Analysis of the Byrne Grant Pilot Program to Improve Disposition Times in a Justice of the Peace Court

February 2004

State of Delaware
Office of the Budget
Delaware Statistical Analysis Center
60 The Plaza
Dover, Delaware 19901
Analysis of the Byrne Grant Pilot Program to Improve Disposition Times in a Justice of the Peace Court

February 2004

Authors:
Charles J. Huenke
John P. O’Connell
Kara W. Wrede

State of Delaware Document #100208-040203
Table of Contents

Introduction .......................................................................................................................... 1
Methodology and Limitations ............................................................................................. 3
  Background ..................................................................................................................... 3
  Study Process ................................................................................................................. 3
Results ................................................................................................................................ 5
  Change in Disposition Proportions ................................................................................. 5
  Change in Case Processing Time ..................................................................................... 7
  Extension of the Pilot Program to Other JP Courts ...................................................... 10
Introduction
This report presents results of DelSAC’s analysis of the Byrne Grant Pilot Program to Improve Disposition Times in a Justice of the Peace Court (herein referred to as the pilot program). The pilot program’s purpose, simply stated, was to reduce case processing times by reducing the number of transfers from the JP Court to the CCP. Pilot program goals were to be achieved by providing two Public Defenders and two Deputy Attorneys General to handle cases at the JP Court, thereby affording defendants and victims, if applicable, the opportunity to resolve cases at the JP level rather than transferring up to the CCP level.

Delaware’s criminal justice system allows most motor vehicle offenses under the state’s Title 21 and many non-drug misdemeanors under Title 11 to be prosecuted at its first level criminal court – the Justice of the Peace (JP) Court. In most cases, however, Deputy Attorneys General and Public Defenders are not available to victims or defendants at the JP level. (Exceptions are driving under the influence and truancy cases.) This lack of state prosecution and defense representation in JP courts may prompt many defendants to take their cases to the next level, the Court of Common Pleas (CCP), with the hope of plea bargains or other advantages. The transfer of cases from JP to CCP can add weeks or months to case processing times.

The pilot program design focused initially on Justice of the Peace Court 20 (JP20), with the intention of exploring potential expansion to other JP courts. JP20 is located in the City of Wilmington in a building shared with the city's police department, operating 24 hours a day, 7 days a week (24/7 operation as of January 2001). JP20 began operation on May 1, 1998, after the city's Municipal Court was merged with CCP. It manages a heavy caseload (41,227 charges in FY 2002 - the largest caseload of any JP Court in the State), so the opportunity for substantial impact was present. Further, although active Municipal Court cases were transferred to CCP in the merger process, it was anticipated in the pilot program that much of the former Municipal Court caseload could be disposed of in JP20, if the adversarial process (city solicitors, state prosecutors, and public defenders) that existed in Municipal Court was replicated at JP20.

The pilot program began in November 2001, providing attorney coverage for 8-hour weekdays, or for about 25 percent of JP20’s operating hours. Evaluation support from DelSAC was requested as part of the pilot program grant proposal via the Delaware State Clearinghouse Committee. (As a federal grant program this project is within the Clearinghouse Committee’s purview pursuant to Title 29, Chapter 76 of the Delaware Code.)

As periodic feedback to the pilot program committee, DelSAC provided interim analyses of case processing trends. Those analyses showed a significant and rapid shift of final case dispositions from CCP to JP20 after the start of the pilot program. Early indications showed that the program was well on track. The court responded to ongoing feedback from SAC and the Pilot Project Committee, as well as from internal analysis of the program, and adjusted operations as part of the process.

This report, which is the final report for this project, covers ten months prior to the pilot program’s implementation and the first 20 months of its operation. Analysis of the first
20 months of the program shows a substantial increase in the number (by an average of about 125 per month) and percentage (from about 54 to 70 percent) of cases retained in JP20 for final disposition. There also appears to be a considerable decrease in case processing time associated with the program. Overall average processing times for cases within the pilot program’s scope declined by more than 30 days. During the project period, JP20 improved processing efficiency while taking on a substantial increase in caseload.

The program also appears to offer potential for statewide improvement if expanded to other JP courts. Extending results achieved in JP20 to other JP courts indicates that the process could reduce CCP caseload by about 25 percent. Additional analysis should be conducted to identify cost/benefit and other issues, but expansion of the project may offer significant opportunities to improve criminal justice system efficiency.
Methodology and Limitations

Background

Developing a study plan to evaluate the pilot program’s progress presented a significant challenge. Prior to undertaking the study it was unknown if the detailed case information desired could be readily extracted from the state’s automated criminal justice information system. Early stages of the analysis involved exploratory work to identify the availability and quality of data and the feasibility of retrieving and analyzing the desired information.

The pilot program committee first requested a baseline study to establish pre-pilot patterns in areas of disposition proportions, processing times, and pre-trial detention. While work in the baseline study yielded disposition proportion benchmarks against which pilot program progress could be measured, it also identified intractable data issues that meant some evaluation aspects could not be addressed with available resources.

An element that was eliminated from study early on was the pilot program’s impact on pre-trial detention. Preliminary work revealed that combinations of incomplete or inaccurate detention data, bail information, and excessive offender activity made it virtually impossible to analyze detention issues without research of paper case records. Though pre-trial detention reduction was a proposed benefit of the pilot program, it was not feasible to study that aspect.

Another troublesome area was identifying complete and reliable case chronology data. Pilot program designers wanted to track cases from arrest to arraignment and then to final disposition. It turned out that there is considerable difficulty with definitive identification of arraignment dates in the electronic system. Case processing times, therefore, were tracked only from arrest date to final disposition date for comparison.

Study Process

A primary pilot program goal was to decrease case transfers to CCP by prosecuting more cases in JP20. Many cases that pass through JP20 are not within the court’s jurisdiction, and are therefore transferred to other courts as a matter of course. Thus it is necessary to restrict the program analysis to appropriate charges and courts. Cases relevant to this study are those within JP jurisdiction that are disposed of in JP20 or CCP. Other cases, while constituting significant caseload proportions in each court, are not within the scope of the project.

Jurisdiction of JP courts is addressed in Title 11, §§ 2701 and 2702, of the Delaware Code. The following list, though not all-inclusive, is provided to give a general idea of the type of charges that are not prosecuted in JP Court.

- Felonies
- Misdemeanor drug offenses
- Misdemeanor sex offenses
- Some misdemeanor offenses related to domestic violence and children
- Violations of certain court orders or probation under jurisdiction of other courts
Driving under the influence, though within JP jurisdiction, is handled by a specialized court and prosecuted in JP15 in New Castle county, not generally in JP20.

As previously noted, JP20 is in the City of Wilmington. In addition to state statutes, the court handles cases involving violations of the city’s municipal code. The City Solicitor prosecutes cases involving some municipal code violations; such cases were excluded from consideration in the pilot program study, because they are not transferable to CCP.

Throughout this report, the term JP-eligible will be used to refer to cases that are within JP jurisdiction, with additional stipulations (unless otherwise noted) that the cases were processed at some point in JP20 and final dispositions occurred, or most likely will occur, in JP20 or CCP. *(A case is defined as one or more charges grouped under a single Uniform Case Number. A single defendant can have multiple cases disposed at the same time; each case is counted distinctly in this report regardless of concurrent processing.)*

Note that identifying a case as JP-eligible does not imply pilot program involvement with that case; it simply classifies the case as one with qualifying charges being processed in the courts of interest to the study.

The primary source of data for this study is Delaware’s Criminal Justice Information System (CJIS). (CJIS was the sole source for JP20 data; some CCP data were obtained from the Judicial Information Center.) CJIS records were queried to extract necessary charge and disposition data. Arrest and disposition dates were key query parameters, along with indicators of JP20 processing. Post-query processing primarily consisted of identifying JP-eligible charges and the courts involved in processing those charges. Some additional details of record processing are provided contextually with various aspects of the study in the next section.

For the requested baseline study, JP-eligible cases with JP20 disposition or transfer dates in the 2nd quarter of 2001 were analyzed. That analysis revealed that about 54 percent of the JP-eligible cases remained in JP20 for final disposition. After the baseline study case grouping shifted to arrest date, rather than disposition date, to better control for when cases entered the system. This change did not invalidate the benchmark rate of transfer to CCP (about 46 percent) against which pilot progress could be measured.

It is important to note that separating cases by arrest date does not cleanly distinguish cases that did or did not have an opportunity to be affected by the pilot program’s intervention mechanism, i.e., contact with a Deputy Attorney General and/or Public Defender in JP20. Some defendants with pre-pilot arrest dates had court appearances in the post-pilot period and therefore had a chance be affected by the pilot mechanism. Conversely, Deputy Attorney General/Public Defender coverage was only provided during weekday hours, so defendants with night hour or weekend appearances in the post-pilot period may not have met with the pilot’s attorneys.

The final phase of the study tracked a total of 28,758 JP-eligible cases that remained in JP20 or were transferred to CCP for final disposition. There were 10,040 such cases with arrests dates from January 2001 through October 2001, which was the period that JP20 operated as a 24-hour court prior to pilot program implementation. The remaining 18,718 cases, with arrest dates from November 2001 through June 2003, entered the system after the pilot program started.
Results
The following charts show pilot program progress indicators from various perspectives. Keep in mind that, unless otherwise noted, all data analyzed are limited to JP-eligible cases that have indications of JP20 involvement and final disposition in JP20 or CCP.

Change in Disposition Proportions
The first three charts show changes in JP20 and CCP disposition proportions for the ten months prior to and twenty months after the pilot program start. Cases are grouped by month and year of arrest. Figure 1, Change in JP-eligible Case Disposition Proportions, JP20 and CCP, represents all cases analyzed in the pre- and post-pilot timeframe.

Figure 1 shows fairly stable disposition proportions throughout the first twenty months following the pilot program’s implementation. During that period an average of about 71 percent of the JP-eligible cases were retained in JP20 for final disposition, versus about 53.7 percent for the ten months prior to the pilot program. The chart also shows that some noticeable shifting of cases from CCP to JP20 started to occur in cases with arrest dates prior to the pilot program start. The early shift will be discussed further with the presentation of the next two charts.

Most offenses defined as JP-eligible for this study are identified in Title 11 and Title 21 of the Delaware Code. Title 11 covers non-drug criminal offenses; motor vehicle laws
are under Title 21. Pilot program planners set separate goals for Title 11 and Title 21 case transfer rates, so study cases were grouped accordingly. Cases were classified as Title 11 if they had any Title 11 charge (some also had Title 21 charges). Any case with a Title 21 charge but no Title 11 charge was labeled as a Title 21 case. Figure 2, *Change in JP-Eligible Title 11 Case Disposition Proportions, JP20 and CCP*, and Figure 3, *Change in JP-Eligible Title 21 Case Disposition Proportions, JP20 and CCP*, show the results of tracking cases by title. (Compare to Figure 1 for all cases.)

![Figure 2](change-in-jp-eligible-title-11-case-disposition-proportions-jp20-and-ccp)

Though considerable fluctuation exists, Figure 2 shows a significant shift of Title 11 cases from CCP to JP20. Prior to the pilot start, an average of about 24.1 percent of JP-eligible Title 11 cases remained in JP20; that average increased to about 41.8 percent for the first twenty months of the pilot program. While raising interesting questions, it would require more extensive resources than available to identify underlying causes of the monthly variations observed in the post-pilot region of Figure 2.

The next figure shows that there has also been considerable change in Title 21 disposition proportions between JP20 and CCP since the pilot program start. Note that, as in Figure 1, Figure 3 shows a shift starting with arrest dates in the few months before November 2001. It is not uncommon, especially in Title 21 cases, for several weeks to elapse between arrest dates (citation dates for traffic offenses) and initial court appearances. So for some cases with arrest dates before the pilot program start, the defendants’ first court appearances did not occur until the program was in progress. JP20’s final disposition
caseload for Title 21 is about 5 to 6 times that of its Title 11 cases. The relatively high volume of Title 21 cases coupled with their likelihood of lag time from arrest to court appearance explains why the pre-pilot shift in Figure 3 is also apparent in Figure 1.

In the pre-pilot period, including the last three months (where the court appearance lag becomes evident), an average of 61.8 percent of the JP-eligible Title 21 cases remained in JP20. In the twenty-month post-pilot period, that average increased to 78 percent. The previous charts show that the pilot program produced a considerable caseload shift from CCP to JP20. About 80 percent of eligible Title 21 cases remain in JP20. Eligible Title 11 cases are near evenly split between JP20 and CCP.

**Change in Case Processing Time**

This section addresses the pilot program goal of reducing processing times. This aspect of the study presents particular difficulties since some cases from the pre- and post-pilot periods had not reached final disposition at the time of data analysis. The problem is illustrated in Figure 4, *Cumulative Percent of Cases Disposed in Monthly Increments*. Represented in Figure 4 are samples from the first six months of each period studied, which allows tracking for the maximum time possible. The maximum tracking times were 32 months for the pre-pilot period and 21 months for the post-pilot period. Despite such an extended observation window, about 10 percent of the cases from each period remain in a pending status.
To develop the cumulative curves in Figure 4, case disposition times were calculated for all disposed cases in each pre- and post-pilot sample. Cases in each group were ordered by disposition time, thus allowing cumulative case counts at monthly increments. The cumulative counts were then expressed as percentages of total cases in each group.

The cumulative curves from both samples are steep for about the first nine months of tracking. Within that time frame, the 80 percent mark is crossed or approached for each period, with post-pilot cases reaching each percentile as much as two months quicker than pre-pilot cases. After the 80 percent mark, the curves flatten considerably, taking another 12 months of tracking to add just a 10 percent disposition increase. The post-pilot sample reached the 90 percent mark within 17 months of case tracking. It took about 22 months of tracking for the pre-pilot sample to reach the 90 percent disposition point; less than two percent of the sample cases were disposed in the remaining 10 months of tracking represented in the figure.

About 10 percent of the cases studied are regarded as exceptional due to excessively long disposition times. Although there are cases that may just fall through cracks in the system, the primary reason appears to be defendants failing to appear for scheduled court proceedings. Some defendants may not be returned for years, if at all. The region above the 90 percent mark reflects the phenomena of some cases taking “virtually forever” to dispose.

Figure 5, *Average Time from Arrest to Disposition, Pre- and Post-Pilot JP-eligible Cases*, uses portions of the six-month samples discussed above where each cumulative percent disposition curve reached the 90 percent mark (22 months of tracking for pre-pilot cases, 17 months for post-pilot). There were 5,504 cases in the six-month pre-pilot sample and 6,223 cases in the six-month post-pilot sample. Figure 5 represents data from cases in each sample that reached final disposition. This figure offers evidence of the shift of cases from CCP to JP20 as well as the improvement in processing times.
As illustrated in Figure 5, the six-month samples indicate that JP-eligible case transfer rates from JP20 to CCP and average disposition times have both decreased since the pilot began. The overall (JP20 and CCP combined) average disposition time decreased from 135 to 97 days (28 percent) at the 90 percent disposition mark. Transfer rates are derived from the number of disposed cases represented in each category in Figure 5; 73.8 percent of the sample post-Pilot cases were disposed in JP20, versus 52.3 percent of the pre-Pilot cases. The large shift of cases to JP20, with its shorter disposition times, caused the more dramatic decrease in overall disposition time than is observed for either JP20 or CCP.

It must be emphasized that, particularly with respect to CCP, the observations above are for JP-eligible cases (from JP20) only. Those cases comprise less than 10 percent of the New Castle County CCP caseload, and about 5 percent statewide; one should not infer a court-wide decrease in CCP disposition times. On the other hand, this caveat should not diminish a remarkable increase in case processing efficiency between the pre- and post-pilot periods. Note that the 28 percent decrease in overall average disposition time coincided with a 13 percent increase in case disposition volume. In JP20 alone, a 10 percent decrease in average disposition time occurred with a nearly 60 percent increase in case volume.

Based on results from the first six months of operation, the pilot program seems to have had a desirable impact on case processing times. The next chart explores consistency of results from the remaining portion of the study period, and from a different processing perspective. Data for this chart cover the first 18 months of the post-pilot period; this cutoff was chosen to allow at least 120 days of tracking. Recall that there were 18,718 post-Pilot cases studied; 16,596 of those cases had arrest dates in the first 18 months.
Figure 6, *JP-Eligible Case Disposition Pace, Percentage-Based*, shows percentages of cases disposed within 30-day increments up to 120 days.

Of the total JP-eligible cases in each period (pre and post), each column in Figure 6 represents the percentage of cases disposed within the specified time span. For example, 2,481 of the 10,040 pre-pilot cases were disposed within 30 days from arrest, and 5,137 of the 16,596 post-pilot cases were disposed within 30 days. The percentage-based count in this chart indicates improved disposition times since implementation of the pilot. The emerging trend appears consistent with the 38-day reduction at the 90th percentile found in the 6-month sample periods. Note that just over 55 percent of the pre-pilot cases were disposed within 120 days; the 55 percent mark was crossed within 90 days in the post-pilot period.

**Extension of the Pilot Program to Other JP Courts**

Given expectations of the pilot program’s impact on cases going through JP20, its planners were also interested in possible expansion of the project to other JP courts. On a case-filing basis, JP-eligible cases make up a significant portion of CCP’s caseload (about 70 percent in FY 2003, i.e., July 1, 2002 to June 30, 2003). Statewide implementation of the pilot process presents possibilities as a major influence on court operation.

Table 1, *Sample Estimation of Pilot Program Reduction of CCP Caseload*, illustrates a method for estimating the impact of the pilot program in terms of JP-eligible cases in CCP.
Table 1
Sample Estimation of Pilot Program Reduction of CCP Caseload

<table>
<thead>
<tr>
<th>FY '03 JP-eligible Cases in JP20/CCP</th>
<th>Court</th>
<th>Pre-pilot Rate Expected Split</th>
<th>Actual Split</th>
<th>Estimated “Pilot Effect” on CCP Caseload</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,636</td>
<td>JP20</td>
<td>5,712</td>
<td>7,528</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCP</td>
<td>4,924</td>
<td>3,108</td>
<td>1,816 (reduction)</td>
</tr>
</tbody>
</table>

The method illustrated in Table 1 is explained as follows. Based on the pre-pilot transfer proportion (refer to Figure 1), we would expect JP20 to retain about 5,712 (53.7 percent) of the 10,636 eligible cases from FY ’03 in the absence of the pilot program. JP20 actually retained 7,528 cases, yielding an estimated reduction of 1,816 cases being transferred to CCP. The 4,924 expected transfers to CCP represent the maximum possible caseload impact from the pilot program. In FY ’03, the pilot program achieved about 36.9 percent (1,816/4,924) of the maximum CCP caseload reduction.

To provide baseline counts for the expansion analysis, CCP case filings were downloaded from Judicial Information Center mainframe records and grouped by state fiscal year for the past ten years. New Castle County CCP received a dramatic influx of cases following the closing of Wilmington’s Municipal Court in April 1998. Analysis of CCP caseload herein covers the period after the Municipal Court closing to reflect a more stable trend.

Figure 7, Statewide CCP Criminal and Traffic Cases Filed, shows statewide CCP case filings by fiscal year. On the following page, Figure 8, CCP Criminal and Traffic Cases Filed by County, provides a breakout of statewide figures for each of Delaware’s three counties.
Figure 8
CCP Criminal and Traffic Cases Filed by County

New Castle County

Kent County

Sussex County

* Estimated based on "JP20 Pilot Effect" if expanded into other counties.
As seen in the statewide and New Castle County charts in Figures 7 and 8, there was a noticeable change in the case-filing pattern after the start of the pilot program. Deviations from the trend lines give some sense of the magnitude of that change. The short period between the Municipal Court closing and the pilot program makes it difficult to establish a reliable trend for caseload growth in New Castle County. Statewide and New Castle County trend lines are based on fiscal years 1999 through 2001; Kent and Sussex trend lines are from FY 1999 through 2003. Fiscal year 2004 estimates were obtained from the trend line for Kent and Sussex counties, and from scaling the 2003 count by the trend line slope for New Castle County.

New Castle County’s filing decrease in FY ’03 resulted in a statewide decline despite increases in the other two counties. The FY ’03 decline from the trend line exceeds the estimated pilot impact illustrated in Table 1, so it appears that influences other than the pilot program are involved. Isolation of all factors that contributed to case filing changes is a complex (if not impossible) undertaking, and well beyond the scope of this study. At least part of the decline could be due to waning intake of old Municipal Court cases. The issue could be studied over time as new trends emerge, but it is not deemed critical at this point for the purpose of a simple expansion estimate.

As noted before, JP-eligible cases comprised about 70 percent of CCP’s FY ‘03 caseload. Thus a statewide expansion of the pilot program could cause a maximum shift of about 70 percent of CCP’s cases to JP courts, with reasonable expectations being some fraction of that maximum. Recall from Table 1 that the JP20 pilot program achieved a case shift of about 36.9 percent of the maximum in FY ’03 cases. (The figure is about 37.5 percent for the full 20-month period studied.) Assuming JP20’s level of success throughout the state, we arrive at an expansion impact estimate based on the pilot experience (referred to as the “JP20 Pilot Effect” in Figures 8 and 9). The estimated impact of statewide pilot program expansion is that about 26 percent (37 percent of 70 percent) of CCP’s caseload would be shifted to JP courts.