

# Improving the Pace of Criminal Case Processing in State Trial Courts

Criminal Justice Policy Review  
2018, Vol. 29(6-7) 736–760  
© The Author(s) 2018  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/0887403417748721  
journals.sagepub.com/home/cjp



**Brian J. Ostrom<sup>1</sup>, Roger A. Hanson<sup>1</sup>,  
and Matthew Kleiman<sup>1</sup>**

## **Abstract**

Delay in the processing of criminal cases has long been viewed as a serious national problem. Substantial differences exist among courts in the average time it takes to resolve both felony and misdemeanor cases, with past research producing inconclusive results on the causes of observed variation. In response, and with the support of the Arnold Foundation, the objective of this article is to highlight predictable variation in the timeliness of criminal case processing and how this knowledge supports court efforts to become more expeditious. Drawing on an extensive set of felony and misdemeanor cases resolved in seven Colorado courts, statistical analysis uncovers important patterns in the composition of criminal caseloads and clarifies how composition influences case duration. Moreover, similarities in the makeup of criminal caseloads show the utility of fundamental principles of criminal caseload management and how courts benefit from being assessed comparatively against established performance benchmarks.

## **Keywords**

criminal case processing, court delay, caseload management

Among the individual rights provided for in the U.S. Constitution, two provisions applicable to criminal courts are sometimes seen as contending in practice if not in theory. The Fifth Amendment states, “No person shall be . . . deprived . . . of life,

---

<sup>1</sup>National Center for State Courts, Williamsburg, VA, USA

## **Corresponding Author:**

Brian J. Ostrom, National Center for State Courts, 300 Newport Avenue, Williamsburg, VA 23185-4147, USA.

Email: [bostrom@ncsc.org](mailto:bostrom@ncsc.org)

liberty, or property . . . without due process of law.” And the Sixth Amendment asserts, “In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial.” As construed by the courts, due process means laws are applied equally to every individual under established rules which do not violate elemental rights. This concept is founded on the fundamental value of fairness; that every person has the right to his or her day in court and to have his or her case heard, considered, and resolved by an independent and impartial judge. In addition to the focus on the individual, criminal court decisions in aggregate should also be timely, consistent, and in proper proportion to the nature and magnitude of the case. All criminal cases should be resolved without delay. What these dueling rights mean in practice is that a well-functioning court system is expected to provide due process through decisions and actions based on individual attention to each case using consistent courtwide practices operating within predictable time frames.

Giving individual attention to cases has direct implications for court performance because it underscores the tension between an individual case and the aggregate nature of a judge’s caseload as a whole and in fact an entire court’s caseload. Judges know they are responsible for their assigned cases and they know the manner in which they resolve them contributes to the institution’s performance. Judges and court managers do not want decisions in any case to be a foregone conclusion or the product of inattention. No one wants to regret an outcome where additional time would have led to a more correct legal decision. Stated more positively, judges know an appropriate amount of time is necessary to allow them to gain requisite information to make the most correct decisions possible. Effective procedures allow contending parties and attorneys to provide all relevant information to the court, to present their respective sides of the case, and to respond to any questioning by a judge. Moreover, the parties and their attorneys should be able to question the opposing side’s arguments.

So while it is important to focus on each individual case, a judge must also look at each case in relationship to all others. Judges and court managers must balance the desire to give every case appropriate attention and the concurrent responsibility to honor this desire in a world of substantial caseloads and finite time and resources. One way to reconcile the conflict between “individualized” attention and caseload imperatives is to apply the proportionality proposition, which states that every case should receive individual attention in direct proportion to what it warrants (Chapper & Hanson, 1983, Ostrom & Hanson, 1999). More complicated, more difficult, and more serious cases should receive more time than the less complex, less difficult, and less serious cases. The idea of proportionality is intended to not only maintain equality and due process in the treatment of cases but also acknowledge the reality that available work time and resources are limited and must be managed.

Modern court management focuses on improving the way judges and staff members handle key proceedings in accordance with the rights and interests of the participants in the legal process within existing resource constraints. Increasingly, court leaders recognize the importance of incorporating explicit performance indicators into their efforts to gauge the success of court practices and procedures. Assessing the degree to which a court is performing well is a matter of results. A high performing

court is evidence-based in establishing success in meeting the expectations of their constituents (Ostrom & Hanson, 2010).

The main objective of this article is to further awareness of predictable variation in the timeliness of criminal case processing and how this knowledge supports court efforts to become more expeditious. Drawing on an extensive set of felony and misdemeanor cases resolved in seven Colorado courts,<sup>1</sup> alternative statistical models provide a deeper understanding of fundamental patterns in the composition of criminal cases and how composition influences case duration. Empirical findings show similarities in the comparative character and makeup of criminal caseloads and thereby support fundamental principles of criminal caseflow management geared to improving the timeliness of criminal caseflow in all state courts. Because criminal courts have similar work responsibilities, they can employ similar management methods and performance metrics. Demonstrating the applicability of a common set of caseflow management principles and the recently developed Model Time Standards for State Courts (National Center for State Courts, 2011) helps clarify the steps judges and court administrators can take to improve the timeliness of case processing.

The article proceeds in six sections. The next section reviews the literature on the empirical study of criminal court delay and finds there are important similarities in the composition of criminal caseloads nationally and proportional treatment based on charge seriousness. Where differences in timeliness occur, the literature points to the critical role of a court's commitment to case management in reducing delay. In the third section, a set of hypotheses are tested using data from the seven Colorado courts to determine whether a linkage exists between key findings from the literature and current criminal case processing. The hypotheses are confirmed and, in the fourth section, the purpose and design of the model time standards are reviewed and used to develop a set of key criminal case processing performance measures. In the fifth section, additional felony and misdemeanor case processing data are used to show how the time standards can be used to manage criminal caseflow in an interpretable and compelling way. The sixth section offers some concluding comments on the value of comparative court analysis.

## Review of the Literature

Research on court delay has produced an extensive literature (Church, Carlson, Lee, & Tan, 1978b; Fort, Hoel, Simonitsch, & Heena, 1978) although relatively few studies have incorporated analysis of case-level data on case processing time. Within this subgroup, there is a long-standing belief that much of the variation in criminal case processing time ought to be related to (a) *individual* case-related factors and (b) *organization-related* factors. The individual perspective acknowledges that case and defendant attributes, such as how serious the charge was, whether the defendant was released on bond, and whether the case was resolved by trial rather than a guilty plea, distinguish one case from another and that each attribute has its own independent effect on the time needed to resolve an individual case. Organizational explanations focus on the effects of the court structure and operations, such as the type of calendaring system

in place, the sufficiency of resources, the number of criminal cases, and other procedures, on case processing time.

However, an overarching result from many previous empirical studies of court delay is that individual (i.e., case- and defendant-related) characteristics are not strong statistical explanations of the variation in how long it takes to resolve cases. Individual attributes found to be important in one court are found to have marginal effects in others (Flemming, Nardulli, & Eisenstein, 1992). In addition, many authors who have combined factors drawn from quite exhaustive sets of case-level data produce results that have relatively low explanatory power (Luskin & Luskin, 1987; Neubauer, Lipetz, Luskin, & Ryan, 1981; Neubauer & Ryan, 1982). While there is a core of factors that explain some part of the variation in case processing time in most courts (e.g., case seriousness), most of the variance remains unexplained. Even the best of the earlier statistical studies are marked by the modest conclusion that, as put by Luskin and Luskin (1987), "courts differ" in what shapes processing time (p. 225). Similarly, Eisenstein, Flemming, and Nardulli (1988) acknowledged that no one has uncovered "a small number of common, influential factors" to explain why one case takes longer to resolve than another (p. 199).

A more nuanced understanding of the role of case and defendant characteristics on criminal case processing time emerges from a large and comprehensive statistical analysis of approximately 3,500 felony cases resolved in nine criminal courts (Ostrom & Hanson, 1999). Cross-sectional regression showed a relatively small number of common case and defendant characteristics accounts for about one third of the variation in the time it takes to resolve criminal cases in the nine courts, with seriousness of charge playing a dominant role. This finding parallels that of Katz (1972) in his study of Cleveland.

Composition will matter if certain types of cases (e.g., person crimes) are inherently more complex (e.g., more motions, more trials, more attention to victims and witnesses) and thereby require more court time and attention to resolve than other felony cases. In addition, judges and prosecutors may believe that more serious cases deserve more time and attention from the court and may establish explicit or implicit priorities to meet that goal. Three major findings arise from Ostrom and Hanson (1999) that relate variation in case processing time to the composition of a courts criminal caseload in multiple ways.

- First, the felony case composition is more similar than different among the nine study courts. Person crimes tended to constitute about 20% of the caseload, property, and drug cases about one third each, and a relatively small residual "other" category (e.g., weapons possession, driving while intoxicated [DWI], escape) of about 10% or so.
- Second, evidence shows that the nine court systems handle their common caseloads with the same proportional or relative degree of timeliness. In every court, the more serious, the more complicated, and the more difficult cases take longer to resolve than the less serious, less complicated, and less difficult cases.

- Third, an important way in which the nine courts differ is in the time frame that it takes to resolve all cases. The absolute elapsed time to disposition is longer in some courts than in others.

These findings show that some courts are able to get the same job done within tighter time frames than their counterparts in other court systems. Some degree of case differentiation is evident in courts of all speeds. The pattern is that case processing time will be longer for cases in which the defendant is convicted of a more serious crime. This aligns with a principle of proportionality that states every case should receive individual attention, but the amount of attention should be proportional to the amount needed. More complicated, more difficult, more serious cases should receive more attention than routine, uncomplicated, and less serious cases. The average speed with which more serious and complex cases are processed is different from court to court, but the relative speed of cases within each court is similar. Person crimes take longer to resolve in some courts than others, but in almost all courts, person cases take longer than property, drug, and so on. However, in more expeditious courts, the time frame for all cases is tighter. Hence, the principle of proportionality rather than assembly line justice guides the resolution of cases.

Why some courts are able to resolve cases in tighter time frames is not explained by the principle of proportionality or the role of case- and defendant-related characteristics. Because there's a limit to what can be learned with this data, some researchers turned their focus to the role of court organizational factors.<sup>2</sup> Yet again, earlier research shows few of the traditional organizational explanations of court delay differentiate faster from slower courts. Multiple studies have found that time to resolution is not significantly correlated with court size, number of criminal court filings, filings per judge, criminal charging process, or speedy trial rules (Church, Carlson, Lee, & Tan, 1978a; Eisenstein, Flemming, & Narduli, 1988; Goerd, Lomvardias, Gallas, & Mahoney, 1989; Ostrom & Hanson, 1999). For example, according to Church et al. (1978a), the speed of resolution is attributable more to "informal expectations, attitudes, and practices of attorneys and judges than the aspects of a court system that can be gleaned from an annual report, organization chart, or compilation of local rules" (p. 5) or what they call "local legal culture."

Ostrom and Hanson (1999) delved more deeply into the influence of local legal culture by analyzing variation in attitudes toward case management held by legal practitioners and the role these alternative views play in explaining case processing practices. The fundamental finding from the investigation into nine midsized courts revealed that attorneys have distinctive attitudes toward the leadership role played by a court and a court's ability to communicate its expectations clearly. If attorneys see a court exercising firm leadership and clearly stating its case management policies, the court is among the most expeditious. Conversely, if the attorneys see a court as a foggy communicator on case management and a source of weak leadership, the court is less timely.

One general conclusion from past research is that the amount of caseload management or control exercised by the court over the pretrial stages of litigation is directly related to the timeliness of criminal case processing. Administratively, an ongoing

mechanism for judicial control over the legal process is the routine practice of establishing and communicating clearly what, how, and when an action is expected of each side at all critical stages of the process. The overall purpose of clarifying expectations is to reduce uncertainty among the parties and their attorneys and thereby encourage attorney preparation. Reducing uncertainty promotes preparation because attorneys know (a) what judges expect at each hearing, (b) the event will occur when scheduled, and (c) there will be consequences if an attorney is not ready to proceed when a case is called (for an expanded discussion and evidence on these points, see Ostrom & Hanson, 1999). Court control of the process has been shown to lead to an overall improvement in timeliness and to enhance the ability of courts to more closely approximate established time standards.

## Modeling Patterns of Case Processing in Colorado

Earlier literature on criminal court delay found important similarities in felony case composition and evidence of proportional treatment in timeliness based on charge seriousness. Where courts differ was found to be in the absolute timing of case processing events. As a means to connect the current research to past inquiries, this section specifies a set of hypotheses to test the equivalence of the patterns of criminal case processing in seven Colorado courts with those observed in earlier studies. Evidence of predictable variation in the timeliness of criminal case processing supports the importance and ongoing development of effective case management practices as a key to improving the pace of litigation. The analytic plan centers around two basic quantitative questions:

- How consistent is the composition of felony and misdemeanor caseloads among courts?
- What are the observed differences in the timeliness of felony and misdemeanor case processing based on seriousness of offense?

Specifically, the analysis tests the following hypotheses:

**Hypotheses 1 (H1):** The courts will show consistency in felony and misdemeanor case composition.

**Hypotheses 2 (H2):** The courts will show evidence of proportional treatment in the timeliness of case processing based on seriousness of offense (more serious cases will take longer to resolve).

**Hypotheses 3 (H3):** The courts will show variation in absolute case processing time while preserving proportional differences based on seriousness of offense.

## Data

Data from Colorado are used to test these hypotheses for both felony and misdemeanor cases across several communities within a common state criminal jurisdiction.<sup>3</sup> Colorado's trial court system is organized into 18 Judicial Districts encompassing one

or more of the state's 64 counties. Each of the 18 judicial districts is organized around both county courts and district courts in each county. Misdemeanor cases and preliminary matters in felony cases are handled in county courts, while district courts resolve felony cases. As a result, part of case processing time for felony cases is consumed by a county court's procedures before it is "bound over" to the district court for final resolution.

To see how case processing time varies across population centers under the same state criminal code, each with sufficient numbers of cases for quantitative inquiries, the analysis focuses on seven court systems. These are the seven most populous counties and their largest city, with the exception of Denver County and City: Adams (pop. 491,337, Commerce City), Arapahoe (pop. 572,003, Aurora), Boulder (pop. 319,372, Boulder), Douglas (pop. 332,387, Castle Rock), El Paso (pop. 674, 741, Colorado Springs), Larimer (pop. 333,577, Fort Collins), and Jefferson (pop. 565,524, Lakewood). These seven counties provide a broad range of population centers from El Paso (Colorado Springs) that approximates Denver (682,545) in size, to large suburban clusters surrounding Denver such as Adams, Arapahoe, and Jefferson to smaller metropolitan locales, such as Boulder and Larimer, and finally to Douglas. In addition, two counties, Arapahoe and Douglas, are from the same Judicial District (18th). Consequently, the set of seven offers a look at how felony and misdemeanor cases are handled in a variety of courts that compare with other large to midsized counties across the country.

The variables used in the analysis are described in Table 1, with the myriad of criminal case types categorized into eight categories. The relationship between population size and the number of cases filed annually is relatively close as seen in Table 2 (felonies) and Table 3 (misdemeanors). The largest number of felonies and misdemeanors occur in El Paso and descend approximately in order of the population size for the remaining counties. The dependent variable is active case processing time.

## Findings

*Consistency in case composition (HI).* The percentile composition of the felony and misdemeanor caseloads are shown below in Figure 1. All criminal charges are grouped into six categories for felony and seven categories for misdemeanor based on a hierarchy of offense types reflecting underlying seriousness. In this ranking, for felonies, homicide is the most serious followed by person, property, drug, and legal process, with a small residual other category. Similar groupings are used for the most common misdemeanor case types.

The graphical display of felony and misdemeanor case distributions illustrates the degree of consistency across the seven courts in the Colorado sample. The percentage share of each case category occurring in each of the seven courts is shown by a hollow circle with the overall seven-court average in black. For each case type, the proportions observed in the individual courts are dispersed around the overall proportion with varying degrees of compactness. For example, the share of the felony caseload

**Table 1.** Variable Description.

Dependent variable:

Active case processing time: The length of active time from the date of court filing to the date of disposition. The running time is suspended when the case is out of court control (e.g., failure to appear and bench warrant is issued). Inactive time is removed from the calculation.

Case type categories:

- Criminal homicide (e.g., murder, negligent manslaughter, vehicular homicide)
- Person offense (e.g., attempted murder, rape, assault, robbery, kidnapping, sex offenses, incest, menacing, child abuse, domestic violence, etc.)
- Property offense (e.g., burglary, larceny, theft, tampering, auto theft, arson, forgery, fraud, bribery, trespass, cruelty to animals, etc.)
- Drugs (e.g., manufacture, distribution, sale, use of controlled substance)
- DUI/DWI
- Violations of the legal process (e.g., perjury, impersonation, obstruction of public justice, bail violation, protection order violation, escape, fugitive from justice, etc.)
- Public order (e.g., violations of liquor laws, disorderly conduct, vagrancy, prostitution, criminal mischief, gambling, public peace and order, curfew, fare evasion, wildlife or natural resources offenses, etc.)
- Other felony or other misdemeanor (e.g., felony or misdemeanor charges that do not fit into one of the categories defined above, including weapons, other motor vehicle, habitual criminal, etc.)

Note. DUI = driving under the influence; DWI = driving while intoxicated.

**Table 2.** Number of Felony Dispositions by Case Type.

County	Homicide	Person	Property	Drugs	Legal process	Other felony	Total
Adams	19	864	1,194	1,021	400	215	3,713
Arapahoe	19	681	937	796	372	174	2,979
Boulder	3	447	653	359	232	95	1,789
Douglas	3	162	316	124	64	36	705
El Paso	53	1,378	2,340	1,071	633	326	5,801
Jefferson	13	830	1,335	776	325	149	3,428
Larimer	4	325	731	381	245	109	1,795
Overall	114	4,687	7,506	4,528	2,271	1,104	20,210

made up of person crimes in each of the seven courts is clustered relatively tightly around the overall average of 23%. Likewise, looking at misdemeanor drug cases, the composition is tightly arrayed around the seven-court average of 6%.

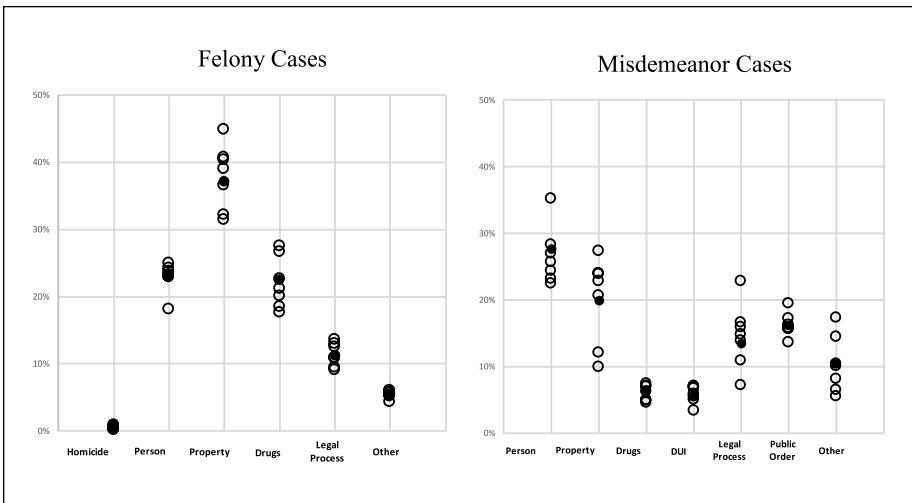
For felony cases, the two case types with the widest observable spread are property and drug cases. As shown in Table 4, the highest standard deviations across courts are also reported for property (4.5%) and drug (3.6%) proportions, and suggest that courts that depart from the overall proportion downward in one of these case types depart in



**Table 3.** Number of Misdemeanor Dispositions by Case Type.

County	Person	Property	Drugs	DUI/DWI	Legal process	Public order	Other misdemeanor	Total
Adams	1,691	594	420	404	886	941	1,041	5,977
Arapahoe	826	447	184	263	839	578	532	3,669
Boulder	563	499	95	145	332	329	116	2,079
Douglas	553	444	106	119	358	351	216	2,147
El Paso	2,720	1,761	576	260	560	1,334	499	7,710
Jefferson	1,325	1,565	362	291	793	783	595	5,714
Larimer	807	794	234	196	360	647	273	3,311
Overall	8,485	6,104	1,977	1,678	4,128	4,963	3,272	30,607

Note. DUI = driving under the influence; DWI = driving while intoxicated.



**Figure 1.** Felony and misdemeanor case composition by court.

Note. DUI = driving under the influence.

the opposite direction in the other. In addition, as will be discussed below under H2 showing the predicted duration of felonies by case type, the average times to disposition for property and drug offenses fall in the middle of the range and not far from each other. Thus, the impact on overall case processing time and allocation of judicial resources resulting from substituting some property offenses for drug offenses or vice versa is likely to be minor.

With respect to felony cases, the hypothesized finding of consistency in caseload composition is largely confirmed as case type categories tend to visibly cluster, with relatively small standard deviations. For misdemeanor cases, however, the result is

**Table 4.** Overall Felony and Misdemeanor Case Composition.

Felony case type	Overall proportion	SD	Misdemeanor case type	Overall proportion	SD
Homicide	0.6%	0.2%	Person	28%	4.0%
Person	23%	2.1%	Property	20%	6.1%
Property	37%	4.5%	Drugs	6%	1.1%
Drugs	22%	3.6%	DUI	5%	1.2%
Legal process	11%	1.6%	Legal process	13%	4.5%
Other	5%	0.5%	Public order	16%	1.7%
			Other	11%	4.0%

Note. DUI = driving under the influence.

less definitive. While person (El Paso is the lone outlier), drug, driving under the influence (DUI), and public order form discrete clusters and are rather tightly clustered around the mean proportions, the share of property and legal process cases show wider spread. However, analogous to felony (and shown under H2), the timeliness for property and legal process cases are similar so that some substitution of these case types among courts will have minimal impact on case processing time. Therefore, the overall conclusion is that while some variation in case composition exists, there is considerably more similarity than difference in the composition of the caseload being handled in each court.

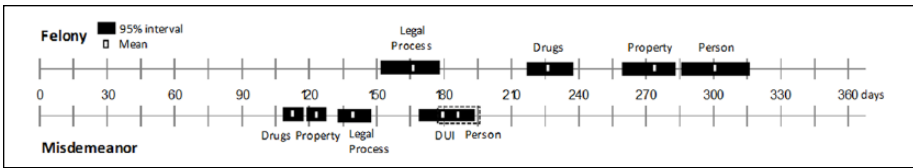
*Evidence of proportional treatment (H2).* Overall time to disposition (filing to disposition) is used to assess variation in timeliness controlling for felony and misdemeanor case categories. To evaluate differences in case duration by most serious offense type, felony and misdemeanor case durations were modeled as a function of case type using a Cox proportional hazards model. The explanatory variables included in the models were a series of indicator variables identifying each of the felony and misdemeanor case types based on case seriousness. The hazard rates from the model results estimate the change in likelihood that a case of a particular type concludes on each successive day, given that it has not terminated previously. Because homicide is specified as the baseline for the felony case model, the hazard rates for other case types are higher, indicating that the chances of a nonhomicide case concluding on a given day are greater than for a homicide case of equivalent duration. Person crimes were used as the baseline in the misdemeanor model. As shown in Table 5, the hazard rates were found to be statistically distinct for all felony and misdemeanor case type categories at  $p < .001$  (with the exception of  $p < .05$  for the difference between DUI and person cases for misdemeanor).

To ease interpretation, and drawing on separate hazard rates for each case type, average estimated durations were produced from the Kaplan–Meier survivor curves for each case type. These average estimated durations are reported in Figure 2 along

**Table 5.** Cox Proportional Hazard Model.

Felony case type	Hazard ratio	SE	$p > z$	Misdemeanor case type	Hazard ratio	SE	$p > z$
Person	1.65	0.16	.000	DUI	1.06	0.03	.041
Property	1.96	0.19	.000	Property	1.49	0.04	.000
Drugs	2.15	0.20	.000	Drugs	1.52	0.05	.000
Legal process	2.96	0.29	.000	Legal process	1.34	0.04	.000
Other	2.28	0.23	.000	Other	1.22	0.03	.000
Homicide-baseline				Person-baseline			

Note. DUI = driving under the influence.



**Figure 2.** Estimated duration for felony and misdemeanor cases.

Note. DUI = driving under the influence.

with the 95% confidence intervals based on the estimated standard errors for the average survival times.

These results confirm the hypothesis that courts treat cases proportionally in that the time to resolve specific types of cases varies depending on the severity of the charge. For example, average case processing time (duration) for felony cases step up in length from less serious (legal process) to more serious (person) in statistically significant distinct patterns.<sup>4</sup> Similar results are found for misdemeanor cases, with drug cases taking the least amount of time on average and DUI and person cases taking the longest. Simply stated, more serious cases take more time and the relationship holds true in all courts.

*Variation in timeliness within proportional treatment (H3).* The final finding is that the proportional treatment of cases in terms of timeliness is preserved as overall time to disposition varies. That is, for example, felony person crimes are among the most time-consuming cases in all seven courts, yet “time-consuming” has a different meaning in the different courts. For example, the mean time to disposition for person cases in Larimer (199 days) is considerably lower than observed in the other courts. The point estimate for mean time to disposition is put in context through the use of interval estimates showing the probable range within a 95% confidence interval for both felony and misdemeanor cases. Accommodating space concerns, Figure 3 shows the mean and corresponding confidence intervals for felony person and drug cases, while Figure 4 displays similar results for misdemeanor person and drug cases.<sup>5</sup>

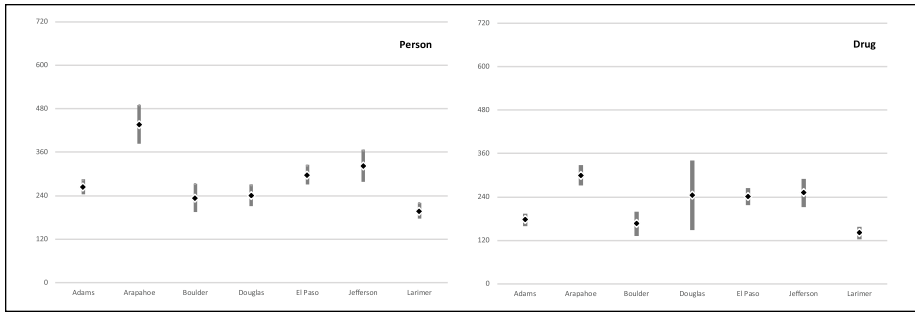


Figure 3. Felony mean time to resolution interval estimates.

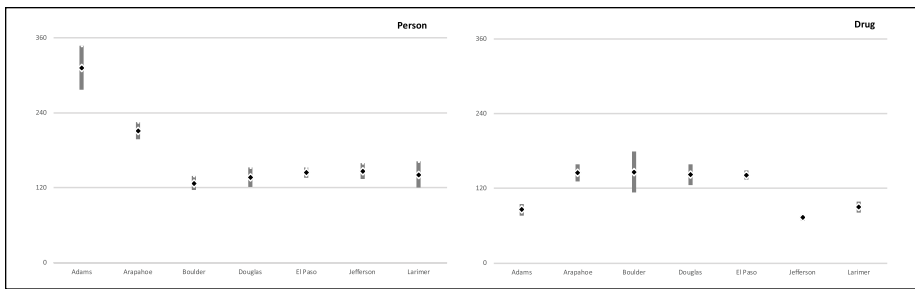


Figure 4. Misdemeanor mean time to resolution interval estimates.

The concept of proportionality implies that case processing time will be longer for more serious cases and is supported by evidence from these figures. For example, within each court and as is shown in the figures, the norm is for person cases to typically take longer to resolve than drug cases.

In addition, treating cases proportionately is a basis for efficiency. Efficiency captures the relationship between court performance and resources (e.g., manpower, time, dollars) and assists in managing a court in the most economical manner. A well-run court precisely avoids “cutting corners” by being efficient in handling all cases. As is discussed more fully in the next section, an efficient court seeks conformance with established time goals (e.g., 90% of felony cases resolved within 180 days) and also aims to reduce the variance (or spread) around the goal. The figures show that some courts resolve similar types of cases more expeditiously than other courts. The mean time with which more serious cases (e.g., person) and less serious cases (e.g., drug) are processed is different from court to court, but the *relative* speed is similar. One interpretation of this result is that the courtroom participants in some court systems are able to get the job done within tighter time frames than their counterparts in other court systems.

In summary, the statistical results confirm all three hypotheses. First, the data demonstrate that these seven courts have much in common in the work they do;

the comparative examination of caseload composition reveals more similarities than differences. Second the similarity in composition extends to a fundamental principle of how they handle cases. Individual attention to cases through proportional treatment in terms of timeliness is found to be a case processing norm. The systematic pattern of proportionality holds up across courts even though the overall time is different. Third, these findings support the belief that the underlying basis for tighter time frames in faster courts is more efficient work practices. And how courts can improve their efficiency through improved caseload management is the focus of the remainder of this article.

## **Assessing the Efficiency of Criminal Caseload Management**

### *Criminal Caseload Management Basics*

Caseload management has come to mean the blend of processes, techniques, and resources necessary to move a case effectively and efficiently from the date of filing to resolution (Friesen, 1984; Mahoney & Sipes, 1988; Ostrom & Hanson, 2010; Steelman, 2000). At the center of successful caseload management is the recognition that judges, with the assistance of court administration, must make a commitment to manage and control the flow of cases through the court. Although this responsibility by judges and court managers should be tempered by continuing consultation with attorneys and others on the best means for improvement, a court must lead the effort if it is to succeed.

With respect to managing the timely resolution of criminal cases, a first step is early and continuing court attention to managing case progress. A court should set the tone for criminal case processing by insisting that cases move expeditiously from filing to initial appearance or bail hearing through plea or trial to sentencing and resolution of any postsentence matters in the trial court. To ensure that dates are always assigned to events in every case, the court should enter a case-scheduling order early in every case. If both prosecution and defense lawyers have had early access to the evidence in a case, the court can schedule case events at appropriate intervals and insist that counsel meet deadlines for case preparation.

Second, timeliness is enhanced by creating the expectation that court events are meaningful; that is, the court communicates to all participants in the legal process the purpose, deadlines, and possible outcomes of all proceedings to ensure all events occur as scheduled and contribute substantially to the resolution of the case. The scheduling of pretrial matters calls for careful exercise of judicial control. It is essential to balance the need for reasonably prompt completion of necessary case-related steps with reasonable accommodation for the demands placed on the time of the participants in the proceedings. By trying to make all pretrial case events meaningful opportunities for resolution, by promoting early and meaningful plea discussions, and by ruling early on suppression and other motions likely to be dispositive, the court should be able to resolve many cases well in advance of trial. Trial dates should be set only for cases that

need them. A smaller number of trials on the trial calendar should enhance the court's ability to provide trials consistently on the first-scheduled trial date.

A third factor is controlling continuances. While courts must allow adequate time to accomplish necessary tasks, events should also be scheduled sufficiently soon to maintain awareness that the court wants reasonable case progress and will not allow continuances simply because participants are not prepared. Key to successful caseflow management is adopting a policy governed by clearly documented business rules to limit continuances and apply it in a reasonable but consistent and firm manner.

In summary, effective court management involves the creation of goals and expectations about what constitutes success. A key ingredient is to identify and establish case processing time guidelines. Courts with successful caseflow management programs know what they are trying to accomplish because their goals are reflected in the case processing time standards that they have adopted.

### *Performance Measurement*

The promise of better caseflow management is that criminal cases are resolved fairly and without unnecessary delay. The extent to which these twin goals are achieved can be addressed empirically through performance measurement. The growing nationwide interest in standards of court performance, and time standards in particular, is where the joint aspects of individual attention and timely case processing intersect. Time standards can provide general boundaries for case processing by balancing the concerns of "quality" and "timeliness." Efforts to achieve this balance require that court systems improve their efficiency. Efficiency within the context of case resolution means to use resources in their most productive fashion to produce more of what a court system values. The benefits to courts from more efficient case processing are significant in terms of better management of existing resources, delay reduction, and furthering public accountability. For example, reducing the time from the date of filing to the date of the pretrial release decision makes it possible to better manage and reduce the costs of standing jail populations. In addition, greater attention to case management reduces delay by, for example, lowering the number of continued events, resulting in fewer wasted courtroom hearings scheduled, redundant review of files, and more timely resolution. Furthermore, robust case management strongly supports a court's efforts to empirically demonstrate to funders and the public a clear commitment to the effective use of court resources.

### *Model Time Standards*

Time standards are essential to setting case processing goals and expectations. The 2011 Model Time Standards for State Trial Courts establish parameters for the time required to dispose of cases from the date of filing to the date of disposition.<sup>6</sup>

*Overall felony and misdemeanor time standards.* For criminal cases, as shown in Table 6, the Model Time Standards provide for a first tier time period within which 75% of the

**Table 6.** Model Time Standards for Felony and Misdemeanor Cases.

Percentage of cases resolved within . . .		
	Felony	Misdemeanor
60 days	—	75%
90 days	75%	90%
180 days	90%	98%
365 days	98%	—

filed cases should be resolved, a second tier time period within which 90% of the filed cases should be resolved, and a third tier time period within which 98% of filed cases should be resolved. The 98% tier is meant to establish a backlog measure and to fix the maximum time that should be taken to decide and finalize all but the most highly complex cases.

*Intermediate time standards.* Meeting the overall time goals for felony cases is a challenge because (a) most jurisdictions operate in a two-tier system (i.e., a limited jurisdiction court hears the early stages of the criminal case and a general jurisdiction court resolves the case following bindover) and (b) cases require the involvement of multiple justice system partners including the prosecutor’s office, indigent defense counsel, and pretrial services. All must work together to achieve fair and timely resolution of felony cases while meeting their institutional responsibilities. Therefore, setting and enforcing intermediate time standards are part of an effective case management strategy.

The Model Time Standards propose a focus on interim court events for both felony and misdemeanor cases so as to allow a court to calculate and monitor case progress. Following the date when the case is first filed with the court, 100% of felony and misdemeanor cases should have the initial appearance within the time set by state law (i.e., typically 24-72 hr after arrest) and, for felony cases, hold the bindover hearing within 60 days. In 98% of felony cases, trials should be initiated or a plea accepted within 330 days, while for misdemeanor cases the goal is 150 days.

### *Integrating Time Standards and Caseflow Management Principles*

The processing of felony and misdemeanor cases largely follows a common set of case processing events. Following arrest, the criminal complaint is filed with the court and a first (or initial) appearance date is set. At the first appearance (typically held within 24-72 hr), the accused is informed of the charges, of the right to counsel (if indigent), a bail review is conducted, and the next court event is set. With respect to misdemeanors, following any pretrial motions (e.g., set aside complaint, dismiss the case, or to suppress evidence) and/or court-established “trial readiness” or “trial management” conferences, the case is typically resolved by plea or trial.

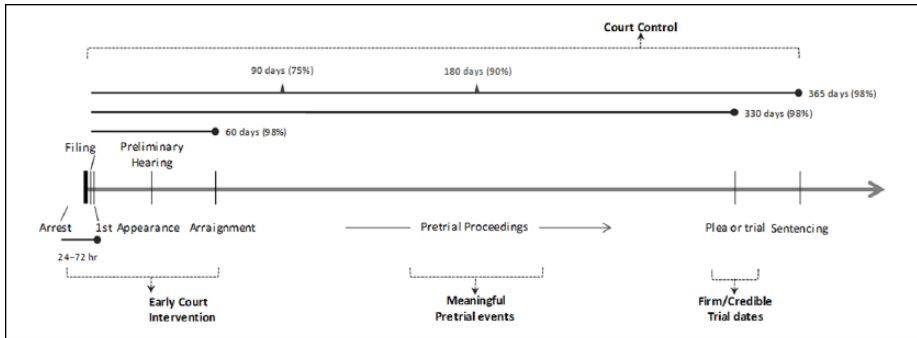


Figure 5. Felony case timeline.

For felony cases, the next scheduled event is typically the preliminary hearing where the defendant has counsel and a judicial determination of probable cause is made through a contested hearing and the next court date is set. In a two-tiered court system, a felony case will be bound over to the upper court for the arraignment. Several pretrial proceedings may be held to hear pretrial motions. Assuming a guilty plea is not entered, a bench or jury trial is held, followed by a sentencing hearing. The felony case processing time standard calls for the completion of all events, for 98% of all cases, within 365 days.

Figure 5 is an overview of the felony process and provides a visual display of the relationship between key felony case processing events, relevant time standards, and caseload management principles. For example, a central part of continuous court control is ensuring felony cases move through all intermediate court events in a timely fashion and are ultimately resolved within established time lines. This idea is shown at the top of the diagram by linking the model time standards to the main events in the life of a felony case.

Likewise, timely case processing means numerous events need to happen in a controlled fashion during the early stages of a felony case. Early court intervention involves tasks such as recording the initial filing, scheduling events, conducting hearings, determining indigence, and exchange of discovery. Keeping cases on track requires that the commencement of a case triggers an ongoing monitoring and review process.

## Discussion

### Overall Time to Disposition

*Felony cases compared with benchmarks.* Across the seven courts, an average of 85% of the felony cases are resolved in 365 days (Table 7). For comparison, the table also provides additional benchmarks based on the model time standards time period tiers (number of days from filing to resolution). However, the pattern in meeting the



**Table 7.** Overall Time to Disposition for Felony Cases.

County	Time from filing to disposition for felonies						Mean No. of days	Median No. of days
	Number of cases	% within 90 days	% within 180 days	% within 365 days	% within 730 days			
Adams	3,713	35%	58%	85%	97%	225	148	
Arapahoe	2,979	22%	41%	73%	92%	351	223	
Boulder	1,789	42%	70%	91%	97%	213	112	
Douglas	705	22%	48%	80%	94%	306	188	
El Paso	5,801	34%	61%	87%	96%	236	138	
Jefferson	3,428	22%	54%	87%	95%	287	168	
Larimer	1,795	42%	73%	93%	97%	174	109	
Overall	20,210	31%	58%	85%	95%	255	150	

established time standards is clear: None of the seven courts meets any of the Model Case Processing Time Standards.

Looking at felonies more closely, the two counties on the smaller end of the filing totals, Boulder and Larimer come closest to meeting the Model Time Standards. In the former court, at least 91% of the felonies reach resolution in 365 days or fewer and in the latter court at least 93% are resolved by one year's time. The Model Time Standards prescribe that 75% of the felony cases be resolved within 90 days and 90% be resolved within 180 days after filing. Once again, Boulder and Larimer Counties come closer to these goals, but they each fall short.

Table 8 focuses on the pattern of felony cases resolved within 365 days. Here is another view of the proportional treatment of cases in terms of timeliness by case type. While 85% of felony cases overall are resolved within 365 days, specific case type proportions vary by seriousness of the offense. That is, across the seven courts, 54% of homicide cases are resolved within 365 days, compared with 80% of person cases and 92% of legal process cases. Similar patterns can be seen in the lower panel showing the median number of days to resolution.

*Misdemeanor cases compared with benchmarks.* With respect to the overall pace of resolution for misdemeanors, similar results emerge, with 77% of cases resolved within the benchmark of 180 days. Taking a more detailed look at misdemeanors, Figure 6 uses an alternative method of presentation to display the percentage of misdemeanor cases resolved within discrete 15-day increments, for each of the seven Colorado counties. For example, 15.4% of misdemeanors are resolved within the first 15 days in Adams County. In addition, the cumulative percentage of cases resolved within 90 and 180 days and the mean and median number of days from filing to disposition are provided for reference (the number of cases is shown in Table 2). The targets within the model time standards of 90% of misdemeanor cases reaching resolution in 90 days and 98% within 180 days, are not consistent with realities. All seven courts

**Table 8.** Time to Disposition by Felony Case Type.

County	All felonies	Homicide	Person	Property	Drugs	Legal process	Other felonies
Percentage of felony cases resolved within 365 days after filing							
Adams	85%	42%	81%	83%	89%	93%	87%
Arapahoe	73%	26%	64%	71%	77%	83%	82%
Boulder	91%	100%	87%	89%	93%	96%	97%
Douglas	80%	33%	82%	75%	86%	89%	75%
El Paso	87%	66%	81%	89%	83%	93%	92%
Jefferson	87%	46%	84%	85%	89%	94%	91%
Larimer	93%	75%	89%	91%	95%	96%	98%
Overall	85%	54%	80%	85%	86%	92%	90%
<i>n</i>	20,210	114	4,687	7,506	4,528	2,271	1,104
Median number of days from filing to resolution							
Adams	148	435	211	161	106	82	158
Arapahoe	223	500	276	228	219	121	189
Boulder	112	229	144	116	88	73	113
Douglas	188	865	196	217	143	73	226
El Paso	138	304	187	121	150	88	117
Jefferson	168	437	203	175	149	97	158
Larimer	109	178	149	108	103	78	114
Overall	150	342	198	148	140	87	137
<i>n</i>	20,210	114	4,687	7,506	4,528	2,271	1,104

fall short of resolving 90% of cases within 90 days, but are relatively better when considering the final cutoff date of 98% within 180 days.

A visual examination of the distributions in Figure 6 reveals three additional patterns related to time to resolution. First, the distribution for each county has positive skew, with more misdemeanor cases being resolved earlier in the process and few cases resolved after 180 days. Second, peaks in the distributions are more pronounced in the faster courts (e.g., Boulder, Larimer, and Jefferson), and flatter in the other counties. For example, in Arapahoe County, the percentage of cases resolved within each 15-day increment within the first 180 days, ranges from 3% to 7%. Finally, in several counties there are discrete periods where the proportion of resolved cases is noticeably higher than other time periods. For example, almost one fifth of all cases resolved in Larimer County occur between 30 and 45 days. Similarly, a large proportion of cases are resolved within the first 15 days (13%) and between 45 and 60 days (15%) in Boulder County. The higher rates in a select set of time intervals may be a reflection of existing court policies, practices, and procedures that encourage case resolution during these time periods.

Table 9 turns attention to the pattern of misdemeanor cases resolved within 180 days by case type and court. While 77% of misdemeanor cases overall are resolved

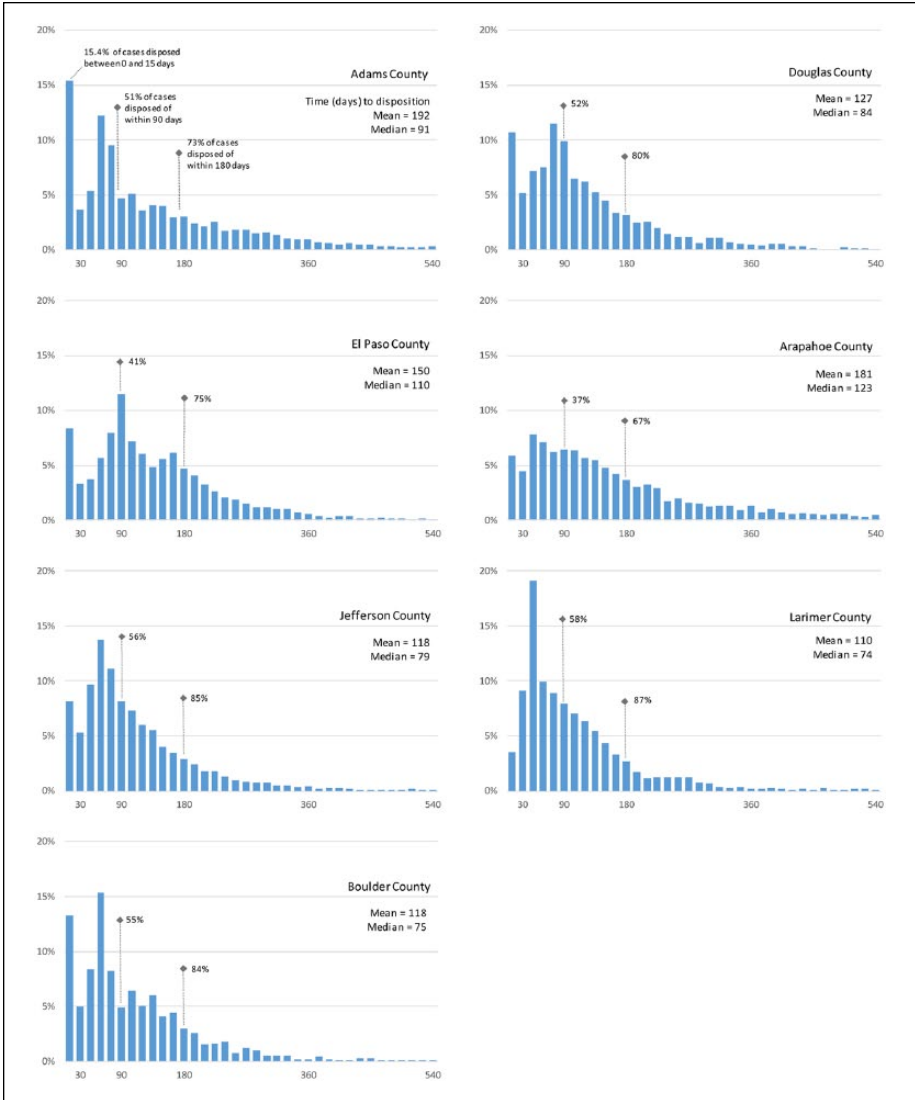


Figure 6. Percentage of misdemeanor cases disposed within discrete 15-day increments.

within 180 days, specific case type proportions vary by seriousness of the offense. Again, courts appear to treat cases proportionally in that the time to resolve specific types of cases varies depending on the seriousness of the charge. Although the pattern for misdemeanors is not as pronounced as for felonies, the table does show that across the courts person crimes cases (overall median of 109 days) and DUI/DWI cases

**Table 9.** Time to Disposition by Misdemeanor Case Type.

County	All misdemeanor	Person	Property	Drugs	DUI/ DWI	Process/ public order	Other misdemeanor
Percentage of misdemeanor cases resolved within 180 days after filing							
Adams	72%	59%	79%	93%	66%	80%	69%
Arapahoe	67%	58%	79%	77%	55%	72%	59%
Boulder	84%	79%	89%	81%	79%	86%	77%
Douglas	80%	76%	88%	84%	80%	80%	76%
El Paso	75%	76%	77%	80%	52%	77%	58%
Jefferson	85%	78%	89%	98%	78%	87%	80%
Larimer	87%	82%	89%	95%	84%	89%	86%
Overall	77%	72%	84%	88%	68%	81%	70%
<i>n</i>	30,607	8,485	6,104	1,977	1,678	9,091	3,272
Median number of days from filing to resolution							
Adams	91	141	72	61	112	68	108
Arapahoe	123	151	77	122	160	106	144
Boulder	75	99	55	101	109	70	103
Douglas	84	96	71	131	78	80	109
El Paso	110	102	101	139	178	104	154
Jefferson	79	98	72	61	112	65	105
Larimer	74	93	58	78	85	68	69
Overall	93	109	81	89	126	83	116
<i>n</i>	30,607	8,485	6,104	1,977	1,678	9,091	3,272

Note. DUI = driving under the influence; DWI = driving while intoxicated.

(overall median of 126 days) tend to take longer than property (81 days), drug (89 days), and legal process/public order cases (83 days).

**Interim Event Times**

*Felony cases.* Concerning the interim stages of the felony legal process, the seven courts approximate the prescribed number of days for plea agreements more than for initial appearance proceedings, bind over from a county court to a district court, and trial completion (Table 10 shows both percentage of days and median days to complete each interim event). Two thirds of pleas are reached in 330 days or fewer in every court, with 75% or greater of pleas attained by 330 days or fewer in six of the courts. Larimer and Boulder Counties have the largest percentages of 92% and 91%, respectively.

The timeliness of the courts dims when looking at initial appearance and bindover events. Here El Paso County registers the largest percentage (69%) for holding initial appearances within 48 hr or fewer and Boulder completes the bindover process in a greater percentage of cases (80%) within 60 days or fewer than the other courts. The

**Table 10.** Interim Event Times for Felony Cases.

County	Percentage of felony cases where . . .				Median number of days in felonies to . . .			
	Initial appearance held within 48 hr	Bindover within 60 days	Disposition within 330 days (plea cases)	Disposition within 330 days (tried cases)	Initial appearance	Bindover	Disposition (plea cases)	Disposition (tried cases)
Adams	49%	41%	83%	29%	3	66	151	427
Arapahoe	51%	50%	69%	13%	1	63	226	576
Boulder	60%	80%	91%	26%	0	29	112	379
Douglas	51%	37%	77%	15%	0	78	196	500
El Paso	69%	76%	85%	53%	1	65	143	319
Jefferson	49%	60%	84%	34%	2	47	175	369
Larimer	65%	62%	92%	35%	0	96	113	392
Overall	55%	59%	83%	34%	1	59	155	403

percentages of these two events happening within the recommended time frames hovers above 50% across all seven courts. However, across the seven courts, the median time is 1 day to conduct the initial appearance and 59 days to bind over.

The situation is least positive for the percentage of trials completed within 330 days. Only El Paso County resolves a majority, 53%, of its trials within 330 days or fewer. Perhaps these resolution times for trials reflect the internal complexity of many cases ultimately resolved at trial. In many courts, especially for cases involving serious offenses, trial dates are frequently only set 12 to 24 months after the filing date to allow time to determine whether often lengthy pretrial proceedings such as mental health examinations and multiple motion hearings justify taking the case to trial. The median time to trial resolution across the seven courts is 403 days.

*Misdemeanor cases.* The overall proportion of misdemeanor cases meeting the 48-hr benchmark for holding the initial appearance of 54% is almost identical to what was observed for felony cases (Table 11). Likewise, the overall percentage meeting the 150-day benchmark for plea acceptance or initiation of trial of 69% for cases resolved by plea and 18% of cases resolved at trial is well below the goal of 98% in all jurisdictions.

Examining the median number of days shows that 50% of misdemeanor cases are resolved by plea within 93 days, while the similar metric shows 264 days for cases resolved at trial. The potentially odd result is the median of 36 days to conduct the initial appearance. The issue is largely resolved when the event times are distinguished depending on whether the defendant’s case was initiated by summons or being taken into custody. In a summons case, the defendant is not taken into custody but is instead issued a summons, citation, notice, or ticket (e.g., desk appearance ticket) directing the defendant to appear in court on a specified date. With that distinction, the median number of days from filing to initial appearance is 0 for custody cases and 58 days for summons cases.

**Table II.** Interim Event Times for Misdemeanor Cases.

County	Percentage of misdemeanor cases where . . .			Median number of days in misdemeanors to . . .		
	Initial appearance held within 48 hr	Disposition within 150 days (plea cases)	Disposition within 150 days (tried cases)	Initial appearance	Disposition (plea cases)	Disposition (tried cases)
Adams	50%	65%	5%	40	93	345
Arapahoe	52%	54%	5%	40	138	490
Boulder	61%	79%	11%	15	70	244
Douglas	54%	73%	14%	24	84	341
El Paso	64%	64%	27%	41	107	229
Jefferson	51%	75%	28%	43	86	195
Larimer	66%	78%	16%	29	76	269
Overall	54%	69%	18%	36	93	264

This section has used data from seven Colorado counties to examine how well one set of courts performs against the model time standards. Most notable is that no court currently meets either the overall or interim time standards for both felony or misdemeanor cases. This finding underscores the aspirational character of the national standards and may suggest the need for additional refinements to the model time standards to better accommodate case processing realities in the courts.

Courts concerned with improving their degree of timeliness and case processing quality need to begin by assembling the information needed for a thorough appraisal of current practices that will serve to establish an ongoing dialogue between bench, bar, and court administration. The recommendation that court systems make better use of information is hardly new, but the current research offers direction in identifying specific information needs, a performance framework for how the information can be used, and results from a set of representative courts against which courts can begin to be compared.

## Conclusion

William Gladstone's maxim that "justice delayed is justice denied" provided a visionary statement for why court management matters. The timely resolution of criminal cases is a primary focus of court management and is supported through the interrelated techniques of caseload management, standard time frames, and performance assessment. All courts pursue the same fundamental purposes: guarantee justice and liberty, resolve disputes, maintain the rule of law, provide equal protection, and ensure due process. What differs is how courts organize and manage themselves to achieve these goals. Increasingly, court leaders recognize the importance of incorporating explicit performance indicators into their efforts to gauge success in achieving essential values.

Courts gain a valuable comparative perspective when their performance is examined in relation to other courts and against established benchmarks. Transcending the brief look at a section of Colorado, the seven counties in their size, composition, and legal structure are similar to counties elsewhere. One of the striking possibilities for this crescent of communities is the continuation of comparisons among additional Colorado courts as well as similarly situated courts in other states. Two important patterns emerge in this analysis that support the utility of cross-court comparisons, raise the prospect for realistic learning opportunities about policies and procedures effective in encouraging timeliness, and provide encouragement for the further development of national standards and benchmarks.

The first pattern concerns caseload composition. Similarities in cases coming to courts are more striking than their differences. For example, when felony criminal cases are grouped by the seriousness of the offense (e.g., homicide, other crimes against the person, property crimes, drug crimes, legal process, and other types of felonies), the rank ordering of the categories is quite similar in most communities, regardless of their demographic characteristics and court structures.

A second pattern is that courts vary in their time frames to resolve cases, although they all tend to follow the norm of proportionality. Courts uniformly give more time to person cases, for example, than drug cases, but some courts manage to resolve such cases faster than other jurisdictions. In fact, the more expeditious courts tend to resolve each of the separate types of cases with greater expedition than the courts that are slower overall. That is, whereas courts have essentially the same work to do, and follow the same basic priority in allocating time, some manage to resolve cases within a tighter schedule.

These dual findings suggest why courts will benefit from the use of a common set of performance metrics. Courts can be assessed comparatively against the same criteria because they share similar caseload responsibilities and a basic orientation in giving attention to individual cases. Established benchmarks provide a point of comparison for court leadership to assess critical aspects of caseload management that are being done well and identify areas that might be in need of improvement. Absent a point of comparison, it is difficult, if not impossible, to assess how a court is doing. Moreover, because courts operate within different time frames, much is to be learned by comparative investigation of how expeditiousness is achieved (or not) in alternative environments.

### **Authors' Note**

The opinions and conclusions contained in this article do not necessarily reflect the policies or positions of the Laura and John Arnold Foundation.

### **Acknowledgments**

We gratefully acknowledge the support of the Laura and John Arnold Foundation. In addition, we would like to thank the anonymous reviewers as well as our colleagues Dr. Scott Graves and Shannon Roth for their help in producing this article.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This paper was commissioned by the Misdemeanor Justice Project—Phase II funded by the Laura and John Arnold Foundation. Points of view or opinions contained within this document are those of the author and/or the participants and do not necessarily represent the official position or policies of the Laura and John Arnold Foundation and the Misdemeanor Justice Project.

## Notes

1. This article contains the initial findings from a larger project titled the *Effective Criminal Case Management* project currently underway and funded by the Laura and John Arnold Foundation. The purpose of this project is to discover, document, and disseminate guidance on the most effective practices for misdemeanor and felony caseload management in the state courts. Developed on the basis of a broad sample of more than 75 trial courts, these solutions will be designed to accommodate courts no matter where they are located in the continuum of organizational capacity, allowing courts to select tools most pertinent to their context. Making a range of evidence-based practices available to practitioners will accelerate improvement in managing criminal cases, reducing delay and cost, and thus improving the quality of justice.
2. The failure to explain case processing time on the basis of case and disposition information led to comparative research on state criminal court delay to all but cease in the 1990s, although practical efforts at delay reduction continued following this period (e.g., Ostrom & Hanson, 2010).
3. All data were provided by the Colorado Administrative Office of the Courts and is comprised of all felony and misdemeanor cases resolved in the seven courts during the calendar year 2014.
4. Homicide is not shown in the above graphic to preserve clarity. The homicide mean is 558 days, with 95% confidence interval of 403 days to 712 days.
5. Similar patterns are found for all case types and results are available upon request.
6. The Conference of Chief Justices, the American Bar Association, the Conference of State Court Administrators, and the National Association for Court Management have all adopted these time standards as a reflection of what is an appropriate time frame to ensure the timely and fair resolution of felony and misdemeanor cases.

## References

- Chapper, J. A., & Hanson, R. A. (1983). Expedited procedures for appellate courts. *Maryland Law Review*, *46*, 653-721.
- Church, T. W., Jr., Carlson, A., Lee, J. Q., & Tan, T. (1978a). *Justice delayed: The pace of litigation in urban trial courts*. Williamsburg, VA: National Center for State Courts.
- Church, T. W., Jr., Carlson, A., Lee, J. Q., & Tan, T. (1978b). *Pretrial delay: A Review and Bibliography*. Williamsburg, VA: National Center for State Courts.



- Eisenstein, J., Flemming, R., & Nardulli, P. (1988). *The contours of justice: Communities and their courts*. Boston, MA: Little, Brown.
- Flemming, R., Nardulli, P., & Eisenstein, J. (1992). *The craft of justice*. Philadelphia: University of Pennsylvania Press.
- Fort, B., Hoel, B., Simonitsch, J., & Heena, P. (1978). *Speedy trial: Selected bibliography and comparative analysis of state speedy trial provisions*. Kansas City, MO: Midwest Research Institute.
- Friesen, E. C., Jr. (1984). Cures for court congestion. *Judges' Journal*, 23, 4-8.
- Goerdt, J., Lomvardias, C., Gallas, G., & Mahoney, B. (1989). *Examining court delay: The pace of litigation in 26 urban trial courts*. Williamsburg, VA: National Center for State Courts.
- Katz, L. (1972). *Justice is the crime: Pretrial delay in felony cases*. Cleveland, OH: The Press of Case Western University.
- Luskin, M., & Luskin, R. (1987). Case processing time in three courts. *Law & Policy*, 9, 207-232.
- Mahoney, B., & Sipes, D. A. (1988). Toward better management of criminal litigation. *Judicature*, 72, 29-42.
- National Center for State Courts. (2011). *Model time standards for state trial courts*. Williamsburg, VA: National Center for State Courts.
- Neubauer, D., Lipetz, M., Luskin, M., & Ryan, P. (1981). *Managing the pace of justice: An evaluation of LEAA's court delay reduction programs*. Washington, DC: Government Printing Office.
- Neubauer, D., & Ryan, J. (1982). Criminal courts and the delivery of speedy justice: The influence of cases and defendant characteristics. *Justice System Journal*, 7, 213-235.
- Ostrom, B. J., & Hanson, R. A. (1999). *Efficiency, timeliness, and quality*. Williamsburg, VA: National Center for State Courts.
- Ostrom, B. J., & Hanson, R. A. (2010). *Achieving high performance: A framework for courts*. Williamsburg, VA: National Center for State Courts.
- Steelman, D. C. (2000). *Caseflow management: The heart of court management*. Williamsburg, VA: National Center for State Courts.

## Author Biographies

**Brian J. Ostrom**, PhD, is a Principal Court Research Consultant with the National Center for State Courts. He has extensive training and experience in performance evaluation and in using a wide range of qualitative and quantitative analysis techniques to understand and overcome problems in the courts. His current research focuses on improving criminal case processing through effective caseflow management and performance assessment.

**Roger A. Hanson**, PhD, is a consultant to the National Center for State Courts. His research focuses on what is required to enable trial and appellate courts to handle cases, litigants, attorneys, and all other participants in the legal process fairly and efficiently.

**Matthew Kleiman**, PhD, is a Principal Court Research Consultant with the National Center for State Courts in Williamsburg, VA. His research emphasizes the development of tools for justice system partners to effectively and efficiently manage their organizations. Recent work has focused on strategic planning, caseflow management, and the implementation of court specific performance measures.