

The Costs and Benefits of an
Indigent Defendant Verification Program

A Report Submitted to the Texas Indigent Defense Task Force

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Executive Summary

This report summarizes the methodology and results of economic analyses of the problems associated with court-appointed criminal defense counsel. The principal investigators conducted site visits of court and jail facilities in four north Texas counties, including collection of documents, interviews with county officials, and observation of arraignments and completion of the financial affidavit. Subsequently, the investigators conducted an economic assessment of the verification process of the financial information used by Collin and Tarrant Counties. Cost-benefit ratios were calculated combining the verification data and county level cost data collected in the second phase of the project. Finally, these county findings were applied to a select group of Texas counties as a way of illustrating how this information might be used to make judgments on a more general level.

In FY 2006, Collin County's benefit-cost ratio was $(\$3,534.00 / \$321.10) = 11.01$, suggesting that each dollar invested by Collin County in verification yields a net savings of \$10.01. Based on the state annual cost average for FY2003-FY2005 of \$318.58, the statewide savings due to comprehensive verification based on a projection of Collin County's experience would be \$11,091,952, or approximately 10.3% of the annual average of total Texas court costs for FY2006.

In FY2006, Tarrant County's benefit-cost ratio was 3.54, suggesting that for each dollar invested by Tarrant County in verification, the net savings would be \$2.54. Using the experience of the Tarrant County verification process as a basis for generalization to the state level, the statewide savings due to comprehensive verification would be \$1,223,207, or approximately 1.1% of the total annual court costs during 2006.

Introduction

In November 2005, the principal investigators were contacted by the staff of the Texas Indigent Defense Task Force about the possibility of conducting a study of how selected counties in the North Texas region qualified criminal defendants as indigent for the purpose of providing them with court-appointed legal counsel. The initial research design was based on current procedures used by three counties – Collin, Tarrant, and Van Zandt – to assist Tarrant County court staff with designing and conducting an experiment by which they would adopt the higher level of verification of self-reported defendant financial data already practiced by Collin County staff.

The initial project plan was to conduct the background research and the experiment during the winter and spring of 2006, and to complete a report by Summer 2006. However, while site visits were conducted by the investigators in Spring 2006 (and an additional county, Denton, was added to that portion of the study), serious data and logistical problems delayed the experiment in Tarrant County until Spring 2007. The experimental treatment has now been completed, and the results are reported here, along with a discussion of their implications for indigent defense programs in Texas counties.

Counties Studied

Collin County, a rapidly growing county in the Dallas-Fort Worth-Arlington, TX Metropolitan Area, has an estimated population of 698,851 (2006), a poverty rate of 5.5%, and a median household income of \$75,709 (2004). (U.S. Census) Collin County has designated a full-time staff position for indigency verification, and also uses collateral verifications prior to appointment. Collin County reported 6,639 indigent defendants in FY2005 of the 15,321 total cases, or 43.33%, an average of 553 paid cases per month.

Tarrant County is the third most populous county in Texas, including the cities of Fort Worth and Arlington, with an estimated population 1,671,295 (2006), a poverty rate of 12.8%, and a median household income of \$48,805 (2004). (U.S. Census) In 2005, Tarrant County reported 28,430 indigent cases with court-appointed attorneys of the total 55,866 cases in all levels of courts, or 50.89%, an average of 2,369 paid cases per month.

Van Zandt County is a largely rural county in East Texas with an estimated population of 52,916 (2006), a poverty rate of 13.7% and a median household income of \$36,953 (2004). (U.S. Census) In 2005, Van Zandt County reported 607 indigent cases of 1512 total cases, or 40.15%, an average of 50 cases per month.

Denton County, like Collin, is a rapidly growing county in the Dallas-Fort Worth-Arlington, TX Metropolitan Area. Its 2006 estimated population was 584,238, with a poverty rate of 8.0% and a median household income of \$62,234 (2004). (U.S. Census)

Previous Research

Over the past couple of decades, there have been few attempts to identify the factors underlying the financial impact on county budgets of county supported legal services for indigent defendants. The decision of whether to provide a defendant with legal representation at public expense is influenced by the standards and procedures under which defendants are determined to be indigent and by the economic consequences of those standards and procedures. Due to the variety of court environments and income and asset guidelines underlying the eligibility decision, there are varying degrees of intensity and costs across courts associated with the verification of the typical low-income defendant's status as indigent. As the costs of indigent defense services mount, economic analysis with the intention of ultimately developing and implementing cost-cutting measures becomes increasingly important.

The objective of the entire screening and verification process is to identify the truly indigent, thereby ensuring the optimal allocation of scarce public funds. However, in spite of the obvious potential for economic modeling of the decision making process, there are few, if any, examples in the research literature that focus directly on establishing the quantitative relationship between the costs and benefits. Nor are there many studies of the savings associated with the various methods and intensity of scrutiny in verifying the financial information provided by the defendant. Indeed, there appears to be a great deal of confusion regarding the role that verification plays in containing costs, and thus the resources that should be allocated to this function in determining indigent status as part of much broader cost-containment initiatives. The lack of quantitative studies of the screening and verification process that are sufficiently sophisticated for generalization have impeded any attempt for formulating a rational and cost effective policy on the determination of indigency.

Among the studies that are available, those commissioned by the courts and conducted by the Spangenberg Group, a justice related research and consultancy organization, are possibly the most technically sophisticated and insightful. The Spangenberg Group's work does address the complexity in providing a just system of defense and reflects an understanding of the allocation of public resources associated with ensuring adequate representation for the indigent defendant. Nevertheless, with respect to the screening and verification components of the Spangenberg Group's reports, analyses are often based on anecdotal evidence, a shortcoming largely due to the absence of existing data collected by the courts and the dearth of independent studies.

For instance, in a recent study of Virginia's indigent defense program (Spangenberg Group, 2004), Spangenberg's finding of little system-wide uniformity or standardization in the extent and intensity of the screening process is based on testimonials with little attention to the underlying costs of the system, an aspect of the system that could only be decided on the basis of a systematic quantitative study. Paradoxically, in Virginia's case, the strictly legal services

provided to indigent defendants are inadequate and the system of indigent defense is underfunded and plagued with flaws that undermine the ability of indigent defendants to receive their mandated right to a fair defense. In these circumstances, the gatekeeper function of screening and verification is lax and inefficient, with many defendants receiving counsel when eligibility is problematic, thereby causing adverse budgetary consequences.

In contrast to Virginia where indigency status is often determined solely by a judge, in the State of Washington (State of Washington, 2001), by statute, the counties are required to use a uniform set of indigency standards in screening and verification, effectively replacing “judicial screening” by a system of “staff screening” as an efficiency measure. Yet there does not appear to be agreement among officials on the budgetary implications of a more intensive verification process. Thus, there is considerable skepticism in the Washington report regarding the employment of more intensive verification procedures beyond the routine attempt to verify selected types of information, and then only in cases where appointment of counsel would not be delayed. Indeed, it is often the case that the screeners, who occasionally themselves appoint the counsel, will not have access to the financial information upon which this crucial decision should rest.

In a more recent report, an audit of Oregon’s Judicial Department (State of Oregon, 2006), the state auditors were principally interested in the process of determining eligibility and ascertaining the degree of reliability to be expected in the typical defendant’s disclosure of financial information. The auditors examined approximately 203 applications submitted to the authorities in Affidavits of Eligibility and determined that 4.5% of the defendants submitted information that was inaccurate and would have led to a favorable eligibility decision. Although the auditors were able to estimate the net cost of defending those who were unqualified but received state appointed counsel, they did not attempt to estimate screening and verification costs for a comparison that might have established whether a net savings could be achieved if all

affidavits were verified by verification specialists. Nevertheless, Justice Department officials lacked adequate resources to engage in a comprehensive verification program, and would be unable to disqualify as large a percentage of defendants. Thus, the Oregon report is necessarily silent on the critical economic issue of whether or not verification is a cost-effective, or better yet, a cost saving strategy that Oregon as well as other states might consider adopting.

The clearly most sophisticated study regarding the economic questions associated with screening and verification strategies was conducted by the University of Nebraska Public Policy Center for Lancaster County, Nebraska (Thomkins and Neeley, 2003). This project was intended to be a three year study of the efficacy of 1) a uniform rule for eligibility determinations; 2) a standardized form for the collection of financial information and other relevant data; and 3) dedicated county court screener and verification personnel whose major responsibility would be to verify financial information entered on the affidavits submitted by defendants seeking indigency status. Because the project did not get much further than that contained in the preliminary report, the information provided in the available document can be considered the final report (personal communication, Neeley, Sept. 2006).

Much like the Oregon study discussed above, the Nebraska study found approximately 4.5% to 10% of the defendants providing inaccurate or false information to the court. However, the information provided may lead to errors in both directions in determining eligibility for court-subsidized counsel -- as the court officers in the Nebraska study make quite clear, defendants claiming indigency are as likely to overstate their income, rendering them ineligible for court-appointed representation as they are to understate their income in order to qualify for indigent status.

Tomkins and Neeley's Lancaster study is divided into several sections, each of which relies on a unique sampling frame ranging from a sample size of 5,232 to three individuals (The sample of three was associated with a return of 10% from 30 letters sent). However, only the

verification section of this research is of relevance to the current study, in spite of the researchers warning that the question of whether use of a “technician screener” is cost-effective for determining indigency would not be addressed. In the verification section the researchers requested that, over the course of a month, the court screener keep track of the number of individuals who “lied about financial information.” (p. 14). As the report notes, out of 450 defendants only an estimated eighteen, or 4%, “gave information that could have conceivably increased the chances of receiving free, public defender services.” (p. 15). Yet this count was based on a “random” check of only 25 out of the 450 individuals processed during the index month, which suggests that it would be unwise to accept this finding as an adequate or acceptable basis for inferences on the efficiency, cost-effectiveness or benefits related to the costs of a screening and verification program.

Nevertheless, in spite of the inconsistencies and the confounded nature of the data that was collected, Tomkins and Neeley are unequivocal in their skepticism regarding the prospect of saving money through a dedicated screening and verification unit that would provide a comprehensive review of the financial information on the majority of defendants’ affidavits. Finally, the researchers indicate that it is the consensus of the judges and the prosecutor’s office staff that “inaccurate or false information tends to be *de minimus* and not worth the time, effort, or expense to pursue.” (p. 11)

In summary, the Lancaster County indigency screener project (Tomkins and Neeley, 2003) is by far the most sophisticated study on screening and verification issues to date. In spite of an in-depth review of virtually every aspect and phase of the screening and verification functions, as well as several quantitative sub-studies of these functions, the analysts were forced to conclude that the only thing recommending the use of verification of financial information provided by the defendants was the image it projects to the public that defendants who are not

qualified will not be provided counsel at taxpayers expense. Tomkins and Neeley state that “It is not clear that verification efforts succeed in uncovering financial information that results in a denial of public defender appointments that, but for verification, would have otherwise occurred. We do not believe verification detects very much false or inaccurate information.” (p.i).

Of particular relevance to the current study is the Lancaster County analysts’ finding that approximately 4.5% (to possibly 10%) of defendants were untruthful about their financial status when completing their affidavits, a percentage that appears to be fairly uniform across studies and audits that were examined as background for the current study (Snohomish County Auditor’s Office, 2005; and above).

Methodology

Research on the project proceeded in three phases. In the first phase, the principal investigators conducted background site visits of court and jail facilities in all four counties to acquaint themselves with issues involved in the determination of indigency and various approaches taken in different counties. These visits included interviews with judges, court clerks and the officers responsible for the initial contact with defendants who were seeking indigent status. The investigators also attended arraignments and witnessed the supervision by court staff of the completion of the financial affidavit by defendants who were requesting indigent status.

In the second phase, the investigators developed a framework that included sampling schemes that would be employed by Collin and Tarrant counties in the systematic collection of data relevant to an economic assessment of the process of verification the financial information on the defendants' affidavits. Between the first and second phase, Mr. Wesley Shackleford, Special Counsel to the Texas Task Force on Indigent Defense, facilitated the contractual arrangements between the Texas Workforce Commission and Tarrant County for internet access to confidential employment and wage information that would be a major tool for the Financial Officers in carrying out a systematic verification scheme.

In the third and final phase of the project, the investigators conducted a statistical analysis of the data submitted by Tarrant and Collin counties and constructed cost-benefit ratios combining the verification data and county level cost data collected in the second phase of the project. Finally, the county findings were applied to a select group of Texas counties as a way of illustrating how this information might be used to make judgments on a more general level.

Data Collection

The primary objective of this research project was to conduct an economic evaluation and cost-benefit analysis of the verification and appointment process in two counties in north central

Texas. In order to accomplish this objective two research and statistical protocols were developed, one for Tarrant County as representative of large counties in Texas and another for Collin County as representative of mid-sized counties in Texas.

Because deadlines for appointment of counsel are short but appointments are to be made fairly, the implementation of a research project as an overlay on the day to day workings of the court presented a number of difficulties for court personnel. One difficulty that introduced an unavoidable confounding factor was that the screening function and the verification function were performed by the same individuals. Thus, any suspicion that was aroused during the completion of the affidavit requesting county appointed counsel could easily have been carried over into a more rigorous and careful process of verification. While this could easily be the way the two functions are related in practice, the verification experiment ideally would be conducted with equal and impartial rigor across all cases. From the time of magistration, through the screening and verification process, to the decision of whether or not the county should appoint counsel, and finally to the act of appointing counsel itself, the research overlay not only needed to remain invisible but also required integration into the ebb and flow of the step-by-step processing of defendants, rather than being carried out as an independent and parallel activity.

For a variety of reasons it appears that the most sophisticated study heretofore conducted was unable to achieve as detailed a focus as that of the current study (personal communication, Neely). Moreover, to date, there are no generally available studies that suggest an attempt has been made to develop the empirical estimates that are required in a cost-benefit analysis of the screening and verification process.

Within the analytical and sampling framework adopted in the current research, court officers of the two counties in question assisted the research team. Survey instruments were developed using Collin County as a model for listing sources of information and as a template for a questionnaire that would be required for a systematic, comprehensive search for verification

of financial information listed on the defendant's affidavit. Throughout the data collection process, the investigators maintained continuous contact with the court officers in both counties and provided technical assistance whenever requested.

One of the primary sources of information used in Collin County for the confirmation of wage and salary information was internet access to the Texas Workforce Commission (TWC) employment files. Because of the successful use of this source, it appeared to be a potentially valuable method of verification that would find widespread adoption by county courts throughout Texas. However, problems arose regarding both the negotiation of a contract between Tarrant County and TWC and maintenance of uninterrupted internet access to the data during the verification phase of the project (personal communication, Holly Webb) calls into question whether this valuable data source can be recommended without major modifications in the contracting process.

Collin County

The first study involved the Collin County courts and two officers of the court trained in the procedures of verification of indigent status. At the request of the investigators, over the course of a randomly chosen week, a sequential sample of sixty defendant affidavits was drawn by the verification officer, and each affidavit was subjected to the routine verification procedures that were developed to detect inaccuracy in the completion of the affidavits required of those in custody requesting indigent status. Using an array of sophisticated search devices including contractual access to Texas Workforce Commission data, LexisNexis:Accurint data, Collin County records, and a specially designed Geographic Information System, the two officers produced a detailed accounting of the accuracy of the information provided by the sixty defendants on the completed affidavits and the time spent in searching the information sources for relevant financial data.

The objective of the sampling process was to establish the processing parameters for the costs associated with the verification. Thus, additional information was obtained on the time required for processing each affidavit and the variable costs incurred by the verification officer, e.g., salary converted to an hourly wage and benefits. Information on the guidelines adopted by the county to identify defendants unlikely to be able to afford private counsel were also obtained, as was a subjective estimate from the verification officer regarding any aspect of the week used for sampling that would set it off in any way as unique and unrepresentative of the typical week observed by the officer.

In consideration of the expertise of Mr. Jack Bryant, Collin County's full-time screening and verification specialist, the manner in which the data was collected was left open as long as Mr. Bryant sampled sequentially, did not skip and choose, and noted the steps he took in identifying and consulting specific data bases. Mr. Bryant was also asked to indicate which sources yielded the most definitive information. As a result, Mr. Bryant developed a data set on

the sixty defendants with detailed information on each subject from the affidavits as well as the results of the verification process that allowed either confirmation of information on the affidavit or rejection of the information as “relevantly” inaccurate.

Tarrant County

The second study investigated the relationship between financial information provided on the affidavits by defendants in Tarrant County custody who requested indigent status against the information retrieved by four trained Finance Officers under a comprehensive, highly structured verification process. The operational question that this study addressed was whether the costs to a Texas county that are incurred by adopting a formal strategy for verification are more than offset by the savings in court costs associated with denial of indigent status to defendants who falsify financial information in their attempt to establish that they qualify under the indigency income/asset guidelines. Data was collected over a 1.5 month period from a random selection (with replacement) of 95 affidavits in Tarrant County followed by a systematic attempt by trained Finance Officers employed by the county to verify the accuracy of the financial information recorded on the affidavits. In the verification process, a number of strategies were employed, including computerized access to confidential income and employment information provided under contract by the Texas Workforce Commission, access to LexisNexis:Accurint searches, and access to county and appraisal district records. The time spent by the court finance officers on the attempted verification of each case was also recorded in order to determine the costs per case of verification.

In order to facilitate a systematic search, identification and collection of data a brief two-page questionnaire (see Appendix 2) was developed and provided to the Tarrant County Project Officer, Mrs. Holly Webb, who distributed it to the court’s Finance Officers for use in identifying the randomly chosen defendants and in systematically documenting their data

collection experience. The completed questionnaire and de-identified portions of each randomly chosen defendant's affidavit were joined and made available by Mrs. Webb for the cost and statistical analysis of the project.

Data were also collected on all costs associated with the verification project. Data on the court cost per indigent case as collected independently from the verification project were used in a comparison of the cost of determining the extent of false information, if any, that could have been used to overturn a positive decision on indigent status. Thus, the ultimate comparison was between the cost of collecting the verification data and the court costs avoided by denial of indigent status and associated court costs that would have been incurred, absent successful verification of financial information.

Statistical Considerations

With respect to supporting the project findings with a statistical analysis, only the Tarrant County survey was actually developed for a rigorous analysis and a basis for deriving an inference on the proportion of defendants who are likely to supply inaccurate information that would qualify them for county appointed counsel, i.e., relevantly inaccurate or false information. The sampling method chosen for Tarrant County was a random sample (with replacement) of 95 affidavits derived from the assumption that this size of sample would be sufficient for a 99% level of confidence in capturing a value within five percentage points of the true proportion of those defendants who provided inaccurate information that would be relevant to a positive determination of the defendants eligibility for indigent status and an appointment of counsel at county expense. The statistical plan for Tarrant County called for a random sample to be drawn of defendant affidavits over the course of one month in 2006.

As noted above, in consultation with the court officers in Collin County, a sampling framework was developed that called for a convenience sequential sample. The assumption

underlying the sampling frames for both counties was that approximately 4.5% of the affidavits would contain information that was inaccurate and that would incorrectly contribute to a positive decision of eligibility for indigent status. The size of the Tarrant County sample (N=95) was determined on the basis that it would be of sufficient size for a 95% level of confidence that it would be possible to detect a value that was within five percentage points of the anticipated value of 4.5%.

Point estimates were used in the cost-benefit analysis of comprehensive verification, i.e., a single value as an indication of the relationship between the monetary value of resources expended and the monetary savings (or, alternatively, losses) that occurred as a result of those resources invested in comprehensive verification. However, the formal statistical analysis was designed to test the hypothesis that a thorough examination of financial evidence through systematic and comprehensive verification program would reveal that inaccurate or untruthful financial information presented by defendants on their affidavits would lend positive support for their application for indigency status.

Specifically, the research hypothesis to be tested was that the probability of untruthful statements that were relevant to a potentially positive indigency decision by the court was greater than zero or, alternatively, that the proportion would on average, lie close to the 4% or 5% incidence rate suggested in the literature. The statistical hypothesis to be tested, that is the “null” hypothesis, was that at a 95% level of confidence (.05 level of significance) the evidence would not allow rejection of the hypothesis that the proportion of relevantly untruthful financial information was zero, or again alternatively, that the evidence would not support the hypothesis that the true proportion was at least 4-5%.

In summary, from a statistical standpoint, a 95% confidence interval that does not contain zero but does contain a value of 4% or 5% lends credibility to the research hypothesis that defendants providing untruthful or inaccurate information biases

the screening process toward assigning indigency status in cases where it was unwarranted.

Relying on this empirical evidence, the cost-benefit analysis establishes a basis for ascertaining whether it is economically sound to expend resources in attempting to identify defendants who present financial information that is inaccurate or untruthful.

Statistical Results

For Collin County, the size of the sequential sample is $N=60$ and the mean proportion of relevant inaccuracies is $X_{\text{mean}} = .10$. Using the methods in Difford's (1988, Appendix I), the 95% Confidence Interval is .024, .176. Given the null hypothesis, $H_0 : u=0$, the 95% Confidence Interval does not contain 0, thus H_0 is not an acceptable hypothesis and the null hypothesis is rejected at the .05 level of significance. The alternative hypothesis $H_1 : u>0$ is accepted as credible.

For Tarrant County, the size of the random sample is $N=95$ and the mean proportion of relevant inaccuracies is $X_{\text{mean}} = .0316$. Using the methods in Zar (1999, p.528), the 95% Confidence Interval is .0085, .0417. Given the null hypothesis, $H_0 : u=0$, the 95% Confidence Interval does not contain 0, thus H_0 is not an acceptable hypothesis and the null hypothesis is rejected at the .05 level of significance. The alternative hypothesis $H_1 : u>0$ is accepted as credible.

Economic Evaluation

Two practical methods used in the economic evaluation of public projects are cost-effectiveness analysis and cost-benefit analysis. For projects like the screening and verification projects carried out in Collin and Tarrant Counties, a cost-effectiveness analysis would attempt to determine the incremental cost of detecting a false statement by a defendant regarding his or her finances that would have resulted in the defendant becoming eligible for indigent status and

the assignment of county provided counsel. In other words, under these conditions the effect per incremental cost is measured in detection of false financial statements that are relevant to an unwarranted assignment of counsel. Normally, to assess how cost-effective a verification program is, it would be necessary to have an alternative program for determining relevant falsification of financial information by defendants and to choose the verification program that produces the largest effect per dollar invested in verification. With respect to Collin County and Tarrant County, a more fruitful approach is cost-benefit analysis, the “gold standard” of economic evaluation.

To evaluate the economic efficacy of a resource intensive screening and verification program, it is necessary to define, identify and measure the monetary benefits relative to the costs of verification, i.e., the monetary value of the savings that can be attributed to identifying false financial statements and the costs of the resources used in identifying false financial information that would be relevant in correctly denying indigency status to a defendant who, in truth, has the means to afford counsel.

One piece of the financial information required for a cost-benefit analysis is the cost of the item in question. An estimate of the cost of the indigency screening process has been included in Table A. Another piece of information that is required is the benefit associated with the particular item (not paying for court-appointed attorneys). Data stating the reported cost of court-appointed attorneys has been taken from the Texas Task Force on Indigent Defense (TFID) database. Cost-benefit ratios that are assembled in this way are generally referred to as “data analytic” models. While the verification cost per adult case is constructed from information collected at the site of verification, the defense costs per adult case were computed from the statewide data in the TFID database.

Cost-Benefit computations lend themselves to a relatively simple interpretation. If the benefit to cost ratio is greater than one, pursuing or investing in the project is warranted. If there is

more than one project competing for funding, the project with the largest benefit-to-cost ratio should be chosen and the others rejected, provided that each of the ratios is greater than one.

The denominator of the benefit/cost ratio is constructed from the product of the average time required for verification and the hourly rate for wages plus salary of the verification specialist. Determining benefits (the numerator of the ratio) uses data drawn from the TFID database and is constructed with total court expenditures for paid cases divided by the number of paid cases in the fiscal year the sample data was collected. As constructed, the benefits measure is unavoidably confounded by the possible inclusion of cases that were “added” prior to the accounting period relevant to the county expenditure data and further by cases “entered” in during the fiscal year that may not end up being “paid” cases during the fiscal year. However, given the expectation that prior “entered” cases that are paid will likely balance out with current “entered” cases that are not paid during the accounting period, confounding is not thought to be severe.

Drawing on the summary measures in Table C, the benefit to cost ratio for Collin County is:

$$\text{(Benefit) / Cost} = (\$3,534.00) / \$321.10 = 11.01$$

and for Tarrant County the ratio is:

$$\text{(Benefit) / Cost} = (\$1,223.22) / \$345.15 = 3.54$$

Interpretation of the Benefit to Cost (B/C) ratio is quite simple when there are no alternative courses of action except that of forgoing the project under consideration. If the B/C is greater than *one*, the project is considered *admissible* and given the constraints set by the budget a worthy undertaking as an investment. In both cases, undertaking a systematic verification program is, relative to the alternative of not doing so, a *preferred* course of action in these two counties.

As an empirical example, in the FY2006, Collin County processed approximately 5,000 indigent adult cases. At a variable cost of \$5.35 per screening, that number of paid cases would have required an outlay of \$26,750 in verification costs. To the extent that the week during which data was collected for this research project was a typical week, an investment of \$26,750 in a comprehensive verification program could be expected to result in a saving of over \$267,768 dollars over the course of a year. For Tarrant County, under similar assumptions, 24,958 cases were processed at a variable cost or investment of \$90,676 with savings of \$230,897, equal to 2.3% of the total adult indigent defense services expenditures. However, whether these county specific research findings can be generalized to any of the other 252 Texas counties is unclear, since the process of verification is so dependent on county-specific institutional processes and costs.

Summary of Collin County Indigent Defense Experiment

During the week of May 28, 2006, Collin County conducted the verification experiment on a sequential sample of sixty (60) defendants who completed an affidavit of indigence thereby requesting appointment of an attorney. The two county officers in charge of the verification process and who conducted the experiment, Ms. Michelle Patrick and Mr. Jack Bryant, are permanent county employees who are highly experienced in the county's comprehensive verification process.

The objectives of this experiment were to determine the distribution of responses relative to verification findings among several possible categories of alternative findings, determine the average time required for a comprehensive internet-based verification search and process and finally, to establish the cost per defendant for a comprehensive attempt to verify the accuracy of the information listed on the affidavit.

Of the sixty defendants processed, forty-two, or 70%, were approved for appointment of representation. Of the forty-two, eight did not strictly conform to the criteria set forth in the county guidelines. Because of this variation, on face value, only thirty-four were qualified and eligible without further intervention by county officials. Of the sixty defendants, six, or 10%, of the affidavits were assessed by the analysts to have “relevant inaccuracies,” i.e., inaccurate self-reported values that would have qualified the defendant for appointment of representation, but due to Collin County’s comprehensive verification process the inaccuracies were detected and the defendant denied indigent status. Of the eighteen denied indigent status, three were so denied due to an excessive level of financial assets.

In FY 2006, Collin County spent \$589.00 per adult indigent defendant for a total of \$2,846,086.53 in court and administrative costs. The total amount of time required in the verification of the sixty defendants requesting indigent status and appointment of an attorney was 13 hours, at a cost of $(\$24.70 \times 13) = \321.10 , comprised of wages and benefits of the verification officer (variable cost). Thus, the probable costs avoided were $(\$589.00 \times 6) = \$3,534.00$. Using the costs avoided as an indication of the monetary benefits obtained as a result of the verification process, the benefit-cost ratio is $(\$3,534.00 / \$321.10) = 11.01$, suggesting that each dollar invested by Collin County in verification yields a net savings of \$10.01.

In FY 2006, total court and administrative costs for attorneys appointed to defend adult indigent defendants throughout the state of Texas were \$107,260,810 or \$318.58 per defendant. Using the experience of the Collin County verification process as a basis for generalization to the state level, and assuming that a similar quality of screening existed across the State of Texas, of the roughly $(336,679 \times 1.43) = 418,451$ defendants processed, 10% or 41,845 defendants would be denied indigent status and thus representation by appointment of counsel. Based on the state annual cost average for FY2003-FY2005 of \$318.58, the statewide saving due to comprehensive verification would be $[(\$318.58 \times 41,845) = \$13,330,980 \text{ minus } (\$5.35 \times 41,845 = \$2,239,713)]$

= \$11,092,267, or approximately 10.3% of the annual average of total court and administrative costs for FY2006.

Summary of Tarrant County Indigent Defense Experiment

During December 2006, Tarrant County finance officers, under the direction of Ms. Holly Webb, conducted the verification experiment on a random sample (with replacement) of ninety-five defendants who completed an affidavit of indigence thereby requesting county appointment of an attorney. The four county officers conducted the verification of financial information under a highly structured protocol that set forth the experimental procedures to be followed.

The objectives of this experiment were to determine the pattern of discrepancies in the responses on the affidavit to verification findings, determine the average time required for a comprehensive internet-based verification search and process and finally, to establish the cost per defendant for a comprehensive attempt to verify the accuracy of the information listed on the affidavit. Of the ninety-five defendants, three, or 3.16%, of the affidavits were assessed by the analysts to have “relevant inaccuracies,” i.e., inaccurate self-reported values that would have qualified the defendant for appointment of representation but due to the Tarrant County’s comprehensive verification process the inaccuracies were detected and the defendant denied indigent status.

In FY2006, Tarrant County spent \$ 407.74 per adult indigent defendant, a weighted average for felony and misdemeanor cases, for a total of \$ 9,983,833 in court and administrative costs. The total amount of time required in the verification of the ninety-five defendants requesting indigent status and appointment of an attorney was 14.85 hours at a cost of $(\$23.24 \times 14.85) = \345.11 , comprised of wages and benefits of the verification officer. The probable costs avoided was $(\$407.74 \times 3) = \1223.22 . Using the costs avoided as an indication of the monetary benefits obtained as a result of the verification process, the benefit-cost ratio is $(\$1223.22/\$345.11) = 3.54$, suggesting that for each dollar invested by Tarrant County in verification, the net savings would be \$2.54.

In 2006, total court and administrative costs for attorneys appointed to defend adult indigent defendants throughout the state of Texas were \$107,260,810 or \$318.58 per defendant. Using the experience of the Tarrant County verification process as a basis for generalization to the state level and assuming that a similar quality of screening existed across the State of Texas, of the roughly $(336,679 \times 1.05) = 353,513$ defendants processed, 3.16% or 11,171 defendants would be denied indigent status and thus representation by appointment of counsel. As above, based on the state annual cost average for FY2003-FY2005 of \$318.58, the statewide savings due to comprehensive verification would be $[(\$318.58 \times 11,624) = \$3,558,860 \text{ minus } (\$3.63 \times 336,679)] = \$1,223,207$, or approximately 1.1% of the total annual court costs of \$107,260,810 during 2006.

Generalizations from Collin and Tarrant Counties to the State of Texas

Because of the mixed and highly varied results from the verification surveys in the two counties in question, any attempt to generalize to the state level or even across smaller aggregations of similar counties must be viewed with great caution. Using the low end of the 95% confidence interval derived from the Tarrant County survey and the high end of the 95% confidence interval from Collin County, a plausible quantitative range sets the benefit to cost ratios that will capture the variation likely to be present across Texas' 254 counties. Based on the analysis, results of the computation of the lower and upper benefit to cost ratios are as follows:

Lower Benefit to Cost Ratio

Upper Benefit to Cost Ratio

(Tarrant Co.)

(Collin Co.)

.70 ----- 15.0,

a range that includes one, or a “break even” point where costs just offset benefits (savings).

Thus the feasible range of benefits (from savings) relative to costs for a verification program for counties throughout the state varies from a bit less than one (a loss) to benefits that are ten and one-half times the costs.

As with any activity that exhibits substantial variation, the results of sampling the activity in order to establish parameters invariably ends up not being terribly informative. Although it does not fall under any statistical rule, and thus lacks support of the typical textbook version of hypothesis testing, with the customary .05 levels of significance, the boundaries set forth with the estimates of these two county surveys would appear to allow the choice of a select group of Texas counties for which instituting a verification program that would lead to savings that could be shifted into securing counsel for those determined to be certifiably indigent. Although the cut off points for inclusion and exclusion are by necessity arbitrary, the confidence intervals of the two counties overlap making “relevant inaccuracies” on affidavits of 4% a fairly plausible estimate of untruthful responses for the average county.

Using this percentage, the list of counties given in Table D identifies those Texas counties having both cost-benefit ratios that exceed 2.5 and a sufficient number of indigents requesting counsel to require, at least in total, one-half hour per day of comprehensive verification of the financial information on their indigency affidavits. Based on the analysis presented in this report, these are the counties whose projected savings (net of costs) could be expected to generate net financial benefits from the establishment of a comprehensive screening and verification program.

Concluding Remarks

As stated in the preceding section, the results of the experiment described in this report suggest that a comprehensive screening and verification program would generate financial benefits for those counties with a sufficient number of criminal arraignments. However, some observations based on the experience of conducting this experiment should be considered along with these results.

First, since the ultimate decision to appoint county-subsidized counsel for criminal defendants is made by local judges, any verification system must be developed with the confidence, cooperation, and support of the elected county officials who will use its recommendations. Thus, state mandates in themselves may not lead to cost-effective verification systems.

Second, to be effective, verification systems rely on the availability of sufficient dedicated local resources. In all four counties visited by the investigators, the court staff persons who were responsible for determining indigency were conscientious, knowledgeable, and had earned the support of their supervising judges. However, these staff persons were also often balancing the responsibility for indigency determination with other important court duties, and were working under strict timetables for magistration and appointment of counsel. This level of productivity, dedication, and support from superiors is notable, and not always found among public officials working in rule-bound bureaucratic settings. A mandated verification system might not be successful in the absence of an effective and committed staff, and it is unclear whether this would be the experience in every county with the potential to develop such a system. It should be noted that in our experimental verification treatment in Tarrant County, even with the prior commitment and full cooperation of county court officials and the provision of additional financial resources by the state Task Force on Indigent Defense, significant delays were experienced in implementing the experiment.

Finally, the cost-effectiveness of an indigency verification system is highly dependent on the cost and timeliness of acquiring needed data. In some other jurisdictions, the cost of financial data provided by proprietary entities would generate much higher costs than were found in this experiment, costs that might seriously affect the positive cost-benefit findings reported here. Even with the data used in this experiment that were provided by another State agency, the Texas Workforce Commission, which had been obtained routinely by Collin County, several months were required to work out a cooperative arrangement to provide similar data to Tarrant County.

The general caveat here is that it cannot be assumed that the ease and efficiency of a system created in one jurisdiction is routinely transferable to other jurisdictions. This may be particularly true for county court systems in Texas, which have traditionally operated with considerable degrees of discretion exercised by local elected judges, and by a variety of local institutional, political, and fiscal factors.

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Table A. Collin County Adult Indigent Cases (2006)

Experiment Results	Collin County (Estimated)	State of Texas (Projected)
Number of Sample Cases Requesting Indigent Status	60	497,377*
Number of Sample Cases Denied Indigent Status	18 (30%)	149,213
Number Denied due to Relevant Inaccuracies Detected in Verification Process	6 (10%)	49,738
<i>COST</i>		
Cost of Comprehensive Verification of All (60) Cases	\$ 321.10	\$ 2,661,796
<i>BENEFIT</i>		
Total Court Costs per Case	\$ 589.00	\$ 318.58
Costs Avoided due to Detecting Relevant Inaccuracies (Court Cost per case x Denials due to Relevant Inaccuracies)	\$ 3,534.00	\$ 13,330,980
<i>BENEFIT / COST ratio</i>	\$3534.00 / \$321.10	\$13,330,980 / \$2,661,796
Each dollar invested in verification yields \$10.01 in net savings (costs avoided) in Collin Co. or \$4.01 throughout Texas (a projection).	= 11.01	= 5.01

Table B Tarrant County Adult Indigent Cases (2006)

Experiment Results	Tarrant County Point Estimate)	State of Texas (Projected)
Number of Sample Cases Requesting Indigent Status	95	367,845 (estimate)
Number of Sample Cases Denied Indigent Status	N/A	N/A
Number Potentially Denied due to Relevant Inaccuracies Detected in Verification Process	3 (3.16%)	11,624
<i>COST</i>		
Cost of Comprehensive Verification of All (95) Cases	\$ 345.15	\$ 1,336,439
<i>BENEFIT</i>		
Total Court Costs per Case	\$ 407.74	\$ 318.58
Costs Avoided due to Detecting Relevant Inaccuracies (Court Cost per case x Denials due to Relevant Inaccuracies)	\$ 1223.22	\$ 4,171,505
<i>BENEFIT / COST ratio</i>	\$1223.22 / \$345.15	\$ 4,171,505 / \$ 1,336,439
Each dollar invested in verification yields \$2.54 in net savings (costs avoided) in Tarrant Co. or \$2.12 throughout Texas (a projection).	= 3.54	= 3.12

Table C
Comparative Statistics for Tarrant County and Collin County

Adults Only		
	Tarrant Co.	Collin Co.
Year	2006	2006
Sampling Design	Random	Sequential
Sample Size	95	60
Total Verification Time	891 min	780 min
Average Verification Time	9.38 min	13.00 min
Variable Cost per Hour	\$23.24	\$24.70
per Minute	\$0.39	\$0.41
Cost per Verification	\$3.63*	\$5.35*
Total Income (defendant)		
Self-Reported	\$275,440.00	\$433,861.74
TWC (recorded)	\$239,113.33	\$425,009.86
Average Income (defendant)		
Self-Reported	\$2,899.37	\$7,231.03
TWC (recorded)	\$2,516.98	\$7,083.50
Median Income (defendants)		
Self-Reported	0	0
TWC (recorded)	\$2,113.36	\$2,631.00
Number of Differences		
between Self-Report and TWC	60	45
Percent	63.16%	75.00%
Average Difference: Self-Report vs. TWC	\$3,909.00	\$147.53
Defense Cost per Weighted Case (Felony and Misdemeanor) <i>official database</i>	\$407.74	\$589.00
Felony	\$681.37	\$831.24
Misdemeanor	\$150.83	\$382.27
Percent Felony	48.40%	46.10%
Defense Costs/Verification Cost	112	110
Benefit to Cost Ratio	1223.22 / 345.15= 3.54	3,534 / 321.10= 11.01

*Negotiated search rates with TWC and Accurint increase these per capita costs by \$1.00 to \$3.00.

Table D

County FY2006	Court Expenditures on Adult Cases	Paid Adult Cases	Total Verification Costs	Savings if 4% Relevant Inaccuracies	Benefit to Cost Ratio
Anderson	\$464,865	1227	\$6,564	\$18,595	2.8
Bell	\$1,226,822	3512	\$18,789	\$49,073	2.6
Brazoria	\$1,355,034	2204	\$11,791	\$54,201	4.6
Brazos	\$800,470	1897	\$10,149	\$32,019	3.2
Cameron	\$805,599	1442	\$7,715	\$32,224	4.2
Comal	\$412,980	1246	\$6,666	\$16,519	2.5
Ector	\$943,724	2130	\$11,396	\$37,749	3.3
Ellis	\$934,029	2585	\$13,830	\$37,361	2.7
Fort Bend	\$1,463,882	2368	\$12,669	\$58,555	4.6
Galveston	\$2,023,572	3031	\$16,216	\$80,943	5.0
Grayson	\$1,015,804	2630	\$14,071	\$40,632	2.9
Gregg	\$762,613	2226	\$11,909	\$30,505	2.6
Hays	\$486,594	1026	\$5,489	\$19,464	3.5
Henderson	\$504,956	1080	\$5,778	\$20,198	3.5
Hidalgo	\$3,866,961	11312	\$60,519	\$154,678	2.6
Hunt	\$1,286,536	1729	\$9,250	\$51,461	5.6
Jefferson	\$1,233,911	1354	\$7,244	\$49,356	6.8
Kaufman	\$599,838	1154	\$6,174	\$23,994	3.9
Lamar	\$496,704	1031	\$5,516	\$19,868	3.6
Lubbock	\$2,067,179	3544	\$18,960	\$82,687	4.4
Midland	\$783,704	1325	\$7,089	\$31,348	4.4
Montgomery	\$3,006,137	4529	\$24,230	\$120,245	5.0
Nueces	\$2,658,716	5961	\$31,891	\$106,349	3.3
Parker	\$385,633	749	\$4,007	\$15,425	3.8
Potter	\$1,341,318	2668	\$14,274	\$53,653	3.8
Randall	\$741,681	1351	\$7,228	\$29,667	4.1
Rockwall	\$300,493	910	\$4,869	\$12,020	2.5
Smith	\$1,252,848	2165	\$11,583	\$50,114	4.3
Tom Green	\$1,100,025	2624	\$14,038	\$44,001	3.1
Victoria	\$448,128	1249	\$6,682	\$17,925	2.7
Williamson	\$1,018,883	1968	\$10,529	\$40,755	3.9

Appendix 1 State-level considerations

To better understand the underlying economic relationship between types of cases, the age group of defendants and various county characteristics, case and expenditure data for 2003 and 2006 on the indigent defense activities across Texas' counties was drawn from the Texas Task Force on Indigent Defense's Indigent Defense Expenditure Report data base and subjected to several statistical analyses. As a result of missing data, out of the 254 Texas counties the data sets used in the analyses varied in size from 209 to 251 counties depending on the variables of interest. Among the entries in the Report data the most salient for the purpose of identifying budgeting and expenditure patterns are the "paid cases" and expenditures in the respective fiscal years. However, the period over which defense resources were expended and the period over which expenditures occurred differed by necessity due to the one month difference in the fiscal accounting periods independently set by the state and counties and also because any given indigent case could easily have been taken up in the fiscal year prior to becoming a "paid case." Nonetheless, distortion is expected to be fairly light and will be ignored in the following analyses.

The first relationship examined was that of total expenditures on indigent defense incurred during 2006 compared to 2003. As expected, simple regression of the two expenditure totals indicated they were highly correlated with variations in expenditures made in 2003 "explaining" 93% ($R^2=.929$; $p<.0001$) of the variation in the 2006 expenditures. Regression analysis based on transformation of the expenditure totals into natural logs indicates that a 10% increase in 2003 expenditures leads to a 9.7% increase in 2006 expenditures or very close to a proportionate relationship. Restricting the analysis to adult cases produces an $R^2 = .987$ ($p<.0001$) and further restriction that focuses on felony cases indicates that variations in 2003 expenditures explains 94.3% of the 2006 variation.

Because of the close relationship between 2003 and 2006 in total indigent expenditures, a plausible expectation would be that costs per case would be fairly well correlated also. However, variation in the 2003 costs per case was found to explain only 18% of the variation in 2006 costs per case, ($R^2 = .18$; $p < .0001$). With respect to adult cases, variation in the costs per adult case in 2003 explains only 10% of the variation in 2006, ($R^2 = .10$; $p < .0001$) while restricting the sample to felons, the 2003 variation in expenditures per felony case explains only 39% of the variation in 2006, ($R^2 = .391$; $p < .003$).

Expenditures per felony case exceed expenditures per misdemeanor case by a substantial margin. However, there does not appear to be any relationship between total indigent expenditures and the ratio of felony cases to misdemeanor cases. In a preliminary multiple regression analysis in which total expenditures were regressed on the total number of cases and the ratio of felony to misdemeanor cases, 91% of the variation in total expenditures was explained by the equation but no statistically significant relationship between expenditures and the felony-misdemeanor ratio was established. In addition, it is doubtful that the lack of a relationship is due to a statistical problem referred to as multicollinearity given the small correlation coefficient for the expenditure-ratio pairing and as well as other pairings.

Appendix 2 Tarrant County Survey Instrument

Indigency Verification Procedures Tarrant County Date _____

Case or ID # _____

Random # _____

ASSET Verification

_____ 1. Residence/Property Owned

- From Address(es) provided on Face Sheet and Affidavits determine if the defendant owns property.
- Property Ownership can be checked at www.texascad.com for addresses in Texas (Appraisal Records).
 - Look up ownership of residence by both name and address
 - Check if Spouse or Parents of Defendant under the age of 19 years owns property
- If defendant is out of state, use Accurint to see if property can be found.
- Brief Description of your findings:

_____ 2. Vehicles

- Check affidavit for self reported.
- Also check Accurint to see if an automobile is listed.
- Value automobile based on “Kelly Blue Book Value” (use base model).

Indigency Verification Procedures Tarrant County

Date: _____

Case or ID # _____

Random # _____

Beginning Time: _____

Ending Time: _____

CREDIBILITY of Initial Screening Highly Credible _____

Somewhat Credible _____

Questionable _____

Not Credible _____

NUMBER of Defendant's dependents _____.

Note: No ___ Yes ___ Subject is eligible and participates in a public support program, e.g. Medicaid, SS Disability, SSI, Food Stamps? If Yes, end verification.

INCOME Determination

1. IF SSN is Available for Defendant (On Face Sheet; Affidavit of Indigency).

- Check Texas Workforce Commission for Income
 - Use the last four more recently reported quarters (currently all 2005 quarters have been registered with TWC).
- Income reported: None _____ \$ _____ \$ _____ \$ _____
- Comment?

2. IF No SSN is Available for Defendant or If no income is found on TWC report.

- Use Accurint to see if SSN can be found and if found, repeat number 1.

3. IF Defendant is Under 19 years of Age or Married

- Use Accurint to get SSN for parents or spouse. (If married use spouse only; Names usually listed on face sheet)
- Check TWC for Income
- Income reported: None _____ \$ _____ \$ _____ \$ _____
- Comment?