Managing Data Quality in California’s Trial Courts


CSP: Let’s begin by asking you to describe the court statistics environment in the California trial courts.

CB: We have 58 superior, or trial, courts here in California and each of these courts essentially operates their own local case management system. Some of these trial courts have multiple systems within their own court, for example, one system for civil cases and another for criminal cases. The compilation, aggregation, mapping and submission of data are all done locally. We have a uniform statistical system known as the Judicial Branch Statistical Information System (JBSIS), which is a comprehensive system of statistical reporting that courts use to determine what to report, how to report, and where to report that data.

Our JBSIS system is made up of 12 different report types. A report type pertains to case type categories such as family law, juvenile delinquency, probate, civil, mental health, or felonies. Within each one of these report types there are numerous case types, and within case types there are specific data elements. All of this is documented in a detailed manual that defines the data and counting rules. Data is reported monthly through a Web portal or sent electronically to the AOC via FTP or e-mail.
How do you review the data, and what feedback do you provide to the courts about the data quality?

We have the initial data quality check built into the report submission process for courts that submit their JBSIS reports electronically. This checks the basic elements like data format, the addition/subtraction and totals. The system will confirm that a report was submitted and accepted or provide feedback on possible errors in the report. The error rate at this stage is very low, and usually attributable to a report coding or file format issue.

In addition, there is a lot of work that we do on the back end once the data gets loaded into our data warehouse and we start to look at it, analyze it, and use it for various projects or purposes here at the AOC.
**CSP:** How do you then go about providing feedback to the courts throughout this second phase of your review and use of the data?

**CB:** We go through a comprehensive, multistage data quality control process for our annual Court Statistics Report. This starts with a review of the filings and disposition data. We designed an automated process that extracts the data from the warehouse and populates a spreadsheet file that we provide to the courts. In that process the system looks for data that is outside the “normal” or expected range of filings, for example, and flags that data cell with a blue box if it is below the expected range and a red box if it is above the expected range.

In addition, we use clearance rate (which the AOC defines as the total number of cases disposed as a percentage of the total number of new cases filed during the reporting period) as a data quality tool. We highlight the cells in the report to indicate a clearance rate below 50 percent or above 150 percent. This provides an easily understood measure that can help identify problems with disposition reporting, for example. This is a common problem in some civil cases, when the parties settle and fail to notify the court and leave the case without a disposition.

**CSP:** The flagged data could be a sign of a data problem, or it could simply be a sign that it was an atypical month, for example, if the court was clearing out a backlog.

**CB:** Absolutely. We do hear back from courts, and in the process learn a great deal about each court’s data and how it reflects their court operations. So usually they can explain the reason for the atypical data, whether it reflects the court’s operations or increased activity, for example, prosecution of particular offenses, or issuing traffic citations as a result of a local law enforcement campaign. But sometimes it does reveal that the court had entered in some data incorrectly. So these tools do help courts identify data entry errors and other sorts of errors, based upon the manual nature of how data is entered, compiled, and reported. Several courts were able to identify an error in their reporting of felony dispositions based on these quality control reports, which resulted in an undercount of certain types of felony dispositions.
You’ve described the process as it relates to the annual Court Statistics Report. Do you also provide feedback to the courts during the year?

Yes, we do, for the obvious reason that it is easier to identify the issues driving the statistics when they are fresh in mind. We disseminate a quarterly data quality control report that contains many of the same flags and the same tools as our quality control report for the annual report. Courts will look at these quarterly reports and identify any data issues and amend the data and resubmit it in a more timely fashion.

In addition to being able to identify one-time discrepancies, do you feel like this has resulted in some sustained improvement in the quality of the data overall?

Note: Excerpt from Annual Data Quality Control Report: 2012 Court Statistics Report (FY2010-11 Data)
### 11a-Non-Traffic Misdemeanors

**Clearance Rate** (Dispositions / Filings)

<table>
<thead>
<tr>
<th></th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2009-2010</strong></td>
<td>76%</td>
<td>80%</td>
<td>104%</td>
<td>85%</td>
<td>91%</td>
<td>79%</td>
<td>108%</td>
<td>76%</td>
<td>49%</td>
<td>96%</td>
<td>79%</td>
<td>94%</td>
<td>87%</td>
</tr>
<tr>
<td><strong>2010-2011</strong></td>
<td>113%</td>
<td>84%</td>
<td>85%</td>
<td>94%</td>
<td>89%</td>
<td>95%</td>
<td>96%</td>
<td>98%</td>
<td>109%</td>
<td>100%</td>
<td>102%</td>
<td>95%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Excerpt from Annual Data Quality Control Report: 2012 Court Statistics Report (FY2010-11 Data)

**CB:** Yes. We use our JBSIS data for a variety of purposes including workload assessment models for judges and staff, as well as our methodology supporting resource allocation decisions. And the courts themselves use these models to manage their own personnel and resources, and we’ve provided several management reports to the courts that allow them to run these workload models based on various scenarios or inputs. The use of these data motivates the courts to improve the quality and the completeness of the data. They are not just doing it for the sake of publishing reports, but rather to improve their operations.

**CSP:** Identifying the real, practical benefits for the trial courts that result from classifying cases and counting them correctly seems critical to improving data quality.
CB: That’s exactly right. California, like many other states, is under intense budget pressure. Having data to evaluate operations, manage resources, and become more efficient is really critical in this environment. Having better data is critical for making better decisions about how best to manage workload and resources in these difficult times at both the court and statewide levels.

CSP: What else do you do to illustrate the benefits?

CB: We also provide additional reports that are not directly related to reporting statistical data, but are tools for courts to help them utilize their data. Time to disposition and age of pending caseload are examples of these reports, which are sent to the data staff person but also to the court executive officer and the presiding judge. This connects the court to its data in useful ways. We’ve received a lot of positive feedback about all of these data reports.

I think for some courts the compilation and the reporting of data is a highly automated process. And although that can be very efficient from a resource perspective, sometimes that can distance the court from having access to and understanding its data. So, the more that we can help courts to look at their data in different ways, the better.

CSP: What is the biggest challenge for courts in terms of maintaining data quality?

CB: The variability not just across the 58 trial courts but also within each court across locations and divisions. As I mentioned earlier, each of the trial courts essentially operates their own local case management system and some courts have multiple systems within their own court. In addition, the data that gets submitted via these monthly reports ultimately comes from hundreds and hundreds of individual clerks and court staff. It really needs uniformity and consistency, which starts at the level of the individual clerk. Using codes in a common way and a common understanding across courtrooms, across court locations, across court systems within California is a hard thing to achieve.
CSP: What lessons have you learned in the course of your data quality work?

CB: We need to be able to demonstrate the value of the data and how the data is used. Having good data for its own sake is not the point. And to use the data for management decisions requires confidence in the data. Data quality improvement aims to build that confidence, to support confidence in the decisions made with that data. That is a key thing for states and courts to understand when setting out to improve their data.

CSP: As you look ahead, what’s next for California data quality?

CB: Much of what we’ve done so far focuses on filings and dispositions. We would like to start exploring other data elements that courts report that are also extremely valuable for understanding workload and operations, for example, types of trial and nontrial dispositions, continuances, and types and numbers of hearings. This would help courts use these data to evaluate the effectiveness of various approaches to organizing and managing the courts’ caseload. Naturally, this effort will require even greater collaboration between the Office of Court Research and the individual trial courts to evaluate the quality of this data and identify methods of improving the data and making it consistent across the state. The more progress we can make on this, the more courts can learn about their operations and the better we at the AOC can reflect the work of the California courts as a whole.
Court Statistics Project

Since 1975, the Court Statistics Project (CSP) has provided a comprehensive analysis of the work of state courts by gathering caseload data and creating meaningful comparisons for identifying trends, comparing caseloads, and highlighting policy issues. The CSP is supported by the Bureau of Justice Statistics and obtains policy direction from the Conference of State Court Administrators. A complete annual analysis of the work of the state trial and appellate courts will be found in *Examining the Work: An Analysis of 2009 State Court Caseloads.*

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