	5
jury trial	13	1.7	14	1 (+4)
Offense Type				
violent	219	28.4	227	8
nonproperty	77	10.0	80	3
MISDEMEANORS	1600	100.0	1700	100

Since he does not foresee any major changes in the court system, these proportions should hold for next year. But with the new mandatory minimums, he knows that jury trials will increase. Therefore he adds 4 more trials to the projected number. He notes this on the pad.

Even though the number of cases handled by the office may increase, he feels confident that the same levels of attorney effort will be spent on them. From his case weighting system, he knows that his attorneys spend an average of 3.9 hours on misdemeanors. Felony cases are different, however, since they vary by crime type and disposition.

Next he lists the average number of hours of attorney effort for each of the categories. The typical felony case or the one handled most frequently involves a property crime which is disposed by a plea of guilty. It requires, on the average, 6.43 hours of attorney effort. Partial service and "other felonies" (i.e., nonproperty, nonviolent, and nondrug-related) require significantly *less* time than the typical case so parentheses are used to indicate negative numbers. Violent and jury trial cases *add* significant amounts of time. He multiplies these time factors by the differences which he has just projected for next year. By adding and subtracting the appropriate amounts from the projected average hourly additional requirement, he is provided with an estimate of the number of additional attorney hours needed to process next year's criminal caseload.

Case Attribute	Attorney Hours	Added Cases	Additional Hours Needed
FELONIES			
All	6.43	30	193
jury trial	28.00	5	140
partial service	(4.15)	5	(21)
violent	4.20	8	34
other	(3.16)	3	(9)
Total felony hours			337
MISDEMEANORS	3.9	100	390
Total All Hours			727

Well, there it was! Next year he would need 727 more attorney hours just for felony and misdemeanor case representation. But attorneys did more work than what was measured here. These weights measured the average amount of effort spent on a specific case. They had to be inflated

by the other work that attorneys did and were paid for, including even fringe benefits.

Reaching into his top drawer he pulled out a sheet of paper which summarized how attorney time is distributed by different types of activities. Periodically, he had the staff log their hours by these categories so that he could have an up to date view of where resources were being directed. This percent distribution was only a week old.

The twelve attorneys employed full time at 2080 hours a year (40 hours a week for 52 weeks), gave him 24,960 paid attorney hours. But not all of these hours are available for work. Holidays, sick leave and annual leave reduce these numbers by 12.9 percent (the agency's leave rate.) Thus, he really has only 21,744 hours available for work. These hours are distributed among the various activities in the office as indicated below. The estimates for the categories of "administration", "other" and "criminal" are based on the attorneys' own assessments of how they spend their time; the case specific work is based on the case weighting system he had just used. The item labelled "criminal general" is the difference between the overall amount of time the attorneys say they spend on criminal duties and the amount of time spent on criminal case specific work which is measured by the AMICUS logs.

This seemingly complicated division of hours is needed to differentiate between attorney time spent on *caseload* in contrast to attorney time spent on the *workload* in the office.

HOURS	Number	Percent of Budgeted Hours	Percent of Logged Hours
Total Annual Hours Budgeted	24,960.0	100.0	
Less leave hours	3,216.0	12.9	
Total Available	21,744.0	87.1	100.0
a. Administration	985.6	3.9	4.5
b. Noncriminal	3,169.6	12.7	14.6
c. Criminal	17,588.8	70.5	80.9
(1) Criminal general	5,942.4	23.8	27.3
(2) Criminal Case Specific	11,646.4	46.7	53.6
(a) felony case specific	5,406.4	21.7	21.7
(b) misd. case specific	6,240.0	25.0	28.7

Taking the 727 additional hours which he will need next year for the increases in felony and misdemeanor case representation and using the above rates, he adjusts the 727 hours to obtain a total *workload* figure as follows:

Additional hours: criminal, specific	727
plus 23.8% for general criminal	173
plus 3.9% administration	28
plus 12.9% fringe	94
Total hours needed	1022

Now it was done. He needed almost half an attorney (1022/2080) to handle the increased caseload. Not quite enough to justify a new attorney position or even a support position, but obviously a demand on his resources. Leaning back in his chair, his mind ranged over the set of options available and the likelihood of their being achieved. He could absorb some of the workload by shifting resources; for example, he could probably reduce the amount of effort directed to noncriminal matter if he could increase the paralegal staff. But there really wasn't much to shift.

He looked at the distribution again. Perhaps he should consider requesting an additional attorney and justify it by shifting the remaining workload to juvenile case representation. That caseload was also growing and could use extra attention. If he was not successful, then he would inform the chief judge that he could not adequately represent any more clients and hope that court appointed counsel would take up the slack even though such an option was more costly. If only he knew how many additional cases his staff could take and still provide adequate representation! The phone rang and, for the moment, his budget concerns were put aside.

The caller was Elaine Blue, public defender in the adjoining county. She had just heard that a new judge was to be added to the trial court in her county to reduce the felony backlog which had risen to unprecedented heights. The problem was exacerbated by the prosecutor who had adopted a no plea bargaining stance which increased the likelihood of trials. Her question to Smith was how to justify requests for additional personnel.

In Blue's county, jury trials consumed 38 hours of attorney effort. Based on other studies and a knowledge of her court system, she estimated that the new judge would add 25 annual trials to her caseload (about two trials a month per judge.) This represented 950 hours of attorney effort. In addition, the new court should be able to dispose of about 250 felony cases requiring appointed counsel a year which, on the average, would take 6 hours of attorney effort (another 1500 hours.)

Adding these hours showed a need for 2450 hours of attorney time. But this figure still had to be inflated by 40.6 percent to account for time spent on general criminal activities, administration and leave benefits. This adjustment increases the number of attorney hours up to 3445 hours. Clearly, Blue had a need for two new attorneys and additional supporting staff.

Estimating the amount of support staff was fairly straightforward since it can be based on the ratio of attorney staff hours to that of the nonattorneys. The ratios vary according to whether the work is criminal or noncriminal and administrative. Blue knew that in her office the ratio was 3.5 attorney hours for each nonattorney hour. This meant that in addition to the two attorneys, she could justify one additional support person. Blue thanked Smith and each wished the other good luck with their requests.

CHAPTER II

BUDGET HEARINGS

John Smith sat patiently in the county council's hearing room. It was late in the day and not many people were present for his testimony. The council was winding up its hearings on the criminal justice agencies and the attitudes and questions reflected the hard line, get tough approach that the citizens were demanding. As he anticipated, he would find little sympathetic response to budget justification arguments based on concepts such as constitutionally adequate representation or the rights of the individual accused. Better that he rely on professionalism and the efficient management of scarce resources as justification strategies, at least at this point.

His turn came for testifying. With the limited time allotted, coupled with the council's general lack of interest in his agency, he and the council's staff had agreed to use graphics to facilitate his justifications which he had kept as clear and simple as possible.

1. Crime was rising. Arrests were increasing and so too was the workload of the office. The trends over the past 5 years show this and give a basis to his request. Figure 2.1 shows these changes and the projected increases.

2. The variety of cases represented by the office places different requirements on the attorney staff. Depending on the type of crime and how cases are disposed, attorneys may spend a great deal of time on a case or dispose of it quickly. For example, a typical case ending in a guilty plea consumes 6.4 attorney hours, while a jury trial requires almost 6 times this effort, using 34.4 hours of time. Because of their notoriety and seriousness, violent crimes also demand more effort than other types.

Figure 2.2. shows how attorney time varies. The typical felony case (the most prevalent in the office), a property crime disposed by a plea of guilty, takes 6.3 attorney hours. If the case goes to a jury trial, time and costs rise dramatically. If the case is only partially serviced, then less time is needed (only 2.3 hours). Similarly if the crime is not property or drug related it will require less time than more serious felonies. Misdemeanors cannot be ignored either since they require 3.9 hours of work apiece.

3. Therefore, not only is it necessary to identify the amount of work needed to bring cases to closure, but it is also necessary to multiply these workload factors by the volume of cases represented by the agency in order to arrive at some budgetary planning decisions.

Figure 2.3 shows how the dispositional routes affect attorney effort. Figure 2.4 multiplies these factors by the number of cases disposed over a year's time to show how the workload in the office is dependent on this. So although jury trials consume the most effort, they only account for 10 percent of the workload in the office because so many of the cases (77 percent) are disposed by pleas of guilty.

4. The mandatory minimums enacted by the legislature and the no plea bargaining stance announced by the prosecutor are expected to change the demand on his resources and have resulted in a request for an additional attorney.

Figure 2.5 compares staff requirements for the present year with those of next year. The increases in the projected workload have projected a need for an additional attorney.

5. The agency is currently operating with an attorney/support staff ratio of 3 to 1. This increase will not change that ratio, therefore no additional support staff is requested at this time.

John Smith thanked the council members for their interest and attention and prepared to respond to their questions.

FIGURE 2.1
5 YEAR ARREST TREND DATA
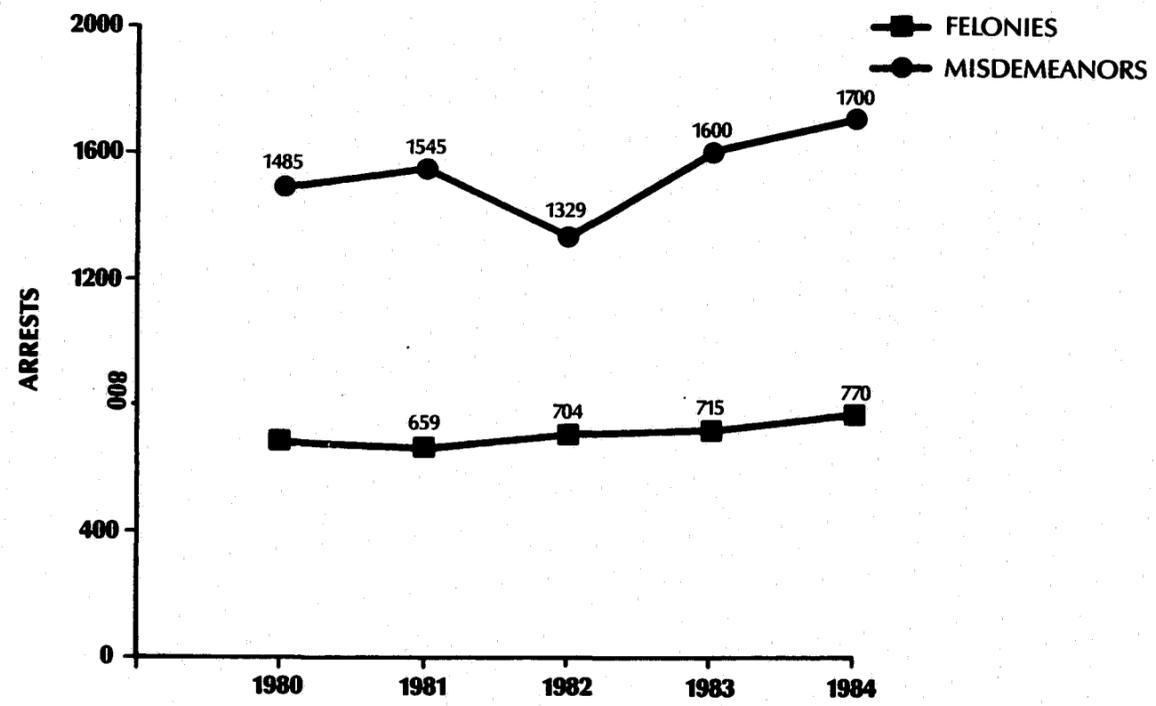
FIGURE 2.2
FELONY CASE WEIGHTS
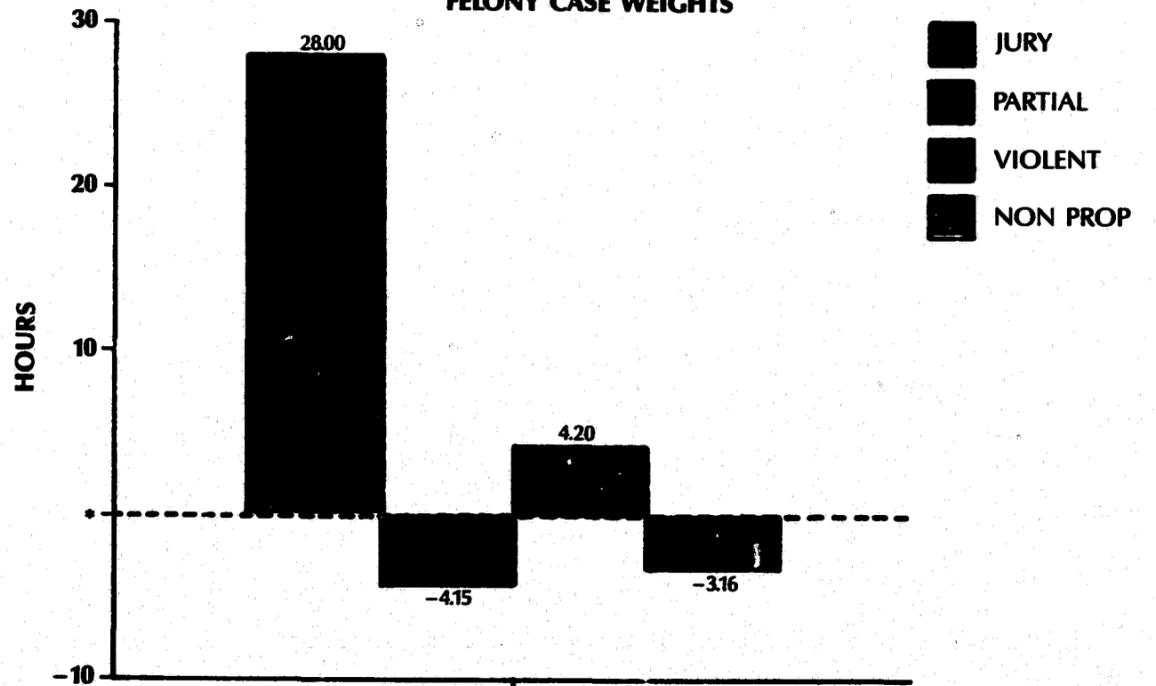
* TYPICAL GUILTY PLEA = 6.43 HOURS

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FIGURE 2.3
AVERAGE ATTORNEY EFFORT BY DISPOSITIONAL ROUTE
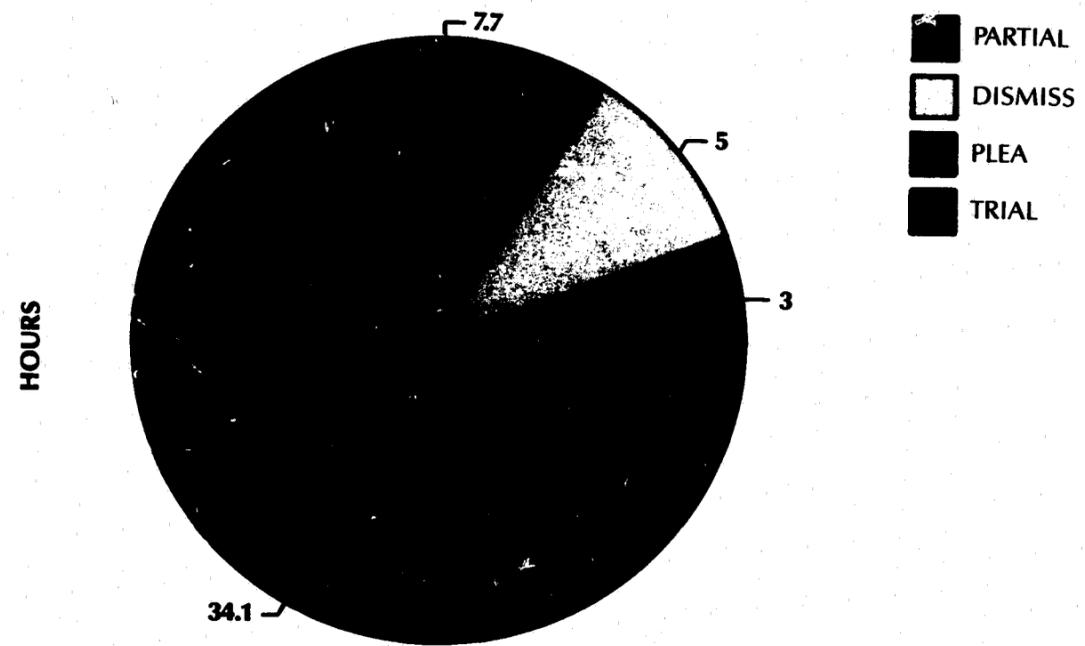
FIGURE 2.4
ATTORNEY WORKLOAD DISTRIBUTION

7
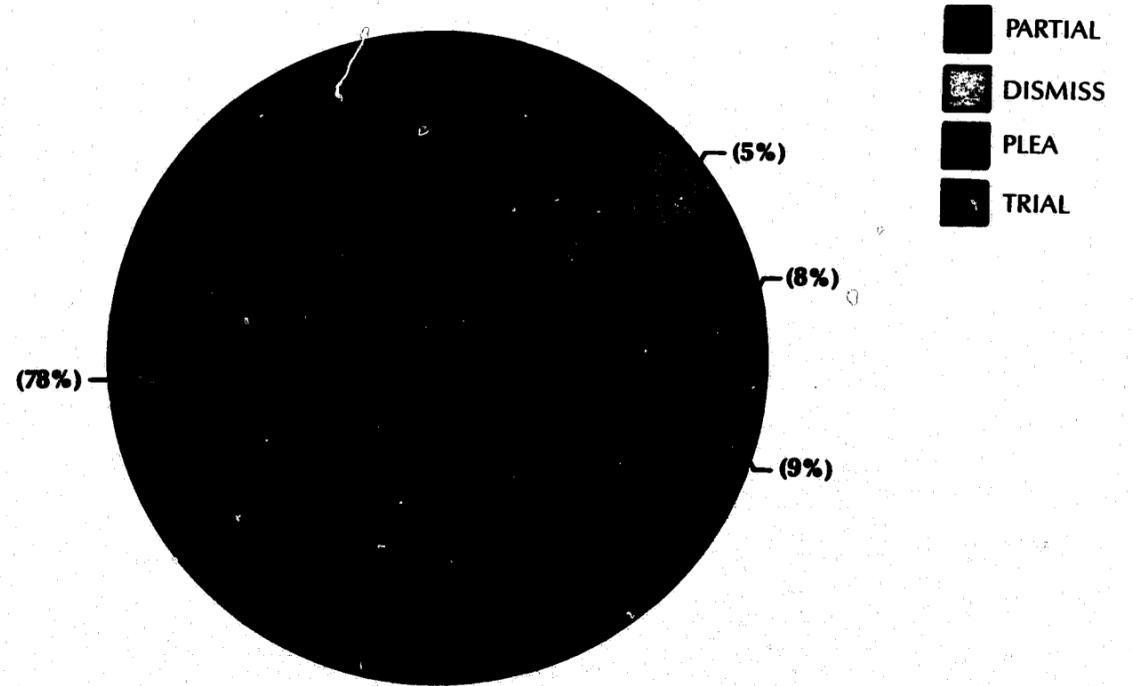
FIGURE 2.5
ATTORNEY STAFF REQUIREMENTS BASED ON
ANNUAL WEIGHTED CASELOAD

MISD

NON PROP

VIOLENT

PARTIAL

JURY

PLEA

THIS YEAR NEXT YEAR
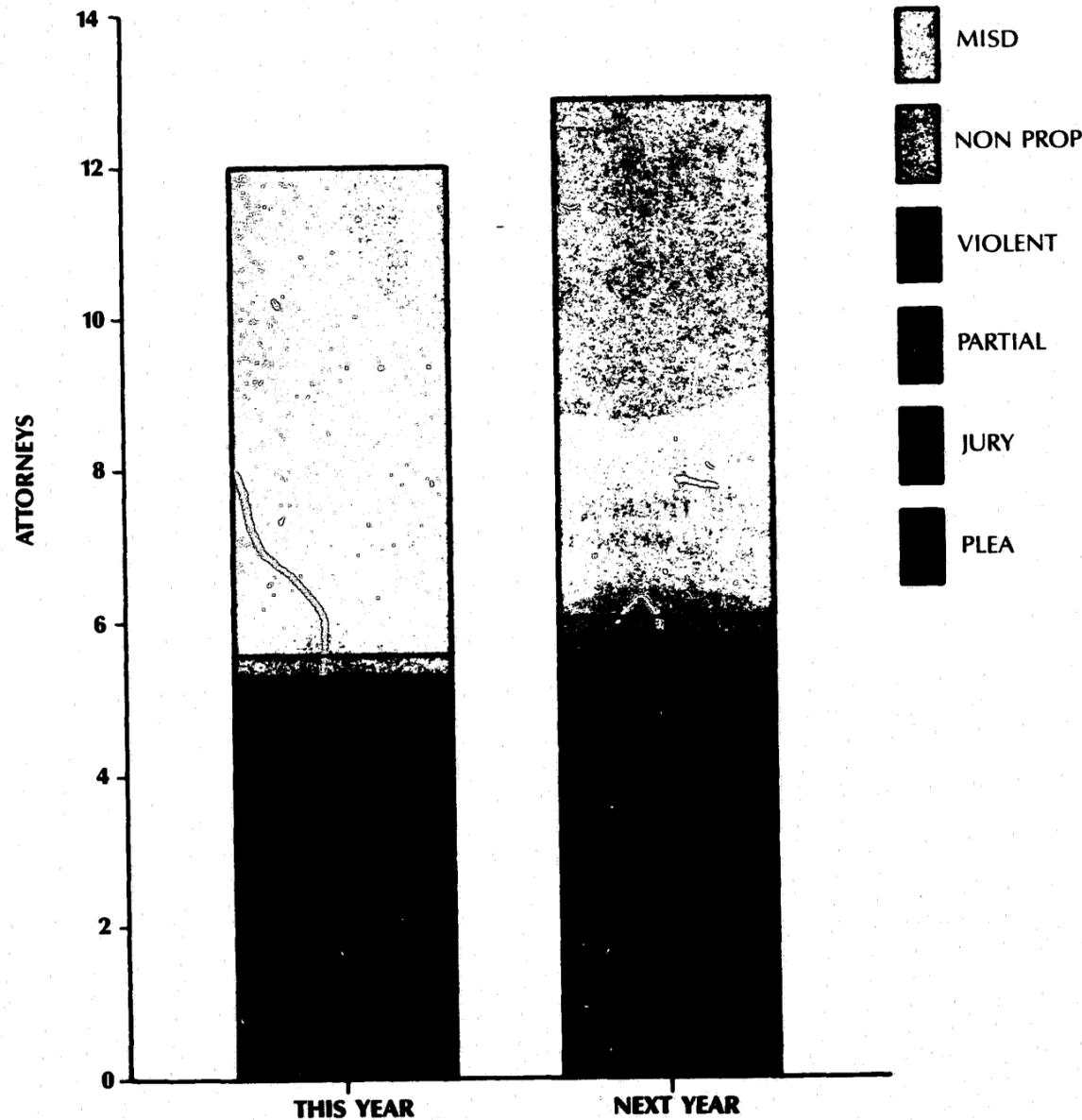
ONE ATTORNEY =1,812 AVAILABLE HOURS

8

Smith feels confident that the same levels of attorney effort will hold for next year. Therefore, using his case weighting system he can project how many attorney hours will be needed because of increases in the caseload. He lists the average number of hours of attorney effort for each type of case that takes more (or less) effort than the "typical" case and multiplies them by the differences which he has just projected for next year. This yields the average number of additional attorney hours needed to process the criminal caseload.

Case Attribute	Attorney Hours	Added Cases	Additional Hours Needed
MISDEMEANORS	3.9	100	390
FELONIES			
All	6.43	30	193
jury trials	28.00	5	140
partial service	(4.15)	5	(21)
violent crimes	4.20	8	34
felony, other	(3.16)	3	(9)
Total felony hours			337
TOTAL ALL HOURS			727

Case weighting systems such as the one used by Smith in the above example can exist only if the office maintains statistics about its caseload and dispositions and has a technique such as NLADA's AMICUS which will capture the amount of attorney effort spent on different types of cases.

This chapter discusses the manner in which both of these information needs can be collected and then analyzed to produce case weighting systems. In the first section, we will look at the volume of work in the office; in the second, the amount of attorney effort expended on this work; and in the third, one technique for deriving case weights.

A. Keeping Caseload Statistics

We will first classify the volume of work in a defender's office by the office's responsiblities (criminal, juvenile, etc.) Since our interest is in adult felony and misdemeanor cases, statistics on that caseload must be collected in a manner that is compatible with the weighting system which will be applied to them.

All research to date has shown that the two basic and essential statistics for case weighting systems are: (1) the *dispositional route* the case followed; and (2) the *type of offense* for which the client was charged.

1. **Dispositional routes** describe how cases exit from the adjudication process. If a case exits early in the process, then less effort is expended on it. For the purposes of case weighting, the following dispositional route distinctions can be made:

a. **Partial service.** This category includes those cases which came to the attention of the defender's office but did not result in representation. It includes, among other types, referrals, conflict of interest cases, cases where private counsel was ultimately retained, or where indigency was not established. Although these cases do not consume a lot of attorney effort relative to other dispositions, (in Hawaii and Nashville, 3 hours were expended on the average, in Lincoln 1 to 1.5), if there is high volume, they may impose a significant workload on the office.

b. **Pretrial dismissals and deferred prosecution.** These two types of dispositions are grouped together because they represent exits early in the process and use about the same levels of effort.

Late dismissals (those that occur during or after a trial, such as a motion for directed verdict, JNOV, or motions for dismissal because evidence was suppressed) should not be counted in this category but rather as occurring at the trial stage since significantly more work is expended in bringing cases to that point.

c. **Guilty pleas.** Includes all cases disposed by pleas. Since guilty pleas constitute the bulk of an agency's dispositions, this route is defined as the typical one and differences in effort expended by the other routes are compared to the typical one of a guilty plea.

d. **Trials.** Research to date has shown that a distinction could be made between jury and bench (or court) trials since the latter usually involve significantly less effort than jury trials (although the Hawaii data show a curiously reverse situation). This can be seen in the following comparison:

	Hawaii	Lincoln	Nashville
Jury trials	28.7	46.3	34.1
Bench trials	33.8	7.9	3.6

These estimates are very important for each office and will vary because of differences in procedural requirements, court operations, the volume of cases processed and local custom and practice. Even though proportionately fewer cases are disposed of by trial, the drain on attorney resources may be considerable.

As an example of the importance of the dispositional route, let us imagine two different offices where the amount of attorney effort expended on cases is the same but the volume differs. We can show this below:

	Office A			Office B		
	Partial Service	Plea	Trial	Partial Service	Plea	Trial
Avg. Attorney Hrs.	2	8	40	2	8	40
No. of cases	100	200	10	30	200	40
Weighted Hours	200	1600	400	60	1600	1600

In Office A, the disposition of cases by pleas uses most of the attorney hours (1600 of 2200 or 73%). In Office B, the situation is very different because trials are increased, resulting in attorney effort being almost equally divided between pleas and trials.

2. **The type of offense** is also important because the more serious the crime, the more attorney effort is expended. The very first distinction to be made is between felony and misdemeanor cases. Felony cases, on the whole, demand more time and energy from the staff. In Hawaii, felonies used an average of 13 hours of effort while misdemeanors used 2.5 hours. In Lincoln, the difference was 23.3 hours for felonies versus 7 for misdemeanors; and in Nashville, the difference was between 6.8 and 3.9. Because misdemeanor case processing moves relatively fast and simply compared to felony processing, an agency is generally safe in using a single average to reflect the amount of effort required to represent misdemeanor cases.

Unfortunately, it is not possible to use the average number of hours spent on felonies for all felony cases. Crimes of murder, rape, robbery and assault usually receive more notoriety and attention. They also involve more adjudication effort especially with respect to motions and trials. As a result, statistics need to be maintained which record the volume of work by the *most serious* charge. For weighted caseload purposes, it is not necessary to record all charges associated with a case (although some indication of multiple charges might be informative for more sophisticated case weighting systems.)

In many jurisdictions, crimes of violence are infrequent. This fortunate circumstance makes it necessary to group offenses so that the weights will be more stable and reliable. Research to date suggests that cases can be grouped into four categories.

a. **Violent crimes:** including murder, kidnapping, rape, robbery and assault.

b. **Property crimes:** including such offenses as arson, breaking and entering, burglary, larceny, fraud, forgery, embezzlement, stolen vehicles, and stolen and damaged property. Generally, property crimes constitute the majority of the caseload in an office but they do not necessarily account for the largest proportion of the workload.

c. **Drugs:** including possession, sale and distribution.

d. **All other crimes:** including consensual crimes like gambling, prostitution and liquor law violations, flight, weapon offenses, public peace and so forth.

Comparing the hours of effort expended by attorneys on these cases in Hawaii, Lincoln and Nashville, some of the differences in the offense categories are evident:

Attorney hours per case			
Offense	Hawaii	Lincoln	Nashville
Violent	17.8	9.8	10.6
Property	10.2	4.5	5.6
Drugs	10.0	5.1	5.4
Other	6.3	4.4	3.9

There may be other factors that are important in explaining differences in case weights. In Lincoln, for example, the pretrial release status of the client (whether detained or not) was an important workload factor. More effort was expended on those cases where the client was released. Also important was whether the client had been convicted of a prior felony (a factor that might lead to incarceration on the present case and thereby call for more defender effort).

It seems reasonable at this point in our studies to assert that there are basic differences in the levels of attorney effort expended which are based on the dispositional route of the case and the type of offense. Other factors which may emerge at individual jurisdictions may be those which reflect the policy and priorities of the office and hence be more unlikely to appear all the time.

The approach adopted for developing case weights is (1) to identify the case characteristics which are associated with differences in levels of work; (2) count the number of cases that have these characteristics; and (3) multiply the average hours of effort by the number of cases to obtain the available attorney hours consumed by criminal defense. Obviously if there is no difference in levels of effort, then there is no need to collect statistics on that piece of information *unless the statistic can be used for other purposes.*

For example, the public defenders in Lincoln spend an average of five hours on felony cases regardless of whether the client is in custody or released. If statistics were collected only for case weighting purposes, the number of offenders in custody or released would not be important. Clearly, however, this count is of major importance to those who are concerned with jail overcrowding or speedy trial issues. All properly designed statistical systems should satisfy as many needs and uses as possible. This requirement results in the collection of many pieces of information. Compared to other uses, the statistical needs for case weighting are very limited.

Inherent is this discussion is a paradox. How does an agency know where variability in effort is located without collecting a lot of information, some of which is unnecessary? There are two possible answers. (1) The agency can rely on the results of analysis conducted by other jurisdictions, much as we have just recommended the collection of dispositional routes and types of offenses as being basic to developing case weights; or (2) the agency can choose to collect a variety

FIGURE 3.1
CASE CLOSING SHEET

Client		Def. number	Attorney		Date opened		Date closed	
Charges		Ct. number	Type of case ☐ Cap ☐ Juv	☐ Fel ☐ Fam	☐ Msd ☐ I.C.	☐ Ord ☐ App	☐ Prob. R ☐ Other:	
Trial Judge		Sentencing Judge		Prosecutor		Arresting Officer		

PERSONAL

1. SEX
1.1 ☐ Male
1.2 ☐ Female

2. MARITAL STATUS
2.1 ☐ Single/Div.
2.2 ☐ Married
2.3 ☐ Head of Household

3. RACE
3.1 ☐ White
3.2 ☐ Black
3.3 ☐ Hispanic
3.4 ☐ Asian
3.5 ☐ Nat. Amer.
3.6 ☐ Other:

4. AGE
4.1 ☐ Under 18
4.2 ☐ 18 - 20
4.3 ☐ 21 - 25
4.4 ☐ 26 - 35
4.5 ☐ 36 - 45
4.6 ☐ 46 - 55
4.7 ☐ Over 55

5. PRIOR RECORD
5.1 ☐ None
5.2 ☐ Juv. only
5.3 ☐ Yes, No Felony
5.4 ☐ One Major Felony
5.5 ☐ Mult. Major Felonies
5.6 ☐ Desig. Car. Criminal

DISPOSITION/REASON FOR CLOSING OF MAJOR COUNT

6.1 ☐ Not Indigent
6.2 ☐ Conflict of Interest
6.3 ☐ Client Withdrew
6.4 ☐ Outside Counsel
6.5 ☐ Advice Only
6.6 ☐ Lawyer Referral
6.7 ☐ Client Jumped Bail or Escaped
6.8 ☐ Dismissed Before Indict.
6.9 ☐ Pre Trial Diversion
6.10 ☐ Incompetent to Stand Trial
6.11 ☐ Dismissed, No Prob. Cause
6.12 ☐ Dismissed, Mot. of Def. or Pros.
6.13 ☐ Plea as Charged
6.14 ☐ Plea or Sentence Bargain
☐ Jury Trial
6.15 ☐ Acquitted
6.16 ☐ Guilty Lesser
6.17 ☐ Guilty as Charged
☐ Bench (Judge) Trial
6.18 ☐ Acquitted
6.19 ☐ Guilty Lesser
6.20 ☐ Guilty as Charged
6.21 ☐ Trial, not guilty-insanity
6.22 ☐ Dismissed, Post-Conv. Motion
6.23 ☐ Post Trial Diversion
6.24 ☐ Probation Revoked
6.25 ☐ Probation Continued
6.26 ☐ Probation Discharged
6.27 ☐ Other (explain) _____

SENTENCE

7.1 ☐ Concurrent
7.2 ☐ Consecutive
Fine or Restitution. Amount: $ _____
7.3 ☐ Only
7.4 ☐ Combined
7.5 ☐ Probation: Little or No Supervision. No conditions.
7.6 ☐ Probation: Intensive Supervision. Court conditions.
7.7 ☐ Periodic incarceration
7.8 ☐ Jail: to 30 days
7.9 ☐ Jail: 31 to 180 days
7.10 ☐ Jail: 181 days to 1 yr
7.11 ☐ Prison: Over 1, to 2 yrs
7.12 ☐ Prison: over 2, to 5 yrs
7.13 ☐ Prison: over 5, to 10 yrs
7.14 ☐ Prison: over 10, to 20 yrs
7.15 ☐ Prison: over 20 yrs
7.16 ☐ Imprisonment for life
7.17 ☐ Death
7.18 ☐ Other _____

When filling in Sentence, mark the total of the consecutive sentences, adding the minimums, if the sentences are given that way.

If the sentences are concurrent, mark the longest of them.

BAIL 8.1 ☐ ROR   8.2 ☐ Bail Met
8.3 ☐ Bail Not Met   8.4 ☐ Custody

ATTORNEY TIME

In Court	Out of Court	Total
•	•	•
HRS THS	HRS THS	HRS THS

Out of Court Time Categories

DE	FF	RS	NG	TR	WT
•	•	•	•	•	•
HRS THS	HRS THS	HRS THS	HRS THS	HRS THS	HRS THS

Comment _____

AMICUS 6/81

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of information recognizing that some of it will not be useful for case weighting systems but will satisfy some other management or operational purposes. For this latter approach, we turn to an examination of AMICUS and its role in developing case weighting systems.

B. Case Weighting Data Requirements

How are case weights developed? Quite simply, they are estimated by statistical analysis techniques from records of time spent on cases by attorneys. Thus, there are two conditions which must be satisfied. First, time records need to be maintained; and secondly, an analysis of these records should be conducted to produce statistically significant weights.

Readily available to public defenders as a time keeping system is the AMICUS system developed by NLADA for public defender offices. AMICUS captures, on logs, the amount of attorney effort expended on individual criminal cases. It provides a base for the development of case weights.

Figure 3.1 shows a "Case Closing Sheet" used by AMICUS which provides information for the statistical analysis. Many jurisdictions have modified this sheet to meet their local circumstances. This was precisely the intent of the developers of the system. Thus, for example, in Hawaii the client's race is described in ethnicities which would rarely be noted elsewhere, including Hawaiian, Polynesian, Samoan, Filipino, Korean and Asian Indian.

The case closing sheet captures the information needed to develop case weights in addition to meeting a number of other statistical and management needs. The amount of time spent by attorneys on the case is recorded by activity, including time spent in court and out of court, and the purpose of the activity which distinguishes between defendant contact, fact finding, research and negotiation. Not surprisingly, most attorney time is spent out of court, doing research or in negotiation.

Since we cannot assume that every jurisdiction expends the same levels of effort based on certain case characteristics or its dispositional route, each item on the closing sheets should be analyzed. This will identify the case characteristics which have significantly different levels of effort. These, then, will be used to develop weights. Because only that information which is recorded on the case closing sheet is analyzed, other factors which might affect attorney effort will be missed. As a result, the case weights will not reflect differences due to these "omitted variables".

Further, the amount of attorney effort expended on a specific criminal case is only a portion of an attorney's work because it does not measure attorney effort spent on other matters (criminal, administrative or other non-case related). The AMICUS logs are case-specific in that they capture only that time which, in the private sector, would be called case-billable.

This distinction cannot be ignored in budget preparation. Much as the private sector distinguishes between billable time and nonbillable time, so also is this appropriate in the public sector. Billable time is that time which can be attributed to a client or a case and billed. It is collected by the time recorded on the AMICUS forms. Nonbillable time is that time which is used to perform all other duties and tasks related to the office and criminal defense work which may include meetings and conferences, research on general topics or issues, training, and even cleaning off desks in preparation for new or different tasks. As we will see, this time consumes a large portion of the hours available for work.

AMICUS only lends itself to the production of case weights. It does not measure effort or work spent on other non-case specific matters. Therefore, as we will see in the next chapter, the remaining nonbillable work has to be added to the billable if the personnel resources are to be distributed for budgeting purposes.

C. Developing Case Weights
1. Using AMICUS

AMICUS lends itself to the development of case weights because attorneys record all case related activity on a log as it occurs. (Non-case related activity is not recorded). These logs are

summarized onto case closing sheets when cases are closed. Case weights are developed by coding and automating the case closing sheets and then, submitting them to analysis to identify those factors that are fairly constant in the levels of effort expended, as well as those that change. For the statistically minded, each of the factors on the case closing sheet is tested for significance using one way analysis of variance. Those that are significantly different are entered into a regression model to estimate the weights. The dependent variable is the total amount of attorney time; the independent variables are the case characteristics.

This is a common statistical procedure which can be performed by a number of resources. In some cases, county data processing agencies may have SPSS programs available to run the data; in other cases, local universities or private consultants may provide this service. The techniques are not complicated and should not be very expensive.

For a number of reasons, some policy and some procedural, we cannot assume that every jurisdiction places the same emphasis on the same types of cases. For example, in Nashville and Lincoln, no difference in effort was observed when cases were classified by race. In Hawaii, there was. Similarly, there were no differences in the levels of effort when cases were classified by the offender's prior criminal history except for one year in Lincoln.

The case weighting system estimates the amount of attorney effort spent on a typical case. A typical case is one which has the characteristics most frequently observed in the office. In the four jurisdictions analyzed here, the typical case involves a young male charged with a property crime to which he pleads guilty. In Hawaii, this case uses, on the average, 7.75 hours of attorney effort; in Nashville, 6.4 hours; and in Lincoln 3.4.

If there are exceptions to the typical case, then adjustments to these numbers are made (either increasing or decreasing the levels of effort.) As we noted earlier, these differences are most observable in the nature of the offense and the dispositional route. Using Hawaii as an example, the adjustments to the typical case which takes 7.75 hours of effort are as follows:

If disposed by jury trial:	increase effort by 20.0 hours
If disposed by partial service:	decrease effort by 3.6
If offense is violent:	increase effort by 5.2
If offense is "all other":	decrease effort by 4.1

Every jurisdiction has its own set of adjustments which reflects its own environment. They can be expressed as formulae and will be used later for budget preparation. For Hawaii, Lincoln and Nashville, the formulae look as follows:

Hawaii:
Effort = 7.75 hours + 20.03 (if jury trial) + 23.07 (if bench trial) − 3.62 (if partial service) + 5.17 (if violent crime) − 4.12 (if "other" felony).

Nashville:
Effort = 6.43 hours + 28 (if jury trial) − 4.15 (if partial service) + 4.2 (if violent crime) − 3.16 (if "other" felony).

Lincoln:
Effort = 3.39 hours + 38.73 (if jury trial) − 3.14 (if partial service) + 3.85 (if violent crime).

Recalling that sometimes other variables emerge as important, Table 3.1 shows that, in Hawaii, both the pretrial release status and the client's age produced significantly different levels of at-

torney effort (adding 4.6 hours if he or she was on ROR and subtracting 3.1 hours if the client was under 18.) Also in Hawaii, another 3.1 hours was added to the case if the client's race was Polynesian.

TABLE 3.1

Site Summary of Case Weights

	Hawaii	Nashville	Lincoln 1982	Lincoln 1983
TYPICAL CASE (Property-Plea)	7.75	6.43	2.85	3.39
Disposition Route				
Jury Trial	20.03	28.00	93.40	38.73
Bench Trial	23.07	*	7.41	*
Partial Service	(3.62)	(4.15)	(2.19)	(3.14)
Type of Offense				
Violent	5.17	4.20	3.11	3.85
Other Felony	(4.12)	(3.16)	*	*
Pretrial Release				
ROR	4.62	*	*	2.80
Bail Not Met	*	*	*	2.57
Bail Met	*	*	2.55	*
Criminal History				
One Felony Conviction	*	*	4.85	*
Habitual Offender	*	*	4.37	*
Age: Under Eighteen	(2.57)	*	*	*
Race: Polynesian	3.10	*	*	*
Sentence Imposed				
Unsupervised Probation	*	*	*	5.41
Jail	*	*	2.98	2.56
Prison: 2-10	*	*	7.65	*
Prison: 11+	*	*	6.51	*

* Not significantly different levels of effort from the typical case.
See the appendix for the results of the regression analyses.

In Lincoln, if the client was released on ROR, then 2.8 more hours of effort was given to the case. The Lincoln analysis also showed differences based on the sentence imposed. (If unsupervised probation was imposed, 5.4 hours were added to the case and if a jail sentence was imposed, the effort increased 2.6 hours.)

Table 3.1 presents a comparison of the weights that emerged from each of the analyses. Two years of Lincoln data were analyzed giving us an opportunity to observe the reproducibility of the weights. There were some staff changes in this office, but no major policy or procedural changes during this period. Thus, it is interesting to observe where the shifts in the levels of effort occurred. The average time spent on the typical property crime case which ended with a guilty plea did not change significantly, nor did the levels of effort associated with cases partially serviced. But major differences occurred with jury trials. This difference is most reasonably explained by the small number of jury trials which had public defender representation (15 in 1982 and 9 in 1983. With such a small sample and because these cases are most widely variant in levels of effort, shifts like this are not unexpected. Until a sufficient number of cases are measured, it may be useful for the public defender to combine the two data sets to produce a more reliable case weight.

The fact that other factors emerged as significant from one year to another, such as the pretrial release status and the prior record of the client may indicate a shift in priority emphasis on these types of cases in the office or, they may be abberational. Until more experience is gained with the weights, each position will have to be considered. For the present time, it appears that the best estimates can be derived using offense type and dispositional route. The net result, after looking at the differences in these levels among the jurisdictions, is to conclude, at least tentatively, that each jurisdiction should have case weights tailored for their environment and working procedures rather than attempting to adopt some other jurisdiction's weights.

FIGURE 3.2

DAILY LOG FOR CRIMINAL CASE TIME

Date: _____

Attorney: _____

Assignment: _____

_____ TOTAL TIME WORKED (Hrs:Min)

_____ 1. on specific crim. cases (from log)

_____ 2. on crim. matters not case-specific (include traffic, juvenile)

_____ 3. on office admin. duties

_____ 4. on non-criminal matters (include involuntary commitments, appeals)

(see reverse for instructions)

ACTIVITY CODES FOR FELONY (F) OR MISDEMEANOR (M)

Activity	Related Step	Result
1. Papering*	10. Magistrates Court	A. Hearing Completed go to next step
2. Conference, Negotiation, Preparation for Court Appearance or Trial	11. Dis. Ct.- Bond/Counsel Set	B. Case Disposed
3. Case File Documentation	12. Probable Cause	C. Continued, not reached
4. Preparation for Sentencing or Presentence	13. Grand Jury	D. Continued for Disposition
5. Post Sentencing Procedures, Activities, Appeals	14. Admin. Court	E. Continued, other
	15. Calendar Call	F. Called and Failed
6. Voluntary Dismissal*	16. Trials	G. Farmed Out (Public Defender Use Only
7. In Court	17. Sentencing	H. Not Applicable
	18. Prob./Parole Revoc.	
*Prosecution Use Only)	19. Not Applicable	
	20. Wait	

Complaint Number	F/M /MA	Defendent's Name	Act. Code	Rel. Step	Rslt Code	Hrs:Min	Charges	Notes
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		
						:		

INSTRUCTIONS FOR COMPLETING DAILY LOG

A. TOTAL TIME WORKED (ALL ATTORNEYS)

The purpose of this entry is to record how an attorney's time is distributed over a working day. Because an attorney's working day may vary drastically depending on trial status, compensatory time or leave, **total time** should reflect these conditions.

1. **Time worked on specific criminal cases** refers to adult criminal cases (excluding traffic but including drunk driving cases) that can be identified by a criminal case number. Record time on the log below and enter total here.

2. **Time worked on criminal matters not case specific** includes all attorney time not specified above that is related to criminal prosecutions such as juvenile and traffic matters. It also includes time spent on such simple things as cleaning off your desk, filing papers, preparing for other activities, reading journals or materials, talking to colleagues, training, or administering small operational units.

3. **Time spent on office administrative duties** will apply to only a few attorneys since this category relates to activities that are officewide, such as office administration, management, policy, personnel, records, budgeting, and planning.

4. **Time spent on noncriminal matters** should be recorded in this category. This includes such areas as child support enforcement, civil matters, appeals, and involuntary commitments.

B. LOG FOR CRIMINAL CASE TIME (ATTORNEYS WITH CRIMINAL CASELOAD)

1. Enter case number, defendant name, and indicate whether case is a felony or misdemeanor.

2. Effort should be recorded each time it can be identified with a criminal case number (or numbers if cases are joined). One may think of this as being analogous to a private attorney billing his or her time to a client.

3. Time should be classified in three ways: (1) by activity, (2) by its relation to the nearest court process step, and (3) the result of in court appearances.

4. **Only one** activity, court step, and result should be entered on a line. If more than one occurred, use as many lines as necessary.

5. The results should be interpreted as follows:

   a. **"Hearing completed"** means that the scheduled court appearance was completed and the case is scheduled for the next process step.

   b. **"Case disposed"** means that the case has been adjudicated by plea, conviction, acquittal, or dismissal. It also is used to show that sentencing has occurred.

   c. **"Case continued"** occurs when the scheduled hearing for this case is not reached or concluded and a new appearance is set. If the case is continued for a plea or other disposition then this is separately identified.

C. Continuation sheets are available if more space is needed for the activities on that date. Use the activity codes from the cover sheet.

— Thank you for your assistance —

2. Using Process Step Logs

If a jurisdiction does not have an AMICUS system in place, or one similar to it, and does not want to track cases from beginning to disposition to obtain these efforts, another procedure is available. This procedure estimates the amount of time attorneys spend on each of the process steps in the adjudication process and then uses these estimates for case weights.

The emphasis differs from case tracking which is the AMICUS focus to case processing. Daily logs maintained by attorneys record time spent on identifiable cases, by the type of activity and link it to a step in the adjudication process—intake, first appearance, accusatory, pretrial, trial and postconviction. Estimates of total attorney effort can be obtained by multiplying the process step weights by the number of cases processed at each step. This will yield essentially the same workload data as the AMICUS system provides. Figure 3.2 shows an example of this type of log and the reader is referred to the on-going cost study being conducted by the Jefferson Institute for Justice Studies which uses this technique.

The advantage of this approach is that it can produce estimates of effort in a relatively short time period: six to eight weeks, depending upon the volume of work in the office. The disadvantage is that few offices maintain statistics on the process step location of case dispositions.

To capture this information a report similar to that shown in Figure 3.3 is needed. For each case closed, the disposition and location of the disposition is captured producing the needed caseload statistics.

In the following illustration, the average number of attorney hours expended is calculated for each process step. These hours are accumulated so that attorney effort can reflect the dispositional routes. The following table presents some hypothetical data to illustrate this technique.

FIGURE 3.3

FELONY DEFENDANT INCIDENT DISPOSITION REPORT

Date Closed: _____

Date Opened: _____

Disposition Stage

1. Screening
2. District Court
3. Grand Jury
4. Arraignment
5. Superior Court

Disposition

1. Declined-Pre-Warrant
2. VD/No Papering
3. VD/Post Warrant Declined Papering ADA: _____
4. VD/Plea to Other Pending Charges
5. VD/No Action by Grand Jury
6. VD/Other _____
7. VDWL
8. Deferred Prosecution
9. No Probable Cause
10. No True Bill
11. Plea - Most Serious Felony or More Than One Felony if Several of equal Seriousness
12. Plea - Lesser Felony Charge or Less Than all Felonies
13. Plea - To Misdemeanor
14. Trial - Guilty/Most Serious Felony
15. Trial - Guilty/Lesser Felony
16. Trial - Guilty/Misdemeanor
17. Trial - Not Guilty
18. Speedy Trial Dismissal
19. Other _____

Original Charges This Incident
(circle all applicable)

1. Murder (14-17)
2. Rape/Sexual Assault (14-27.2 to 27.5)
3. Arson/Other Burning (14-58 to 67.1)
4. Kidnapping (14-39, 41)
5. Armed Robbery (14-87)
6. B & E Residence (14-51, 54)
7. Manslaughter (14-18)
8. Felony Assault (14-32)
9. Indecent Liberties (14-202.1)
10. Narcotics Felony (Non Marijuana) (90-95)
11. Common Law Robbery (14-87.1)
12. Conspiracy (Common Law)
13. Discharging Firearm Into Occupied Property (14-34.1)
14. Fraud/False Pretense (14-100)
15. Embezzlement (14-90 to 92, 254)
16. B & E Other Building (14-54)
17. Possession of Stolen Goods (14-71.1)
18. Larceny (14-72, 74)
19. B & E Conveyance/Machine (14-56, 56.1, 56.3)
20. Marijuana Felony (90-95)
21. Forgery & Uttering (14-120, 122)
22. Hit and Run (20-166(a))
23. Credit Card Cases (14-113.8 to 113.7)
24. Escape (148-45(b))
25. Fugitive
26. Other (_____ /Statute)

Type of Activity	Avg. Level of Effort per attorney hour		Cumulative level of attorney hours
First appearance	.2		.2
Preliminary Hearing	1.5		1.7
Grand Jury	.4		2.1
Arraignment	.3		2.4 baseline
If plea, add 2.4 +	3.3	=	5.7
If bench trial, add 2.4 +	4.0	=	6.4
If jury trial, add 2.4 +	28.3	=	30.7

For this illustration, the offense categories were not shown; but they would be available from the logs. Applying the caseload statistics to these estimates will yield essentially the same information produced by the AMICUS system and can be subjected to the same statistical tests for significance to identify the weights needed for budgeting. Either technique can then be used to estimate the number of attorney hours required to bring cases to disposition.

D. Estimating Case Billable Time

When John Smith wanted to estimate the number of hours that an increase in caseload and in jury trials would produce, he multiplied the differences he expected by the number of attorney hours they consumed. Once that was done, he had an estimate of the additional attorney hours needed on a "case billable" basis.

Case Attribute	Attorney Hours	Added Cases	Weighted Attorney Hours
MISDEMEANOR	3.9	100	390
FELONIES			
All	6.43	30	193
Jury trials	28.00	5	140
Partial service	(4.15)	5	(21)
Violent crimes	4.20	8	34
Other felony	(3.16)	3	(9)
Total Felony			337
TOTAL ALL HOURS			727

The 727 hours represent only one part of an attorney's activities. They reflect only case billable time and do not include other activities normally associated with the position. To flesh out this figure and make it reflect the total requirements of the office, it is necessary to understand how the resources are used in the office and what relationship case-billable time has to all other duties.

CHAPTER IV

PERSONNEL INFORMATION AND RESOURCES AVAILABLE FOR WORK

Taking the 727 additional attorney hours which he will need next year to handle the increases in felony and misdemeanor cases and using the personnel activity rates for the office, Smith adjusted the 727 hours to obtain an estimate of workload as follows:

Additional hours: criminal, specific	727
plus 23.8% for general criminal duties	173
plus 3.9% administration	28
plus 12.9% fringe	94
TOTAL HOURS NEEDED	1022

Now it was done! He needed almost half an attorney (1022/2080 annual hours paid) to handle the increased caseload. Not quite enough to justify a new position, but obviously a demand on his resources.

John Smith had to adjust the additional number of attorney hours he had projected by time spent on other activities and included in the budget. He knew that case weights identify only the amount of attorney effort spent on "case-billable" activities and that this represents only about 60 percent of the total time budgeted and paid for. The list Smith pulled from his desk drawer showed him how this additional time was spent. Even Elaine Blue had a list. Otherwise, how would she have known that her ratio of attorney hours to nonattorney hours for criminal matters was 3.5 to 1 and that this fact would be used to justify her request for an additional nonattorney position?

The rates which Smith and Blue used to adjust work hours up to budget hours were not difficult to establish. This chapter describes how they were calculated and how the basic information is collected.

A. Calculating Leave Rates and Hours Available For Work

Personnel costs are based on the assumption that all employees work full time (which we have defined here as 2080 hours per year) or some proportion of that time, less the amount of time set aside for leave, vacations, holidays, etc. This leave time should be subtracted from the amount of time budgeted so that the **time available for work** can be calculated. It is on this time that case weighting systems are based and which form the basis for budget preparation and justification.

Since leave benefits may vary because of length of employment or part-time status, the hours available for work may also vary. As a result, we should calculate how many hours are paid for, how many are set aside for leave benefits, and the balance which is available for work. An example of the form needed to do this calculation is shown in Table 4.1.

From this form, leave rates for attorneys can be calculated by dividing the number of hours set aside for leave by the total number of attorney hours budgeted. Similarly, leave rates for nonattorney staff can be computed. Finally, the ratio of attorney hours available to non-attorney hours can be computed. The result of this can be summarized as follows:

1. **To estimate the number of hours available for work:**

   Subtract the annual hours set aside for holidays, sick leave and annual leave from the total number of hours budgeted.

   From Table 4.1, for employee Smith, this is:
   2080 (budgeted) − 88 (11 holidays) − 80 (10 sick leave days) − 120 (15 annual leave) = 1,792 hours available for work.

2. **To estimate the leave rate for attorneys and nonattorneys:**

   Divide the total hours set aside for leave by total hours budgeted. Do this for attorney hours and nonattorney hours

   From Table 4.1, this yields:
   For attorneys: 3,216 divided by 24,960 = 12.9%
   For nonattorneys: 1,056 divided by 8,320 = 12.7%.

3. **To estimate the ratio of attorney to support staff:**

   Divide the total number of attorney hours available by the total number of nonattorney hours available.

   From Table 4.1, this yields 21.744 to 7,264 or a ratio of 3 to 1.

Table 4.1

Calculation of Leave Rates and Hours Available for Work

Name	Personnel Classification	Annual Hours	Annual Leave	Holi-days	Sick Leave	Annual Leave Hours	Annual Available Hours
ATTORNEY							
Smith	Public Defndr.	2,080	15	11.0	10	288	1,792
Green	Chief Deputy	2,080	15	11.0	10	288	1,792
Johnson	Deputy P.D.	2,080	12	11.0	10	264	1,816
White	Deputy P.D.	2,080	12	11.0	10	264	1,816
Miller	Deputy P.D.	2,080	12	11.0	10	264	1,816
Brown	Deputy P.D.	2,080	12	11.0	10	264	1,816
Powell	Deputy P.D.	2,080	12	11.0	10	264	1,816
Rogers	Deputy P.D.	2,080	12	11.0	10	264	1,816
Murphy	Deputy P.D.	2,080	12	11.0	10	264	1,816
Thompson	Deputy P.D.	2,080	12	11.0	10	264	1,816
Morgan	Deputy P.D.	2,080	12	11.0	10	264	1,816
Williams	Deputy P.D.	1,040	6	5.5	5	132	908
Kelley	Deputy P.D.	1,040	6	5.5	5	132	908
NON ATTORNEY							
Clark	Adm. Aide 1	2,080	12	11.0	10	264	1,816
Lewis	Legal Steno 1	2,080	12	11.0	10	264	1,816
Jackson	Clerk/Typist 2	2,080	12	11.0	10	264	1,816
Taylor	Law Clerk	1,040	6	5.5	5	132	908
Jones	Law Clerk	1,040	6	5.5	5	132	908
TOTAL							
All Staff		33,280	198	176.0	160	4,272	29,008
Attorney		24,960	150	132.0	120	3,215	21,744
Nonattorney		8,320	48	44.0	40	1,056	7,264

OFFICE LEAVE RATE	
Attorneys	12.9
Nonattorneys	12.7
RATIO: Attorneys to Nonattorneys Hours Available	2.99

B. Distributing Hours Available For Work By Activity.

Not all public defender activity is related to case-specific criminal defense work; yet the case weighting system applies only to that activity. In order to identify what portion adult criminal defense is of all the work in the office, we need to distribute the employees' work according to the responsibilities of the agency.

Table 4.2

Percent Distribution of Personnel Time

ATTORNEY	Annual Available Hours*	All Activities			Criminal		
		Crim- inal	Other	Adminis- tration	Felony	Misde- meanor	Juve- nile
Smith	1,792	20	35	45	100	0	0
Green	1,792	90	0	10	100	0	0
Johnson	1,816	100	0	0	90	10	0
White	1,816	100	0	0	85	10	5
Miller	1,816	80	20	0	90	5	5
Brown	1,816	100	0	0	70	20	10
Powell	1,816	100	0	0	90	10	0
Rogers	1,816	100	0	0	75	20	5
Murphy	1,816	80	20	0	0	20	80
Thompson	1,816	100	0	0	5	95	0
Morgan	1,816	50	50	0	0	100	0
Williams	908	100	0	0	100	0	0
Kelley	908	0	100	0	0	0	100
NON ATTORNEY							
Clark	1,816	0	0	100	0	0	100
Lewis	1,816	75	25	0	75	15	10
Jackson	1,816	75	15	10	75	20	5
Taylor	908	100	0	0	75	25	0
Jones	908	100	0	0	75	25	0
TOTAL							
All Staff	29,008						
Attorney	21,744						
Nonattorney	7,264						

*From Table 3.1

1. Classifying Activity

In its simplest form, a distinction can be made between criminal, administrative and other activities. (Finer distinctions can be made, if so desired, between, for example, appeals, mental competency hearings or child support enforcement.)

Administrative activities may be defined as those activities devoted to the administration of the agency, its policy and program setting, direction and guidance and liaison with other agencies or groups. This type of administration is officewide in scope and **does not apply to the administration of subunits within the office such as supervising the criminal branch.** Most of the administrative work is performed by the chief public defender and the deputy chief. Very little is done by the trial attorneys.

Criminal case activities needs to be classified in two ways: first, by adult felony, misdemeanor and juvenile case representation (necessary if the weighted caseloads are derived only for felony cases and/or misdemeanors); and secondly, by whether the activity is case specific or general. These distinctions are necessary because the AMICUS system or systems similar to it which produce the weighted caseloads **only estimate case specific time** and then only for a certain set of cases as defined by the office (for example, felonies).

Much of an attorney's work revolves around activities which cannot be directly assigned to a specific criminal case. This includes such simple matters as cleaning off desks, filing papers, reading new cases, answering correspondence and writing reports, doing general research in a library, attending meetings, preparing memos, and perhaps even some more serendipitous pursuits. It will be clear when this exercise is over that these activities consume substantial amounts of time and they have to be considered in estimating personnel requirements.

Thus, if we can estimate total time spent on criminal activities, undifferentiated as to whether it is either case specific or not, then by subtracting case specific activities from this total, we have an estimate of the amount of time spent on **general** criminal activities.

Other activity is used generically here to represent special categories which the public defender might wish to identify separately. This may include child support enforcement, appeals, mental competency hearings or parole and probation revocations.

2. Collecting activity data

There are two ways to obtain the distribution of personnel by activity and they are dependent mainly on the size of the office. The first way is to list all attorney and nonattorney staff on a form and have each distribute his or her time by the percent devoted to criminal, administration and other duties. This approach works well in smaller offices since assignments are generally known by the chief administrator, most are directly related to adult criminal case activities and the time it takes to make the distributions is brief. An example of this type of listing is shown in Table 4.2.

If the office is large, then such a listing may suffice for the nonattorney staff but the attorneys should keep a log of their time for a pay period. It is important in these larger offices that the distinction between administrative time and other noncriminal duties be captured. As the office increases in size, these activities also increase and are spread over more attorney personnel than in smaller jurisdictions.

For the larger offices, logs should be kept by each attorney for a typical pay period. The log should record on a daily basis the actual time an attorney worked (not including lunch or leave) whether it was reimbursed or not. This latter point is important because trial preparation for a specific case may consume 10 hours or more on the day prior to trial which, though not recompensed, is work. Analogously, some days may show only 6 hours of work because the attorney used sick leave or took compensatory time off.

The purpose of this log is to distribute attorney hours by the different types of activities performed in the office. An example of a typical daily log is shown in Table 4.3.

As an aside, we have been asked whether time spent waiting should be recorded by the attorneys. This is a valid question since this time is unproductive and "dead". Our response is that it depends on the public defender. It should be included as part of an attorney's total case work. However, it does not have to be identified as a separate activity **unless** it will serve some other useful management or planning purpose. It cannot be excluded from measuring attorney effort because it is a cost which has to be absorbed by the agency much as the costs of holidays or annual leave are absorbed.

TABLE 4.3

Daily Log of Attorney Effort by Activity

Attorney Name Jones				Unit: Trials	
Date	Hours Worked	Admin.	Other	Criminal Felony	Misdemeanor
5/6	10.5	1.0		9.5	
5/7	6.0	6.0			
5/8	8.0		2.5	0.5	5.0
5/9	9.5			4.0	5.5
5/10	8.5			8.5	
5/13	10.0	1.0	3.0	6.0	
5/14	7.5			7.5	
5/15	9.5			4.6	4.9
5/16	8.0			0.5	7.5
5/17	9.0		8.0	1.0	

Table 4.4

Distribution of Hours Worked

	All Activities			Criminal		
	Criminal	Other	Administration	Felony	Misdemeanor	Juvenile
ATTORNEY						
Smith	358.4	627.0	806.4	358.4	.0	.0
Green	1,612.8	.0	179.2	1,612.8	.0	.0
Johnson	1,816.0	.0	.0	1,634.4	181.6	.0
White	1,816.0	.0	.0	1,543.6	181.6	90.8
Miller	1,452.8	363.2	.0	1,307.5	72.6	72.6
Brown	1,816.0	.0	.0	1,271.2	363.2	181.6
Powell	1,816.0	.0	.0	1,634.4	181.6	.0
Rogers	1,816.0	.0	.0	1,362.0	363.2	90.8
Murphy	1,452.8	363.2	.0	.0	290.6	1,162.2
Thompson	1,816.0	.0	.0	90.8	1,725.2	.0
Morgan	908.0	908.0	.0	.0	908.0	.0
Williams	908.0	.0	.0	908.0	.0	.0
Kelley	.0	908.0	.0	.0	.0	.0
NON ATTORNEY						
Clark	.0	.0	1,816.0	.0	.0	.0
Lewis	1,362.0	454.0	.0	1,021.5	204.3	136.2
Jackson	1,362.0	272.4	181.6	1,021.5	272.4	68.1
Taylor	908.0	.0	.0	681.0	227.0	.0
Jones	908.0	.0	.0	681.0	227.0	.0
TOTAL						
All Staff	22,128.8	3,896.0	2,983.2	15,128.1	5,198.3	1,802.4
Attorney	17,588.8	3,169.6	985.6	11,723.1	4,267.6	1,598.1
Nonattorney	4,540.0	726.4	1,997.6	3,405.0	930.7	204.3
PERCENT OF TIME						
All Staff	76.3	13.4	10.3	52.2	17.9	6.2
Attorney	80.9	14.6	4.5	53.9	19.6	7.3
Nonattorney	62.5	10.0	27.5	46.9	12.8	2.8

3. Calculating hours and rates by activity.

Table 4.2 shows the major categories of work in which we are interested. The first column contains the hours available for work. This is followed by the percent of time allocated to the three major categories of Criminal, Other and Administrative duties.

The percent of time spent on criminal matters is subdivided into adult (felony, misdemeanor) and juvenile responsibilities.

Once this table is completed the distribution of employee hours of work can be calculated by multiplying available hours by each percentage. The results of this multiplication is presented in Table 4.4.

Rates then are formed for each of the activities by summing the hours spent on them and dividing by the total hours available. Combining these rates with the leave rate computed in the earlier section, our rate list looks as follows:

	Source	Percent
Total Hours Budgeted:	Table 3.4	100.0
Less Leave Rate	Table 3.4	12.9
Hours Available for Work:	Table 3.4	87.1
Administrative	Table 3.4	
Other	Table 3.4	
All Criminal	Table 3.4	
Case Specific	case weights	
General	by subtraction	

Such a rate list yields Table 4.5.

C. Taking An Alternative Approach

Thus we see where the case weighting system fits into the overall personnel budget. It looks like only a small part of the overall budget, but because it varies so much by type of case and disposition, it may have a substantial impact on personnel needs.

If such a system were not in use, then budget planning would be simplified but the estimates might be far from reflecting the real needs of the agency. Even with Smith's office, we can see what could have happened without such a tool.

Let us assume that the office did not have any statistics except the volume of cases that the agency handled last year. In this case, workload projections would have to be based on different sets of information. Most likely, they would be some estimates of caseload. An example would be as follows:

	Last Year	Next Year	Difference
Number of Cases	2,370	2,500	+ 130
Felonies	770	800	+ 30
Misdemeanors	1,600	1,700	+ 100
Number of Attorneys	12	13	+ 1
Caseload per attorney	197.5	192.3	− 5.2
Felony caseload	64.2	61.5	− 2.7
Misdemeanor caseload	133.3	130.8	− 32.5

TABLE 4.5

Distribution of Personnel Hours by Crime Type and Activity

A. ATTORNEY HOURS	Hours*	Percent Distribution*
1. Total Budgeted	24,960.0	100.0
2. Less Fringe	3,216.0	12.9
3. Total Available	21,744.0	87.1
a. Administration	985.6	3.9
b. Other	3,169.6	12.7
c. All Criminal	17,588.8	70.5
(1) case specific**	11,646.4	46.7
(2) general**	5,942.4	23.8
B. NONATTORNEY HOURS		
1. Total Budgeted	8,320.0	100.0
2. Less Fringe	1,056.0	12.7
3. Total Available	7,264.0	87.3
a. Administration	1,997.6	24.0
b. Other	726.4	8.7
c. Felonies	3,405.0	40.9
d. Misdemeanors	930.7	11.2
e. Other Criminal	204.3	2.5

* All entries are derived from Tables 4.1 and 4.4, except for case specific hours which are derived from AMICUS logs.

** Case specific hours are computed from case weights and last year's misdemeanor and felony caseloads. General hours represent the difference between total criminal and case specific hours and include juvenile casework.

Using this approach, which shows actual reductions in per-attorney caseloads, it is much more difficult to justify an additional attorney position. The apparent reduction in caseload will have to be responded to by presenting arguments to show how the adequacy of representation can be improved and what other benefits might be derived from reduced caseloads. Chances are that with this type of presentation, the budget decision would be to wait for next year when additional increases might justify the need for the attorney position and "keep the level of services constant."

EPILOGUE

John Smith drove slowly home. Traffic was relatively light at this time of the evening giving him time to reflect on the hassles of budgets and his desire to do almost anything else but justify them. The committee's reaction to his presentation was not greeted with overwhelming enthusiasm; but he felt as though it had been a solid and professional presentation.

As he expected, the budget staff were not overly impressed with his use of case weights to justify the increases. As much as they were numbers oriented, they were also skeptics. Their questioning focused on the weakness of self-reported data and the fact that the numbers could be fudged. His response was to agree with them noting that all reporting systems have this weakness. But he countered their criticisms in two ways. First, he told them that the real test of the reliability of the weights would be found in their ability to forecast the workload for the next year. If they were reasonable, then he should be able to provide defender services at an adequate level. If they were too low, then he expected to see case delay, backlogs and increases in the number of cases carried by the attorneys. If they were too high, on the other hand, this could be observed in a number of ways including reduced caseloads, more time spent on cases and an increase in the level of services offered.

Over time these determinations would be easier to make. Patterns should emerge that would be fairly consistent. Differences between what was forecasted and what was budgeted would become more obvious once a history was developed. If the differences were large, then this would signal the need for new weights and adjustments to the system.

He pointed out to the committee that time-based calculations allowed him to develop a more flexible caseload range to present to the budget authorities, as opposed to the fixed figures generated by the case-based systems such as the average hours per case or cost per case. They were far better than the simple, inflexible averages for hours per case or cost per case which could distort the budget and worst yet, not show the dynamics of the work and how resources can be allocated. This technique refined those which were used before. It also gave him the opportunity to compare his hourly rates with those of other jurisdictions.

To make the point that these were conservative requests, not some wish list, he also used all the other indicators and justifications which they were accustomed to see including unit based measures for such items as the increase in criminal caseload, the average caseload per attorney, number of dispositions and time to disposition, and number of court hearings, motions or briefs. Buffered by these facts and figures, the total reliance on case weights for the budget justification was dampened and in a sense, their value for future use was protected.

He liked the case weights for reasons other than just budgeting. He liked their ability to show him (and others) how work was being distributed in the office. He saw their potential for even wider use in making case assignments based on the attorney's workload and even for determining who were the most productive attorneys in the office. Paul Ligda's study in Solano County was intriguing when he found the range of productivity to vary among attorneys between 1,200 and 1,500 hours per year (out of 2,080 hours). Ligda's most outstanding lawyer was able to "bill" just over 1,900 hours per year while the least productive was close to 1,100. (Ligda, 1976:24).

Most importantly, he knew that if public defenders were going to acquire a reputation of professionalism and the aura of a law office, it would come from practices such as this one and budget presentations such as the one he just gave. He was proud of his office and its services. He felt he had represented them well today.

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APPENDIX

STATISTICAL NOTES AND REGRESSION ANALYSES

A. Data

The data used to estimate the workload models were generated from four sites. Three of the sites, namely, Hawaii, Nashville and Lincoln, are comparable in almost all respects. The fourth site is an early analysis done at Lincoln which is introduced here for some indications of stability.

The model estimated for this study uses several groups of variables.

First, the *route* variable is introduced to reflect the differential costs associated with the path the case took through the adjudication system. These dispositional routes include, jury trial, bench trial, dismissal, partial service, probation revocation and the omitted class which is a disposition by a plea of guilty.

The second group contains several *demographic* variables. Marital status is represented by the variable, married; while the omitted class contains everyone else. Age includes two variables, 18 and under and over fifty; the omitted class being 19-50. Race is divided into separate groups for hispanic and black; with all others falling into the omitted class.

The third group of variables includes *offense and release status* variables. Pretrial release status was divided into blocking variables for ROR, bail not met and in custody; the omitted variable was cash bail. The offenses were divided into four classes using NCIC codes. Classes were for violent crime, property crime, drugs and other. NCIC coded 1302 to 2000, reflecting property crimes, formed the omitted class.

B. Procedure

The separate models for the four sites are provided without comment. The models estimated for the three comparable sites are used as the starting point for a multi-variate covariance analysis in order to address the issue of stability of the models across sites. This analysis requires that several additional models be estimated.

First, a pooled model of the three sites is estimated. Next, a model is estimated which includes the entire sample but introduces blocking variables for two of the sites. The omitted site is contained in the constant term.

With these three models, formal F tests were constructed to test for differences in the constant terms and/or coefficients across sites. The first test for equality of constant terms fails with an F value of 19.23 (2,2072). In the pooled model with dummy analysis, Hawaii was shown to be significantly different from Nashville, while Lincoln was not.

The test for differences of slopes also failed with an F of 4.03 (39,2033) as did the test for overall homogeneity with an F of 4.71 (42,2033).

POOLED PUBLIC DEFENDER CASES WITH SITE VARIABLES

	MEAN	STD DEV	CASES	LABEL
VAR01	73.870	108.272	2095	TOT-TIME
VAR02	0.108	0.310	2287	DRUGS
VAR03	0.205	0.404	2287	VIOLENT
VAR04	0.155	0.362	2287	OTHCRM
VAR05	0.024	0.155	2287	PRIS1
VAR06	0.077	0.267	2287	PRIS2
VAR07	0.128	0.334	2287	JAIL
VAR08	0.069	0.253	2287	UNSUPR
VAR09	0.081	0.273	2287	FINE
VAR10	0.101	0.302	2287	NOTMET
VAR11	0.057	0.232	2287	ROR
VAR12	0.016	0.124	2287	OVERFF
VAR13	0.258	0.438	2287	EIGHTEEN
VAR14	0.021	0.143	2287	HISP
VAR15	0.192	0.394	2287	BLACK
VAR16	0.170	0.375	2287	PARSERV
VAR17	0.109	0.312	2287	DISMIS
VAR18	0.045	0.207	2287	JURY
VAR19	0.011	0.106	2287	BENCH
VAR20	0.007	0.083	2287	PROBREV
VAR21	0.166	0.372	2287	MARRIED
HAWAII	0.296	0.457	2287	
LINCOLN	0.507	0.500	2287	

MULTIPLE R   0.60946
R SQUARE   0.37144
ADJUSTED R SQUARE   0.36477
STANDARD ERROR   86.29468

ANALYSIS OF VARIANCE

	DF	SUM OF SQUARES
REGRESSION	22	9118005.18762
RESIDUAL	2072	15429710.23768

F = 55.65563   SIGNIF F = 0.0000

----------------- VARIABLES IN THE EQUATION -----------------

VARIABLE	B	SE B	BETA	T	SIG T
LINCOLN	-8.01132	5.55980	-0.03700	-1.441	0.1498
VAR10	23.59794	6.63876	0.06582	3.555	0.0004
VAR21	1.07857	5.12553	0.00370	0.210	0.8334
VAR04	-19.46231	5.51927	-0.06503	-3.526	0.0004
VAR14	-7.99994	13.23374	-0.01059	-0.605	0.5456
VAR13	-8.83372	4.36189	-0.03570	-2.025	0.0430
VAR19	60.79049	17.95726	0.05954	3.385	0.0007
VAR11	40.90387	8.31619	0.08749	4.919	0.0000
VAR20	-49.18523	22.83583	-0.03787	-2.154	0.0314
VAR08	19.51103	7.94864	0.04558	2.455	0.0142
VAR12	-14.42555	15.34040	-0.01659	-0.940	0.3471
VAR17	-18.96238	6.60762	-0.05456	-2.870	0.0041
VAR05	62.20352	12.72529	0.08881	4.888	0.0000
VAR02	4.20587	6.34751	0.01206	0.663	0.5077
VAR18	230.60328	9.57360	0.44180	24.087	0.0000
VAR09	-28.24394	7.44325	-0.07114	-3.795	0.0002
VAR15	-2.80318	5.14346	-0.01020	-0.545	0.5858
VAR06	6.02904	7.94523	0.01484	0.759	0.4480
VAR03	41.85852	5.01463	0.15600	8.347	0.0000
VAR07	7.96699	6.28495	0.02456	1.268	0.2051
VAR16	-46.87064	5.70110	-0.16251	-8.221	0.0000
HAWAII	20.75136	6.17926	0.08755	3.358	0.0008
(CONSTANT)	61.30925	6.12613		10.008	0.0000

POOLED PUBLIC DEFENDER CASES (NO SITE VARIABLES)

	MEAN	STD DEV	CASES	LABEL
VAR01	73.870	108.272	2095	TOT-TIME
VAR02	0.108	0.310	2287	DRUGS
VAR03	0.205	0.404	2287	VIOLENT
VAR04	0.155	0.362	2287	OTHCRM
VAR05	0.024	0.155	2287	PRIS1
VAR06	0.077	0.267	2287	PRIS2
VAR07	0.128	0.334	2287	JAIL
VAR08	0.069	0.253	2287	UNSUPR
VAR09	0.081	0.273	2287	FINE
VAR10	0.101	0.302	2287	NOTMET
VAR11	0.057	0.232	2287	ROR
VAR12	0.016	0.124	2287	OVERFF
VAR13	0.258	0.438	2287	EIGHTEEN
VAR14	0.021	0.143	2287	HISP
VAR15	0.192	0.394	2287	BLACK
VAR16	0.170	0.375	2287	PARSERV
VAR17	0.109	0.312	2287	DISMIS
VAR18	0.045	0.207	2287	JURY
VAR19	0.011	0.106	2287	BENCH
VAR20	0.007	0.083	2287	PROBREV
VAR21	0.166	0.372	2287	MARRIED

MULTIPLE R   0.59981
R SQUARE   0.35977
ADJUSTED R SQUARE   0.35360
STANDARD ERROR   87.05000

ANALYSIS OF VARIANCE

	DF	SUM OF SQUARES
REGRESSION	20	8831558.89158
RESIDUAL	2074	15716156.53371

F = 58.27332   SIGNIF F = 0.0000

----------------- VARIABLES IN THE EQUATION -----------------

VARIABLE	B	SE B	BETA	T	SIG T
VAR21	1.35981	5.16932	0.00467	0.263	0.7925
VAR02	4.46878	6.39522	0.01281	0.699	0.4848
VAR20	-36.74892	22.93229	-0.02830	-1.602	0.1092
VAR14	-6.70500	13.34241	-0.00888	-0.503	0.6153
VAR09	-29.28083	7.46261	-0.07376	-3.924	0.0001
VAR11	44.58898	8.34954	0.09538	5.340	0.0000
VAR19	58.84678	18.10340	0.05763	3.251	0.0012
VAR18	244.17516	9.37426	0.46780	26.047	0.0000
VAR13	-8.73668	4.39357	-0.03531	-1.989	0.0469
VAR12	-8.29483	15.43662	-0.00954	-0.537	0.5911
VAR08	21.20525	7.99543	0.04953	2.652	0.0081
VAR05	70.72712	12.76065	0.10098	5.543	0.0000
VAR15	-6.49194	5.00438	-0.02362	-1.297	0.1947
VAR17	-19.86117	6.65533	-0.05715	-2.984	0.0029
VAR04	-18.45370	5.56193	-0.06166	-3.318	0.0009
VAR06	8.04968	7.74241	0.01982	1.040	0.2986
VAR10	21.06299	6.67935	0.05875	3.153	0.0016
VAR07	4.91415	6.30737	0.01515	0.779	0.4360
VAR03	41.50282	5.05504	0.15468	8.210	0.0000
VAR16	-43.68781	5.72460	-0.15148	-7.632	0.0000
(CONSTANT)	62.72477	4.15656		15.091	0.0000

PUBLIC DEFENDER HAWAII 1984 DATA

	MEAN	STD DEV	CASES	LABEL
VAR25	108.501	142.105	607	TOT-TIME
DRUGS	0.128	0.335	678	
VIOLENT	0.180	0.384	678	
OTHCRM	0.180	0.384	678	
PRIS1	0.050	0.218	678	
PRIS2	0.044	0.206	678	
JAIL	0.080	0.271	678	
UNSUPR	0.091	0.288	678	
FINE	0.084	0.278	678	
NOTMET	0.046	0.209	678	
ROR	0.086	0.280	678	
OVERFF	0.028	0.165	678	
EGHTEEN	0.232	0.422	678	
HISP	0.027	0.161	678	
BLACK	0.068	0.252	678	
PARSERV	0.208	0.406	678	
DISMIS	0.096	0.295	678	
JURY	0.121	0.326	678	
BENCH	0.007	0.086	678	
PROBREV	0.016	0.126	678	
MARRIED	0.170	0.376	678	

MULTIPLE R	0.61059	ANALYSIS OF VARIANCE		
R SQUARE	0.37282		DF	SUM OF SQUARES
ADJUSTED R SQUARE	0.35141	REGRESSION	20	4562354.49778
STANDARD ERROR	114.44413	RESIDUAL	586	7675111.25181
F =	17.41694	SIGNIF F = 0.0000		

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	SE B	BETA	T	SIG T
MARRIED	21.16675	12.87993	0.05594	1.643	0.1008
JAIL	0.48373	18.34875	.922E-03	0.026	0.9790
NOTMET	41.55757	24.24706	0.06113	1.714	0.0871
DRUGS	-3.38546	14.81283	-0.00797	-0.229	0.8193
JURY	191.30287	15.35421	0.43927	12.459	0.0000
HISP	-46.19650	29.31380	-0.05230	-1.576	0.1156
FINE	-42.77019	18.13794	-0.08358	-2.358	0.0187
PROBREV	-78.65014	37.38269	-0.06997	-2.104	0.0358
PRIS2	-20.64018	23.73082	-0.02989	-0.870	0.3848
OVERFF	-63.56048	28.84800	-0.07387	-2.203	0.0280
BLACK	-10.83866	18.93398	-0.01920	-0.572	0.5672
DISMIS	-19.09956	17.60318	-0.03960	-1.085	0.2784
ROR	38.89065	17.14216	0.07660	2.269	0.0236
UNSUPR	-21.84063	17.51770	-0.04433	-1.247	0.2130
BENCH	202.33768	56.79567	0.12191	3.563	0.0004
EGHTEEN	-20.36970	11.48877	-0.06051	-1.773	0.0767
VIOLENT	45.87770	13.22277	0.12411	3.470	0.0006
PRIS1	67.58477	23.09450	0.10388	2.926	0.0036
OTHCRM	-34.88861	13.67838	-0.09438	-2.551	0.0110
PARSERV	-51.99115	13.57273	-0.14860	-3.831	0.0001
(CONSTANT)	98.96930	10.44803		9.473	0.0000

PUBLIC DEFENDER LINCOLN 1984 DATA

	MEAN	STD DEV	CASES	LABEL
VAR25	56.645	87.043	1111	TOT-TIME
DRUGS	0.117	0.322	1159	
VIOLENT	0.188	0.391	1159	
OTHCRM	0.161	0.368	1159	
PRIS1	0.008	0.088	1159	
PRIS2	0.028	0.164	1159	
JAIL	0.170	0.376	1159	
UNSUPR	0.072	0.258	1159	
FINE	0.108	0.310	1159	
NOTMET	0.101	0.301	1159	
ROR	0.060	0.237	1159	
OVERFF	0.009	0.093	1159	
EGHTEEN	0.250	0.433	1159	
HISP	0.023	0.151	1159	
BLACK	0.173	0.378	1159	
PARSERV	0.139	0.346	1159	
DISMIS	0.133	0.340	1159	
JURY	0.013	0.113	1159	
BENCH	0.016	0.127	1159	
PROBREV	0.000	0.000	1159	
MARRIED	0.159	0.366	1159	

MULTIPLE R	0.67116	ANALYSIS OF VARIANCE		
R SQUARE	0.45045		DF	SUM OF SQUARES
ADJUSTED R SQUARE	0.44088	REGRESSION	19	3788250.33043
STANDARD ERROR	65.08594	RESIDUAL	1091	4621671.94320
F =	47.06637	SIGNIF F = 0.0000		

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	SE B	BETA	T	SIG T
MARRIED	-9.59152	5.43019	-0.04029	-1.766	0.0776
VIOLENT	36.53125	5.39053	0.16408	6.777	0.0000
ROR	30.53444	8.48382	0.08304	3.599	0.0003
HISP	13.43965	13.07606	0.02330	1.028	0.3043
BENCH	23.58471	15.62804	0.03442	1.509	0.1316
JURY	386.06976	17.47992	0.50153	22.086	0.0000
UNSUPR	48.56639	8.11135	0.14393	5.987	0.0000
BLACK	1.38009	5.24100	0.00599	0.263	0.7923
OVERFF	42.22722	21.38597	0.04489	1.975	0.0486
EGHTEEN	-5.12400	4.57897	-0.02551	-1.119	0.2634
PRIS2	61.53105	12.43256	0.11588	4.949	0.0000
PRIS1	72.62575	22.76620	0.07327	3.190	0.0015
FINE	-13.43625	6.88458	-0.04790	-1.952	0.0512
DRUGS	6.41390	6.35080	0.02372	1.010	0.3127
DISMIS	-8.86051	6.44185	-0.03457	-1.375	0.1693
NOTMET	25.44997	6.96016	0.08812	3.657	0.0003
OTHCRM	-7.39827	5.65614	-0.03128	-1.308	0.1911
PARSERV	-37.49153	6.31045	-0.14903	-5.941	0.0000
JAIL	20.83060	5.97645	0.08993	3.485	0.0005
(CONSTANT)	40.88717	4.27095		9.573	0.0000

PUBLIC DEFENDER NASHVILLE 1984 DATA

	MEAN	STD DEV	CASES	LABEL
VAR25	68.870	86.807	377	TOT-TIME
DRUGS	0.053	0.225	450	
VIOLENT	0.284	0.452	450	
OTHCRM	0.100	0.300	450	
PRIS1	0.029	0.168	450	
PRIS2	0.253	0.435	450	
JAIL	0.091	0.288	450	
UNSUPR	0.027	0.161	450	
FINE	0.007	0.081	450	
NOTMET	0.187	0.390	450	
ROR	0.007	0.081	450	
OVERFF	0.016	0.124	450	
EGHTEEN	0.318	0.466	450	
HISP	0.007	0.081	450	
BLACK	0.429	0.495	450	
PARSERV	0.191	0.394	450	
DISMIS	0.067	0.250	450	
JURY	0.013	0.115	450	
BENCH	0.004	0.067	450	
PROBREV	0.011	0.105	450	
MARRIED	0.178	0.383	450	

MULTIPLE R	0.53411	ANALYSIS OF VARIANCE	
R SQUARE	0.28528		DF
ADJUSTED R SQUARE	0.24512	REGRESSION	20
STANDARD ERROR	75.42088	RESIDUAL	356
F =	7.10469	SIGNIF F = 0.0000	

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	SE B	BETA	T	SIG T
MARRIED	2.17336	10.69659	0.00958	0.203	0.8391
PROBREV	-2.12419	38.57637	-0.00257	-0.055	0.9561
OVERFF	2.80034	32.04461	0.00400	0.087	0.9304
PRIS1	9.98375	24.22109	0.01929	0.412	0.6804
BENCH	-59.85693	58.98900	-0.04592	-1.015	0.3109
FINE	-47.87771	48.39400	-0.04493	-0.989	0.3232
HISP	31.89791	48.46163	0.02994	0.658	0.5108
ROR	54.25425	49.17819	0.05092	1.103	0.2707
NOTMET	-6.97412	10.74062	-0.03134	-0.649	0.5165
DISMIS	-35.84803	16.72503	-0.10313	-2.143	0.0328
JURY	271.96903	34.69344	0.35975	7.839	0.0000
DRUGS	1.78264	17.93024	0.00462	0.099	0.9209
JAIL	-27.63457	15.17382	-0.09171	-1.821	0.0694
UNSUPR	-22.44894	25.36289	-0.04171	-0.885	0.3767
BLACK	-4.25551	8.44006	-0.02429	-0.504	0.6144
VIOLENT	41.89672	9.32523	0.21799	4.493	0.0000
PARSERV	-53.45116	11.55578	-0.24237	-4.625	0.0000
EGHTEEN	8.53977	9.09831	0.04586	0.939	0.3486
OTHCRM	-30.29110	14.26297	-0.10480	-2.124	0.0344
PRIS2	-16.44484	10.52885	-0.08248	-1.562	0.1192
(CONSTANT)	75.87732	8.78423		8.638	0.0000

OLD LINCOLN

	MEAN	STD DEV	CASES	LABEL
VAR027	50.319	120.181	1059	TOTAL-TIME
VIOLENT	0.138	0.345	1374	
DRUGS	0.048	0.214	1374	
OTHERCRM	0.258	0.437	1374	
BAILMET	0.111	0.314	1374	
BAILNOT	0.125	0.331	1374	
FEMALE	0.156	0.363	1374	
MARRIED	0.127	0.333	1374	
NOREC	0.214	0.410	1374	
JUV	0.044	0.204	1374	
ONEFEL	0.076	0.266	1374	
PARTIAL	0.250	0.433	1374	
PLEA	0.389	0.488	1374	
BENCH	0.019	0.136	1374	
JURY	0.007	0.081	1374	
MULTFEL	0.087	0.282	1374	
HABIT	0.026	0.160	1374	
PROB	0.259	0.438	1374	
JAIL	0.263	0.441	1374	
PRISA	0.126	0.332	1374	
PRISB	0.000	0.000	1374	

MULTIPLE R	0.70039	ANALYSIS OF VARIANCE	
R SQUARE	0.49055		DF
ADJUSTED R SQUARE	0.48173	REGRESSION	18
STANDARD ERROR	86.51945	RESIDUAL	1040
F =	55.63425	SIGNIF F = 0.0000	

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	SE B	BETA	T	SIG T
HABIT	45.10695	17.26233	0.05997	2.613	0.0091
BAILMET	22.74807	8.72794	0.05939	2.606	0.0093
JUV	-12.72019	13.51821	-0.02164	-0.941	0.3469
BENCH	60.94468	21.84515	0.06912	2.790	0.0054
ONEFEL	47.55538	10.54879	0.10516	4.508	0.0000
DRUGS	11.88280	12.86345	0.02115	0.924	0.3558
MARRIED	24.16498	8.21365	0.06689	2.942	0.0033
JURY	918.56579	34.72852	0.61678	26.450	0.0000
MULTFEL	10.05636	10.25269	0.02363	0.981	0.3269
VIOLENT	27.53902	8.27104	0.07895	3.330	0.0009
FEMALE	-7.03834	7.88516	-0.02128	-0.893	0.3723
PROB	-22.80927	11.25464	-0.08318	-2.027	0.0430
OTHERCRM	-13.79676	6.52943	-0.05022	-2.113	0.0348
NOREC	0.44992	7.03722	0.00154	0.064	0.9490
BAILNOT	3.79952	8.78440	0.01047	0.433	0.6654
PARTIAL	-38.20770	11.22466	-0.13765	-3.404	0.0007
JAIL	12.52958	11.30703	0.04594	1.108	0.2681
(CONSTANT)	46.09684	10.26960		4.489	0.0000

END