



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**JUSTICE SECURED: IMPLEMENTING A RISK-BASED
APPROACH TO COURT SECURITY**

by

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March 2008

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE March 2008	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Justice Secured: Implementing a Risk-Based Approach to Court Security		5. FUNDING NUMBERS	
6. AUTHOR(S) Sara K. Fisher		8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) A significant challenge to reducing pervasive security risks in judiciary operations is the lack of an objective method to evaluate and compare existing levels of risk in court facilities. This is particularly problematic when security funding enhancements are not supported by a standardized risk assessment methodology. This thesis proposes a risk-based approach to identify and reduce risk to court security operations. The primary thrust of this research effort is the development and testing of a risk assessment tool. Threat, vulnerability, and consequence elements of the risk assessment tool are identified and quantified. The tool is beta-tested using data from four California courts. The end result is a risk assessment tool which can serve as an integral part of a decision support system to help court security managers identify and reduce pervasive security risks.			
14. SUBJECT TERMS Court security, judicial security, risk management, risk-based approach, risk assessment, risk management framework.			15. NUMBER OF PAGES 121
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

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**JUSTICE SECURED: IMPLEMENTING A RISK-BASED APPROACH TO
COURT SECURITY**

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

A significant challenge to reducing pervasive security risks in judiciary operations is the lack of an objective method to evaluate and compare existing levels of risk in court facilities. This is particularly problematic when security-funding enhancements are not supported by a standardized risk assessment methodology.

This thesis proposes a risk-based approach to identify and reduce risk to court security operations. The primary thrust of this research effort is the development and testing of a risk assessment tool. Threat, vulnerability, and consequence elements of the risk assessment tool are identified and quantified. The tool is beta-tested using data from four California courts. The end result is a risk assessment tool which can serve as an integral part of a decision support system to help court security managers identify and reduce pervasive security risks.

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I. INTRODUCTION

Courthouses must be a safe harbor to which members of the public come to resolve disputes that often are volatile. Once courthouses themselves are perceived as dangerous, the integrity and efficacy of the entire judicial process is in jeopardy.

— Ronald M. George, Chief Justice of California

A. PROBLEM STATEMENT

Judiciaries are, by their very nature, fraught with a common conundrum: how to balance the goal of “access to justice for all” with the need to maintain a secure physical environment for judicial officers, court staff, and public stakeholders.

The third branch of government, embodied in the federal, state, and local/tribal courts throughout the nation, is vital to the democratic ideals upon which America is based. Therefore, it is essential that accessibility to courts is maintained for all those seeking entry. At the same time as accessibility to justice must be maintained, courts are under regular threat from those attempting to do harm to the system, its judicial officers or court staff, or court facilities themselves.

The balance is between ensuring access to justice and maintaining a secure environment where all stakeholders (members of the public, in-custody defendants, judges, court staff, etc.) are safe to conduct the business of the third branch of government. In order to do so, the court must be committed to a robust physical security system.

The quality of court security varies widely throughout the California state courts. While the majority of courts in California, for example, have entrance screening stations in order to lessen the likelihood of weapons and other contraband in the court, a 2006 survey revealed that 22 percent of the courts in the state did not possess entrance screening. Some state courts have well-defined secure circulation zones allowing judicial officers and court staff to circulate separately from “in-custody” inmates. Many courts,

however, have no such separation. In these courts, judicial officers and the inmates they see in court regularly come into close contact. In many courts, the mixing of inmates, judicial officers, jurors, and members of the public exacerbates the situation. These are just two examples of many of the wide variances in court security levels throughout the California state court system.

The drastic differences in court security throughout the state are the result of multiple factors. Probably the most significant determinant is the fact that, until 2002, court facilities were under individual county control. Counties built new courts, converted existing facilities into court space, and installed security equipment according to county standards. With fifty-eight counties in the state, fifty-eight vastly different standards for security were employed throughout the judiciary. Some counties were diligent, for instance, about building foyers with adequate space to accommodate entrance screening. Others were not. A few counties considered the need for ballistic resistant material in judges' benches. Most did not.

Another barrier to court security lies in the large numbers of registered historic buildings that house courts throughout California. Many courts are located in facilities that date to the nineteenth century. Several of today's security concerns (small but powerful bombs, easily concealable high powered weapons, etc.) did not exist when these buildings were initially constructed. Additionally, security, as a science, was not as refined as in modern times. Today, it is taken for granted that there should be four completely separate circulation zones in court facilities (one for inmates, one for judicial officers and staff, one for members of the public, and one in which all can interface).¹ This principle of court security was not foundational in the construction of new courthouses in the 1800s.

Addressing a court's security vulnerabilities and maintaining a secure court environment is extremely costly. At the same time, court security improvement funding is a finite resource. The current method used to allocate court security improvement funds in the state of California is based upon established need, on a court-by-court basis.

¹ Michael Griebel and Todd Phillips, "Architectural Design for Security in Courthouse Facilities," *Annals of the American Academy of Political and Social Science*, no. 576 (July 2001), 122-123.

The following generally defines the process by which security improvement funding is allocated to a court in the state of California.

- 1) Court has identified a specific security deficiency to the Emergency Response and Security (ERS) unit within the Administrative Office of the Courts (AOC).²
- 2) ERS has evaluated the court's security, through conduct of a site visit and court security survey.
- 3) Based upon subjective affirmation of the existing deficiency/vulnerability, ERS has allocated funding to the court for security upgrade project(s).

While this process serves the purpose of mitigating security deficiencies in certain courts, it is not replicable across the range of court operations in the state for two primary reasons. First, it is based largely on a first come, first served basis. Security problems in one court are viewed in relation to the needs of that court only and not with an eye towards best enhancing security for courts statewide. There is no holistic approach to the current process. Additionally, it is extremely labor intensive. This is a particular problem as there are over 450 facilities in the California Judicial Branch, and ERS staffs only one individual with the primary job responsibility to conduct court security surveys.³ In addition to the manpower issues this process presents, the method is rather subjective, and resulting funding allocations are open to criticism that no objective set of written standards are followed in the funding allocation process.

The above approach suffers from a lack of a formalized, objective process for assessing and prioritizing risk to the courts. Security deficiencies are prioritized based upon the experience of the ERS staff assessing the problem. For example, the court in Lake County may approach ERS with a particular security deficiency: the judges' bench in a courtroom in their facility, which lacks weapons screening, does not contain ballistic resistant material. The court in Inyo County may approach ERS with a different problem: The clerk's counters are not outfitted with any barrier between the clerks and the public.⁴ Were security improvement funds severely restricted, a decision may well

² The Administrative Office of the Courts is the administrative arm for the California Judicial Branch.

³ Two management-level individuals are also able to conduct surveys but are rarely available to do so.

⁴ Both examples are theoretical and not actual.

need to be made as to which security upgrade to fund. At this point, the decision would be purely subjective. However, assume it were known that the judicial officer who sits behind that particular bench had been previously attacked by a paroled inmate who has threatened to shoot him? In that case, the emergent need would clearly be to quickly install ballistic resistant material behind the bench. What if, however, in the past five years, the clerks at the unprotected counter in Inyo County had seen weapons pulled on them twice? At this point, which security upgrade is in most immediate need of funding? Without a formal risk-based process of assessing level of threat, vulnerability, and the consequences, the answers to the scenario remain subjective.

This lack of a risk-based approach to court security is a problem in state courts nationwide. The National Center for State Courts, a service organization that often serves as a clearinghouse for state court best practices in the realm of court security and general judicial administration, is not aware of a method for quantifying risk in courthouse facilities.⁵ This creates a significant problem in state court systems, where court security is often substandard. While it may create less of an issue in small state court systems, it represents a significant deficiency in court systems with hundreds of facilities for which they must manage security, such as California, Texas, or New York.

B. LITERATURE REVIEW

If we cannot ensure the safety of the all participants in the judicial process, we cannot maintain the integrity of the system, we cannot — in sum — ‘establish justice,’ as mandated in the preamble to the Constitution of the United States.

—Joint Statement of former U.S. Supreme Court Justice Warren Burger and former U.S. Attorney General William French Smith

The previous quote was taken from a 1982 Department of Justice *Report of the Attorney General’s Task Force on Court Security*.⁶ This report called for the

⁵ Steve Berson, Court Management Consultant for the National Center for State Courts, email communication with author, March 19-27, 2007.

⁶ Department of Justice, *Report of the Attorney General’s Task Force on Court Security* (Washington D.C., 1982).

implementation of a strategic risk-based approach to guide federal court security efforts. A July 1994 report by the General Accounting Office (GAO) illuminated the fact that key elements of the recommendations were, twelve years later, still not in place.⁷

Thirteen years following the 1994 GAO report, it is unknown whether a comprehensive risk management program has been implemented by the federal judiciary. Review of current literature revealed nothing confirming or denying that a risk-based approach to federal judicial security is now in place.

The primary importance of the aforementioned document is that the concept of a risk-based approach to securing the judiciary has existed in the public consciousness for at least the past twenty five years. This concept was well recognized in the third branch even prior to the terrorist attacks upon the Murrah Federal Building, which shared a parking structure with Oklahoma City's federal courthouse, and the World Trade Center, which spurred action in multiple sectors to seriously evaluate physical security.

While the need for a risk-based approach to judicial branch security has been known for well over two decades, precious few state and local courts have embraced the concept. A review of court security plans for state courts nationwide reveals an inconsequential number of state courts have embraced the terminology of risk. In 1991, the Arizona Supreme Court approved a Risk Management/Court Security Plan as a goal for the Arizona Judicial Branch.⁸ However, a 2007 interview with a representative from the Arizona Administrative Office of the Courts revealed that Arizona's judiciary does not, in fact, utilize a risk-based approach to court security.⁹ Current judicial security efforts in Arizona are not guided by any quantifiable method. Similarly, the largest judiciary in the nation (and the world), the California Judicial Branch, does not yet utilize

⁷ General Accounting Office, *Federal Judicial Security: Comprehensive Risk-Based Program Should Be Fully Implemented, Report to Congressional Requesters* (1994), 3.

⁸ Arizona Judicial Council's Committee on Risk Management/Court Security, *Risk Management/Court Security Plan* (Phoenix, December 1991).

⁹ Niki O'Keefe, Arizona Administrative Office of the Courts, *telephone interview with author*, March 21, 2007.

a risk-based approach to court security at the state level. It is possible some individual courts and their security providers may embrace the concept, but it is not implicit at the state level.

In a speech at George Washington University in 2005, the Secretary of the Department of Homeland Security discussed risk management in the following terms:

We must manage risk at the homeland security level. That means developing plans and allocating resources in a way that balances security and freedom when calculating risks and implementing protections.¹⁰

There is no better sector than the judicial branch — which, by its nature, must be committed to freedom and access to justice for all Americans — to embrace the concept of risk management.

The literature explored for this topic falls into four general categories: government policy documents and research reports focusing on risk management; privately authored books on security protection systems and risk assessment methods; news reports and scholarly articles outlining threats posed to judiciary operations; and texts and reports generated specifically by and for judicial branch stakeholders.

1) Government policy documents and research reports focusing on risk management

Government policy and research reports are helpful in setting the stage for the current state of risk management research and application to government operations. Homeland Security plans for infrastructure protection and risk methodology analysis make clear the importance of a risk management approach to homeland security. These reports also help define, to a limited extent, how that approach can be shaped by offering an outline of the primary elements of a risk management framework. Congressional Research Service (CRS) and Government Accounting/Accountability Office (GAO) reports analyzing the successes and failures of risk management frameworks are useful in the development of unique risk-based assessment tools. It is helpful to know, up front,

¹⁰ Michael Chertoff, *remarks made to the George Washington University Homeland Security Policy Institute*, Washington D.C., March 16, 2005.

what has or has not worked well in the past. For example, a GAO report assessing the federal judiciary's incomplete implementation of a risk management framework helps identify the pitfalls to avoid in implementing a program.¹¹

2) Privately authored books on security protection systems and risk assessment methods

Non-governmental literature on the topic of security protection systems offers insight into the nexus between risk management and the general field of physical security. An evaluation of the literature highlights the shortcomings of existing risk assessment tools, as they relate specifically to the needs of the judiciary. For example, resources such as *The Design and Evaluation of Physical Protection Systems*¹² or *Risk Management for Security Professionals*¹³ are helpful in identifying the major physical systems necessitating evaluation in a risk framework. The texts are, however, focused on the private sector and do not offer specific guidance for conducting risk assessments in government facilities.

3) News reports and scholarly articles outlining threats posed to judiciary operations

News reports and scholarly articles that detail threats to the judiciary underscore the importance of developing a formalized approach to securing the third branch of government. Much of the source material in this third category comes from non-academic news reports of attacks upon courts or judicial stakeholders. This is important to note, as non-academic source material is much more likely to be digested by the general public than is academic literature. News reports detailing bomb threats, attacks upon judges and court staff, and fatalities in courthouses can serve a role in lessening public confidence in the judiciary.

¹¹ General Accounting Office, *Federal Judicial Security*.

¹² Mary Lynn Garcia, *The Design and Evaluation of Physical Protection Systems* (Boston: Butterworth Heinemann, 2001).

¹³ Carl Roper, *Risk Management for Security Professionals* (Boston: Butterworth Heinemann, 1999).

4) Texts and reports generated specifically by and for judicial branch stakeholders

Texts and reports generated specifically by and for judicial branch stakeholders are helpful in assessing the most prevalent vulnerabilities existing in courthouse facilities. These known vulnerabilities can be examined as they specifically relate to the California court system. One excellent resource in this category is the wealth of articles focused on judicial security contained in the Summer 2001 *Annals of the American Academy of Political and Social Science*.¹⁴

A great deal of literature is devoted to exploring the concept of risk management. The Department of Homeland Security's 2006 guidance document, the *National Infrastructure Protection Plan* (NIPP), is committed to establishing critical infrastructure protection programs grounded in risk management principles.¹⁵ The plan assigns responsibility for critical infrastructure protection to state and local governments, particularly "with regard to establishing funding priorities."¹⁶ In January of 2007, the Congressional Research Service released a report entitled *Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threats, Vulnerabilities and Consequences*.¹⁷ The CRS report studied methodology and models for successful risk management frameworks. The report's focus was on integration of the three major elements of risk assessment: threats, vulnerabilities, and consequences.

Although governmental reports and guidance are prevalent in the risk management discourse, non-governmental literature has also substantially contributed to the dialectic. One text, *The Design and Evaluation of Physical Protection Systems*, provides a highly complex framework from which to approach risk management.¹⁸ The need for "expert" evaluators possessing "specialized skills" is conveyed. Similarly,

¹⁴ Don Hardenbergh and Neil Weiner, "Preface," *Annals of the American Academy of Political and Social Science*, no. 576 (July 2001).

¹⁵ Department of Homeland Security, *National Infrastructure Protection Plan* (2006), 15.

¹⁶ *Ibid.*, 23.

¹⁷ Congressional Research Service, *Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threats, Vulnerabilities and Consequences* (Washington D.C., 2007).

¹⁸ Garcia, *The Design and Evaluation of Physical Protection Systems*, 274.

another treatise on the topic, *Critical Infrastructure Protection in Homeland Security*, proposes a network approach to risk assessment and vulnerability analysis which requires no small amount of specialized skill and instruction to master.¹⁹ While both methods may be highly useful for technically proficient risk managers and security professionals, they are not likely to be well received in the field of court security.²⁰

Risk is defined mathematically as the threat of an attack multiplied by the vulnerability of an attack multiplied by the consequences of an attack or:

$$\text{Risk [R]} = \text{Threat [T]} \times \text{Vulnerability [V]} \times \text{Consequences [C]}^{21}$$

To better understand risk management in the judiciary, it is necessary to break down each of the components of the risk equation and relate them to the judicial environment.

1. Threat

Threats are indications or events with the potential to cause loss of, or damage to, an asset.²² Courts have, throughout the ages, been under threat from anti-government extremists, everyday criminals, and irate family court litigants. A review of violent incidents in the courts reveals a plethora of evidence of consummated threats to the third branch of government.

- In the early 1990s, a drunk-driving defendant in Florida pulled a gun on a judge and shot the courtroom bailiff, who tried to intervene.²³
- On the same day in 1992, three separate incidents occurred in courtrooms across the country: a man in North Dakota shot and seriously wounded a judge, a man in Missouri shot and killed his wife while waiting for court to begin, and a man was shot in the shoulder during an argument in an Alabama courthouse.²⁴

¹⁹ Ted Lewis, *Critical Infrastructure Protection in Homeland Security* (Hoboken: John Wiley and Sons, 2006).

²⁰ The majority of court security professionals are deputy-level Sheriff's department staff, generally not at a stage in their careers where they are likely to possess acute knowledge of complex critical infrastructure protection schema or risk management frameworks.

²¹ Office of Domestic Preparedness, *Vulnerability Assessment Methodologies Report* (Washington D.C., 2003), 11.

²² Ibid.

²³ Hardenbergh and Weiner, *Preface to the Annals*, 8.

²⁴ Ibid.



Figure 1. In 1997, a man hurled a firebomb into a courtroom in Champaign, Illinois, causing extensive damage to the courtroom.²⁵

- In August of 2004, a convicted counterfeiter with a grudge against the court system was arrested on charges of plotting to blow up the federal courthouse in Chicago.²⁶
- In February of 2005, a partially ignited firebomb was found and dismantled outside of the Placer County Courthouse in California.²⁷ The Earth Liberation Front claimed responsibility for the attempted bombing.
- In March of 2005, a judge, a court reporter, and a court security officer were shot and killed by defendant Brian Nichols in Fulton County, Georgia.²⁸
- In April of 2006, two brothers were arrested after plotting to blow up a courthouse in Rice County, Minnesota. The brothers were disgruntled former litigants who had two propane tanks filled with propane and fertilizer, in preparation for the bomb attack.²⁹
- In June of 2006, a judge was shot by a disgruntled family court litigant while standing in front of a window on the third floor of a courthouse in Reno, Nevada.³⁰

²⁵ Mary Ann Barton, "Can you afford to neglect security at your courthouse?" *County News Online*, no. 8 (1997).

²⁶ Associated Press, *Counterfeiter Accused of Courthouse Bomb Plot in Chicago*, August 5, 2004, <http://www.newsmax.com/archives/articles/2004/8/5/143448.shtml> (accessed May 6, 2007).

²⁷ Associated Press, *Pipe Bomb Dismantled at Calif. DMV Office*, February 16, 2005, <http://www.newsmax.com/archives/articles/2005/2/16/94307.shtml> (accessed May 6, 2007).

²⁸ Larry Copeland, "I could tell he was going to shoot everybody," *USAToday.com*, http://www.usatoday.com/news/nation/2005-03-13-ga-courthouse_x.htm (accessed March 9, 2007).

²⁹ Karna M. Peters, "Responding to Rhetoric Against Judges," *Bench & Bar of Minnesota* 63, no. 6 (2006).

³⁰ Associated Press, *Reno Police look for suspect in judge shooting*, June 12, 2006, <http://www.foxnews.com/story/0,2933,199176,00.html> (accessed March 26, 2007).

- In August of 2006, an anti-government crusader sent letters containing what was purported to be anthrax to two California courts. Operations were shut down for an entire day in one affected court and for three hours in the other.³¹

The threat of violence to courts is incontrovertible. While the threat is plain, the quantification of that threat is much harder to fathom. In order to conduct a risk assessment, quantification of threat is necessary. What is lacking in the existing literature is a standardized method for quantifying threat information. One afore referenced text, *The Design and Evaluation of Physical Protection Systems*, offers a method to *qualitatively* assign a rating (high, medium, low) to threats.³² However, there is not a subsequent *quantification* of threat information explored in the literature.

In order to adequately utilize a risk-based approach to evaluating security, it is necessary to employ a quantitative ranking system. What the literature does not relay, but which must be explored, is the translation of qualitative assessments (high, medium, low) to quantitative values (e.g., 1, .5, 0).

Understanding threats to the judiciary can lead to efforts to protect facilities and branch personnel against those threats. Two examples from the literature will illustrate this truism. Both examples elucidate how proper protection against identified threats can reduce risk to judiciary operations.

In April of 2005, cookies mailed to the Supreme Court in Washington D.C. contained enough rat poison to kill all nine justices. All mail to the Supreme Court is screened, and the justices never received the packages of poison-laced cookies.³³

In June 2005, a man brought a loaded AK-47 to a courthouse in Tyler, Texas, to confront his estranged wife and her son. The court employed entrance screening and the perpetrator did not enter the courthouse. Unfortunately, he shot and killed his victims outside of the courthouse.³⁴ However tragic the result, the lesson in this particular case is

³¹ Anecdotal evidence relayed to author from court executive officers in the two affected courts.

³² Garcia, *The Design and Evaluation of Physical Protection Systems*, 33-35.

³³ Kevin Bohn, "O'Connor details half-baked attempt to kill Supreme Court," *CNN.com*, November 17, 2006, <http://www.cnn.com/2006/LAW/11/17/court.cookies/index.html> (accessed March 9, 2007).

³⁴ KLTV 7, *Three Killed, Including Gunman, In Smith County Courthouse Shoot-out In Tyler*, <http://www.kltv.com/Global/story.asp?S=2994393> (accessed March 9, 2007).

that the perpetrator did not wreak his havoc *inside* the courthouse. He was thwarted from doing so by security measures appropriate to counter the existing threat.

2. Vulnerability

Vulnerability is a weakness that can be exploited to gain access to an asset.³⁵ That access may be gained to carry out a threat. In any discussion of vulnerability in the judicial arena, it is necessary to define the parameters of the protected space. Justice does not begin and end at the courthouse door. Judicial officers, court staff, attorneys, and court security officers go home at night to their families, participate in social events, and live lives in the public view. Oftentimes, judicial officers are under threat from irate litigants who may attempt to cause them harm away from the courthouse. One particularly brutal example of this is the 2005 murders of Judge Joan Lefkow's husband and mother in their home.³⁶ The perpetrator had intended to kill the judge herself for having dismissed his case.

There is no dispute that judicial officers are vulnerable away from the courthouse setting. For the purposes of this research, however, the focus will be upon vulnerabilities *within* the courthouse setting, where judges, witnesses, court security officers, attorneys, litigants, inmates, jurors, and others all congregate. The courthouse facility will serve as the focal point for vulnerability analysis.

With this understanding, it is prudent to review literature relative to courthouse facility vulnerabilities. The literature on this topic is expansive. Numerous books, articles, and government documents address the need to identify vulnerabilities in the courts. *Court Security: A Guide for Post 9-11 Environments* is one such example.³⁷ An article written by Randall Atlas, *Designing for Security in Courthouses of the Future*, followed on the heels of the Oklahoma City bombing and serves as an additional guide in

³⁵ Office of Domestic Preparedness, *Vulnerability Assessment Methodologies Report*, 11.

³⁶ Jeff Coen and David Heinzmann, "Police: DNA matches: Top cop says evidence, suicide notes solve Lefkow slayings," *Chicago Tribune*, March 11, 2005, <http://www.chicagotribune.com/news/specials/chi-0503110284mar11,1,1817591.story?coll=chi-news-specials-hed> (accessed October 23, 2006).

³⁷ Tony L. Jones, *Court Security: A Guide for Post 9-11 Environments* (Springfield, Ill: Charles C. Thomas Publisher, Ltd, 2003).

the field of courthouse vulnerability analysis.³⁸ Checklists and information written by the National Sheriff's Association are also useful in the endeavor to evaluate vulnerabilities to courthouses.³⁹

On a related note, there are numerous books in the more general field of physical security containing lessons that can be applied to the court environment, such as *The Design and Evaluation of Physical Protection Systems*.⁴⁰

While all of the cited literature is helpful in determining what aspects of physical security to focus upon while conducting vulnerability analyses, the discourse is clearly lacking methods for quantification. While it may be well understood, for example, that a courthouse should possess entrance screening and alarm its emergency exits, no method exists to assign a numerical value to courts that do or do not possess such systems, or employ limited entrance screening. Neither the National Center for State Courts,⁴¹ nor the U.S. Marshals have a method for quantifying vulnerability.⁴² This is problematic. In order to conduct a risk analysis, vulnerabilities must be quantified, just as threats and consequences must be. This will assist courts in making prudent resource allocations and clearly identify branch-wide priority vulnerabilities.

3. Consequences

The impact to the owner in case of loss or damage to an asset defines the consequences element of the risk analysis equation.⁴³ Information and guidance on how to conceptualize consequences, as they relate to judiciary operations, is nearly nonexistent. According to the *National Infrastructure Protection Plan* (NIPP), the four primary concerns relative to consequence assessment are:

³⁸ Randall Atlas, "Designing for Security in Courthouses of the Future," *Fifth National Court Technology Conference for the National Center for State Courts*, September 1997.

³⁹ National Sheriff's Association, *Physical Security Checklist*, 1999.

⁴⁰ Garcia, *The Design and Evaluation of Physical Protection Systems*.

⁴¹ Steve Berson, Court Management Consultant for the National Center for State Courts, email communication with author, March 19-27, 2007.

⁴² Nancy Aschbrenner, U.S. Marshal, Judicial Security Division Chief, Los Angeles District, *interview by author*, November 13, 2006.

⁴³ Office of Domestic Preparedness, *Vulnerability Assessment*, 11.

- Human Impact (such as fatalities or injuries)
- Economic Impact: Direct and indirect effects on the economy
- Impact on Public Confidence
- Impact on Government Capability: Effect on the government’s ability to maintain order and deliver minimum essential public services⁴⁴

While helpful in determining what types of consequences to focus upon while conducting risk assessments, the NIPP does not guide the end user toward a methodology to quantify consequences in the fulfillment of the risk assessment equation. This deficiency was highlighted in the January 2007 report by the Congressional Research Service:

. . .the NIPP states that assessment methodologies are required and that some standards for estimating consequences need to be developed. However . . .the NIPP offers little in way of setting standards for what measures to use, and the assumptions that need to be made.⁴⁵

The question then remains: How does one measure the consequence of the loss of a courthouse, temporarily or long term?

The question is a variant of others posed earlier in this literature review: How does one quantify threats to the courts? Vulnerabilities? A method for quantifying all aspects of the risk management framework, with specific focus on judiciary operations, has yet to be developed.

C. SIGNIFICANCE OF THE RESEARCH TO HOMELAND SECURITY

This research fills a crucial gap in the existing compendium of court security-related discourse and links the unique nature of the judicial branch security to the Department of Homeland Security issues and goals. The judiciary, as an independent branch of government, is often not considered a partner in the overall effort to enhance

⁴⁴ Department of Homeland Security, *National Infrastructure Protection Plan*, 37.

⁴⁵ Congressional Research Service, “Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threats, Vulnerabilities and Consequences” (Washington D.C., 2007), 22.

homeland security (HS), set HS policy, and define objectives for critical infrastructure protection. This analysis contributes to the nascent discourse on the role of homeland security goals and policies to judicial branch security operations.

The primary audience for this research is state court security managers, risk management professionals working in the field of judicial operations, and judicial branch budget departments. This thesis also appeals, more globally, to government risk assessors and security professionals.

The role of the judiciary to protect the rule of law and the rights and freedoms of the people it serves is as vitally important to the functioning of government as are the deliberations of the legislative branch and the authority vested in the executive. Therefore, security of the judiciary should be researched and invested in on par with the other two branches of government.

Two primary goals of the Department of Homeland Security are:

- Prevention — Detect, deter and mitigate threats to our homeland.
- Protection — Safeguard our people and their freedoms, critical infrastructure, property and the economy of our nation from acts of terrorism, natural disasters, or other emergencies.

Consequently, the focus of this thesis is to develop and test an approach to risk management that will enhance prevention and protection efforts within the judiciary, in line with the goals of the Department of Homeland Security. Additionally, the research contributes to the growing body of homeland security literature surrounding critical infrastructure protection and risk management. The focus upon judicial branch critical infrastructure protection is a new direction in this field.

D. METHOD

The methodology utilized in this thesis includes the development of a risk assessment decision support tool, incident analysis, interviews, and surveys.

Development of a risk assessment decision support tool

Various existing risk management frameworks and assessment models are studied and a hybrid risk assessment tool is developed and tested. The application of this decision support tool allows for an ordinal ranking of court-security-related projects, useful for prioritizing budget allocations in a fair and sensible manner. A beta-test of four California courts vets the viability of the tool. The results of the beta-test are synthesized and risk mitigation is proposed for the most at-risk court.

Incident Analysis

A comprehensive review of incidents occurring in state courts throughout the past ten years determined the most common threats to a judiciary system. This forms the basis for the threat component of the risk assessment tool.

Interviews

Interviews are conducted with subject matter experts, primarily in the disciplines of risk management and court security. The interviews focus on understanding current efforts in the risk management field and the nexus of those efforts to court security. Interview results aid in the development of the court security risk assessment tool produced in the thesis.

Surveys

Two surveys are utilized in this thesis to develop the quantification component of the risk assessment tool. One survey queries individuals in leadership positions in California courts and court security managers to assign numerical values to the threats common to court systems, in order of severity. The resulting values quantify the qualitative threats posed to judiciaries. A second survey asks court security specialists from the California Administrative Office of the Courts and state court security managers to rank the vulnerabilities most commonly existent in the courts. The resulting values quantify the qualitative vulnerabilities posed to judiciaries.

E. CHAPTER OVERVIEW

The second chapter in this thesis explores the relationship between homeland security and the implementation of a risk-based approach to court security. Chapter III of this thesis identifies threats most common to courts and proposes a method for quantifying those threats. Chapter IV identifies the vulnerabilities most common to court facilities and proposes a method for quantifying those vulnerabilities. Chapter V probes consequence assessment in judiciary operations and proposes a method to quantify consequences. Chapter VI discusses the beta-test of the proposed risk assessment decision support tool to four California courts and outlines recommendations to improve security in the most at-risk court, as identified by the tool. Chapter VII summarizes the results of this research effort, discusses the application of the risk assessment tool, and offers recommendations for future research and development.

Throughout this research, the California court system is the exemplar court system, due to accessibility by the author. Despite the focus upon the California court experience, the risk-based approach advanced in this thesis and the decision support tool developed herein can be utilized by all judicial systems.

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II. RISK MANAGEMENT IN THE JUDICIARY AND HOMELAND SECURITY GOALS

A. THE JUDICIARY AND HOMELAND SECURITY

The relationship of the judicial security field to homeland security objectives and efforts has not been appropriately explored. The alignment of goals between the two fields is considerable. Critical asset protection, disaster preparedness, prevention of terrorist attacks — all are homeland security goals that are vitally important to court security managers. Perhaps most importantly, Homeland Security Presidential Directive 7 identifies government facilities as part of the nation’s critical infrastructure/key resources.⁴⁶ The preservation of critical infrastructure is vital to the nation’s security and way of life.⁴⁷ As critical infrastructure, the courts “guarantee our national security and freedom, and administer key public functions.”⁴⁸ A terrorist attack upon even one courthouse represents an attack upon the institution of government itself. Additionally, one’s constitutional right to a fair, speedy, and public trial is reliant upon the existence of a court system. Court systems are comprised of courthouses, judicial officers, staffing, administrative processes, and, of course, the citizenry (as jurors, visitors, litigants, attorneys, etc.). The destruction of one or many links in the system may serve to effectively retard justice. Even a temporary disruption may cause grave damage to confidence in the judiciary, which is fundamental to the preservation of constitutional rights.

The importance of the judiciary to the proper functioning of government is evident. Unfortunately, the current relationship between the judiciary and homeland security is ill defined.

⁴⁶ President, *Homeland Security Presidential Directive 7* (Washington D.C., 2003).

⁴⁷ Department of Homeland Security, *National Infrastructure Protection Plan*, 1.

⁴⁸ Office of Homeland Security, *National Strategy for Homeland Security* (Washington D.C., 2002), 30.

An informal survey of state court leaders at the October 2006 Western Conference of State Court Administrators (COSCA) revealed that not one out of the thirteen represented states enjoyed any kind of regular dialogue with their counterparts in state homeland security departments.⁴⁹ In the California courts, the largest judiciary in the world, this lack of collaboration is perplexing. With over four hundred and fifty government facilities and twenty-two thousand government employees in the judicial branch, homeland security critical asset protection efforts should be vitally linked to judicial branch operations.

In addition to government asset protection concerns, threats faced by state courts throughout the country, including California, could result in significant loss of civilian life. The bomb plot uncovered in Rice County, Minnesota, for example, could have easily resulted in over a hundred deaths, on scale with the devastation of the Alfred P. Murrah bombing in Oklahoma in 1995.⁵⁰ The firebomb dismantled outside of the Placer County courthouse could have easily injured civilians, as well as court staff and judicial officers. Indeed, an attack on a courthouse could have a huge civilian loss of life factor. The downtown Los Angeles courthouse houses over one hundred courtrooms. In addition to courtrooms, large public areas are devoted to caseload filing, jury assembly, the payment of traffic fines and civil assessment fees, etc. At any one time, thousands of people may be in the courthouse. A successful bomb detonation in the underground parking lot could result in copious deaths.

B. BUDGET ALLOCATION

A major problem facing professionals who work in the judicial branch security field is the lack of a big picture view of what security concerns are present in courthouses throughout a judicial system. In California, with over 450 court facilities, it is all too easy for myopia to guide security upgrade funding allocations. The needs of one facility may appear dire at first blush. For example, one court's holding cell area may have a rear

⁴⁹ Survey of state court leaders from thirteen western states accomplished by author at the Western Conference of State Court Administrators (Napa, CA: October 2006).

⁵⁰ Peters, "Responding to Rhetoric Against Judges."

emergency exit door, which has been used by two in-custody inmates to escape over the past year and a half. If available, funding may be immediately allocated to correct this serious deficiency and enclose the area behind the emergency exit door. Upon further examination of courts throughout the state, however, it may be discovered that many courts have similar issues in their facilities. Unfortunately, funding is not limitless and not all courts suffering similar maladies will be administered the same prescription.

Currently, no process exists by which to evaluate the security situation present in the judiciary from a global perspective. How many courts have emergency exit doors that have served as escape routes for inmates? Of those, are there mitigating factors that would make one court a better candidate for immediate funding than another? For example, perhaps one court has been subject to escape attempts in the past.

The importance of being able to responsibly allocated security funding in a court system the size of California's cannot be minimized. Funding efforts must be judicious and transparent, as the branch is responsible to state constituents for allocation of funding derived from state taxes. In fiscal year 2006-2007, the California judicial branch received \$3.4 billion in funding.⁵¹ Over \$500 million was allocated to security expenditures, including court security staffing and security upgrade funding. Ensuring judicial security funding dollars are being allocated in a responsible, transparent, and answerable manner is imperative. Implementation of a risk-based approach to help achieve standardization and transparency in decision making is a major step in the overarching goal of achieving judicious court security funding allocations.

C. TARGETED SECURITY ENHANCEMENT PROJECTS

One reason it is extremely important to have a global picture of the security needs throughout the state of California's judicial branch is to garner political support and budget funding increases targeted to reducing risk comprehensively throughout the court system. This model was effectively implemented in the judiciary's 2006 effort to acquire funding for entrance screening stations in trial courts throughout the state.

⁵¹ Governor Arnold Schwarzenegger, *2006-07 Budget Act* (Sacramento, CA, June 30, 2006).

A best practice in court security management is that screening personnel for weapons and contraband prior to entry into a building is vitally important to enhancing the security profile of that facility.⁵² In 2005, the Administrative Office of the Courts conducted a survey of the fifty-eight courts throughout California to determine how many court facilities were lacking entrance screening stations. The survey determined that ninety-seven facilities throughout the state lacked such screening. As a result, the Judicial Council of California, the constitutional policy-making body of the judicial branch, requested a special allocation in the 2006-2007 Budget Act to procure entrance screening equipment and staffing for those deficient facilities. Presented with firm data and verified need, both the legislature and the governor agreed to provide funding for the entrance screening stations. The Budget Act of 2006-2007 included \$18.7 million in funding to ameliorate this shortcoming.⁵³

Success stories like the preceding are much more likely to be replicated if the legislative and executive branches are presented with convincing and articulate requests from the judiciary. Utilizing a risk-based methodology that clearly weighs threats, vulnerabilities, and consequences to arrive at a global picture of existing deficiencies will greatly assist in the justification of identified court security improvement funding requests.

D. CURRENT EFFORTS IN THE COURT SECURITY FIELD

The Court Security Improvement Act of 2007, federal legislation enacted in December of 2007, highlights the necessity for state courts to be able to demonstrate need for court security improvements. The legislation allows for \$20 million in grant funding, per year through 2012, to be allocated to state courts for the express purpose of enhancing court security.⁵⁴ The law states: “Priority shall be given to State court applicants under

⁵² Griebel and Phillips, “Architectural Design for Security in Courthouse Facilities,” 123-124.

⁵³ Governor Arnold Schwarzenegger, *Governor’s Budget Summary 2007-2008* (Sacramento, CA, January 2007).

⁵⁴ One Hundred Tenth Congress of the United States of America, *Court Security Improvement Act of 2007* (Washington D.C., 2007), <http://www.govtrack.us/congress/billtext.xpd?bill=h110-660> (accessed February 12, 2008).

subsection (a)(4) that have the greatest demonstrated need to provide security in order to administer justice.”⁵⁵ The legislation does not define how “the greatest demonstrated need” shall be authenticated. However, as discussed in Chapter I, the Department of Homeland Security has focused on a risk-based model for resource allocation.⁵⁶ If HS funding is to be tied to risk management, so too, one could assume, should federally-granted security funding for the state courts. State courts taking an early lead in implementing such an approach to court security will, therefore, be in a better position to secure federal grant funding upon passage of the Court Security Improvement Act.

Specifically, the National Infrastructure Protection Plan guides the process the courts may use to implement a risk-based approach to court security. The cornerstone of the plan is its risk management framework. The NIPP’s framework is multi-faceted and features a continuous feedback loop to ensure constant improvement of the risk management process.⁵⁷

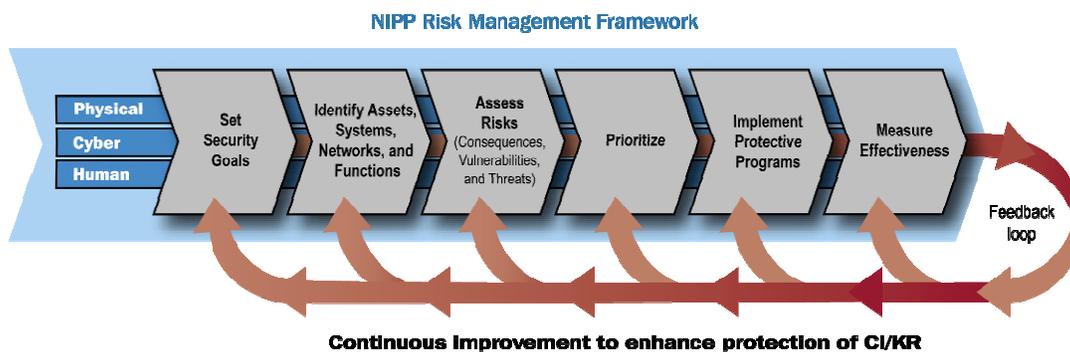


Figure 2. National Infrastructure Protection Plan Risk Management Framework.

⁵⁵ One Hundred Tenth Congress of the United States of America, *Court Security Improvement Act*.

⁵⁶ Michael Chertoff (U.S. Secretary of Homeland Security), remarks made to the George Washington University Homeland Security Policy Institute, Washington D.C., March 16, 2005.

⁵⁷ Department of Homeland Security, *National Infrastructure Protection Plan*, 4.

The entire Risk Management Framework is essential to harmonizing court security goals with those of homeland security. Although all steps are discussed to some extent, this thesis focuses upon steps one through three of the Risk Management Framework. Setting security goals is the baseline step for any protection program, whether in the field of physical, cyber, or personal security. This step is included in Section F of this chapter. Asset identification in the California courts has been accomplished, and detailed information about each court facility resides within the Administrative Office of the Courts. Identification of sub-assets and systems unique to each facility is included in the vulnerability assessment portion of this thesis's proposed risk assessment tool. The majority of this thesis is devoted to step three of the NIPP's Risk Management Framework, assessing risks.

E. COURT SECURITY GOALS

Goals for court security encompass a range of factors. Training for security providers, emergency preparedness levels in the court, measures taken for personal security — all are crucial to a well-rounded court security plan. Goals specific to physical security, however, provide the baseline of the risk-based approach to court security. The National Sheriffs' Association offers broad guidance:

Goal: To establish appropriate protection for court staff and facilities, the general public, and the judicial process as a whole.⁵⁸

Several subordinate goals are important to guide court security risk assessment objectives. A review of literature pertinent to court security planning, including the *National Strategic Plan for Judicial Branch Security*,⁵⁹ the *Mini-Symposium on Court Security*,⁶⁰ and the National Center for State Courts *Future Trends in State Courts* helps identify the three primary subordinate goals, which are outlined below:

⁵⁸ National Sheriffs' Association, *Court Security: A Manual of Guidelines and Procedures* (Washington, DC: Law Enforcement Assistance Administration, 1978).

⁵⁹ Pamela Casey, *A National Strategic Plan for Judicial Branch Security* (Washington D.C., 2006).

⁶⁰ Dow Constantine, "Mini-Symposium on Court Security: Citizens Have a Right to Safety in the Courthouse," *The Justice System Journal* 28, no. 1 (2007), 23.

Goal: Prevent the introduction of weapons and contraband into the courthouse.

Goal: Provide secure circulation zones for the separation of judicial officers, inmates, court staff, and members of the public.

Goal: Leverage technology to provide for immediate annunciation of emergency situations and to assist in terrorism-prevention efforts.

One method that will greatly assist the judiciary in achieving these goals is the systematic application of a risk-based approach to court security, spurred by the development of a decision support risk assessment tool. A clear identification of the threats, vulnerabilities, and potential consequences of an attack upon a courthouse will help court security managers evaluate and implement appropriate protection for the judicial process and its resources. The following three chapters will examine each element of the risk-based approach, and its application to judiciary security, in detail.

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III. THREATS TO THE JUDICIARY

Any analysis of threats posed to a specific sector must focus upon at least three factors. First, a definition of whom or what is primarily threatened in the sector must be understood. Second, the primary group or party responsible for the threats posed shall be identified. Finally, an examination of the manner of threats posed to the sector shall be undertaken.⁶¹

It is feasible to examine the first two factors conjointly. Who is threatened is largely defined by the individual carrying out the threatening behavior.⁶² The third factor, identification of the existing threats, is the first element in the Risk equation.

$$\text{Risk [R]} = \textit{Threat [T]} \times \text{Vulnerability [V]} \times \text{Consequences [C]}^{63}$$

A. THOSE WHO THREATEN THE JUDICIARY

Threats are often defined by the types of individual who pose them (e.g., Islamic extremists, anti-abortion zealots). A wide range of individuals pose threats to the judiciary. In general, the primary purveyors of violence in the judiciary are individuals who are a party to cases before the courts. Aside from gender, however, there are few commonalities among those who commit violence in the courts.⁶⁴ An examination of threats made in the federal courts from 1789 to 1993 included a breakdown of the threateners by race.⁶⁵ Although the federal judiciary represents an environment that is

⁶¹ For the purposes of this thesis, threats will be confined to human-generated incidents. Although natural disasters present a grave threat to judicial operations, as illustrated by the devastating effects of Hurricane Katrina upon the functioning of the Louisiana courts, an analysis of naturally-occurring threats is beyond the scope of this work.

⁶² For example, a family court litigant is more likely to be threatened by an estranged spouse than by an anti-government crusader.

⁶³ Office of Domestic Preparedness, *Vulnerability Assessment*, 11.

⁶⁴ As with violent crime in general, males disproportionately resort to violence in the court setting.

⁶⁵ Frederick Calhoun, *Hunters and Howlers: Threats and Violence Against Federal Judicial Officials in the United States, 1789-1993* (Arlington, VA, 1998), 101.

different from a state judiciary, it is reasonable to assume that those who threaten the federal court system are not radically dissimilar from those who would threaten state courts.

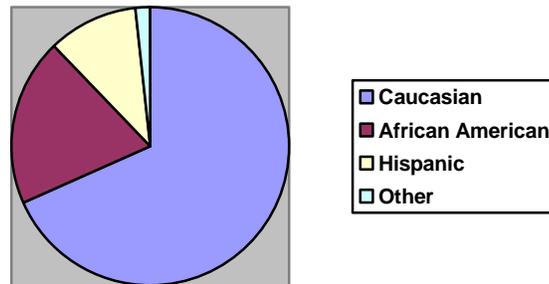


Figure 3. A breakdown of perpetrators in federal courts, 1789–1993.

A comprehensive review of state court-related incidents occurring in the past ten years reveals a smorgasbord of individuals who have sought to do harm to state judicial officers, court security officers, trial participants, or courts in general.⁶⁶ Age, race, socioeconomic status, and educational background all varied significantly. While a 1978 study by the National Sheriff's Association identified that judges, bailiffs, and attorneys were the most likely personnel in courts to be *targeted* for violence, an extensive review of the literature has not revealed a similar study identifying who is most likely to *commit* violence in the courts.⁶⁷ A few exemplary cases of violence toward judicial officers, court security officers, participants, and courts in general will offer a broad overview of the variance among those who threaten state courts.

⁶⁶ Paul Banner, *Court Related Incidents* (Public Agency Training Council, 2007).

⁶⁷ James McMahon, *Court Security: A Manual of Guidelines and Procedures* (Washington D.C., 1978).

1. Those who threaten judicial officers

In 2005, Judge Rowland Barnes in Fulton County, Georgia, was shot and killed by Brian Nichols, a defendant in a rape trial over which the judge was presiding.⁶⁸ At the time he committed his crime, Brian Nichols was thirty-three years old and making six figures as a computer engineer for UPS.⁶⁹ Mr. Nichols is African American.

Judge Chuck Weller was shot by Darren Mack in 2006, a party to a divorce proceeding in the judge's court.⁷⁰ When Darren Mack shot Judge Weller, Mack's estimated net worth was \$9.4 million dollars and his annual income was approximately \$500,000. The reason Mr. Mack shot Judge Weller is suspected to be that the judge had ordered him to pay his wife \$10,000 a month in spousal support.⁷¹ Darren Mack is Caucasian and was forty-five years old at the time of his crime.

2. Those who threaten court security officers

In 2006, an inmate, Timothy Jones, appearing in a court in Jackson County, Georgia, shot a court security officer three times during an escape attempt. The African American Mr. Jones was twenty-eight years old at the time of the shooting.⁷²

In 2001 in Orange County, Texas, Keith Gonzales, an inmate seeking to escape from custody, shot a court security officer. Mr. Gonzales was forty-one years old at the time of the shooting.⁷³

⁶⁸ Copeland, "I could tell he was going to shoot everybody".

⁶⁹ Wikipedia, http://en.wikipedia.org/wiki/Brian_Nichols (accessed March 9, 2007).

⁷⁰ Associated Press, *Reno Police look for suspect in judge shooting*, June 12, 2006, <http://www.foxnews.com/story/0,2933,199176,00.html> (accessed March 26, 2007).

⁷¹ Wikipedia, http://en.wikipedia.org/wiki/Darren_Mack (accessed March 19, 2007).

⁷² Blair Meeks and Duffie Dixon, "2 Shot at Jackson Co. Courthouse," *11 Alive News*, August 21, 2006, http://www.11alive.com/news/news_article.aspx?storyid=83626 (accessed March 8, 2007).

⁷³ Banner, *Court Related Incidents*.

3. Those who threaten participants in proceedings

In 2000, Edward Lansdale, a defendant in a child molestation charge, shot his accuser in the courthouse hallway before turning the gun on himself. At the time of the shooting, the Caucasian Mr. Lansdale was sixty-eight years old.⁷⁴

In 2005, David Arroyo fatally shot his estranged wife, Maribel Estrada, as she attempted to enter a courthouse in Tyler, Texas.⁷⁵ The Latino Mr. Arroyo was forty-three at the time of the shooting.

In 2001, Michael Hill shot his former girlfriend and her mother outside the courthouse where his child visitation hearing had just been held. Mr. Hill was a forty-five-year-old retired Navy officer at the time of the shooting.⁷⁶

4. Those who threaten courts in general

In 2003, Donald Benjamin, armed with a baseball bat and a steak knife, entered a courthouse in Georgia and attacked four individuals, none of whom were known to him.⁷⁷ The twenty-four-year-old Mr. Benjamin was on bond at the time of the attack, awaiting trial on charges that he beat a police officer.⁷⁸

In 2002, Leroy Harris and Charles Chatman sprinkled a non-hazardous powdery substance in and around the Saluda County Courthouse in South Carolina. At the time of the offense, termed “use of a hoax device of mass destruction,” Harris was fifty years old and Chatman was forty-four.⁷⁹

The most important lesson that can be learned from delving into the types of individuals that commit crime in the courts is that there does not appear to be a set type that can be anticipated and screened. Since it is not productive to focus on identifying

⁷⁴ Banner, *Court Related Incidents*.

⁷⁵ KLTN 7, *Three Killed, Including Gunman In Smith County Courthouse Shoot-out In Tyler*.

⁷⁶ Banner, *Court Related Incidents*.

⁷⁷ *Ibid*.

⁷⁸ Dave Miller, “Man injures four in courthouse,” *walb.com*
<http://www.walb.com/global/story.asp?s=1449497&ClientType=Printable> (accessed July 29, 2007).

⁷⁹ Banner, *Court Related Incidents*.

who poses a threat to courts, it is imperative to recognize the *manner* of threats that are most common in the courts, in an effort to focus court security efforts on the alleviation of threats.⁸⁰

B. TYPES OF THREATS

A review of courthouse incidents over the past ten years underscores the types of threats occurring most frequently in the nation’s state court facilities. Of the surveyed incidents in state court facilities, the following incidents are the most common:⁸¹

Table 1. Most common incidents in state court facilities.

Incident
Shooting in the courthouse/courtroom
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.
Explosive device/bomb/arson in or on courthouse property
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.
Bomb Threat
Inmate escape
Hostage situation
Attempted inmate escape

⁸⁰ This is not to say, of course, that serious efforts can not be made to pre-identify those who may pose the greatest threat to courts. Those responsible for court security should make every effort to work with judicial officers and court staff on identifying “at-risk” individuals throughout every step of the judicial process.

⁸¹ Banner, *Court Related Incidents*.

C. QUANTIFICATION METHOD

Many risk management software programs are on the market today, offering computer-guided methodologies to quantify risk factors. Digital Sandbox, Riskwatch, and CounterMeasures are three such programs that include physical security modules. These programs are extremely robust and may provide an adequate security risk management solution for some court systems. Other judicial branches may not require a highly robust system or possess adequate resources to purchase risk-management software. Regardless of size or fiscal prowess, a judiciary serious about security should develop a fundamental understanding of the inter-relationship of the various factors comprising a risk assessment. Entering information into pre-identified fields in a computer program may result in a laundry list of protective actions to be taken to enhance a court system's security profile. However, it is unlikely that assessing risk using this method alone will result in a comprehensive understanding of the threats, vulnerabilities, and consequences facing a court system. For a nuanced comprehension of the risks prevalent in a court system, it would be beneficial for those tasked with the court security mission to undertake a preliminary risk evaluation. By doing so, court administrators will be in a better position to defend against the threats, strengthen the vulnerabilities, and prepare for adverse consequences. This should, therefore, occur in any court system prior to utilizing a computer-based program to accomplish risk assessments.⁸² To do so, it is necessary to develop a basic quantification method for each of the three factors. Quantifying threats to the judiciary is the first step in this process.

D. THREAT QUANTIFICATION

Identifying *who* poses a threat to the judiciary is not as productive as identifying the *types* of threats that pose the greatest risk to courts. The task is to translate frequency and severity of threats into a numerical value to be used in the risk equation.

Based upon their status as government symbols and the highly-charged nature of court business, all courts are targets, vulnerable to a range of threats. There is, therefore,

⁸² Smaller and under-resourced court systems may find that this method of risk assessment is robust enough to meet the judiciary's needs.

no zero-risk equation in the field of court security risk assessment. Some courts, however, are likely to be more vulnerable to certain threats based upon a range of factors. Those factors may include the type of cases heard in the court (i.e., criminal court vs. traffic court), the location of the court (easily recognizable downtown facility vs. nondescript storefront), the nature of the community served by the court (the central front in a gang-warfare zone vs. a small-town, law-abiding community), and a plethora of others. A detailed threat assessment could evaluate all of the aforementioned factors individually. However, the scope of this exposition will focus on a specific method for characterizing threat: the historical record of security incidents in court facilities. This method has been recognized by the General Accountability Office as a viable rubric by which to anticipate threats to a sector.⁸³ To accomplish a practicable threat assessment, the risk manager must utilize information from the local law enforcement and intelligence community serving the court system. Local law enforcement will be able to provide historical data (i.e., number of bomb threats, inmate escapes, etc.) necessary to complete the assessment. In the California court system, for example, this requires the participation of numerous different agencies, including fifty-eight different sheriff's departments, two court marshal's services, the California Highway Patrol, and an unknown number of municipal police departments.

To normalize the data over a measurable timeline, threats occurring over the past five years should be included in the assessment.⁸⁴ The number of points assigned per incident depend upon the severity of the threat, on a scale from one to five. Examples of high-threat events are those that would result in high numbers of casualties or a significant disruption in court operations. Points were allocated to threats based upon

⁸³ General Accounting Office, *Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments* (Washington D.C., April 1998), 23.

⁸⁴ Five years is an appropriate timeline for two primary reasons. Based upon experience conducting historical surveys in the courts, it is unlikely reliable data will be available much beyond five years. Additionally, incidents recorded many years ago are less likely to be representative of current threats.

survey responses of twenty-four members of the California Court Security Network Listserve, a group of court security officers and court staff security liaisons from throughout the state.⁸⁵

The total of all threats, once aggregated and normalized, are factored into the overall risk management equation. The possibility exists that a court may end up with zero points on the threat scale, if, over the past five years, the court has not been subject to any of the incidents in the threat-assessment tool. However, the simple fact of not having been exposed to incidents in the past five years does not translate to a complete lack of risk. All courts, by virtue of their mission and accessibility to the public, are potentially under threat of attack. Therefore, each court shall receive a baseline number of two threat points, representing the lowest level of potential threat.

Based upon the review of the most common incidents occurring in the nation’s state courts over the past ten years and the Court Security Network Listserve survey, the following quantification framework has been developed.

Table 2. Threat Quantification Framework.

Incident	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape		4	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.		4	

⁸⁵ Survey respondents were asked to assign a value of one to five (one being the least severe and five being the most severe) to the most common threats facing the judiciary. Responses for each threat measure were averaged to achieve a point value for each threat. A detailed explanation of the survey is located in Appendix I.

Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.		3	
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb threat		2	
		Total (minimum 2)	

A value of two on the threat scale indicates the lowest threat, relative to the other threats included in the risk assessment tool. A score of three represents moderate threat on the scale; a score of four represent high threat; and a score of five represents a critical threat on the scale.

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IV. VULNERABILITIES IN THE JUDICIARY

The second factor that must be analyzed in a comprehensive risk assessment is vulnerability. A vulnerability is a weakness that can be exploited to gain access to an asset.⁸⁶

$$\text{Risk [R]} = \text{Threat [T]} \times \text{Vulnerability [V]} \times \text{Consequences [C]}^{87}$$

Vulnerabilities abound in court facilities. An examination of the most common types of vulnerabilities and a method to quantify those vulnerabilities are important steps in the goal of creating a risk-based approach to court security. As the exemplar court system analyzed in this thesis, vulnerabilities in the California judicial branch will be specifically explored. It is logical to assume that other judicial branch entities possess similar vulnerabilities to those present in California.

A. THE STATE OF JUDICIARY FACILITIES IN CALIFORNIA

The greatest impediment to the provision of adequate security throughout the California state courts are the court facilities themselves. Many state court facilities are historic in nature and feature architectural attributes which run counter to the principles of security. A full 35 percent of all California court facilities were built prior to 1970.⁸⁸ Courthouse construction in California prior to 1970 was focused on providing access to justice and on making the courthouse the center of civic life. Security was not a major concern in California courthouse construction until the 1970 hostage taking and murder of a judge in the Marin County Courthouse. The courthouse, designed by famous architect Frank Lloyd Wright in 1968, did not feature entrance screening in 1970.⁸⁹ The judge's murderer brought several weapons in the front door of the facility, through the

⁸⁶ Office of Domestic Preparedness, *Vulnerability Assessment*, 11.

⁸⁷ *Ibid.*

⁸⁸ California Administrative Office of the Courts, *Court Facility Listing*, November 2006.

⁸⁹ In fact, entrance screening was not emplaced in the Marin County Courthouse until 2006.

public hallways, and into the courtroom.⁹⁰ It was not until after this event that courthouse construction became more focused on security in California.

Two representative examples of California judicial facilities may best illustrate the challenge of securing historic court facilities. The courthouse pictured below (Figure 4) was constructed in the 1920s. A registered national historic landmark, it features daily tours attracting thousands of visitors a year, and is one of the top wedding destinations in its county. It also has seven different points of entry and several open-air access points. With no inmate holding area; inmates are walked from a holding facility across the street and into the courthouse through a public entry door. Judges, court staff, jurors, witnesses, and inmates all circulate in the same public space. The landscaping around the courthouse, beautifully manicured and maintained by the county's historical society, affords numerous hiding spots for explosive devices.



Figure 4. An example of a facility that is extremely difficult to secure.

⁹⁰ Bettina Aptheker, *The Morning Breaks: The Trial of Angela Davis* (New York: Cornell University Press, 1999), xiii.

A further example of a facility ill suited to housing secure court operations is pictured in Figure 5. The one-room courthouse in this facility was formerly a dentist's office. It currently shares space with a real estate office. In addition to the oddity that every room in the building features its own sink, there is no way to incorporate entrance screening in the building, with the current physical makeup. Additionally, no standoff or barriers exist between the court and the street. Any vehicle could easily drive right into the facility. The door leading into the courtroom opens directly into a perfect view of the judge sitting on the bench.



Figure 5. A facility ill suited for court operations.

B. TYPES OF VULNERABILITIES

The two primary categories of vulnerability to be evaluated within the scope of this thesis are those that compromise a court's general security against risk of personal attack, inmate escape, etc., and those that make the court vulnerable to terrorist attack. In many cases, a vulnerability to terrorist attack may concurrently pose a vulnerability to general security. For example, a lack of entrance screening equipment may afford a terrorist the opportunity to introduce an explosive device into the court. At the same

time, a lack of entrance screening may allow a disgruntled traffic court litigant to carry a knife into the facility, which may be used to attack a traffic court clerk in a fit of rage over perceived injustice. Because many of the vulnerabilities are common to both general security deficiencies and terrorism-related deficiencies, no distinction will be made between the two categories of vulnerability within the risk assessment tool. Although no distinction will be made between *categories* of vulnerability, explanations of the primary *types* of vulnerabilities existing in courthouses will help define the problem facing judicial security.

1. Facilities-related Vulnerabilities

The most prevalent facilities-related security inadequacies exist in several key areas, including building entry points, inmate delivery areas and holding facilities, and circulation control. Other facility features that impact the vulnerability of a courthouse include parking, the presence or absence of security windows at clerk's counters, landscaping, exterior lighting, chambers' location, and composition of exterior windows.

Weapons screening

The building entrance is the first point at which visitors can be screened to ensure they are not carrying weapons into the courthouse. A secure court must have space for entrance screening equipment (x-ray and magnetometer) and staff to operate the equipment. A common problem in courts throughout California is a lack of adequate space for entrance screening or unusual architectural design features making entrance screening difficult to emplace.

Inmate delivery areas

Inmate delivery points are potentially very dangerous locations. Depending upon the makeup of the delivery area, the point at which the inmate gets off the bus or van to transition into the courthouse may be his or her best opportunity to escape. This is particularly true in courts that do not contain secure access points, such as a sally port. A sally port is a controlled space with two doors, or gates. To open one gate, the other gate must be closed. Sally ports are ideal inmate delivery areas; the opportunity for inmate

escape is drastically lessened by physical controls. Sally ports are effective at securing inmates. They are also expensive. Therefore, many California court facilities do not have sally ports. A court's inmate delivery point may be as primitive as a sidewalk painted with the words "Custody Transports Only."



Figure 6. Unsecured inmate delivery point.

Inmate holding facilities

In order to adequately secure inmates and reduce vulnerabilities associated with potential escapes or violent incidents, a court should possess an inmate holding facility. Courts without inmate holding are forced to rely upon frequent transport of potentially violent inmates in and out of the courthouse. With inmate delivery being one of the most dangerous functions accomplished at a courthouse, the lack of inmate holding can significantly impact a court's vulnerability to security incidents.

Circulation control

The ideal secure court facility features four separate circulation zones, (1) public, (2) court staff, (3) inmate, and (4) interface/courtroom.⁹¹ The majority of California court facilities do not feature the four distinct separation zones. Few have completely secure inmate control zones. Many courts have some secure staff areas. Oftentimes, however, staff areas are intermixed with inmate zones.

⁹¹ Griebel and Phillips, "Architectural Design for Security in Courthouse Facilities," 122.

Parking

Courthouses should feature three distinct parking areas, (1) judicial officer parking, (2) staff parking, and (3) visitor parking.⁹² Judges' parking should be fenced completely and situated adjacent to the judge's entrance into the facility (if such an entrance exists). Staff parking should also be fenced and separate from the public parking area. Many California courts have separate parking areas for judicial officers, although the effectiveness of the access controls used to control entry varies widely. Few courts have distinct, secured staff parking. Many courts have no distinct parking zones. Some courts have no parking areas at all and rely upon street parking for all judges, court staff, and court visitors. This is a particular problem for courts built in the late 1800s, when vehicles were not in use.

Security windows at clerk's counters

Clerk's counters are potentially volatile areas, where often angry members of the public come to pay fines or request information on court proceedings to which they are a party. Ensuring the security of court clerks staffing public counters can be best accomplished by providing separation between the clerks and members of the public. This helps protect against the potential for robbery, as well as physically assaultive behavior. Many courts do feature some kind of barrier at their clerks' counters. Many do not.

Landscaping

Landscaping around a courthouse can enhance or degrade the facility's security profile. Lush, overgrown landscaping can serve as a hiding place for explosive devices. An example of this occurred in 1997, when an explosive device hidden in bushes outside of the Solano County Courthouse in Vallejo was detonated. The blast shut down court operations for a week.⁹³ In order to protect a court against terrorist attacks of this nature, landscaping around a court facility should be well-manicured and maintained.

⁹² Griebel and Phillips, "Architectural Design for Security in Courthouse Facilities," 121.

⁹³ Sabra Forbes, Solano County Superior Court Vallejo Branch Manager, *interview with author*, September 6, 2006.

Exterior lighting

Adequate lighting around a courthouse helps decrease the possibility for evening attacks or IED emplacement. Many courts feature little to no exterior lighting.

Composition of exterior windows and wall panels (i.e., ballistic resistant)

Ballistic-resistant windows and exterior wall panels help prevent successful explosive attacks against participants in court proceedings, judges in chambers, etc. Some courts throughout California feature ballistic-resistant material on the exterior building walls and windows. Many do not.

2. Technological Vulnerabilities

Technology can greatly assist a court in preventing incidents or with fostering more timely response to incidents. The presence of key electronic security features, such as access control systems, duress annunciation systems, closed circuit television cameras and monitoring, and intrusion alarms, can help courts increase their security profile.

Access control system

An access control system helps ensure courts are limiting access only to individuals authorized to be in secure areas of the court. In some courts, access control systems may feature full-blown electronic access controls. In others, a strict lock and key policy serves as the court's access control. In some courts, little access control is in place. In one California court, a *pincode* system is used to control access to secure areas. The pincode used to open doors, including those allowing access to courtrooms and chambers, has been the same for thirteen years, since the system was first put into place.⁹⁴

Duress annunciation system

When an incident occurs in a courtroom, staff area, or inmate holding cell, one immediate way to alert first responders is through the use of a duress annunciation

⁹⁴ Anonymous, Superior Court Facilities Manager, *interview with author*, April 25, 2007.

system, also known as a panic alarm system. A recent statewide effort to ensure courts have duress alarm systems in place has significantly increased the number of facilities housing such technology.

Closed-circuit television cameras and monitoring

Closed-circuit television (CCTV) cameras, when monitored, can serve as a force multiplier in the effort to detect terrorist or criminal activity. CCTV cameras monitoring a courthouse's exterior and parking areas can be particularly effective in detecting suspicious activity before it potentially impacts the court. The presence and monitoring of CCTV varies significantly throughout the state.

Intrusion alarms

Intrusion alarms can serve as harbingers of terrorist or criminal activity. Some courts have intrusion alarm systems. Some do not.

Policy-related vulnerability

In addition to architectural features, physical controls, and equipment that can enhance or degrade a court's security profile, the presence or absence of security-focused policies can impact a court's overall security.

Entrance screening practices

An entrance screening policy that includes the screening of all personnel entering a courthouse, including all employees and visitors, greatly enhances a court's security profile.⁹⁵ Even judges entering the courthouse through the main entrance should be subject to screening.⁹⁶ Most California courts exempt numerous classifications of individuals. Types of individuals most commonly exempted include court and/or county staff, members of the California Bar Association, and off-duty law enforcement officers.

⁹⁵ AOC Emergency Response and Security, *Court Security Best Practices*, 5.

⁹⁶ Ideally, judges should be afforded a separate, secure entrance entirely, which would exempt them from being subject to screening.

C. VULNERABILITY QUANTIFICATION

From May 2005 through February 2008, 80 percent of the fifty-eight court systems in California were visited by the AOC's Emergency Response and Security unit. Security vulnerabilities were observed in approximately 120 court facilities. Twenty-nine comprehensive court security surveys were accomplished. Knowledge gained during the court security visits was instrumental in the effort to develop a vulnerability quantification method, as was the National Sheriff's Association Court Security Checklist. The National Sheriff's Association, court security experts from the Annals of the American Academy of Political and Social Science, the National Center for State Courts, and the AOC's Emergency Response and Security unit recognize the importance of certain aspects of court security. The presence or absence of elements of court security led to the quantification of easily observable judicial security vulnerabilities. The following vulnerability quantification method is similar to the methodology used to quantify threats to the judiciary. The relative point value of each vulnerability was formulated based upon feedback from court security experts from the Emergency Response and Security unit within the California Administrative Office of the Courts and four court security leaders from the following California County Sheriff's Departments: Riverside, Sacramento, Santa Barbara, and Yolo.⁹⁷

⁹⁷ A more detailed description of the methodology used to determine the final vulnerability ranking is located in Appendix II.

Table 3. Vulnerability Quantification Framework.

<i>Vulnerability</i>	<i>Relative Points Value</i>
No weapons screening exists	10
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7
No distinct circulation exists (public, staff, judges, and inmates mingle)	7
Partial weapons screening only (i.e., screening part time or only with hand wands)	7
No secure holding facilities exist	7
No access control system is in place (i.e., there is no key control system or card access system)	6
Sally port (for inmate delivery) is unsecured	6
No duress annunciation system is in place	6
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5
No secure parking exists for judges and court staff	5
No barrier/partition exists between clerks and public	5
Exterior lighting is greatly lacking or nonexistent	5
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5
No ballistic-resistant material exists in vulnerable windows or wall paneling	4
No intrusion alarm system exists	4

No CCTV system exists	4
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4
Some access controls are in place, but application is not comprehensive	4
Some, but not all, of the vulnerable windows and wall paneling features ballistic-resistant material	4
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4
A CCTV system is in place, is intermittently monitored and/or not comprehensive throughout the courthouse	4
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3
The sally port is moderately, but not fully, secured	3
Partial clerk's security windows exist	3
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2

A score of two on the vulnerability scale represents a low vulnerability, relative to the rest of the vulnerabilities in the scale. A value of three through nine represents a medium vulnerability — exploitation of the vulnerability could result in increasingly serious damage and/or casualties. A value of ten represents the greatest vulnerability — the presence of this vulnerability could lead to the most serious detrimental effect relative to the other vulnerabilities in the scale.

D. ASSESSMENT RELIABILITY

The presence or absence of historical threats to the judiciary is an objective measure. A threat has either occurred in the past or it has not. A primary impediment to proper threat quantification may be the absence of accurate threat data through poor record keeping. However, vulnerability assessment is a markedly more objective

enterprise. Some measures are unequivocal. For example, full or partial entrance screening either exists or it does not. Many measures are more abstract. Where one person may observe exterior lighting to be adequate, another may deem the lighting deficient. Assessment reliability, therefore, is supremely important in the effort to quantify vulnerabilities. Each assessor must be trained to recognize vulnerabilities in a replicable fashion. For the purposes of this thesis, reliability is ensured by the fact that the same expert conducted each assessment. For this tool to be broadly applicable, security managers must ensure that assessors are trained to the same standard. This could be accomplished through a comprehensive training program, which may include site visits to representative facilities and/or training by review of pictorial archetypes. Tests should be conducted to ensure reliability among assessors prior to utilization of the tool.

V. CONSEQUENCES

The third factor that must be analyzed in a comprehensive risk assessment is consequence. Consequence is defined as the impact, or adverse effect, of loss or damage to the asset.⁹⁸

$$\text{Risk [R]} = \text{Threat [T]} \times \text{Vulnerability [V]} \times \text{Consequences [C]}^{99}$$

Consequence is the most difficult element of the risk assessment framework to quantify. The National Infrastructure Protection Plan (NIPP) stresses the necessity for comprehensive risk assessments to include consequence calculation.¹⁰⁰ Unfortunately, the plan offers no method as to how to best achieve quantification for this important factor.¹⁰¹ The NIPP sets out a common set of criteria risk managers may use to evaluate the consequences of a terrorist attack upon a sector asset. Public health and safety, economic, psychological, and governmental impacts are all factors that can be measured by consequence assessment. However, it is understood that a full consequence assessment may be cumbersome and beyond the capabilities for a given risk analysis. Two factors are considered fundamental to a consequences assessment: direct economic impact and human impact.¹⁰²

A. DIRECT ECONOMIC IMPACT

When measuring the economic impact of an attack on a courthouse, it is first necessary to set the measurement criteria. Although an attack resulting in complete courthouse destruction is highly unlikely, utilizing a “worst case scenario” approach to consequences measurement is the most practicable option. It would be impossible to accurately predict partial loss events. It would similarly be very difficult to measure lost

⁹⁸ Office of Domestic Preparedness, *Vulnerability Assessment*, 13.

⁹⁹ *Ibid.*, 11.

¹⁰⁰ Department of Homeland Security, *National Infrastructure Protection Plan*, 2006, 37.

¹⁰¹ Congressional Research Service, *Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threats, Vulnerabilities and Consequences* (Washington D.C., 2007), 22.

¹⁰² Department of Homeland Security, *National Infrastructure Protection Plan*, 2006, 37.

economic revenue, lost wages, etc., as those measurements would depend largely upon the scale of the event, unknown until an actual incident occurs. Therefore, assessing direct economic impact utilizing property value is the most pragmatic method to quantifying the consequences factor in the risk assessment equation.

The value of court facilities varies drastically throughout the state of California. Many court locations are located in mixed-use facilities, usually co-located with county offices such as boards of supervisors, probation departments, district attorneys, etc. Court-occupied space ranges in size from the very small (500 square feet of area housing one courtroom) to the very large (400,000 square feet of area housing over one hundred courtrooms).

The California Administrative Office of the Courts Office of Court Construction and Management (OCCM), in consultation with the judicial branch contracted actuary, has assigned a direct economic value to existing court space of \$250 per square foot.¹⁰³ Utilizing this standard unit of measurement, direct economic value of California court facilities ranges from \$125,000 to \$102 million.

B. HUMAN IMPACT

Measuring human impact as a result of a terrorist attack is inherently difficult. Post-event, multiple factors may be taken into account, including — for survivors — medical costs, costs of psychological counseling, and lost wages. For the deceased, lifetime lost wages and burial costs are just two factors to consider. There are other ways an attack upon a courthouse could have a significant human impact. An attack could result in a loss of faith in government institutions (i.e., if the courts can not protect me from a terrorist attack, how can I rely upon them to accurately dispense justice?). An attack could result in a decrease in life satisfaction for survivors and community members.¹⁰⁴

¹⁰³ James Mullen, Senior Facilities Risk Manager, California Administrative Office of the Courts, *interview by author*, November 2, 2007.

¹⁰⁴ Bruno Frey et al., “Calculating Tragedy: Assessing the Costs of Terrorism,” *Journal of Economic Surveys* 21, no. 1 (2004), 17.

For the purposes of pre-event consequence assessment, it is very difficult to estimate factors such as medical costs, psychological counseling, etc., without knowing the scale of the event. Quantifying abstract factors, such as loss of faith in government or one's decrease in life satisfaction, is currently impossible. Academic research is sorely lacking in this topic area.

Assessing the human impact consequences of an attack upon a courthouse, however, can be accomplished using straightforward, quantifiable proxies. For example, the Municipal Police Officers' Education and Training Commission (MPOETC) developed a Vulnerability Assessment Worksheet, which includes a human loss of life factor in consequence measurement.¹⁰⁵ The MPOETC measurement takes into account site population capacity at a particular site. Site population capacity is defined as the maximum number of individuals at a site at a given time.¹⁰⁶ It is sensible to assume that site population capacity would correlate closely to courthouse size. The larger the facility, the more people an incident is likely to impact, and vice versa. Therefore, it would logically stand to reason that the consequence measurement of direct economic impact would also reliably measure the human impact of a terrorist attack. For the purposes of this risk assessment tool, the direct economic impact consequence assessment will serve also as a proxy measurement for the human impact consequence.

C. CONSEQUENCE QUANTIFICATION

Direct economic value in court facilities throughout the state ranges from \$125,000 to \$102 million. In order to maintain a consistent quantification methodology, direct economic value is translated into a points system proportionate with that utilized for threats and vulnerabilities. The following method will be utilized to quantify the consequence measurement for direct economic value:

¹⁰⁵ Municipal Police Officers' Education and Training Commission, *Vulnerability Assessment Worksheet*, <http://www.mpoetc.state.pa.us/mpotrs/cwp/view.asp?a=1133&q=441444> (accessed October 10, 2007).

¹⁰⁶ *Ibid.*

Table 4. Consequence Quantification Framework.

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M ¹⁰⁷	10

* Direct economic value equals the number of square feet in a facility times the economic value of that space.

Security planners in other states will need to determine direct economic impact values appropriate for their own court facilities, as values will vary from one state to the next.

¹⁰⁷ Only one court in the state rates a direct economic value of over \$90 million – the Stanley Mosk Courthouse in Los Angeles, with over 400,000 square feet and an economic value of \$102 million.

VI. RISK ASSESSMENT TOOL BETA-TEST

The complete risk assessment tool developed as a result of this research is located in Appendix III. The tool was beta-tested using data from four courthouses throughout the state of California. Historical threat data was collected by surveying leadership personnel from each respective court. The author collected vulnerability data during onsite court visits conducted from 2006 to 2007. Information on square footage of court space, used to calculate consequences, was provided by official data from the AOC's Office of Court Construction and Management. Because the data collected includes information on existing vulnerabilities, the names of the actual courts have not been used. Instead, the courts will be referred to as A, B, C, and D. All court facilities surveyed are the primary courts in their respective counties. All courts are located in primarily rural counties, with populations ranging from between 65,000 and 190,000 people.

A. BETA-TEST RESULTS

The full risk assessment results are included in Appendix IV. Summary results are reproduced below. Threats that had not occurred in any of the courts over the previous five years, and vulnerabilities that were non-existent in any of the courts, were not included in the respective summary results tables.

Table 5. Threats in beta-tested courts.

<i>Incident/Threat</i>	<i>Court A</i>	<i>Court B</i>	<i>Court C</i>	<i>Court D</i>
Inmate escape		1		4
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.	1		1	4
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.	1			3
Attempted inmate escape				1
Bomb Threat	5	3	1	3

Table 6. Direct Economic impact in beta-tested courts.

<i>Vulnerability</i>	<i>Court A</i>	<i>Court B</i>	<i>Court C</i>	<i>Court D</i>
No weapons screening exists			X	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)		X		
No distinct circulation exists (public, staff, judges, and inmates mingle)			X	X
No secure holding facilities exist			X	
No access control system is in place (i.e., there is no key control system or card access system)			X	
Sally port (for inmate delivery) is unsecured			X	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	X			X
No secure parking exists for judges and court staff	X		X	X
No barrier/partition exists between clerks and public		X		
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas		X		
No ballistic resistant material exists in vulnerable windows or wall paneling	X	X	X	
No intrusion alarm system exists	X	X	X	
No CCTV system exists	X	X	X	
Some access controls are in place, but application is not comprehensive	X	X		X
Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material				X
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)		X		
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	X	X	X	X
Partial clerk's security windows exist	X			X
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness			X	X

<i>Court A Square Footage/Economic Impact</i>	<i>Court B Square Footage/Economic Impact</i>	<i>Court C Square Footage/Economic Impact</i>	<i>Court D Square Footage/Economic Impact</i>
42,000/\$11M	19,000/\$5M	8,600/\$2.15M	35,000/\$9M

As illustrated by the tables above, the assessed threat level varied considerably among the four courts. Court C reported only two threats over the five-year period while court D reported fifteen threats in the same period. This represents the greatest variance among any of the three factors comprising the risk assessment.

Court A reported the lowest number of vulnerabilities while Court C reported the greatest. Court A is the most modern of the courts included in the test and is vulnerable to the least number of security deficiencies. Court C is the oldest of the four beta-tested courts, having been constructed in 1860. The facility housing court C is occupied by several other county tenants; the court is a minority occupant. As such, the court has less control over the security of the building than the other three courts, each of which is the majority occupant in their facility. The vulnerabilities for Court C are the most significant among the four courts.

Court A is the largest of the four courts and rates highest on the consequence scale, as a result. Court C is the smallest.

Calculation of raw scores by category

Calculating the raw score for the threat variable is a two-step process. First, multiply the number of times a threat occurred by the points assigned to that type of threat. Second, sum the values obtained in the first step. For example, if one inmate has escaped, multiply 1 incident x 4 points and add the result to the scores of other incident/threats for the raw score.

Calculate the raw score for vulnerabilities by summing the points associated with each of the vulnerabilities present for that court. For example, if no weapons screening exists (10 points) and no CCTV system exists (4 points), then add 10 plus 4 to yield 14 points.

Consequences are a function of the size of the court. Obtain the raw consequences score by multiplying the number of square feet by the economic value of \$250 and use the consequences table to determine the point value. For example, if the size is 10,000 square feet, and the value in the table is \$2,500,000, the corresponding number of points is two.

Table 7. Raw risk scores for beta-tested courts.

	<i>Raw Score Valuation</i>				
	<i>Court A</i>	<i>Court B</i>	<i>Court C</i>	<i>Court D</i>	<i>Maximum</i>
<i>Threats</i>	17	10	6	38	38
<i>Vulnerabilities</i>	32	38	58	33	58
<i>Consequences</i>	3	2	2	2	3

Normalization of risk values

Within the risk assessment tool, all qualitative threat, vulnerability, and consequence information is standardized. Data within each category is normalized to ensure each value falls between the range of 0 and 1 by dividing each factor by a common variable. The common variable used is always the highest value in the data set for that variable.

The dynamic nature of the underlying data requires a simultaneous evaluation methodology that reflects a snapshot in time; that is, data is compared only to other data

gathered at the same time. This precludes evaluation across multiple time periods. Consequently, evaluations of courts should be accomplished in close temporal proximity to one another.

Calculation of normalized scores by category

Following are the raw threat scores for the courts: 17, 10, 6, and 38. The values are normalized by dividing all of them by the highest value, 38. Normalized threat scores fall between .16 and 1.

The raw vulnerability scores for the four courts are 32, 33, 38, and 58. The values are normalized by dividing all of them by the highest value, 58. Normalized vulnerability scores fall between .55 and 1.

The raw consequence score for three of the four courts is 2. One court, Court A, has a raw consequence score of 3. Each score was divided by the highest value, 3. The normalized consequence score for three of the four courts is .67. The normalized consequence score for Court A is 1.

Table 8. Normalized threat, vulnerability, and consequence scores for beta-tested courts.

	<i>Normalized Score Valuation</i>			
	<i>Court A</i>	<i>Court B</i>	<i>Court C</i>	<i>Court D</i>
<i>Threats</i>	0.45	0.26	0.16	1.00
<i>Vulnerabilities</i>	0.55	0.66	1.00	0.57
<i>Consequences</i>	1.00	0.67	0.67	0.67

Calculating normalized risk assessment scores

Calculating a court's normalized risk assessment score is accomplished by multiplying the normalized threat value, the normalized vulnerabilities value, and the

normalized consequences value. The entire product is then multiplied by 100. For example, below is the equation used to calculate the normalized risk assessment score for Court A:

$$0.45 \times 0.55 \times 1 \times 100 = 25$$

Table 9. Final risk assessment score for beta-tested courts.

<i>Normalized Risk Assessment Score</i>				
	<i>Court A</i>	<i>Court B</i>	<i>Court C</i>	<i>Court D</i>
<i>T x V x C x 100</i>	25	11	11	38

Evaluating risk-based upon normalized risk assessment scores

By rank ordering (i.e., prioritizing) the risk ratings for the four beta-tested courts, it is possible to identify which court warrants the most immediate attention. The highest level of risk exists in court D, with a total value of 38. The court at second highest risk is court A, with a total value of 25. Courts B and C ranked last on the risk scale, each with a risk value of 11.

B. REDUCING IDENTIFIED RISK IN COURT D

In order to implement protective programs it is necessary to identify countermeasures to reduce existing risks.¹⁰⁸ For the purpose of this thesis, risk reduction will be focused on the most at-risk court, court D.

The most common historical threat in court D is “Other violence resulting in physical harm to a judicial officer, court staff, juror, witness, litigant, etc.” Also common is “Attempted violence to a judicial officer, court staff, juror, witness, litigant, etc.” Other threats faced by the court include “Inmate escape” and “Attempted inmate escape.”

By looking at the existing vulnerabilities in the courthouse, the most serious vulnerability faced by court D is a lack of distinct circulation. Court D’s courthouse is a

¹⁰⁸ Department of Homeland Security, *National Infrastructure Protection Plan*, 4.

registered historic landmark, built in 1917. Like many historic courthouses, a separate circulation pattern for inmates, judicial officers and staff, and members of the public was not part of the architectural design. Judges' chambers open onto public corridors and inmates are escorted to court through public hallways. While the attending sheriff's deputies undoubtedly do their best to mitigate incidents, it is reasonable to assume that a lack of secure circulation is an important factor in the high incidence of attacks in the courthouse. It may also be related to the attempted and successful inmate escapes.

Court D also has a historical record of susceptibility to bomb threats. The court has had three bomb threats over the past five years. Although there are no known countermeasures to alleviate the likelihood of bomb threats, countermeasures may be developed to mitigate the possibility of a successful actual bomb attack. Looking at existing vulnerabilities in the courthouse, there are several that could be addressed to lower the court's vulnerability to a successful bomb attack. These are reproduced below.

- No secure parking exists for judges and court staff;
- Some, but not all, of the vulnerable windows and wall paneling features ballistic-resistant material; and
- Landscaping is partially trimmed, but some problem areas exist where improvised explosive devices could be hidden.

The implementation of a secure parking area for judicial officers would mitigate the possibility of a bomb being placed under a judge's vehicle. Landscaping practices (i.e., pruning of hedges) could reduce the likelihood of an explosive device being planted adjacent to the courthouse. Installation of ballistic-resistant material in all of the vulnerable windows and wall paneling could help reduce the effects of a bomb blast.

Implementation of the following countermeasures would reduce risk to court D:

- Implement separate, secure circulation zones;
- Provide a secure parking area for judicial officers and court staff;

- Ensure all landscaping is manicured to thwart easy placement of an improvised explosive device; and
- Install ballistic-resistant material in all of the vulnerable windows and wall paneling.

If all of the four suggested recommendations to reduce vulnerability for court D were implemented and risks were re-assessed relative to courts A, B, and C (assuming that nothing changed in courts A, B, or C), the following new risk rating would be assigned to the court:

Table 10. Revised risk score for Court D.

<i>Total Risk Assessment: Court D</i>
<i>Threats 1 x Vulnerabilities .24 x Consequences .6667 x 100</i> = <i>16</i>

With vulnerability reduction, court D would no longer be the most at-risk among the four courts. Although its threat and consequence ratings remain unchanged, the mitigation of four existing vulnerabilities measurably reduces the risk rating for court D. The full risk-assessment tool for court D, re-assessed with notional vulnerability reduction, is included in Appendix V.

Risk-Assessment Tool Beta-Test Summary

The beta-test of the risk assessment tool illustrates the potential for quantitative analysis within a holistic approach to security management for the judiciary. By analyzing the threats and vulnerabilities faced by courts and rank ordering the relative risk faced by each facility, resources can be allocated in a more prioritized and responsible manner. Once the risk score for each court is rank ordered and the priorities are made evident, more detailed analysis of individual court data is appropriate. The

analysis should focus on the most likely threats to the facility and the existing vulnerabilities. Countermeasure recommendations most likely to reduce the likelihood of successful attacks should be developed. Notional vulnerability reduction and risk re-assessment are helpful tools to illustrate the effects of vulnerability reduction on overall risk in advance of investment.

C. RISK ASSESSMENTS AND COURT CLUSTERING IN CALIFORNIA

Purely accounting for economic impact, large courthouses will always score higher on the consequence scale than small, one-courtroom-type facilities. This will routinely result in a greater overall risk assessment score for larger facilities than for smaller. It is neither politically feasible, nor sensible from the perspective of security, to concentrate all resources on large facilities. A solution to the wide disparity in direct economic value is to address risk assessment in a somewhat more refined manner. For example, the California courts are divided into four “court clusters” based upon the county in which they are located. Courts are assigned to clusters based upon a rather complex formula accounting for the following factors: county population size, annual number of case filings, and number of assigned judicial officers.¹⁰⁹ Court cluster one comprises the smallest courts in the state, while court cluster four represents the largest.

In order to allow for resource provision to courts throughout the state, rather than just the largest facilities, risk assessment rankings can be broken up into the four pre-existing court clusters. Cluster one courts will only contend for resources, based upon their risk-assessed ranking, with other cluster one courts. This will ensure that a two-courtroom facility in San Benito County will not be forced to “compete” for resources with a seventy-courtroom facility in San Diego County. For the purposes of this thesis, all beta-tested courts belong to court cluster two.

¹⁰⁹ Marcia Caballin, Finance Division Assistant Director, California Administrative Office of the Courts, *interview by author*, January 18, 2007.

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VII. CONCLUSION

A. SUMMARY

The purpose of this thesis was to encourage a risk-based approach to court security and develop a risk assessment tool to evaluate relative risk across a range of judicial facilities. The risk assessment tool was developed by determining the most prevalent threats to the judiciary, the most common existing vulnerabilities in court facilities, and the consequence of direct economic impact on court facilities. The most prevalent threats were determined by aggregating incident data from state courts across the nation. Vulnerabilities were determined based upon security survey data from the California Administrative Office of the Courts Emergency Response and Security unit and guidance from the National Sheriff's Association, the National Center for State Courts, and court security experts from the Annals of the American Academy of Political and Social Science. Quantification of threat and vulnerability data was achieved by surveying court security specialists throughout the state of California. Values from the California Administrative Office of the Courts Office of Court Construction and Management were used to measure direct economic impact — the consequences portion of the risk assessment tool.

Once the tool was developed, four courts were surveyed as a beta-test. The goal of the beta-test was to evaluate the tool's utility in determining relative risk across a small subset of facilities. All courts were surveyed to determine the following information:

- Type and frequency of threats occurring over the previous five years
- Existing vulnerabilities
- Square footage of court occupied space

The data was applied to the risk-assessment formula, quantified, and normalized across the four beta-tested courts. A numeric risk-assessment score was determined for each of the courts. Relative risk was determined by comparing the four numeric values.

Threats and vulnerabilities for the court with the highest risk rating, Court D, were analyzed in depth, in an effort to determine countermeasures appropriate to reducing risk. Following the discussion of countermeasures, the tool was re-applied to Court D, with the goal of evaluating the effect of the recommendations on risk reduction. Once applied, the risk score for the most at-risk court dropped below that of the next most at-risk court.

B. FINDINGS AND RECOMMENDATIONS FOR FURTHER RESEARCH AND DEVELOPMENT

The decision support tool developed in this thesis represents the initial deliverable in the effort to evaluate court security utilizing a risk-based approach. The beta-test validated the tool as a useful mechanism for calculating and rank-ordering risk across a range of court facilities.

Many lessons were learned during this research effort. Most importantly, the risk-assessment tool is a useful mechanism for evaluating and comparing relative risk for the judiciary. It also aids in assessing changes in relative risk following planned investment. A meaningful byproduct of the research effort is the understanding that much more work needs to be done to identify threats to the judiciary.

Threats

During the information-gathering stage of the research effort, it was clear that historical threat data is not universally gathered by individual courts. Only one of the four beta-tested courts had detailed records of the threats experienced by the court over the past five years. None of the other three courts had a written log of security incidents. Instead, incidents were recalled by staff members who had worked at the court for several years. The risk-assessment tool is only effective when populated with valid data. A court that does not have a record of the threats it has faced over the past five years may under- or over-report threats during the data-gathering stage.

One development effort that should begin immediately, as a result of this thesis, is a mechanism to collect threat incident data from courts throughout the state of California. Other state judiciaries that also lack comprehensive threat and incident reporting systems

should also consider enacting procedures for capturing threat information. A comprehensive educational effort to instruct court leaders and security personnel as to what constitutes a threat, and how to report it, should necessarily accompany the implementation of such a system.

Threats are assessed in this risk model by examining historical threat data (i.e., what incidents have occurred in each court within the past five years). Not identified using this model, in the manifest interest of keeping the tool user friendly, are other threat factors that may help a security planner develop a more comprehensive threat picture. Future iterations of this tool may take into account additional threat information, such as type (e.g., insider, terrorist, random), intent or motivation, triggers (e.g., events that might precede an attack, such as the scheduling of a high-profile trial at a specific court facility), capability (e.g., skills, access to materials or equipment), and most likely methods (e.g., use of truck bombs, pipe bombs, small arms fire).¹¹⁰

Vulnerabilities

The identification of vulnerabilities in the courts is a more self evident process than the identification of historical threats. Vulnerabilities either exist or they do not. Assuming accurate reporting, the vulnerabilities section of the risk assessment tool does not suffer from a potential reliability gap. This held true during the application phase of the beta-test discussed in this thesis.

Future iterations of the tool, as planners become more adept at risk-based security management, may include additional factors, beyond those strictly related to physical security. Additional factors that could increase a court's vulnerability to attack may include the types of cases heard in a court (i.e., criminal court vs. traffic court), the location of the court (i.e., in an easily recognizable iconic court facility, as opposed to a nondescript storefront type of facility), and the nature of the community served by the court (i.e., a court located on the central front in a gang-warfare zone may be at a greater risk of attack than a court in a small, generally law-abiding community).

¹¹⁰ Congressional Research Service, *Risk Management and Critical Infrastructure Protection: Assessing, Integrating, and Managing Threats, Vulnerabilities and Consequences*, 7.

Consequences

The Consequences component of the risk-assessment tool, as developed in this thesis, is straightforward. Like the vulnerabilities factor, consequences are relatively easy to measure, as long as square footage of the court space is known. However, there are areas that would benefit from further exploration. One such area is the impact on public confidence in the government following an attack. The body of literature researched for this thesis did not reveal methods for quantifying lack of public confidence following an attack. The mission of the judiciary is to provide fair and accessible justice to all. If a courthouse is attacked and citizens are placed at risk, how can we determine the potential short-term and long-term psychological effects of that attack? How would faith in government's ability to protect the public degrade following an attack of this nature? Would the psychological effects be more pronounced if the attack were on a major urban court that serves hundreds of thousands of residents, or in a small court environment, where the courthouse has historically served as a focal point of the county? Future research must be developed to assess the psychological impact of terrorist attacks on government and how to quantify those effects for inclusion in the risk-assessment tool.

Another area that is likely to suffer after an attack is the government's ability to deliver minimum essential public services. The body of literature researched for this thesis, however, did not reveal methods for quantifying loss of government capability following an attack. Therefore, research need be accomplished to measure this consequence factor.

Future research should also explore risk management and the judiciary in relation to offsite locations. Threats to judicial officers, court staff, and witnesses are not confined to courthouses. Sadly, violence can make its way into the private lives of those who serve justice. Continued efforts to protect those who serve the judiciary, outside of the courthouse setting, should be the focus of future research on this topic.

C. APPLICATION OF THE RISK-ASSESSMENT TOOL

The risk-assessment tool will help courts and security planners identify existing vulnerabilities with a nod toward alleviating those vulnerabilities. The tool, when broadly applied across courts throughout a state, will function as an integral part of a decision support system to help security managers identify pervasive security issues. Once global issues are identified, security planners can use the tool to help them as they work within the state court budget process to evaluate the utility of specific strategies and expenditures in reducing risk in courts. For instance, if a summary assessment of courts identifies the fact that intrusion alarm systems are not installed in most courts, an effort to procure a statewide contract for intrusion alarms may result. A statewide funding request may also be submitted to address the issue in a comprehensive manner. Data from the risk-assessment tool will be applicable throughout the process of identifying need, proposing countermeasures, and requesting state funding to reduce risk. Included in the process should be a measured effort to forecast for future security expenditures, based upon information gathered in the risk assessment process.

To achieve a global risk picture, the tool should be applied to all existing state court facilities. In California, this ambitious effort should be accomplished one court cluster at a time, starting from the smallest courts in cluster one and ending with the largest courts in cluster four. This gradual approach will make a formidable task more practicable. It will also allow for cluster-by-cluster analysis of the most pressing vulnerabilities to be addressed in the state courts. Security planners in other state judiciaries should determine practical strategies to apply the tool over all state court facilities.

Consistent with the NIPP's Risk Management Framework, trends identified by the statewide survey should be used to implement protective programs. To do this, statewide initiatives should be undertaken to request funding for security programs that are found to be particularly deficient in courts throughout the state, as identified by the survey. In California, this request should be similar to the successful request, in 2005, to provide funding for entrance screening for courts lacking such equipment.

Other funding earmarked for court security should be focused on improving the components deemed most deficient by the survey. When possible, statewide contracts should be procured to ensure a standard of quality and cost controls for necessary components and services.

Finally, consistent with the NIPP Risk Management Framework, the risk assessment tool should be regularly re-applied to state court systems in an effort to measure effectiveness. Courts, particularly those most at risk, should be re-evaluated on a biennial basis. Facilities should be ranked in order of deficiency severity. Chronically at-risk courts should be placed at the top of the priority list for funding for facility upgrades.

APPENDIX I: THREAT QUANTIFICATION SURVEY

The survey to determine the points allocated to threats was sent to the California Court Security Network Listserv. The California Court Security Network listserv is a forum for court security professionals and staff liaisons to discuss issues and best practices relating to court security. The makeup of the listserv is evenly split between court security professionals (generally, the court's most senior member of the county Sheriff's Court Security division) and court leadership overseeing court security issues within the court. There are approximately ninety active members of the Security Network Listserv. The survey consisted of the following request:

Hello Security Network,

In an effort to develop a risk assessment framework for court security, I'm working on evaluating the various types of threats courts are exposed to. I've used data accumulated over the last ten years, as compiled by Paul Banner from the Public Agency Training Council, to identify the most common threats courts are exposed to. Now, I'd like your assistance and expertise in rank ordering the severity of those threats from what you consider to be most severe to least severe.¹¹¹

Your response to this survey will help enable me to assign appropriately ranked points to each threat, as part of the framework. If you have a couple of minutes to assist me by applying your expertise to this endeavor, I would appreciate it.

If you have the time, please assign a ranking from 1-5 for each of the ten incidents below, 1 being the least severe and 5 being the most severe. Once completed, please send to me at sara.fisher@jud.ca.gov (please do not respond to the entire list).

¹¹¹ Severity, for the purposes of this survey, should be understood to mean "most destructive for court operations, loss of life, loss of faith in the judiciary, etc."

Least Severe

Moderately Severe

Most Severe

1. 2. 3. 4. 5

Incident	Severity
Explosive device/bomb in or on courthouse property	
Shooting in the courthouse/courtroom	
Hostage situation	
Inmate escape	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.	
Bomb threat	
Attempted shooting in courthouse/courtroom	
Attempted hostage situation	
Attempted inmate escape	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.	

Twenty four responses were received. The results appear in the table on the next page.

Table 11. Threat Quantification Survey: Descriptive statistics.

	<i>Explosives</i>	<i>Shooting</i>	<i>Hostage Situation</i>	<i>Inmate Escape</i>	<i>Other Violence</i>	<i>Bomb Threat</i>	<i>Attempted Shooting</i>	<i>Attempted Hostage Situation</i>	<i>Attempted Escape</i>	<i>Attempted Violence</i>
Mean	4.46	4.63	4.38	3.54	4.13	2.42	4.33	3.42	3.17	3.38
Standard Error	0.18	0.19	0.17	0.20	0.23	0.22	0.18	0.21	0.26	0.25
Median	5	5	5	4	5	3	5	4	4	4
Mode	5	5	5	4	5	3	5	4	4	4
Standard Deviation	0.88	0.92	0.82	0.98	1.12	1.10	0.87	1.02	1.27	1.21
Sample Variance	0.78	0.85	0.68	0.95	1.24	1.21	0.75	1.04	1.62	1.46
Minimum	2	2	3	2	2	1	2	1	1	1
Maximum	5	5	5	5	5	4	5	5	5	5
Count	24	24	24	24	24	24	24	24	24	24

Average point values from the survey form the basis for assigning point values for each incident.

Incident	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape		4	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.		4	
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.		3	
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb threat		2	
		Total Threats (minimum 2)	

APPENDIX II: VULNERABILITY QUANTIFICATION SURVEY

The survey to determine the points allocated to vulnerabilities was sent to a small group of senior court security leaders and security coordinators from the Emergency Response and Security unit within the California Administrative Office of the Courts. Ranking officers from the following counties provided feedback leading to the development of the vulnerability point allocation: Riverside, Sacramento, Santa Barbara, and Yolo County.

The survey consisted of the following request:

Thank you all for responding to my last survey regarding threats to the courts. I'm sending this to a limited number of senior leaders in the California Court Security field, in an effort to get your expert feedback on the second piece of the risk assessment framework for court security — vulnerabilities.

Now that we have a sense of the relative importance of the various threats to the courts in California, it's necessary to develop a relative ranking for the primary vulnerabilities which exist in courthouses across the state. The list of vulnerabilities on the attached is by no means representative of all of the vulnerabilities faced in our courts. It should include the major vulnerabilities, however. The ranking for vulnerabilities is from 1-10. The higher the number, the more serious the vulnerability. I'm seeking your assistance in ranking the vulnerabilities in order of importance/seriousness, based upon your experience in the courts. It may be somewhat difficult to assess which vulnerability poses the greater severity. I'm looking for your expert opinion. For example, I personally believe that a vulnerability which would allow a bomb to be easily planted adjacent to a courthouse is more serious than a vulnerability which would make a clerk vulnerable to attack from an irate customer. Therefore, in my own ranking, I assigned a higher point value to landscaping overgrowth than I did to a lack of barrier between the clerks and the public. It is that type of "gut feeling" assessment I'm seeking from you.

Please let me know if you have any questions. Thank you for your participation in this survey.

<i>Vulnerability</i>	<i>Relative Points Value</i>
No weapons screening exists	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	
No distinct circulation exists (public, staff, judges, and inmates mingle)	
Partial weapons screening only (i.e., screening part time or only with hand wands)	
No secure holding facilities exist	
No access control system is in place (i.e., there is no key control system or card access system)	
Sally port (for inmate delivery) is unsecured	
No duress annunciation system is in place	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	
No secure parking exists for judges and court staff	
No barrier/partition exists between clerks and public	
Exterior lighting is greatly lacking or nonexistent	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	
No ballistic resistant material exists in vulnerable windows or wall paneling	
No intrusion alarm system exists	
No CCTV system exists	
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	
Some access controls are in place, but application is not comprehensive	

Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	
The sally port is moderately, but not fully, secured	
Partial clerk's security windows exist	
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	

Data on vulnerability quantification was solicited from seven court security experts. The results appear in the next table.

Vulnerability Quantification Survey: Descriptive statistics.

<i>Vulnerability</i>	<i>Mean</i>	<i>Standard Error</i>	<i>Median</i>	<i>Mode</i>	<i>Standard Deviation</i>	<i>Sample Variance</i>	<i>Min.</i>	<i>Max.</i>	<i>Count</i>
No weapons screening exists	10.00	0.00	10	10	0.00	0.00	10	10	7
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7.14	0.34	7	7	0.90	0.81	6	9	7
No distinct circulation exists (public, staff, judges, and inmates mingle)	7.00	0.38	7	7	1.00	1.00	6	9	7
No access control system is in place (i.e., there is no key control system in place, a card access system is not used)	6.14	0.40	6	6	1.07	1.14	4	7	7
No secure holding facilities exist	7.14	0.34	7	8	0.90	0.81	6	8	7
No duress annunciation system is in place	6.00	0.49	6	6	1.29	1.67	4	8	7
Partial weapons screening (i.e., screening part time or only with hand wands)	6.86	0.63	7	5	1.68	2.81	5	9	7
No secure parking exists for judges and court staff	5.14	0.40	5	5	1.07	1.14	4	7	7
No ballistic resistant material exists in vulnerable windows or wall paneling	4.43	0.57	4	4	1.51	2.29	2	7	7
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5.00	0.31	5	5	0.82	0.67	4	6	7
Sally port is unsecured	5.86	0.51	6	7	1.35	1.81	4	7	7
Some exemptions exist to the entrance screening policy (i.e., court staff, off	4.71	0.52	4	4	1.38	1.90	3	7	7

duty law enforcement)									
No barrier/partition exists between clerks and public	4.86	0.26	5	5	0.69	0.48	4	6	7
No intrusion alarm system exists	4.29	0.42	5	5	1.11	1.24	2	5	7
No CCTV system exists	4.14	0.55	5	5	1.46	2.14	2	6	7
Exterior lighting is greatly lacking or nonexistent	4.57	0.48	5	3	1.27	1.62	3	6	7
Some access controls are in place, but application is not comprehensive	3.86	0.46	3	3	1.21	1.48	3	6	7
Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	3.86	0.40	4	3	1.07	1.14	3	6	7
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4.00	0.65	3	3	1.73	3.00	3	7	7
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	4.57	0.43	4	4	1.13	1.29	3	6	7
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	3.57	0.48	4	2	1.27	1.62	2	5	7
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	2.86	0.46	2	2	1.21	1.48	2	5	7
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	3.57	0.65	3	2	1.72	2.95	2	6	7
The sally port is moderately, but not fully, secured	2.71	0.57	3	1	1.50	2.24	1	5	7

Partial clerk's security windows exist	2.86	0.67	4	1	1.77	3.14	1	5	7
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	1.86	0.40	2	1	1.07	1.14	1	4	7

Average point values from the survey form the basis for assigning point values for each vulnerability.

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	
No access control system is in place (i.e., there is no key control system or card access system)	6	
Sally port (for inmate delivery) is unsecured	6	
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	
No secure parking exists for judges and court staff	5	
No barrier/partition exists between clerks and public	5	
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	
No ballistic resistant material exists in vulnerable windows or wall paneling	4	
No intrusion alarm system exists	4	
No CCTV system exists	4	

Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	
Some access controls are in place, but application is not comprehensive	4	
Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	
	<i>Total Vulnerabilities</i>	

APPENDIX III: COMPLETE RISK ASSESSMENT TOOL

Instructions on how to calculate scores using the risk assessment tool:

Calculating the *raw* score for the threat variable is a two-step process. First, multiply the number of times a threat occurred by the points assigned to that type of threat. Second, sum the values obtained in the first step. For example, if one inmate has escaped (worth four points on the threat table), multiply 1 incident x 4 points and add the result to the scores of other incident/threats for that court.

Calculate the raw score for vulnerabilities by summing the points associated with each of the vulnerabilities present for that court. For example, if no weapons screening exists (10 points) and no CCTV system exists (4 points), add 10 plus 4 to yield 14 points.

Consequences are a function of the size of the court. Obtain the raw consequences score by multiplying the number of square feet by the economic value of \$250 and use the consequences table to determine the point value. For example, if the size is 10,000 square feet, the value in the table is \$2,500,000 and the corresponding number of points is two.

Calculating a court's *normalized* risk assessment score is accomplished by multiplying the normalized threat value, the normalized vulnerabilities value, and the normalized consequences value. The entire product is then multiplied by 100. For example, below is a sample equation:

$$T (0.45) \times V (0.55) \times C (1) \times 100 = 25$$

Threats

Incident/Threat	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape		4	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.		4	
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.		3	
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb Threat		2	
		<i>Total Threats (minimum 2)</i>	
		<i>Normalized Threat Rating</i>	

Vulnerabilities

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	
No access control system is in place (i.e., there is no key control system or card access system)	6	
Sally port (for inmate delivery) is unsecured	6	
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	
No secure parking exists for judges and court staff	5	
No barrier/partition exists between clerks and public	5	
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	
No ballistic resistant material exists in vulnerable windows or wall paneling	4	
No intrusion alarm system exists	4	
No CCTV system exists	4	
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	
Some access controls are in place, but application is not comprehensive	4	

Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	
	Total Vulnerabilities	
	Normalized Vulnerabilities Rating	

Consequences

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M	10

Square footage of court space	Direct Economic Value of Court Facility (square footage x \$250)	Points

<i>Total Risk Assessment</i>	
$ \text{Threats} \underline{\hspace{2cm}} \times \text{Vulnerabilities} \underline{\hspace{2cm}} \times \\ \text{Consequences} \underline{\hspace{2cm}} \times 100 \\ = \\ \underline{\hspace{2cm}} $	

Court Cluster (1, 2, 3, 4): _____

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APPENDIX IV: RISK ASSESSMENT TOOL BETA-TEST RESULTS

This appendix contains the data collected to evaluate the threats, vulnerabilities, and consequences at each of the four courts used in the beta-test.

Court A: Threats

Incident/Threat	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape		4	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.	1	4	4
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.	1	3	3
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb Threat	5	2	10
		Total Threats (minimum 2)	17
		Normalized Threat Rating	.45

Court A: Vulnerabilities

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	
No access control system is in place (i.e., there is no key control system or card access system)	6	
Sally port (for inmate delivery) is unsecured	6	
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	5
No secure parking exists for judges and court staff	5	5
No barrier/partition exists between clerks and public	5	
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	
No ballistic resistant material exists in vulnerable windows or wall paneling	4	4
No intrusion alarm system exists	4	4
No CCTV system exists	4	4
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	

Some access controls are in place, but application is not comprehensive	4	4
Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	3
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	3
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	
	Total Vulnerabilities	32
	Normalized Vulnerabilities Rating	.55

Court A: Consequences

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M	10

Square footage of court space	Direct Economic Value of Court Facility (square footage x \$250)	Points
42,000	\$11M	3
	<i>Normalized Consequences Rating</i>	1

<i>Total Risk Assessment: Court A</i>
<p><i>Threats .45 x Vulnerabilities .55 x Consequences 1 x 100</i></p> <p>=</p> <p>25</p>

Court B: Threats

Incident/Threat	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape	1	4	4
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.		4	
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.		3	
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb Threat	3	2	6
		<i>Total Threats (minimum 2)</i>	<i>10</i>
		<i>Normalized Threat Rating</i>	<i>.26</i>

Court B: Vulnerabilities

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	7
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	
No access control system is in place (i.e., there is no key control system or card access system)	6	
Sally port (for inmate delivery) is unsecured	6	
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	
No secure parking exists for judges and court staff	5	
No barrier/partition exists between clerks and public	5	5
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	3
No ballistic resistant material exists in vulnerable windows or wall paneling	4	4
No intrusion alarm system exists	4	4
No CCTV system exists	4	4
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	
Some access controls are in place, but application is not comprehensive	4	4

Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	4
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	3
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	
	Total Vulnerabilities	38
	Normalized Vulnerabilities Rating	.66

Court B: Consequences

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M	10

Square footage of court space	Direct Economic Value of Court Facility (square footage x \$250)	Points
19,000	\$5M	2
	<i>Normalized Consequences Rating</i>	<i>.67</i>

<i>Total Risk Assessment: Court B</i>
<p><i>Threats .26 x Vulnerabilities .66 x Consequences .67 x 100</i></p> <p><i>=</i></p> <p><i>12</i></p>

Court C: Threats

Incident/Threat	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape		4	
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.	1	4	4
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.		3	
Attempted hostage situation		3	
Attempted inmate escape		3	
Bomb Threat	1	2	2
<i>Total Threats (minimum 2)</i>			6
<i>Normalized Threat Rating</i>			.16

Court C: Vulnerabilities

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	10
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	7
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	7
No access control system is in place (i.e., there is no key control system or card access system)	6	6
Sally port (for inmate delivery) is unsecured	6	6
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	
No secure parking exists for judges and court staff	5	5
No barrier/partition exists between clerks and public	5	
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	
No ballistic resistant material exists in vulnerable windows or wall paneling	4	4
No intrusion alarm system exists	4	4
No CCTV system exists	4	4
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	
Some access controls are in place, but application is not comprehensive	4	

Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	3
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	2
	<i>Total Vulnerabilities</i>	58
	<i>Normalized Vulnerabilities Rating</i>	1

Court C: Consequences

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M	10

Square footage of court space	Direct Economic Value of Court Facility (square footage x \$250)	Points
8,600	\$2.15M	2
	<i>Normalized Consequences Rating</i>	<i>.67</i>

<i>Total Risk Assessment: Court C</i>
<i>Threats .16 x Vulnerabilities 1 x Consequences .67 x 100</i>
<i>=</i>
<i>11</i>

Court D: Threats

Incident/Threat	# of incidents occurring within last five years	Point value per incident	# of incidents x point value per incident
Explosive device/bomb in or on courthouse property		5	
Shooting in the courthouse/courtroom		5	
Hostage situation		4	
Inmate escape	1	4	4
Other violence resulting in physical harm to judicial officer, court staff, juror, witness, litigant, etc.	4	4	16
Attempted shooting in courthouse/courtroom		4	
Attempted violence to judicial officer, court staff, juror, witness, litigant, etc.	3	3	9
Attempted hostage situation		3	
Attempted inmate escape	1	3	3
Bomb Threat	3	2	6
		<i>Total Threats (minimum 2)</i>	38
		<i>Normalized Threat Rating</i>	1

Court D: Vulnerabilities

<i>Vulnerability</i>	<i>Relative Points Value</i>	<i>Total Points</i>
No weapons screening exists	10	
Many exemptions exist to the entrance screening policy (i.e., court staff, members of the California Bar, county employees)	7	
No distinct circulation exists (public, staff, judges, and inmates mingle)	7	7
Partial weapons screening only (i.e., screening part time or only with hand wands)	7	
No secure holding facilities exist	7	
No access control system is in place (i.e., there is no key control system or card access system)	6	
Sally port (for inmate delivery) is unsecured	6	
No duress annunciation system is in place	6	
Some exemptions exist to the entrance screening policy (i.e., court staff, off duty law enforcement)	5	5
No secure parking exists for judges and court staff	5	5
No barrier/partition exists between clerks and public	5	
Exterior lighting is greatly lacking or nonexistent	5	
Landscaping near facility is overgrown and affords opportunity to hide improvised explosive devices	5	
A duress annunciation system exists, but reliability is uncertain and/or system is not in place in some vulnerable areas	5	
No ballistic resistant material exists in vulnerable windows or wall paneling	4	
No intrusion alarm system exists	4	
No CCTV system exists	4	
Partially controlled parking areas exist for judges and court staff (i.e., drop arm barrier)	4	

Some access controls are in place, but application is not comprehensive	4	4
Some, but not all, of the vulnerable windows and wall paneling features ballistic resistant material	4	4
Semi-distinct circulation exists (ex. some minimal mixing of staff and inmates may occur)	4	
A CCTV system is in place which is intermittently monitored and/or not comprehensive throughout the courthouse	4	
Landscaping is partially trimmed but some problem areas exist where improvised explosive devices could be hidden	3	3
The sally port is moderately, but not fully, secured	3	
Partial clerk's security windows exist	3	3
Exterior lighting partially, but not fully, illuminates exterior of courthouse during hours of darkness	2	2
	<i>Total Vulnerabilities</i>	33
	<i>Normalized Vulnerabilities Rating</i>	.57

Court D: Consequences

Direct Economic Value*	Points	Direct Economic Value	Points
Below \$1M	1	\$40M - \$50M	6
\$1M - \$10M	2	\$50M - \$60M	7
\$10M - \$20M	3	\$60M - \$70M	8
\$20M - \$30M	4	\$70M - \$80M	9
\$30M - \$40M	5	Above \$80M	10

Square footage of court space	Direct Economic Value of Court Facility (square footage x \$250)	Points
35,000	\$9M	2
	<i>Normalized Consequences Rating</i>	.67

<i>Total Risk Assessment: Court D</i>
<p><i>Threats 1 x Vulnerabilities .57 x Consequences .67 x 100</i></p> <p align="center">=</p> <p align="center">38</p>

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