

A MATRIX OF MEASURES OF COURT CASELOAD

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Performance measures depend on the clarity and consistency of their metrics. The standard unit of analysis of court proceedings is the “case.” Yet the definition of a case varies widely. It may include multiple accused persons and charges, a count of accused persons, the number of informations (a set of charges), or the number of charges. Likewise, whether new cases, completed cases, or the number of cases heard in court are counted make a tremendous difference. In theory, many dozens of caseload measures are possible. Here, a matrix of twelve measures is proposed which balances theoretical exhaustion with practicality. Using data for one year of adult criminal cases in the Provincial Court of British Columbia it is shown that the choice of measure introduces variability of workload over 400 per cent. The matrix is intended as a heuristic device for policy-makers to scrutinise case-based indicators.

Les mesures de rendement dépendent de la clarté et de la cohérence des leurs données. L’unité d’analyse de mesure retenue dans les procédures des tribunaux est le « dossier ». Pourtant la définition d’un dossier varie considérablement. Il peut comprendre plus d’un accusé ou de multiples accusations, le nombre d’informations (les chefs d’accusations), ou le nombre de chefs d’accusation. De même, le fait de compter les nouveaux dossiers, les dossiers clôturés, ou le nombre de dossiers traités par les tribunaux crée une énorme différence. En théorie, des dizaines de mesures du nombre des dossiers sont possibles. Voici une matrice de 12 mesures qui fait la part de l’épuisement sur le plan théorique et sur le plan pratique. En se servant des données pour une année relatives aux dossiers concernant les affaires pénales des adultes dans la province de la cour provinciale de la Colombie-Britannique, on voit que le choix d’une mesure entraîne une variabilité du nombre des dossiers de plus de 400 pour cent. La matrice est conçue comme un exercice heuristique pour aider les responsables des politiques à examiner minutieusement les indicateurs basés sur les dossiers.

1. Introduction

Policy makers need performance indicators to assess completed work and make informed decisions, and to introduce and shape new policies. Those

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indicators depend upon the clarity and consistency of their definitions and metrics. In relation to court proceedings, the standard metric is often the “case.” Most court-related performance indicators derive in some fashion from a measure of case workload. This includes comparisons of workloads over time and place, elapsed time to case completion, case attrition rates, models of court systems and case flow, gauging the role of case complexity, and so on. Across the court system, however, the range of definitions for “case” that are used can be considerable. Even in the same geographic jurisdictions, various institutions may measure caseloads differently. Hence, the present study sets out a way to compare and understand the different definitions. We review the various measures of case workload and develop a matrix of what we intend are twelve practical measures.¹ The hope is that the matrix will serve as a heuristic device for policy makers, facilitating the understanding of existing performance indicators and assisting in the development of others. Following the review of measures, we use data from adult criminal cases in the Provincial Court of British Columbia to gauge empirically the relationship between them. We find that caseload varies by over four hundred per cent depending on which measure is selected. The bulk of the study is concerned with describing the definitional and measurement issues. The remainder of the introduction sets the scene and gives some illustrative examples.

The popular understanding of a court case, as typically used by the media and general public, tends to be as follows. It refers to an accused person or persons and a criminal event or group of related criminal events that are brought as one or more charges before a court. This definition is broad and encompasses one accused person facing one charge as well as multiple accused and multiple charges. As a result, it is not uncommon for news media to report on a case involving multiple accused persons. For example, in a recent media release the Canadian Press reported: “The case involves six men convicted last April in the 2006 kidnapping and ransom of a drug trafficker and two other people.”² Here, a single case involved six accused persons.

¹ See Amir Ghaseminejad, Paul Brantingham and Patricia Brantingham, “The distribution of event complexity in the British Columbia court system” (2012) 1 Security Informatics online: <<http://link.springer.com/article/10.1186%2F2190-8532-1-13#page-1>>, Proceedings of the IEEE International Conference on Intelligence and Security Informatics (ISI), for a discussion and preliminary empirical analysis of how courts may aggregate workloads differently.

² “Top court to hear case over emergency wiretaps,” *The Canadian Press* (23 December, 2010) online: CTV News <<http://www.ctvnews.ca/top-court-to-hear-case-over-emergency-wiretaps-1.589171>>.

In other contexts however, the use and understanding of the term case can be quite different. This can reflect administrative or working practices within the legal realm. Lawyers, for example, often refer to each of their cases as a “person matter” because they tend to deal with individual accused persons, and so the number of persons is counted as their caseload. In a similar fashion, courts often publish information at the level of individual persons. This is true of the Provincial Court of British Columbia which, in its annual report, defines a new case as “[o]ne accused person with one or more charges on an Information or initiating document that has resulted in a first appearance in Provincial court.”³ Here, charges against multiple accused persons would be counted as separate cases for each person.⁴ To return to our Canadian Press example using this new metric, there were six cases of kidnapping rather than one because six persons were charged.

There are other units that also count workload. The *Manitoba Justice Annual Report 2010-2011* states that

[w]hile Manitoba Prosecutions Service opened 49,365 files in 2010/2011, the Provincial Court processed 96,121 new adult and youth charges in the fiscal year. The primary reason for the difference is that Manitoba Prosecutions Service statistics refer to files and Court Division statistics refer to informations. Manitoba Prosecutions Service can have one file that encompasses a series of charges relating to one incident.⁵

With respect to charges, to return to the kidnapping example, if each of the six accused was separately charged with kidnapping for each of the three victims, there would be eighteen charges. The Manitoba report also refers to “informations” – documents by which sets of charges (one or more) are brought before the court – which would likely produce a count somewhere in between that of person-cases and charges.

Illustrating another dimension to the issue, the *Adult Criminal Court Statistics* report of Statistics Canada is transparent regarding the importance of metrics. It observes:

³ Provincial Court of British Columbia, *Provincial Court of British Columbia Annual Report 2009-2010*, online: (2011) Provincial Court of British Columbia <<http://www.provincialcourt.bc.ca/downloads/pdf/annualreport2009-2010.pdf>> at 14.

⁴ Technically, this is when the charges pertain to a distinct information or initiating document. An “information” or initiating document is the document by which one or more charges are brought before a court.

⁵ Attorney General – Ministry of Justice, *Manitoba Justice (including Justice Initiatives Fund) Annual Report 2010-2011*, online: (2011) Manitoba Department of Justice <<http://www.gov.mb.ca/justice/publications/annualreports/pdf/annualreport1011.pdf>> at 18.

The primary unit of analysis is the case. The concept of a case changed for the 2006/2007 release of data. The new definition attempts to more closely reflect court processing. It combines all charges against the same person having one or more key overlapping dates (date of offence, date of initiation, date of first appearance, date of decision, date of sentencing) into a single case. The former definition (used in releases prior to October 2007) combined all charges against the same person disposed of in court on the same day into a case. This tended to undercount the number of charges in a case, over-count the number of cases and underestimate the length of time required to process a case through court because not all charges are necessarily disposed of on the same day. All data, including years prior to 2006/2007 have been re-processed using the new case definition so that they are comparable.⁶

Here, the unit that defines a case is the individual person, similar to the Provincial Court of British Columbia example above. Here, however, how each person is counted has changed. The paragraph introduces additional complexities of concern to the present study. The new definition allows for multiple informations to be counted as a single case if they are heard on the same date. The old definition, however, considered only those charges against a person that were *completed* on the same day as a case. While it is still the number of persons that are counted, the point in time or stage of court processing at which they are counted has changed.

The Statistics Canada statement notes three types of bias inherent to the previous measure. The definitional modification changed the number of cases apparently dealt with by Canada's courts by 2.3 per cent, though this varied between provinces and territories and was 17.6 per cent in the Northwest Territories.⁷ The "Adult Criminal Court Statistics" published in 2008 seems to be the first use of the new definition,⁸ while the earlier one was used by Statistics Canada for many years.⁹

Recall that, earlier in this section, the Provincial Court of British Columbia was found to report *new* cases in its annual report. Thus person-

⁶ Jennifer Thomas, "Adult Criminal Court Statistics, 2008-2009" (2010) 30:2 *Juristat* (Ottawa: Canadian Centre for Justice Statistics) at 17.

⁷ *Ibid.*

⁸ Michael Marth, "Adult Criminal Court Statistics, 2006/2007" (2008) 28:5 *Juristat* (Ottawa: Canadian Centre for Justice Statistics).

⁹ See e.g. Denyse Carrière, "Adult Criminal Court Statistics, 1996-97" (1998) 18:7 *Juristat* (Ottawa: Canadian Centre for Justice Statistics); Liisa Pent, "Adult Criminal Court Statistics, 1999-00" (2001) 28:5 *Juristat* (Ottawa: Canadian Centre for Justice Statistics); Jennifer Pereira and Craig Grimes, "Case Processing in Criminal Courts, 1999/00" (2002) 22:1 *Juristat* (Ottawa: Canadian Centre for Justice Statistics); Statistics Canada, *Adult Criminal Court Data Tables 1999/00*, online: (2001) Minister of Industry <http://prod.library.utoronto.ca/datalib/codebooks/cstdli/justice/2001/99-00%20_data_tables_e.pdf>.

cases have now been counted at three points: the number *initiated*, the number *heard*, and the number *completed*.

2. Specification of the Measures

The preceding discussion showed how whether the count refers to groups of persons, individual persons, informations or charges, can make a big difference. These are referred to here as the “unit of count,” and we focus on four main categories. They form the first dimension of our matrix of measures.

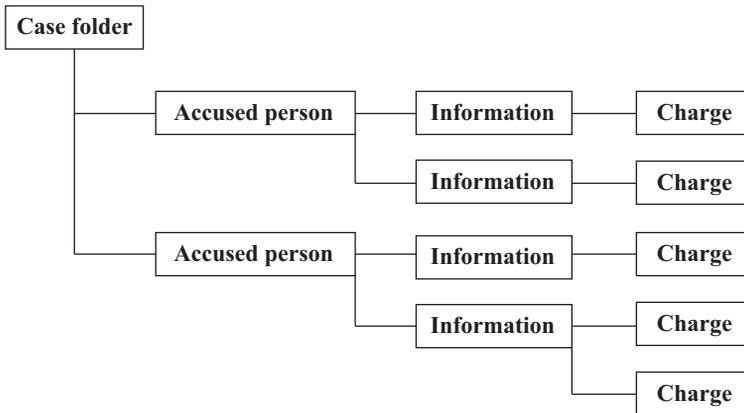
The Statistics Canada example showed that whether new, heard or completed cases are counted also makes a big difference. These are referred to as the Aspect of the case, and we focus on these three categories. They form the second dimension of the matrix.

These categories and the twelve measures in the matrix are more properly thought of as a select subset of a larger array. This will be clarified when additional measures are discussed after the main categories we identify are more formally defined.

A) Units of Count

Figure 1 illustrates the sequential one-to-many relationships of our four units of count. Each, and their relationships, will be briefly described.

Figure 1: Relationship between potential Units of Count



1) *Case-folder*

A *case-folder* is our most aggregated unit of analysis. It may include one or more accused persons that are dealt with together because they have one or more related criminal charges against them. Hence the term “case-folder” refers to what we discussed earlier as the popular understanding of what constitutes a court case. It could be one person and one charge, or it could be multiple persons and charges (all of the kidnapers and charges are one case). “Folder” is the modifier because in most instances there is literally a physical folder containing files and documents used by the court. This terminology is preferable because it adds precision and reduces ambiguity that arises if the term “case” is used without the modifier.

2) *Person-folder*

A *person-folder* is our second unit of count. It describes the number of individual accused persons within a single case folder. If there is only one person then the person-folder count is the same as the case-folder count. Since there is sometimes more than one person, however, they are distinct units of count. In the aggregate, *person-folder* counts the average number of persons per case-folder. We avoid the term “person-matter,” a popular term used by lawyers to refer to proceedings against an individual accused person, to reduce ambiguity. This is because, if the same person appeared on more than one case-folder, a typical count of person-matters would count that individual twice. Hence we define the term *person-folder* as referring to the number of distinct individuals, without double counting.

3) *Information*

An *information* is our third unit of count. One or more informations may be associated with an individual person. *Information* is synonymous with “file” or “document” in some provincial courts because a file or initiating document must be filed with the court in order for a charge or multiple charges to be brought against a person. *Information* is our preferred term because it is the formal term used in court procedures and refers to distinct pieces of information forwarded to the court the by Crown when a charge or charges are laid. An example will clarify; if there are two accused persons on the same case-folder but they each have two distinct informations (or file/document numbers), then there are four informations.

4) *Charge*

A *charge* is our fourth unit of count. A criminal charge details the actions of the accused pertaining to the relevant statute and section of criminal

legislation that is alleged to have been breached. The Canadian *Criminal Code*¹⁰ is the federal statute in Canada that details the vast majority of criminal charges. Other notable statutes that detail criminal charges include the *Controlled Drugs and Substances Act*¹¹ and the *Youth Criminal Justice Act*.¹² If the same section of criminal legislation has been breached on more than one occasion, or if more than one section has been breached, these are brought to the court as separate criminal charges, usually within the same physical folder or information. In other words, there may be one or more charges included on each information brought before the court.

The relationship between these four units can be illustrated through an example and is shown as Figure 1. Consider a case-folder that involves two accused persons. The first information charges the first accused with burglary and dangerous driving but the second person only with burglary. At a later date, information brought before the court result in them both being charged with assault. Here there is one case-folder, two accused person-folders, four information (one against each of them each time) and five charges (two burglaries, two assaults, one dangerous driving). The relationships are shown in Figure 1, which illustrates how it would be possible to count one, two, four or five “cases” depending on the unit of count.

5) Other Possible Units of Count

The four units of count detailed above are not an exhaustive list. There are others that could be considered and which would indicate additional components of court workload. An *appearance* at court by a defendant is another possible unit of analysis. The reason it is not addressed empirically in what follows is because it cannot be counted against all of the aspects of count that we define next. Thus the number of appearances at the start of a case cannot be counted, although the number of appearances at a court during a period such as a year could be counted, as could the number of appearances to completion of a case or set of cases. Hence, it is acknowledged that the number of appearances, particularly when measured per court, per judge, per court room, per folder, per accused person, per information, and per charge, and time between appearances, could certainly be used to give some indication of workload, process, and performance, and we note that the Department of Justice reports on the number of appearances per charge to provide a measure of workload variability over time.¹³

¹⁰ RSC 1985, c C-46.

¹¹ SC 1996, c 19.

¹² SC 2002, c 1.

¹³ Department of Justice, *The Final Report on Early Case Consideration of the Steering Committee on Justice Efficiencies and Access to the Justice System*, online:

An *agency file*¹⁴ is another potential unit of count. It is the most aggregated unit of analysis that is documented in court appearance data and may be used to connect individuals to the same related charges. In most instances it is the police file but the term may refer to another enforcement agency. It represents all information about an event before it is passed to Crown or the court. It may refer to one or more, of any of the subsequent court activity measures. This does not seem to be a unit of count for the criminal court system itself, but in BC the agency file identification number is often included in published data of court appearances. Consequently it holds the potential to be used to understand processing patterns of the court after the police provide information to Crown Counsel. As it links the police and court cases, it could be used to assess how different types of case are processed from start to finish, particularly if it could be linked to corrections data.

The public prosecution service in Canada is referred to as Crown Counsel. A *Report to Crown Counsel* is another possible unit of analysis. Different from most other jurisdictions in Canada, in British Columbia police do not charge offenders. Instead, the police make a Report to Crown Counsel (RCC) which is a written report detailing the evidence and suggesting it be prosecuted. Crown Counsel reviews that evidence, and takes forward those prosecutions which are in the public interest and likely to succeed. There is therefore potentially useful information about case flow and attrition to be gleaned from analysis that includes RCC and its relationship to cases at other stages. It is not included here because it could not be empirically considered because the RCC information is not included in the published records of the Provincial Court of British Columbia.

B) Aspect of Measurement

The particular aspect of the court process at which a count of cases is taken is a key parameter in determining the apparent number of cases. It is here termed the *aspect* of the case. In this study, three aspects are considered. They are the number of cases initiated, the number of cases heard, and the number of cases completed.

(2006) Department of Justice <<http://www.justice.gc.ca/eng/tp-pr/csj-sjc/esc-cde/ecc-epd/p1.html>>.

¹⁴ Agency file numbers are not published in the scheduled appearance data by Court Services of BC. This limits the types of case units that may be empirically assessed in the current analysis because although it may be possible to know the number of agency file number cases that are heard or completed in a given time period, it is not possible to know how many were initiated.

1) *New Cases*

The first aspect is the number of new cases that are initiated. This refers to the number of new cases brought before the court within a time period, here taken to be a year. However, note that just as there is potential ambiguity in the definition of a case, so too there is potential ambiguity in the definition of “initiation.” The Provincial Court of British Columbia defines a “Provincial Court criminal new case” as

One accused person with one or more charges on an information or initiating document that has resulted in a first appearance in Provincial Court. These charges can be *Criminal Code*, *Youth Criminal Justice Act*, other federal statutes or provincial statutes. This does not include Traffic or municipal bylaw.¹⁵

What is not clear from this description, however, is whether a “first appearance” refers to the first time a person appeared before the court on a set of charges or whether a person made an appearance in court for the reason of a “first appearance.” The British Columbia Ministry of Justice website notes that the term first appearance is “used when the accused is not in custody on that document and the expectation is that the accused will be attending for the first time before the court related to a specific matter.”¹⁶ As a result, a person may appear before the court for a bail hearing or other type of appearance in relation to charges that have not yet had a first appearance. In the current analysis, the initiation of a case is defined by the earliest hearing date.¹⁷

2) *Cases Heard*

The second aspect is the number of cases *heard* in court. This is more straightforward. Any case that included at least one appearance in a time period can be deemed to have been heard. This measure will almost certainly include some cases that began earlier than, and/or ended later, than the time window of measurement. For example, a case that was initiated before the 2009-2010 fiscal year and concluded after the 2009-2010 fiscal year may still be counted as heard during the time period if it

¹⁵ *Supra* note 3 at 14.

¹⁶ Ministry of Justice – British Columbia, *Province of British Columbia Provincial Court Lists – JUSTIN Code Table*, online: (2007) Ministry of Justice <<http://www.ag.gov.bc.ca/courts/court-lists/criminal/index.htm>>.

¹⁷ For this analysis of activity within the 2009-2010 fiscal year, hearing dates from June 1 2007 were considered. Therefore, if a case was heard earlier than 01 June 2007 and did not have a subsequent hearing date scheduled until the 2009-2010 fiscal year, it would be counted as being initiated in the 2009-2010 fiscal year. We anticipate that the number of such cases would be vanishingly small as a proportion of the present dataset and so will not affect the substance of the findings.

experienced at least one appearance. In the analysis that follows, any case that has an appearance hearing date falling within the 2009-2010 fiscal year is deemed to have been heard during that time period.

3) *Cases Completed*

The third aspect is the number of cases *concluded*. Identifying precisely when a case concludes according to which criteria is not necessarily straightforward. For instance, various appeals and applications may take place after a matter has been resolved through a final disposition. Hence whether or not a case can be deemed concluded involves a subjective decision. Some formal measures of concluded cases may not account for such extensions. The Province of British Columbia website for criminal justice information and support provides “Definitions for Courts Measures,” noting that

[c]oncluded court cases indicates the number of Provincial Court criminal cases with a final disposition recorded against all of the charges on an Information or ticket. Cases that are on outstanding bench warrants are not counted as concluded cases. Only Provincial Court criminal case figures are currently available.¹⁸

The British Columbia Ministry of Justice includes the indicator “Concluded,” defined as being used “at the conclusion of an issue or a count.”¹⁹ This is often used when a final disposition such as “Guilty,” “Not Guilty” or “Stay of Proceedings” is documented for a specific charge but does not account for subsequent court activity that may include an appeal or application related to the matter. For the current analysis, a case was deemed completed upon the last recorded hearing date of relevance to its unit of count.²⁰

4) *Other Possible Aspects and the Measurement Time-Window*

As with the units of count, we note that the three aspects examined here do not constitute an exhaustive list. From the discussion above it is clear that each of the three aspects could have more than one definition, effectively producing more measures. This was clearest in relation to determining

¹⁸ Justice BC, “Definitions for Courts Measures” *Justice Data*, online: British Columbia Justice BC <<http://www.justicebc.ca/en/rm/data/definitions-courts.html>>.

¹⁹ *Supra* note 14.

²⁰ We included hearing dates up to May 31, 2011 in the study. So, strictly speaking, if a case heard during 2009-2010 fiscal year did not have any hearings for the thirteen months to May 31 2011 but had a hearing after that date it would be counted as completed for present purposes. We anticipate that the number of such cases would be vanishingly small as a proportion of the present dataset and so will not affect the findings.

precisely when a case is initiated, and in relation to determining precisely when a case is deemed completed. Likewise, the duration of time to which these measures refer could also be varied and the effects would not be expected to be the same for each aspect captured. One year is used in the empirical section of this study as that is the common period of performance assessment for courts and other institutions in the present context.

3. The Matrix of Twelve Measures

The previous discussion identified four units of count and three aspects of the court process. It was noted, however, that in theory there are additional possible measures as well as potentially multiple variations of the present set of measures. Thus at one stage in the evolution of this study the research team considered 11 units of count and five aspects. This would have made for a matrix of 55 measures, and more were conceivable. Such an extensive array is not presented here for three reasons. First, there are diminishing marginal returns to additional measures, many of which would lie somewhere between one or other of the measures offered here. Second, we aimed to produce measures for which we could generate empirical estimates from the published court records that are detailed in the following section. Third, such a large matrix would be cumbersome and of little practical value to policy-makers. Hence the twelve measures used here balance the responsibility of ensuring theoretical exhaustion with that of practicality. Nevertheless, the research team do not preclude the possibility of future iterations of this work if there is a demand, and in which instance we would view it as an indicator of the utility of this study.

The matrix of twelve measures is shown as Table 1. Unit of count and aspect are the two dimensions, with four and three categories, respectively. The twelve resulting measures are labelled as 1 through 12 in the cells of the table. Thus measure 1 counts the number of new case-folders, measures 2 counts the number of completed case-folders heard, and measure 3 counts the number of case-folders heard, and so on to measure 12 which counts the number of charges heard.

Table 1: Twelve measures of court caseload

		Unit of Count			
		Case-folders	Person-cases	Informations	Charges
Aspect	New	1	4	7	10
	Completed	2	5	8	11
	Heard	3	6	9	12

Note that the number of new and completed cases will always be less than the number heard over any given time period. This is because some of those cases that are heard begin before, and some continue after, the time-window of interest. The number of new and completed cases depends on case flow. The number of heard cases is listed as the third measure in this dimension, in anticipation of its larger count. The value of the matrix is more readily apparent when the measures can be empirically distinguished. This quantification is undertaken after the court records data is introduced.

4. *The Court Records*

Each provincial court centre in BC publishes its schedules and its appearance records at the end of each working day. Over four million records of scheduled court appearances, and over five million records of appearances were published in the four years up to and including those for the 2009-2010 fiscal year that is covered here. For the present study, data were selected for fiscal year 2009-2010, that is, April 1 2009 to March 31 2010, in relation to adult criminal cases.

The Court Services Online (CSO) of the British Columbia Ministry of Attorney General publish the data and include a disclaimer, which notes:

The data is provided “as is” without warranty of any kind, either express or implied. The Province does not warrant the accuracy or the completeness of the data, nor that CSO will function without error, failure or interruption. Users of CSO acknowledge that some data may suffer from inaccuracies, errors or omissions.²¹

And that the data is available for research purposes, stating:

Court record information is available through CSO for public information and research purposes...The court record information may be used without permission for public information and research provided the material is accurately reproduced and an acknowledgement made of the source.²²

Thus, if a court failed to publish its records on any given day, those records would not appear in the dataset used here. By 2009-2010, however, the publication process had been undertaken by BC provincial courts for several years. The present research team had collated the data each day for four years, conducted extensive quality control, and are yet to identify any key sources of omission, bias or error. Moreover, since BC provincial courts publish the data not only for research purposes but to inform the

²¹ Ministry of Justice – British Columbia, “Disclaimer” *Court Services Online* (Court Services Online Ver 2.6.2.00).

²² *Ibid.*

public – including defendants, victims and others – about court business, there is good reason to expect a high level of accuracy. Overall therefore, there is good reason to have confidence in the accuracy of the data. Further technical aspects of how particular variables were operationalised from the dataset are included as Appendix 1.

5. Results

Each of the twelve measures of caseload was generated for adult criminal cases of the Provincial Court of British Columbia in the year. The general orientation of the results is as expected. Whether new cases, hearings or completed cases are examined, within each category there are always more charges than informations, more informations than person-cases, and more person-cases than case-folders. Similarly, regardless of the definition of case, more are heard in the year than are initiated or completed.

It is the relationship between measures that is of primary interest here. For example, in the Canadian Press coverage of kidnapping and ransom mentioned earlier, there were either one, six or eighteen cases depending on whether case-folder, person-cases, or charges, was counted. Hence ratios are used here to portray the results, because they allow the relative size of the different measures to be ascertained. We used three set of ratios to shed light on different elements of the findings, and these are described next in turn.

A) Each measure relative to the number of new case folders

Table 2 shows ratios that are relative to the count of new case-folders (measure 1). Thus, its left numeric column shows that, for every new case-folder, 1.64 case-folders were heard in court that year, and 1.13 completed. The second column shows that on average there were 1.09 person-cases per case-folder which is because there was on average 1.09 accused persons per case-folder. This average masks that there are a relatively small number of case-folders with multiple accused and charges.

Table 2: Case workload for BC Provincial Courts – other measures relative to new case-folders

		Unit of Count			
		Folders	Persons	Information documents	Charges
Aspect	New	1.00	1.09	1.55	2.62
	Completed	1.13	1.26	1.80	3.06
	Heard	1.64	1.79	2.32	4.04

Unsurprisingly, the largest ratios are found when case-folder measures are compared to those of charges. It is, however, useful to know that the magnitude of that difference can be exaggerated if they are compared across different aspects. Thus, if one court report measured *new* folder-cases and another measured the number of charges *heard*, the result is more than a four hundred percent difference in the apparent workload, indicated by the ratio of 4.04 in the bottom right-hand cell. This is the biggest difference between each of the measures.

B) Comparing measures within units of count

Our second ratio compares the size of the workload counts within each unit of count. Table 3 shows the results with the number of initiated cases indexed to 1 for each unit of count. The results should thus be read down the columns. The left column gives the same values as that of Table 1 but the others are different. It is clear that there is some consistency in the relationships between aspects, that is, within each unit of count. Between 13 and 17 per cent more cases were concluded than initiated. That is, cases were completed more quickly than new ones began. This may be because fewer new cases entered the BC court system than in preceding years or because they were processed more quickly, but the present study is not designed to explore that issue. Between 50 and 64 per cent more cases are heard than initiated, regardless of the unit of count.

Table 3: Relative workload measures within units of count

		Unit of Count			
		Folders	Persons	Information documents	Charges
Aspect	New	1.00	1.00	1.00	1.00
	Completed	1.13	1.15	1.17	1.17
	Heard	1.64	1.64	1.5	1.54

C) Comparing measures within aspects

It is similarly informative to examine the relationship between caseload measures within each aspect of the court process. Table 4 shows the measures indexed to a value of 1 for case-folders. The results should be read across each row. It is also clear that there is a good deal of consistency in the magnitude of differences across aspects. There are around ten per cent more person-folders than case-folders in each instance, and between 40 and 60 per cent more informations than case-folders each time. The

number of charges is always in the region of two and a half times the number of case-folders.

Table 4: Relative workload measures within aspects

		Unit of Count			
		Folders	Persons	Information documents	Charges
Aspect	New	1.00	1.09	1.55	2.62
	Completed	1.00	1.11	1.59	2.7
	Heard	1.00	1.09	1.41	2.46

6. Discussion and Conclusion

There is little consensus over how court workloads should be measured. Participants in the justice system will view and count workloads differently to best serve their specific roles. In practice this means court statistics are often difficult to compare over time, place, and institution. Moreover they can be difficult to interpret due to definitional differences in the term “case” and different in the aspect of the court process to which they refer. Even within the same geographic jurisdictions, different institutions may measure annual caseloads differently. With national, provincial, and municipal bodies, individual courts, court services, lawyers, judges, and others counting and interpreting case workloads, the possibility of discrepancies and misunderstandings can arise. Perhaps surprisingly, neither national nor provincial agencies appear to routinely count cases at the case-folder level which is arguably the most widely and readily understood definition. Our preferred interpretation of this state of affairs is that measures tend to reflect what is administratively available and technically possible. It is not unreasonable to expect, however, that agencies and persons may also tend to measure what serves their interests the best.

Media reporting of court caseloads incurs less methodological accountability than institutions of the court. Many are simply ambiguous with respect to what is being counted. It seems reasonable to anticipate that, on occasion, one unit of count may imperceptibly slide into another, particularly when hot topics such as court delay are at issue. Here, in some instances, there may even be a perverse incentive to offer a measure of the number of charges and allow readers to assume it is case-folders. Thus if the number of charges thrown out of court due to unreasonable delay is reported as the number of cases, then based on the present evidence that is

an inflation from the number of case-folders of between two and four hundred percent.

The twelve measures in the matrix represent a balance between the responsibility for theoretical exhaustion and that of practicality. The hope is that this set of measures might be 'good enough' to empower policy-makers. At its most ambitious it would serve as a sunlight matrix that promotes transparency and accountability in court performance measures.

APPENDIX 1: TECHNICAL NOTES ON OPERATIONALIZATION OF MEASURES

This appendix relates some technical details of the operationalization of the measures defined in the main text. It is included for the more specialist reader who is versed in the intricacies of such data.

What we here term *case-folders* were referred to as “physical folders” in the published court records. Each physical folder is assigned a number, but that number is only unique to each court location. Consequently, the identification of case folders involved identifying unique physical folders for each court to avoid the possibility that two physical folders at different courts had been assigned the same number. All other measures of a case were located in various disaggregations of each physical folder.

The published records did not contain unique identifiers for individual persons other than their full names with middle initials where relevant. Consequently, a *person-matter* or accused person was identified as the unique combination of court location, physical folder number and the name of the person. It is hypothetically possible that two persons with the same name made an appearance in relation to the same physical folder at the same court location – and a father-son team of co-accused with identical names is not impossible. Yet the likelihood of this state of affairs is sufficiently low that its impact upon any results in terms of the overall proportion of the data can reasonably be anticipated to be vanishingly small. Another hypothetical source of error is where the name of an accused changed during the course of their case which we anticipate to have similarly trivial effect on our aggregate analysis.

In a similar fashion to case folders, an *information* was operationalized as the unique result of the combination of court location, physical folder number, document number, and name of accused. The only additional field to those discussed already is the document number. In the published records it is a supplement to the physical folder number which identifies distinct filings of information.

Following on from the above, a *charge* was operationalized through the combination of six fields: court location, physical folder number, document number, name of the accused, count number, and crime type. The two additions to those discussed so far are count number and crime type. Count number identifies the sequential order of each charge. Crime type identifies the specific statute, section, and subsection of legislation under which the charge was filed. Since an individual could be charged

multiple times for the same crime type, both additional fields were required to identify each unique charge.