

Methods for Determining the Number and Allocation of Judges

Basic Concepts of Case Weighting Analysis

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Some Basic Concepts of Case Weighting

- Not all cases demand the same level of case-processing attention from judges.
- Case weights reflect how much more, or less, burdensome one case type is compared to another.
- Case weights estimate caseload demands better than does a simple count of cases filed since they reflect the number and mix of cases.

What are case weights?

Case weights are estimates of the average amount of time judges actually spend, from filing to termination, on cases of particular types.

Two Misconceptions

1. Because the time a judge must spend on any particular case varies greatly, average case times are not helpful in assessing judicial workload.
2. Case weights represent the elapsed time between the filing and resolution of a case.

How are case weights used?

- To help assess the level of judicial resources needed to process the cases filed in each court location.
- To equitably assign cases to judges within a court location.
- To help assess the number and location of courts.
- To help assess how many judges and how much time would be needed to process the backlog of cases in courts.

The Utility of Case Weights

A plain count of filings can over- or under-estimate work demands on a district's judges, depending on the mix of cases.

	Court 1	Court 2	Court 3
Criminal Cases	20	40	20
Family Civil Cases	70	45	10
Commercial Civil Cases	10	15	70
Total	100	100	100

The Utility of Case Weights

But if . . .

criminal cases are weighted 1.00; family civil cases are weighted 0.66; and commercial civil cases are weighted 1.87, then . . .

The three courts appear to have different workloads although they have the same number of raw filings.

	Court 1		Court 2		Court 3	
	Raw	Weighted	Raw	Weighted	Raw	Weighted
Criminal Cases	20	20	40	40	20	20
Family Civil Cases	70	46	45	30	10	07
Commercial Civil Cases	10	19	15	28	70	131
Total	100	85	100	98	100	158

Calculating a Court's Weighted Caseload

Weighted filings = the number of *raw* filings of each case type X the weight of the case type.

Weighted caseload = the sum of the weighted filings for each case type.

Types of Case Weights

- 1. Relative weights:** Case weights can be scaled so that the case type that takes the average amount of time is assigned a case weight of 1. Case types that take more or less than the average time would be assigned values of various degrees greater or lower than 1.
- 2. Weights as time:** Case weights can also reflect the actual amount of judicial time in hours and minutes required to process major types of cases that comprise the jurisdiction of the court.

Using Case Weights to Estimate the Number of Judges Needed in a Court

- Calculate the court's weighted caseload.
- Divide the weighted caseload by the number of current judgeships to obtain the number of hours worked or number of weighted cases handled per judge per year.
- Hours per judgeship above a certain threshold (e.g., 1500 hours) or number of weighted cases per judgeship above a threshold (e.g., 430 weighted cases) is evidence that additional judges may be needed.
- Consider additional factors not reflected in the case weights (e.g., travel required, backlog, unique aspects of cases in district).

Types of Case Weighting Studies

	Case-based	Event-based
Time Studies	Diary Study Longitudinal Case-tracking Study	
Judgmental Studies		

Case-Based Time Studies

Diary Studies

- Data collected are more complete
- Capture time spent on all judicial business, not just cases
- Burdensome on judges, but probably less than LCT studies
- Calculations may be more complex
- Shorter data-collection period may be possible
- Level of participation among judges are more controllable.

Longitudinal Case-Tracking Studies

- Statistical calculations are more straightforward
- Can ensure enough data about low-frequency case types are obtained
- Only reflect judicial time spent on case-related activity
- Level of participation among individual judges are less controllable.

Judgmental Studies

- Less resource-intensive
- Can be conducted in short period of time
- Iterative process ameliorates some problems with subjectivity
- Subjective assessments may be inaccurate and influenced by memorable events
- Steps must be taken to assess degree of bias in weights

Judgmental Studies

FOR EXAMPLE:

- 1. The first step is to obtain reasonable time estimates from judges in representative courts.**

For example, interview or survey judges in (almost) all of the courts and ask them to estimate how much time they spent on the primary types of cases in the court's competence.

- 2. The second step is to refine the time estimates obtained in the interviews with a representative group of judges.**

For example, conduct a focus group with lower trial court judges in each of the districts. Then conduct a final focus group with representative lower trial court judges from each district, but not from each court.

- 3. The third step is to examine whether the resulting case weights were biased toward the more time-consuming and thus easier to remember cases, and to make adjustments as necessary.**

For example, apply the case weights to the number of cases solved in the previous year. This provides an estimate of the number of hours the judges worked, assuming the case weights were accurate measures of the time they spent on cases of each type. Adjusted the weights accordingly. Or, conduct a small-scale objective time study.

What Information is Required?

- 1. Case descriptors:** used to organize individual cases into case types (e.g., civil cause of action, criminal offense); information must be known at case filing
- 2. Judicial time:** objective time reports or estimates of time associated with types of cases or events within cases.
- 3. Event frequency:** the type and frequency of different case events that require judicial attention

Event-based Studies

Case weight = (what judges do) * (the time it takes to do it)

For all types of case events:

Freq (event) multiplied by average time (event)

The case weight is the sum of these multiplications.

District Court Event-based Studies

Event Schematic of a District Court Case Weighting Framework

Civil Events																	
Generic Civil Proceeding Categories							Preparation for Civil Proceedings					Handling of Orders on Specific Civil Motions					
Jury Trial	Bench Trial	Prel Injctn/TRO Hrg	Evid Hrg	Settltmt Conf	Oth Conf	Mtn Hrg	Jury Trial	Bench Trial	Generic Hrg	Oth Conf	Settltmt Conf	Pre Trial	Discovery	Dispositive	Post-Trial	Injunctive Relief	Judgment/Decision

Criminal Events																		
Generic Criminal Proceeding Categories									Preparation for Criminal Proceedings					Handling of Orders on Specific Criminal Motions				
Arrgnment Hrg	Plea Hrg	Conference	Mtn/Oth Hrg	Evid Hrg	Jury Trial	Bench Trial	Evid Sent Hrg	NonEv Sent Hrg	Jury Trial	Bench Trial	Generic Hrg	Evid Sent Hrg	NonEv Sent Hrg	Suppression	Pre Trial	Dispositive	Post-Trial	Judgment

Categories shaded green have times computed from objective time records. Those shaded blue would have times derived from another source (i.e., survey or contemporaneous time logs).

Getting Started

1. Establish an advisory group consisting of judges, court administrators, court governance officials.
2. Identify researcher to carry out the study.
3. Determine basic design, depending on resources, available data, type of court, and timeframe.
4. Collect time data and other necessary information.
5. Calculate case weights.
6. Develop policy statement based on review by advisory group.

Things to Consider

Objective Time Studies

- Who will define the case types (and events)?
- Will a diary or case-tracking method be used?
- Who will keep time records?
- How long will the recording continue?
- Can electronic case management systems provide information?
- Are there “seasonality” or “Hawthorne Effect” issues?
- Will there be enough data points to do the calculations?
- How will “low frequency” case types be addressed?
- How and when will the weights be updated?

Things to Consider

Judgmental Studies

- Who will define the case types (and events)?
- Who will participate in making the judgments?
- Will survey or face-to-face methods be used?
- How will problems with subjectivity and bias be addressed?
- How and when will the weights be updated?

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