Wisconsin Criminal Justice Study Commission

Position Paper: “Decreasing the Turnaround Time for DNA Testing”

I. Introduction

DNA testing is a uniquely powerful tool for solving crime and delivering justice. We have become accustomed to media reports of “cold hits” - DNA tests that identify a repeat offender as the perpetrator of an unsolved crime - and of prisoners exonerated by DNA testing after years of wrongful incarceration. In Wisconsin, the State Crime Laboratories have been enormously successful in helping law enforcement solve crimes through the miracle of DNA testing.
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DNA testing is a uniquely powerful tool for solving crime and delivering justice. We have become accustomed to media reports of “cold hits”—DNA tests that identify a repeat offender as the perpetrator of an unsolved crime—and of prisoners exonerated by DNA testing after years of wrongful incarceration. In Wisconsin, the State Crime Laboratories have been enormously successful in helping law enforcement solve crimes through the miracle of DNA testing.

With each much-touted DNA testing success comes an ever-increasing demand for testing in more cases, and on more samples. Unfortunately, our resources have not kept up with the demand: the State Crime Laboratories have not been provided with the capacity to conduct all the testing requested by law enforcement entities. This lack of resources leads, unavoidably, to delays in conducting the DNA testing that can solve crimes. And when DNA testing is delayed, this sometimes allows dangerous people to remain free to commit additional crimes and cause more victimization.

It is unrealistic to think we can completely eliminate delays in DNA testing. The DNA testing process is time-consuming, so even if the Crime Laboratories could begin testing immediately in every case, there would still be a delay between submitting the sample and obtaining results. Furthermore, it would require enormous resources to ensure that the Crime Laboratories have sufficient staff to begin testing immediately in every case. Given the inevitability of some delay, policy-makers must decide what amount of delay is acceptable, and what resources are necessary to prevent unacceptable delay.

This paper seeks to comprehensively address the issue of delays in DNA testing, and it makes recommendations for reducing the delays. As the following sections explain, delays in DNA testing are the result of increased demand and a lack of capacity, and therefore the primary solution should be increasing resources for DNA testing. These increased resources should be used for a) outsourcing, b) granting the Wisconsin Department of Justice’s request for a sufficient number of new DNA-related positions, and c) continued implementation of robotics. In addition to increasing resources, policy-makers should maintain projections for how the demand for DNA analysis will grow in the future, and criminal justice entities should continue efforts to manage DNA submissions.
II. The Supply and Demand for DNA Testing in Wisconsin

According to its own internal statistics, the Wisconsin State Crime Laboratories currently have the capacity to perform DNA testing in approximately 1,200 cases per year. (An average case consists of 8 samples.) The following chart depicts the number of cases submitted to the Crime Laboratories per year since 2000.

\[
\begin{align*}
2000: & \ 1,083 \\
2001: & \ 1,050 \\
2002: & \ 1,218 \\
2003: & \ 1,199 \\
2004: & \ 1,239 \\
2005: & \ 1,944 \\
2006: & \ 2,226 \\
2007: & \ 2,493 \text{ (projected)} \\
\end{align*}
\]

As the chart makes clear, in 2006 the Crime Laboratories received submissions that they can analyze with current resources. Thus, even (and increases in DNA testing do not further accelerate), our systems requests for DNA testing. And as the next section suggests, the potential to increase the demand may accelerate even more dramatically.

III. New Sources of Demand for DNA Testing

With the proliferation of “cold hits” in unsolved cases, policymakers around the country have understandably sought to expand the number of profiles in convicted offender databases. Currently, Wisconsin law, like the laws of 43 other states, requires anyone convicted of a felony to submit a DNA profile for the convicted offender database. (A recent change in Wisconsin law now also requires submission of a DNA sample upon conviction of one of the sexually-based misdemeanor offenses specified in Wis. Stats. § 973.047.) The national trend is toward further expansion: in 7 states, the law requires any arrested person to submit a DNA sample.

It is unclear at this point whether Wisconsin will adopt an “arrestee” law. If we do, then our already overburdened system of DNA testing will see an influx of cases in which DNA profiles must be obtained and entered into the databank. This will require additional funding, both to extract the convicted offender profiles and to enter them into the databank. Thus, although it is vital to address the current delays in testing, Wisconsin policymakers must also plan for the possible influx of arrestee DNA samples.

Furthermore, the future will likely bring demand for new kinds of DNA testing that the Wisconsin State Crime Laboratories do not currently perform. For example, the Crime Laboratories already receive requests for “mitochondrial” DNA testing, which allows for DNA testing on samples (such as the shaft
of a hair) that cannot be tested with standard technologies. The Crime Laboratories currently do not conduct this kind of testing, and instead refer these requests to the FBI Laboratories. The future may also bring demand for testing on non-human animal DNA, which has recently played a key role in solving several crimes in other jurisdictions. As demand for these technologies grows, the Wisconsin State Crime Laboratories may be forced to find new cost-effective ways to meet the demand.

IV. Risks of Failing to Address the Increased Demand

The current backlog and delays in DNA testing reflect the Crime Laboratories' tremendous success in utilizing this technology, rather than a failure on the part of the Crime Laboratories. As suggested above, the delays are caused by increased demand, combined with a failure, thus far, to provide funding flexibility to meet the increased strain on the Crime Laboratories' resources. Given the Laboratories' success with DNA, and the corresponding increasing demand for DNA testing, we must be mindful of the consequences of failing to provide the Crime Laboratories with adequate resources for meeting the increased demand.

A. The Guilty Escape Apprehension, and Victims are Denied Justice

Because DNA testing is such an extraordinarily powerful tool for solving crime, delays in DNA testing will necessarily lead to delays in solving crimes and apprehending offenders. Such delays mean that victims are denied justice, and therefore denied the opportunity for closure. Furthermore, such delays mean that offenders remain free to commit other crimes and create new victims.

B. Civil Liability

Aside from preventing apprehension of offenders—which can have tragic consequences for victims and for the wider community—delays in DNA testing also expose governmental entities to civil liability. When an offender leaves DNA at one crime scene, but the DNA is identified too late to prevent a subsequent crime by the same offender, the victims of the second crime may choose to sue governmental entities, contending that timely DNA testing could have prevented their victimization. If delays in DNA testing remain unaddressed, it is only a matter of time before such a case reaches Wisconsin.

V. Three Recommendations for Meeting the Increased Demand

In order to begin the process of implementing a comprehensive strategy for effective DNA testing in our state, the Wisconsin Criminal Justice Study Commission sets forth the following recommendations:

RECOMMENDATION #1: Provide sufficient funding for A) outsourcing, B) a sufficient number of new DNA-related positions as requested by the Wisconsin Department of Justice, and C) continued implementation of robotics. These three steps should ensure that, as soon as reasonably possible, the Crime Laboratories can maintain a turnaround time of 30-60 days for DNA submissions.
Ideally, DNA testing would be completed almost immediately in every case; however, doing so would require the Crime Laboratories to have an inordinately large staff, most of whom would be unoccupied when the volume of DNA submissions is low. Instead, the Crime Laboratories should aim for a turnaround time of 30-60 days, which would guarantee both timely processing of DNA samples and maximum efficiency in the Laboratories. In individual cases where public safety demands swifter results, the Crime Laboratories will be able to produce results faster than 30-60 days.

There is no question, however, that maintaining a turnaround time of 30-60 days will require a substantial increase in resources. The question is how best to apply those resources.

A. Outsourcing

Estimates from the Wisconsin Department of Justice indicate that adding personnel will not eliminate existing delays until 2010. Even if the Crime Laboratories hire a substantial number of new analysts, most of these analysts will not be able to begin DNA analysis for more than a year because of the time it will take to hire and train them. During that period, the Crime Laboratories will fall further behind, and delays for DNA analysis will grow exponentially.

In addition to the time spent hiring and training them, once they begin working the new analysts (like current analysts) will be required to spend much of their time on cases with court dates and court orders, which will force them to defer uncharged cases. The existing delays are longest for these uncharged cases. However, recent statistics show how extraordinarily effective DNA can be in these cases. Between April, 2002, and December, 2004, the federal government provided grants for DNA testing in uncharged cases. Under the program, known as the “Wisconsin No Suspect Case Initiative,” the Wisconsin State Crime Laboratories sent 705 crime scene samples from uncharged cases to a private lab. In 63% of those cases, the private lab discovered a DNA profile on the evidence. In 25% of the cases with a DNA profile, the profile returned a “cold hit” on a convicted offender. Although these remarkable statistics reinforce the tremendous potential of DNA to solve crimes, the federal money ran out in March, 2005, and, as explained above, our current State Laboratories lack the capacity to keep up.

Outsourcing is necessary in order to begin addressing the delays immediately and to prevent the delays from getting worse in the near future. Outsourcing provides a short-term, temporary solution to what should be a short-term, temporary problem. If (as discussed below) the Crime Laboratories are provided with funding to hire a sufficient number of new, permanent analysts, the Laboratories will be able to keep up with future demand, and outsourcing should be required only temporarily, to clear the accumulated backlog and to permit Laboratory personnel thereafter to meet the 30-60 day turnaround goal without further outsourcing. If no funding is provided for outsourcing, however, then additional permanent staff will be required to enable the Laboratories to catch up with accumulated demand more quickly.
B. Hiring New DNA Analysts

Although outsourcing is necessary in the short-term, it is not cost-effective in the long-term. Outsourcing costs 3-4 times as much as conducting DNA testing in-house. Moreover, the Crime Laboratories have an excellent track record in conducting DNA testing. Thus, the Crime Laboratories should remain the primary provider of DNA testing in Wisconsin, and the legislature should provide funding for new positions to ensure that the Crime Laboratories have sufficient capacity in the long-term.

The Wisconsin Department of Justice has estimated that, without outsourcing, it will need 31 new DNA-related positions to eliminate delays by 2010. If funding is provided for immediate outsourcing, however, fewer permanent hires may be required, and backlogged cases can be resolved in a shorter period of time, allowing the Laboratories to achieve the goal of a 30-60 day turnaround much more quickly. Department of Justice statistics will suggest to what extent additional positions are unnecessary if the legislature allocates funding for immediate outsourcing.

C. Continuing Implementation of Robotics

In addition to outsourcing and human resources, the legislature should provide sufficient funding for the Crime Laboratories to continue implementing robotics. The State Crime Laboratories have begun implementing robotics, but the process has been slowed somewhat by the need to apply limited resources to actual testing. Robots can process substantially more samples than human analysts, and therefore have the potential to greatly increase efficiency in DNA testing. The legislature should provide funding sufficient for robotics equipment and for the human resources needed to implement and operate the equipment.

The traditional avenue for adding these additional resources is the biennial budget process, the structure of which creates several challenges for those requesting and providing funding. First, the biennial process does not allow an annual review, which means funding decisions must cover a full biennium, with little flexibility for adjustments in the middle of the biennium. Second, the funding projections actually span more than a biennium, because the requests are submitted more than six months before the next biennium begins. Thus, the current budget request, which was submitted in October, 2006, must cover the period lasting until June 30, 2009. Given the difficulties in predicting how demand will change between now and June 30, 2009, it is even more important for policy-makers to provide funding sufficient to allow the Crime Laboratories to adjust to changing circumstances. Furthermore, the Crime Laboratories should be given the flexibility to ask for additional funding outside the biennial budget process.

When considering funding for DNA testing, policy-makers must make an exception to the current trend toward demanding cuts in government funding. While funding cuts may be reasonable for governmental entities that do not face an increased demand for vital services, the large increases in demand for DNA testing require additional resources, even in an otherwise tight budget atmosphere.
RECOMMENDATION #2: Develop and maintain projections for how the demand for DNA analysis will change in the future.

Although our first priority should be to fix the current problems, we must also plan for the additional problems that are likely to emerge in the future. Most notably, because of the power of DNA databanks to solve cases, policymakers should recognize that increased reliance on DNA and expanded DNA databanks may create a substantially increased burden on our resources, and we must plan for how best to shoulder that burden.

In addition, DNA technology will continue to evolve, causing demand for our Crime Laboratories to add new DNA testing methods, such as mitochondrial testing (which, unlike existing STR testing, allows DNA testing on the shaft of a hair) and testing for non-human DNA. Policymakers must be aware that these new technologies will place new demands on our State Crime Laboratories’ resources.

To prepare for what will come in the future, policy-makers should develop and maintain projections for how the demand for DNA analysis will grow in the future, what amount of funding will be necessary to meet the demand, and how that funding can be provided. These projections should be provided to and reviewed by the legislature on a regular basis. The projections should guide our efforts to prevent further overburdening our DNA testing resources and to insure the quality and reliability of forensic evidence.

RECOMMENDATION #3: Continue System-Wide Efforts to Manage DNA Submissions.

Legislation rigidly and arbitrarily limiting the number of samples investigators may submit is not in the public interest for reasons both pragmatic and legal. Because DNA is such a powerful tool for solving crime, and because each case presents unique circumstances, rigid restrictions could jeopardize our ability to maximize the potential of DNA testing.

Instead, the Crime Laboratories should continue to work with local law enforcement, prosecutors, and courts to manage submissions and to develop flexible guidelines for what samples should be tested in a given case. Although it is difficult to draft specific guidance for every case, certain basic principles should be clearly documented and distributed. This will save the Crime Laboratories time in sorting the probative samples from the non-probative. Furthermore, submitting entities should continue training to instill reasonable expectations about the Crime Laboratories’ capacity and an understanding of what samples are most likely to produce probative results.