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The Private Security Industry: A Review of the Definitions, Available Data Sources, and Paths Moving Forward

Literature Review and Secondary Data Analysis

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1. EXECUTIVE SUMMARY

The private security industry is a crucial component of security and safety in the United States and abroad. Today, private security is responsible not only for protecting many of the nation's institutions and critical infrastructure systems, but also for protecting intellectual property and sensitive corporate information. U.S. companies also rely heavily on private security for a wide range of functions, including protecting employees and property, conducting investigations, performing pre-employment screening, providing information technology security, and many other functions.

In the past four decades, a series of reports and studies have examined private security agencies and personnel (i.e., Kakalik & Wildhorn, 1971a, 1971b, 1971c, 1971d; Cunningham, Taylor, & Hallcrest Systems, Inc., 1985; Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990). These studies helped redefine the roles of private security and documented the growth and trends in the industry as a whole. However, these studies have become outdated, and there continues to be a significant need for more detailed and timely information, especially when considering the increasing range of roles played by private security. Moreover, the survey methodologies employed by some prior data collection efforts have produced data that are not generalizable to the population or that are potentially subject to nonresponse bias. Therefore, how well one can use these sources to make inference to private security as a whole is unknown. Currently, there is no existing data source that provides detailed information about private security—beyond basic demographics—that is not methodologically flawed due to the design or high nonresponse rates.

The Bureau of Justice Statistics (BJS), an independent statistical agency located within the U.S. Department of Justice, launched a design project to assess the feasibility of conducting a National Private Security Survey (NPSS). This report was developed as part of the design work. It provides a review of the literature on private security, including major trends, demographics, collaborations with law enforcement, budgeting and licensing, legal authority and powers within private security, and security operations. The report also presents an analysis of the availability and quality of secondary data on private security including a review of all available private security data from government sources, commercial sources, and research or academic sources. As part of this review, the report examines the methodology used to collect data on the private security industry and provides an assessment of the data quality.

The review suggests that suitable data are available on certain aspects of the private security industry. However, some components of the private security industry have not been studied in detail, while others have been studied but the existing data are either inconsistent or outdated. Based on the review, the following conclusions were generated:

1) **Employee Demographics.** Overall, high-quality demographic data have been collected in existing surveys; however, variations in the survey methodology and definitions of private security across these surveys produced some discrepancies in the estimates.

2) **Budgeting and licensing.** Budgeting and licensing information on contract security firms was substantial, compared to information for companies with a proprietary security force.

3) **Private security powers.** An insufficient amount of comprehensive data has been collected on private security powers; therefore, there is a significant need for information in this area.

4) **Security operations.** One of two secondary data sources provided information on security operations topics. Although one of the survey designs was methodologically sound, the response rate created a potential for biased estimates.

As a result of these findings, we offer the following recommendations for the design and implementation of a national survey of the private security industry:

1) **Develop a clear definition of private security.** When conducting a national data collection effort such as the NPSS, a succinct definition of private security should be developed with an understanding that the definition used may result in the collection of data that are different from those currently available.

2) **Cover a broad range of topics.** A targeted, national study of the private security industry should cover a broad range of topics in order to minimize any potential measurement error caused by combining data from multiple sources that use different definitions of private security. Therefore, it is important that a future study not only fill in the recognized information gaps on private security (e.g., private security powers and security operations), but also obtain reliable and updated statistics, such as employee demographics, that are sufficiently covered by other surveys.

3) **Utilize a rigorous data collection methodology.** Future studies should also seek to address methodological and response rate challenges that affected past data collection efforts. This should include the development of a national sampling frame that provides more representative coverage of the companies to which inference will be drawn. Furthermore, procedures must include non-response follow-up to ensure a reasonable response rate.

4) **Conduct the survey periodically.** Studies that examine private security consistently over time would provide a significant advantage. This could be achieved either by examining a cohort of companies over time or drawing a new nationally

representative sample of companies each time the data collection is fielded. Regardless of the approach, a set of studies conducted over time will better inform how private security changes in the size and characteristics of the industry, as well as the changing role and function of private security in the United States. These trends in the industry have both economic and policy implications.

In summary, this report provides recommendations for how future data collection efforts, such as the NPSS, can build on past efforts to increase knowledge of the private security industry and yield higher quality and more consistent data over time. The relevance of private security to our criminal justice system and to our nation's safety and security requires that we collect more consistent and timely information on the private security industry. This should include tracking of the functions and roles of private security as well as their intersection with policing, corrections, homeland security, and other relevant areas. By building on and improving upon past data collection efforts, we can ensure that the information that is collected is accurate, generalizable, and useful to the private security field, as well as to federal agencies and policymakers, and others with an interest in private security data.

2. BACKGROUND

Private security is essential to ensuring the security and safety of persons and property, as well as intellectual property and sensitive corporate information. Private security officers are responsible for protecting many of the nation's institutions and critical infrastructure systems, including industry and manufacturing, utilities, transportation, and health and educational facilities. Companies are also heavily invested in private security, hiring security firms to perform functions such as store security, private investigations, pre-employment screening, and information technology (IT) security. These services are used in a wide range of markets, from commercial to residential. Some companies hire their own security personnel, whereas others contract with security firms for these services or use a mix of services—both proprietary and contract staff.

In the 1970s, researchers at RAND Corporation produced a five-volume series of reports that examined the regulation, licensing, and responsibilities of private security agencies and personnel (Kakalik & Wildhorn, 1971a, 1971b, 1971c, 1971d, Volumes I–V). Later, Hallcrest Systems published two comprehensive studies on the private security industry: *Private Security and Police in America: The Hallcrest Report I* (Cunningham, Taylor, & Hallcrest Systems, Inc., 1985) and *Private Security Trends 1970–2000: The Hallcrest Report II* (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990). These studies defined the roles of private police in crime prevention and control and documented the growth and trends in the industry. In addition to these studies, many government, commercial, and research organization studies have gathered information about the private security industry. Although these past reports and profiles of the private security industry have been influential, much remains to be considered when examining the industry, including the increasing variety of roles played by private security in today's society.

The Bureau of Justice Statistics (BJS) is considering the value and feasibility of developing a statistical series on private security, the National Private Security Survey (NPSS). This data collection effort would be geared towards enhancing the understanding of the role that private security plays in the United States. One component of the NPSS design work that has been undertaken is a comprehensive review of the literature currently available about private security and an analysis of the relevant secondary data. In addition to summarizing the existing literature, this report describes the availability and quality of secondary data on private security and identifies gaps in the information currently available from secondary sources. The report begins with a review of the definitions of private security, structure of the industry, services performed by the industry, and markets for private security. The next section provides an overview of the secondary data sources and survey methodologies they employ. This is followed by sections that utilize secondary data sources, when available, to describe the trends and employee characteristics in private security, the relationship

between private security and law enforcement, and regulation and training of private security sectors.

2.1 Defining Private Security

Experts do not agree about what constitutes private security, and various definitions have been used in prior research. Definitional differences tend to include the focus of job tasks, the influence of profit and the client, and the inclusion of products, such as the manufacturing, distribution, and installation of equipment and technology (Cunningham et al., 1990). Several of the most commonly cited definitions are discussed below.

In one of its initial studies, RAND defined private security as "all types of private organizations and individuals providing all types of security-related services, including investigation, guard, patrol, lie detection, alarm, and armored transportation" (Kakalik & Wildhorn, 1971b, p. 3). One common function across most of these services, according to that study, is "crime prevention and detection" (p. 18). Hallcrest I argued that a broader definition of private security that includes physical, information, and employment-related security is a more accurate representation of the roles and responsibilities of private security, as opposed to the "private police" label applied by Kakalik and Wildhorn (1971b). Bottom and Kostanoski (1983) state that private security provides protection against not only crime but also four additional threats: waste, accident, error, and unethical practice.

In addition to its emphasis on crime, RAND's definition was criticized by the Private Security Task Force (PSTF), a group established by the Law Enforcement Alliance of America (LEAA), because it (1) excluded quasi-public police (e.g., park and recreation police) and (2) did not include the client relationship or profit nature of the industry. Thus, the PSTF adopted a definition that includes "those self-employed individuals and privately funded business entities and organizations providing security-related services to specific clientele for a fee, for the individual or entity that retains or employs them, or for themselves, in order to protect their persons, private property, or interests from various hazards" (Cunningham et al., 1990). The PSTF also restricted its definition to organizations with a profit-oriented delivery system and excluded quasi-public police organizations unless they were paid by private funds.

Green (1981) argued that distinctions based on profit orientation or source of funds are not useful because nonprofit institutions, such as hospitals, airports, and schools, often hire private security. He defined private security as "those individuals, organizations, and services other than public law enforcement agencies, which are engaged primarily in the prevention of crime, loss, or harm to specific individuals, organizations, or facilities" (as described in Cunningham et al., 1990).

Although these varying historical definitions are commonly cited, they were criticized in both Hallcrest reports because they are restricted to personnel and businesses, excluding what

Cunningham and colleagues (1990) identify as "the fastest growing segment of private security… manufacturing, distribution, and installation of security equipment and technological systems."

The broader view of the role of private security prevails today. For example, American Society for Industrial Security (ASIS) International, the largest association of private security professionals in the United States, has defined private security as "the nongovernmental, private-sector practice of protecting people, property, and information, conducting investigations, and otherwise safeguarding an organization's assets" (ASIS International, 2009a). ASIS further argued that private security has a role in "helping the private sector secure its business and critical infrastructure, whether from natural disaster, accidents or planned actions, such as terrorist attacks, vandalism, etc." (ASIS International, 2009b). Experts attending an ASIS symposium were asked to develop a definition of the security field and identified 18 core elements (ASIS Foundation, 2009):

1. physical security,
2. personnel security,
3. information systems security,
4. investigations,
5. loss prevention,
6. risk management,
7. legal aspects,
8. emergency and contingency planning,
9. fire protection,
10. crisis management,
11. disaster management,
12. counterterrorism,
13. competitive intelligence,
14. executive protection,
15. violence in the workplace,
16. crime prevention,
17. crime prevention through environmental design (CPTED), and
18. security architecture and engineering.

2.2 Structure of the Industry

Under the broad definition commonly used today, the term "private security" can represent a wide range of organizations, including corporate security, security guard companies, armored car businesses, investigative services, and many others. Personnel hired by these companies can be armed or unarmed, can be employed as either in-house or contract

employees, and can have different powers, depending on where they work and what duties they fulfill. Some U.S. communities have deputized their security personnel under state law to create a force with the full power to arrest, search, and seize.

The private security industry is often described by distinctions based on the proprietary or contractual nature of security departments, type of security provided (physical, information, or employment-related), services provided (e.g., guarding, armored transport), and markets (e.g., critical infrastructure, commercial venues). Some of these characteristics are discussed in more detail in the following section.

2.2.1 Distinctions Between Contract and Proprietary Security

According to ASIS International, proprietary security is "any organization, or department of that organization, that provides full time security officers solely for itself" (ASIS International, 2009a). According to Cunningham and colleagues (1990), proprietary security "includes the methods to institute equipment owned, and personnel employed by an organization for the exclusive protection of its assets and personnel." On the other hand, contract security is "protective services provided by one company, specializing in such services, to another company on a paid contractual basis" (ASIS International, 2009a). Each type of private security has advantages over the other. For example, contractual security may be less expensive, but proprietary security may include higher quality and more loyal staff. Additionally, organizations with an in-house security department will have more control over the activities of security staff. Organizations may use both proprietary and contractual security staff, depending on the security components and the tasks required. Executives in the security industry believe that in the future they will serve less as managers and more as "brokers," by contracting out security personnel for certain tasks, while proprietary security personnel handle other tasks (Cunningham et al., 1990).

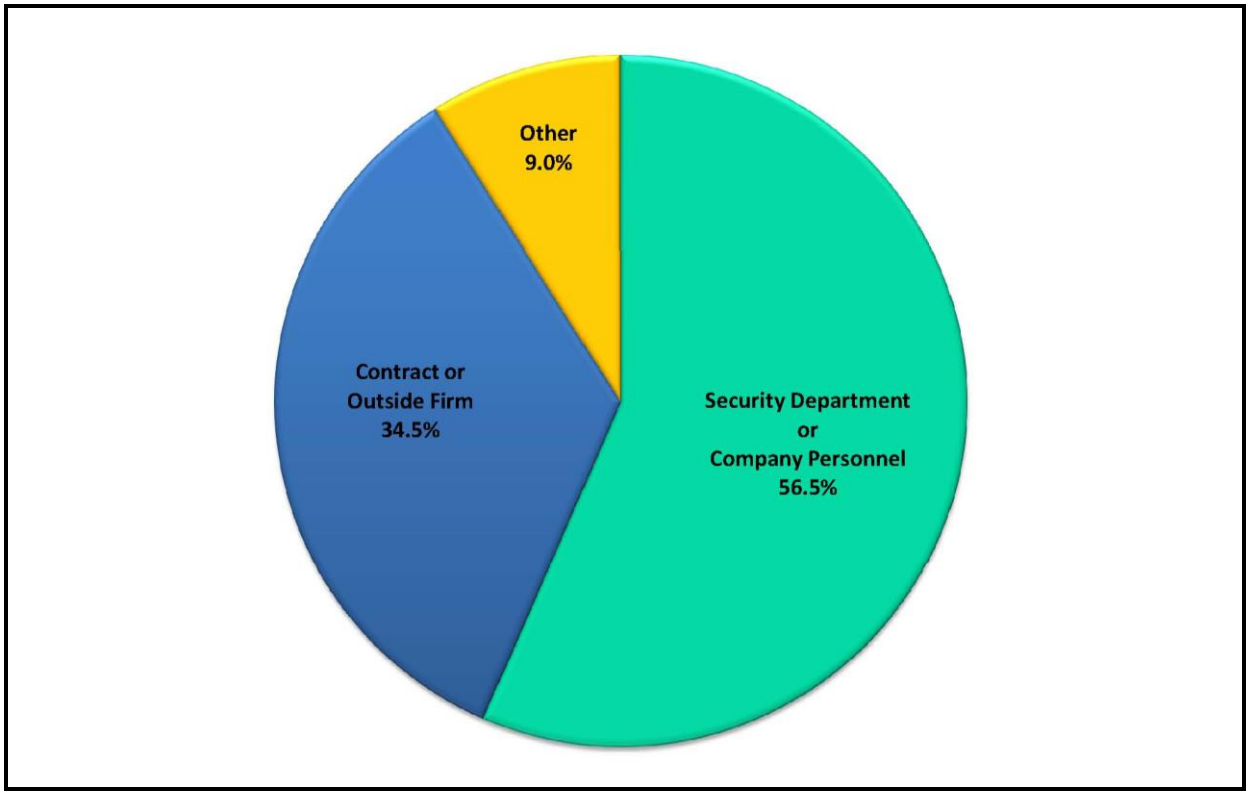
The ASIS Scope and Emerging Trends survey (ASIS Foundation, 2005) collected data on the distribution of proprietary and contract officers across all industry sectors. Among the 4,000 companies surveyed in 2005 (response rate of 21.6%), 56.5% of security was handled by in-house security staff while 34.5% was handled by a contractor, an outside firm, or some other source (Figure 1). It should be noted that the breakdown from the ASIS survey does not represent the total percentage of private security personnel that are contract versus proprietary.

2.2.2 Types of Security

Proprietary and contractual security organizations play a role in three broad types of security: physical, information, and employment-related. Physical security is concerned with "physical measures designed to safeguard people; to prevent unauthorized access to equipment, facilities, material, and documents; and to safeguard them against a security incident" (ASIS International, 2009a). Physical security may include perimeter and interior

space protection through the use of barriers, locks, lights, sensors, and guards—who are a key component of physical security, due to their high visibility (Cunningham et al., 1990).

Figure 1. Distribution of Company Security Functions Between Internal and External Providers, 2005



Source: ASIS Foundation (2005).

In Hallcrest II, Cunningham and colleagues (1990) described information security as the protection of confidential information (such as mailing lists, research and development documentation, and financial information) that is maintained in hard copy or electronic format. This area has grown immensely with the growth of computer technology. Information security now also includes "maintaining the confidentiality, reliability, and availability of data created, stored, processed, and/or transmitted via automated information systems. Information systems security personnel develop procedures and safeguards to protect against hackers and other unauthorized efforts to access data, in addition to protecting against viruses and other threats to information systems" (Dempsey, 2008). It includes protection against cybercrimes such as fraud and identity theft, computer viruses, software piracy, and data security. Finally, employment-related security requires "knowing the essential information about employees, both permanent and temporary, that might impact their job performance, breach security, or subject the organization to liability" (Dempsey, 2008). This can include screening job applicants for drug use or criminal history,

protecting executives through the use of residential security measures or bodyguards (Cunningham et al., 1990), monitoring employee phone calls and computer use, and investigating employee misconduct (Dempsey, 2008).

3. OVERVIEW OF SECONDARY DATA SOURCES AND SURVEY METHODOLOGIES

The secondary data analysis serves two main purposes. First, it allows survey designers to determine what information can be used for comparisons to the data they plan to collect and provides an understanding of how other studies measure or define key items. Moreover, by assessing the available information, the analysis can identify gaps in the literature. Second, a secondary data analysis allows for an assessment of the quality of the data in the public domain. Quality measures include how current the data are; the methodology used to collect data (including the mode of data collection, who the respondents are [e.g., company representatives or persons in an occupation], and the survey response rate); and the definitions used when designing the studies, such as the target and sampling populations. This information can be used to develop a survey design that utilizes approaches from previous successful studies that obtained high-quality data.

3.1 Sources of Secondary Data

This secondary data analysis attempts to review all available private security data from government sources, commercial sources, and research or academic sources. Table 1 presents the government sources that collect information on private security. These include national surveys conducted by the Census Bureau (Census), the Bureau of Labor Statistics (BLS), the Department of Labor's (DOL) O*NET online, and the Congressional Research Service. Table 2 presents the commercial sources, including Dun and Bradstreet (D&B), which maintains a national database on establishments across all industries in the United States, and *Security Magazine*, which conducts an annual survey of the top 500 security firms in the United States. Table 3 presents the research or academic organizations that have collected data on private security, including Hallcrest, which conducted the first comprehensive study on private security, and ASIS International. Both of these organizations conducted federally funded studies.

Tables 1, 2, and 3 also illustrate how these secondary data sources defined private security with respect to guarding. One of three approaches was used by each of these sources to sample and collect data: an industry approach, an occupation approach, or a combination of the two.

Table 1. Government Studies with Data on Private Security Industry and Segments of Private Security Industry Covered by Each

<table>
<tr><th colspan="3">Census Business Surveys—County Business Survey/Economic Survey/Census Service Annual Survey</th></tr>
<tr><td>• Body guard services
• Guard dog services
• Guard services
• Parking security services</td><td>• Patrol services, security
• Personal protection services (except security systems services)
• Property protection services (except armored car, security systems)</td><td>• Protection services (except armored car, security systems, personal or property)
• Protective guard services
• Security guard services</td></tr>
<tr><td colspan="3">• Excludes security patrol services</td></tr>
<tr><th colspan="3">Bureau of Labor Statistics (BLS) Business Surveys—BLS Occupational Outlook Handbook, Occupational Employment Statistics (OES) survey, Census of Fatal Occupational Injuries (CFOI), Survey of Occupational Injuries and Illnesses (SOII)</th></tr>
<tr><td colspan="3">Definitions vary by survey</td></tr>
<tr><td colspan="2">BLS Occupational Outlook Handbook
• Guard services
• Investigative services
• Excludes armored car services</td><td>OES and SOII
• Security guards
• Excludes private detectives and investigators</td></tr>
<tr><td colspan="2">CFOI
• Security guards
• Gaming surveillance officers</td><td></td></tr>
<tr><th colspan="3">BLS Household Surveys—Current Population Survey (CPS)</th></tr>
<tr><td colspan="3">• Security guards
• Gaming surveillance officers
• Excludes private detectives and investigators</td></tr>
<tr><th colspan="3">O*NET OnLine (DOL)</th></tr>
<tr><td colspan="3">• Security guards
• Excludes private detectives and investigators</td></tr>
<tr><th colspan="3">Congressional Research Service</th></tr>
<tr><td colspan="3">• Security guards
• Excludes private detectives and investigators</td></tr>
</table>

Table 2. Commercial Studies with Data on Private Security Industry and Segments of Private Security Industry Covered by Each

<table>
<tr><th colspan="2">Dun & Bradstreet</th></tr>
<tr><td>• Polygraph service
• Security guard and patrol service
• Armored car service
• Detective agencies</td><td>• Burglary and robbery protective service
• Guard dogs
• Fingerprinting
• Investigators</td></tr>
<tr><th colspan="2">Security Magazine</th></tr>
<tr><td colspan="2">• All private security related occupations</td></tr>
</table>

Table 3. Research Organization Studies with Data on Private Security Industry and Segments of Private Security Industry Covered by Each

Hallcrest Reports
Survey used to obtain data on hours of training received • Security guards and managers **Survey to obtain firearms training and use of force data** • Security guards
ASIS Scope and Emerging Trends
• All private security related occupations
RAND
• Security guards

An industry approach involves splitting companies into segments, or industries, that best characterize the function of the company (e.g., AT&T would be in the telecommunications industry; Securitas would be in the private security guarding services industry). The Census Business Surveys (e.g., County Business Survey, Economic Census, and Census Service Annual Survey), D&B, and *Security Magazine* use this method to define private security for sampling and data collection purposes. Data collected with this approach are often good for analyzing contract security firms, since these firms can be found in specific industry segments. This approach also supports the collection of company-level rather than person-level statistics. However, data sources using an industry approach include a slightly different subset of industries under the heading of private security. Most studies employing an industry-level approach use the 2007 North American Industrial Classification System (NAICS) to combine industries into sectors; some older data are based on the Standard Industrial Classification (SIC) system, which preceded the NAICS. Table 4 presents the NAICS industry codes that are used to define private contract security and private security guarding firms (U.S. Census Bureau, 2008) and Table 5 presents the corresponding SIC codes (Office of Management and Budget, 1987; D&B, 2003–2009). Private contract security is divided into six detailed NAICS codes, with code 561612 identifying companies whose primary function is providing guard services. Under the SIC system, the federal government divides private contract security into two codes, with SIC code 7381 identifying firms with a primary guarding function. D&B has created more detailed SIC codes, splitting SIC code 7381 into three industry codes with one specifically for guarding services.

Table 4. NAICS Codes Related to Private Contract Security

NAICS	Title	Description	Security Officer Industry
561611	Investigation Services	This U.S. industry comprises establishments primarily engaged in providing investigation and detective services.	
561612	Security Guards and Patrol Services	This U.S. industry comprises establishments primarily engaged in providing guard and patrol services, such as bodyguard, guard dog, and parking security services.	x
561613	Armored Car Services	This U.S. industry comprises establishments primarily engaged in picking up and delivering money, receipts, or other valuable items. These establishments maintain personnel and equipment to protect such properties while in transit.	
561621	Security Systems Services (except Locksmiths)	This U.S. industry comprises establishments primarily engaged in (1) selling security alarm systems, such as burglar and fire alarms, along with installation, repair, or monitoring services or (2) remote monitoring of electronic security alarm systems.	
561622	Locksmiths	This U.S. industry comprises establishments primarily engaged in (1) selling mechanical or electronic locking devices, safes, and security vaults, along with installation, repair, rebuilding, or adjusting services or (2) installing, repairing, rebuilding, and adjusting mechanical or electronic locking devices, safes, and security vaults.	

An occupation approach to studying private security, which is used by the BLS Occupational Outlook Handbook and the Current Population Survey, focuses on the position held by individuals in the course of their employment. Specific occupations are grouped into more general categories for sampling and data collection purposes. For example, the Standard Occupation Classification (SOC) system (defined by the Department of Labor and used by all government sources) includes the following occupations in its definition of security guards: store and facility guards, bodyguards, bouncers, armored car guards, and watch guards. The duties of a security guard are defined as guarding, patrolling, or monitoring premises to prevent theft, violence, or infractions of rules.

Table 5. SIC Codes Related to Private Contract Security

SIC	Title	Description[a]	Security Officer Industry
7381	Detective, Guard, and Armored Car Services	This category comprises establishments primarily engaged in providing detective, guard, and armored car services.	
7381-00	Detective and Armored Car Services	n/a	
7381-01	Guard Services	n/a	x
7381-02	Detective Services	n/a	
7382	Security Systems Services	This category comprises establishments primarily engaged in monitoring and maintaining security systems devices, such as burglar and fire alarms. Establishments of this business may sell or lease and install the security systems, which they monitor and maintain.	

[a] SIC codes are defined by the federal government at the 4-digit level. Commercial companies that maintain establishment databases (such as D&B or InfoUSA) have developed a more detailed set of SIC-codes at the 6- or 8-digit level. The 6-digit codes shown in Table 5 were created by D&B.

The Congressional Research Service (Parfomak, 2004a) study on private security was based on secondary data but used an occupation approach when collecting its data. Data from an occupation approach are useful for analyzing information about the overall field of private security and security occupations in all industries because they include private security officers from both contract security firms and proprietary (non-security) firms. Furthermore, since this approach gathers data directly from persons in the occupation of interest, it can more easily obtain detailed employee-level characteristics such as demographics. This is because the individual is the unit of measure and not all information about the company or industry is known.

A combination approach usually begins with a sample of companies and then selection of individuals to interview within those companies. The companies are selected from a pre-determined set of industries. Then, employees in those companies are selected based on whether they meet the criteria of interest (e.g., for private security one would select those that act as private security officers). Sources that used this approach to define private security include the Occupational Employment Statistics (OES) survey, O*NET OnLine, the Hallcrest reports, the ASIS Scope and Emerging Trends report, the Census of Fatal Occupational Industries (CFOI), and the Survey of Occupational Injuries and Illness (SOII). Data from this type of approach can be used to assess both contract security firms as well as proprietary firms. These sources contact the employees directly and can therefore ascertain whether they are employed by a contract firm or directly by the company from which they were selected. Because of its design, the combination approach can obtain

information at both the industry and occupational level. Therefore, data from these sources can provide measurements at both levels of analysis.

Regardless of the approach used to sample and collect the secondary data summarized in this document, an analyst needs to be mindful of how the population of interest is defined. Even small differences in the scope of the studies can make a difference in the published statistics. For example, under the industry approach, the Census surveys define contract security firms using a set of smaller industry segments that is different from that used by D&B. (Namely, armored car services are excluded under the Census surveys, but included in the D&B data.) Similarly, under the occupational approach different sets of occupations may be grouped together for publication. For example, the CPS includes private security guards *and* gaming surveillance officers, but other sources that use this approach, such as the BLS Occupational Outlook Handbook and the Congressional Research Service, include only security guards as defined by the SOC system.

3.1.1 Survey Methodologies Used by Secondary Data Sources

In addition to understanding how each secondary data source defines private security, it is equally important to understand the methodology used to collect the data. This allows for an assessment of the representativeness of the data for the entire private security field. Moreover, the methodology provides insight into the quality of the data in terms of response rates and other factors that may cause measurement error or biased estimates. This section summarizes the data collection methodology used by each of the secondary data sources. Because the methodology influenced the type of information collected, it also impacted the frequency with which information from a given data source was used in this analysis. Table 6 presents the number of times a source was used as a percentage of the outcomes analyzed. For example, the Census Surveys provided Employees data for 13.3% (or 4) of the 30 outcome variables included in the secondary analysis, Budgets and Licensing data on 18.8% (or 3) of the 16 outcome variables, and no data on Security Powers or Operations. In general, secondary sources contributed data on one (50%) or two (31.2%) outcomes of interest, but never in all areas.

3.1.1.1 Government Studies

Several government studies and surveys provide statistics on private security. Many of these studies are conducted on a periodic basis (often annually) that allows for trends to be analyzed. As described in this section, these studies employed a wide array of methodologies. However, all of these studies followed protocols dictated by the Office of Management and Budget (OMB), which requires at least an 80% response rate and adherence to rigorous statistical guidelines. Therefore, data from these studies are of high quality with a minimal amount of bias.

Table 6. Percentage of Outcome Variables Contributed by Secondary Data Source

Source	Type of Outcome Variable				
	All (54 Outcomes)	Employees (30 Outcomes)	Budgets and Licensing (16 Outcomes)	Security Powers (1 Outcome)	Operations (7 Outcomes)
Census Surveys	13.0%	13.3%	18.8%	0.0%	0.0%
Economic Census	7.4%	6.7%	12.5%	0.0%	0.0%
Service Annual Survey	1.9%	0.0%	6.3%	0.0%	0.0%
County Business Patterns	3.7%	6.7%	0.0%	0.0%	0.0%
BLS Establishment Studies	13.0%	13.3%	0.0%	0.0%	42.9%
OES	3.7%	6.7%	0.0%	0.0%	0.0%
Occupational Outlook Handbook	3.7%	6.7%	0.0%	0.0%	0.0%
CFOI	1.9%	0.0%	0.0%	0.0%	14.3%
SOII	3.7%	0.0%	0.0%	0.0%	28.6%
CPS	9.3%	16.7%	0.0%	0.0%	0.0%
O*NET OnLine	3.7%	6.7%	0.0%	0.0%	0.0%
Congressional Research Service	9.3%	10.0%	12.5%	0.0%	0.0%
D&B	9.3%	10.0%	12.5%	0.0%	0.0%
Security Magazine	5.6%	3.3%	12.5%	0.0%	0.0%
Hallcrest Reports	14.8%	16.7%	12.5%	100.0%	0.0%
ASIS Scope and Emerging Trends	11.1%	3.3%	6.3%	0.0%	57.1%
RAND	3.7%	6.7%	0.0%	0.0%	0.0%
State Licensing Boards	7.4%	0.0%	25.0%	0.0%	0.0%

Census Sources. The Census Business surveys, including the Economic Census, the 2007 Service Annual Survey, and 2007 County Business Patterns, are establishment surveys that follow the industry approach when collecting data. The Economic Census and the 2007 Service Annual Survey used the same methodology while the 2007 County Business Patterns was based on administrative data extracted from the Census business registry.

The Economic Census (U.S. Census Bureau Economic Census, 2002, 2007) and 2007 County Business Patterns surveys (U.S. Census Bureau County Business Patterns, 2007) stratified the universe of businesses by those that would receive a report form and those that would

not. Those that received the report form were defined as large employers (i.e., all multi-establishment firms and all employer firms with payroll above a specified cutoff) and a sample of small employers (i.e., single-establishment firms with payroll below a specified cutoff in industries for which specialized data preclude reliance solely on administrative records sources). Businesses in the stratum that did not receive a report form were small employers that were not selected into the small employer sample. Statistics for those in the report form stratum are based on respondent data while statistics from those businesses not sent a report form are derived or estimated from administrative records of other federal agencies. Some of the firms were sent a shorter version of a report form to obtain industry classification information only. Participation in the Economic Census is mandatory under Title 13 of the United States Code.

***BLS Business Survey Sources*.** The BLS establishment studies include the OES survey, Occupational Outlook Handbook, CFOI, and SOII. The OES survey is the largest BLS establishment survey, and the Occupational Outlook Handbook extracts data from it. The CFOI and SOII are separate business surveys conducted by BLS.

The OES program conducts a semiannual mail survey designed to produce estimates of employment and wages for specific occupations (BLS, 2010c). To produce employment and wage estimates for about 800 occupations, the OES program collects data on wage and salary workers in nonfarm establishments. Data from self-employed persons are not collected and are not included in the estimates. The OES program produces these occupational estimates by geographic area and by industry. BLS produces occupational employment and wage estimates for over 450 industry classifications at the national level. The industry classifications correspond to the sector and 3-, 4-, and 5-digit NAICS industrial groups. The OES program surveys approximately 200,000 establishments per panel (every 6 months), taking 3 years to fully complete data collection with the sample of 1.2 million establishments. The response rate for the 2008 OES survey was 74.25%.

Data on safety come from the BLS injuries, illnesses, and fatalities website (http://www.bls.gov/iif), which posts findings from the bureau's Census of Fatal Occupational Injuries (CFOI) and the Survey of Occupational Injuries and Illnesses (SOII). The CFOI compiles a count of all fatal work injuries occurring in the United States during the calendar year (CFOI, 2003–2008). The program uses diverse state, federal, and independent data sources to identify, verify, and describe fatal work injuries. This ensures that counts are as complete and accurate as possible. For example, in the 2008 CFOI data collection, over 20,000 unique source documents were reviewed. The SOII is a national annual survey of companies that reports nonfatal injuries and illnesses by occupation (BLS, 2009a). Independent samples of establishments are selected within states based on the research interests of each state. Participating states gather the data, and both state and national estimates are created from the data. For states that do not participate, BLS administers the survey. Establishments are required by law to maintain records of specific

types of workplace injuries, and these data are used to classify injuries and illnesses for selected establishments.

***BLS Household Surveys*.** The Current Population Survey (CPS) is conducted by BLS, but unlike their other studies it is a sample of households rather than businesses (BLS, 2010b). The CPS collects information on the labor force status of the civilian noninstitutional population 15 years of age and older, although labor force estimates are reported only for those 16 and older. Persons under 16 years of age are excluded from the official estimates because child labor laws, compulsory school attendance, and general social custom in the United States severely limit the types and amount of work that these children can do. Persons on active duty in the U.S. Armed Forces are excluded from coverage. The institutional population, which also is excluded from coverage, consists of residents of penal and mental institutions and homes for the aged and infirm. The CPS is collected each month from a probability sample of approximately 60,000 households. Respondents are assured that all information obtained is completely confidential and is used only for the purpose of statistical analysis. Although the survey is conducted on a strictly voluntary basis, about 4% of eligible households refuse to cooperate each month. Another 3% to 4% are not interviewed because of difficulties in making contact.

***Other Government Surveys*.** In addition to the Census Bureau and BLS, several other government sources provide data on private security. These include O*NET OnLine, funded by the Department of Labor, and the Congressional Research Service. O*NET OnLine is a two-stage survey of businesses and workers within selected businesses. Data are collected on over 900 occupations (O*NET OnLine, 2008). Information on the knowledge required, work context, skills required, work activities, and tasks for each occupation are collected through standardized questionnaires (i.e., the same questionnaire is used for all occupations). The O*NET survey also collects demographic characteristics for each of its respondents. The response rate among workers is 65%. While this response rate is lower than the 80% threshold used by the OMB as an indicator of potential bias due to nonresponse, O*NET OnLine has conducted nonresponse bias analyses and found that potential bias due to nonresponse is small. The Congressional Research Service published two reports that included data on private security (Parfomak, 2004a; Parfomak, 2004b). These data were based on a review of administrative records and data published in other government reports.

3.1.1.2 Commercial Studies

Two commercial sources were used in the secondary data analysis: the D&B frame of businesses in the United States and *Security Magazine*'s 2009 survey of the top 500 security firms. D&B creates its frame through a combination of credit reports and yellow and white page telephone books (Dun & Bradstreet, 2003–2010). It contains over 15 million businesses in its database. Its collection of credit reports contains the industry each

business is classified under and the revenue earned during the past year. D&B can provide information only at the industry level and, therefore, was used only for statistics on contract security firms, which can be defined by a set of industries (see Tables 4 and 5).

Security Magazine's survey (McCourt, 2009) provides data on the level of private security used based on several different criteria (e.g., employment and expenditures) by industry segment. Data were collected directly from organizations and were estimated using public records for organizations that did not respond. Responding organizations self-selected their classification across 16 industry sectors:

- Education (Colleges and Universities, K–12);
- Casinos, Hospitality, Arenas and Entertainment;
- Finance/Insurance/Banking;
- Government (Federal, State, and Local);
- Construction, Real Estate, and Property Management;
- Energy, Utilities, Power, Gas, Nuclear, and Water;
- Business Services;
- Industrial and Manufacturing;
- Retail, Restaurants, and Food Service;
- Agriculture/Farming/Food;
- Information Technology, Communications, and Media;
- Transportation, Logistics, Warehousing, and Supply Chain;
- Diversified Companies;
- Ports and Terminals: Sea/Land/Air; and
- Healthcare/Medical Centers/Hospitals.

Any organization within these 16 sectors could participate in the study, and *Security Magazine*'s outreach program reaches 10,000 organizations to encourage participation. Of the top 500 companies, 365 submitted data (a 73% response rate). Over 700 organizations in total provided data. However, the survey design involves a convenience sample, rather than a random sample of businesses; thus, the outreach is not random, which can have a biasing effect on estimates if the types of organizations that do not participate are different from those that do participate. Also, with this approach, the precision of the estimates cannot be evaluated (i.e., standard errors cannot be produced).

3.1.1.3 Research Organization Studies

Three research organizations provide data on private security: Hallcrest Systems, Inc., ASIS, and RAND. Hallcrest I (Cunningham et al., 1985) data on use of force, detention

powers, and firearm authority were based on a case study in Baltimore, MD, and Multnomah County, OR. Among companies that agreed to participate, a sample of security officers was selected which included both proprietary and contract security officers. However, because the companies that agreed to participate were not random, the sample was skewed such that a disproportionate number of the proprietary officers had *special forces* training that the contract security officers did not. Moreover, the survey used in the case study achieved only a 27% response rate. As indicated in the report, these data are not representative of the private security population. Thus, the statistics based on this survey can be used to make inference only on this specific sample population and cannot be generalized. Furthermore, the Hallcrest studies are slightly dated and it is uncertain how much the security industry landscape has changed since their publication.

The ASIS Scope and Emerging Trends Report (ASIS Foundation, 2005) is based on a sample of 4,000 businesses across nine industry sectors. Ward's Business Directory was used as the frame from which businesses were selected. The companies varied in size, but the allocation of sample across the nine industry segments and company size was not provided in the report. The survey mode was paper (via mail) or web, with an abbreviated nonresponse follow-up interview of key questions conducted by telephone. The study reports a response rate of 21.6%; while the low response rate increases the potential for biased estimates, the bias may be minimal if the response distribution mirrors the population. Because of a lack of external information regarding the sampled establishments, survey weights were not created. Instead, to minimize the potential for biased estimates, the authors analyzed the data separately within each industry sector. Thus, the authors avoided having a sector with a high response propensity from dominating the overall estimate. Furthermore, because of lack of frame information about each of the sampled businesses, the authors indicated that a nonresponse bias analysis was not conducted. Therefore, we cannot conclude whether the participating businesses are different from those that did not respond to the survey.

RAND published a report that included data on private security (Kakalik & Wildhorn, 1971a, 1971b, 1971c, 1971d). These data were based on a review of books, articles, reports, laws, court rulings, financial and insurance industry data, census and labor statistics, public law-enforcement officials, private security industry executives, "company privileged information" files, private security employees, and officials and files of agencies that regulate the private security industry.

4. TRENDS AND EMPLOYEE CHARACTERISTICS IN PRIVATE SECURITY

The private security industry has increased its role in protecting critical infrastructure and providing other security-related services. Two of the estimates for the size of private policing in the United States come from studies that were funded by the National Institute of Justice (NIJ). Hallcrest I (Cunningham et al., 1985) was one of the first comprehensive reports to document the changes in private security personnel and expenditures compared with public policing. Hallcrest II (Cunningham et al., 1990) concluded that private security was the nation's primary security resource in terms of the number of personnel employed and total expenditures. The report attributed the growth in private security relative to public law enforcement to factors that included increasing workplace crime, a rising fear of crime, the declining rate of expenditures for protecting the public, and an increasing awareness about the effectiveness of private security measures.

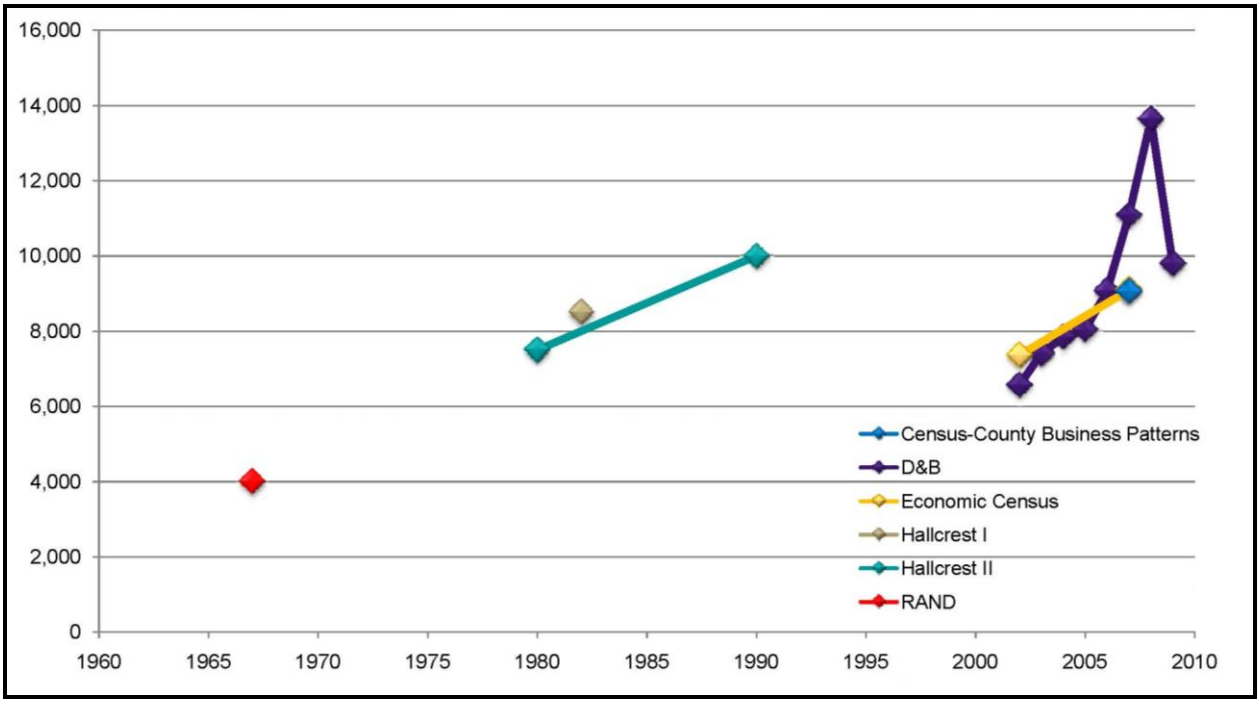
4.1 Private Security Contract Firms

The number of contract security firms can be estimated from several sources and used over time to observe trends and compare estimates from different sources. Figure 2 shows the number of contract firms over time starting in 1967. These data come from six sources and show an overall increase in the number of contract security firms from 4,000 in 1967 to just under 10,000 in 2009.[1] However, there are gaps in the data between 1969 and 1980 and 1990 and 2002. Moreover, when multiple sources are available for a given year, the data do not always agree.

Beginning in 2002, D&B and the Economic Census have multiple data points. These two sources track closely with one another, except from 2006 to 2008, when D&B shows a spike in the number of contract firms. However, the D&B count is similar to the Economic Census estimate in 2009. The spike in the D&B data may be attributable to several factors. For instance, the spike immediately precedes the U.S. economic downturn. Thus, it may be that a number of contract security companies opened during robust economic times but were forced to close as the economy faltered. The spike may also be influenced by the methods used by D&B to obtain its count. D&B relies on companies to self-assign their primary industry. It is possible, then, that during these years more companies identified themselves as primarily providing guard services, but changed that designation in 2009. An alternative reason for the increase count in D&B is that during the height of the Iraq war, which

[1] Sources: Dun & Bradstreet (2003–2010), *The Hallcrest Report I* (Cunningham, Taylor, & Hallcrest Systems, Inc., 1985), The Hallcrest Report II (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990), Kakalik and Wildhorn (1971), U.S. Census Bureau County Business Patterns (2007), U.S. Census Bureau Economic Census (2002, 2007).

Figure 2. Number of Contract Security Firms in the United States by Data Source, 1967–2009

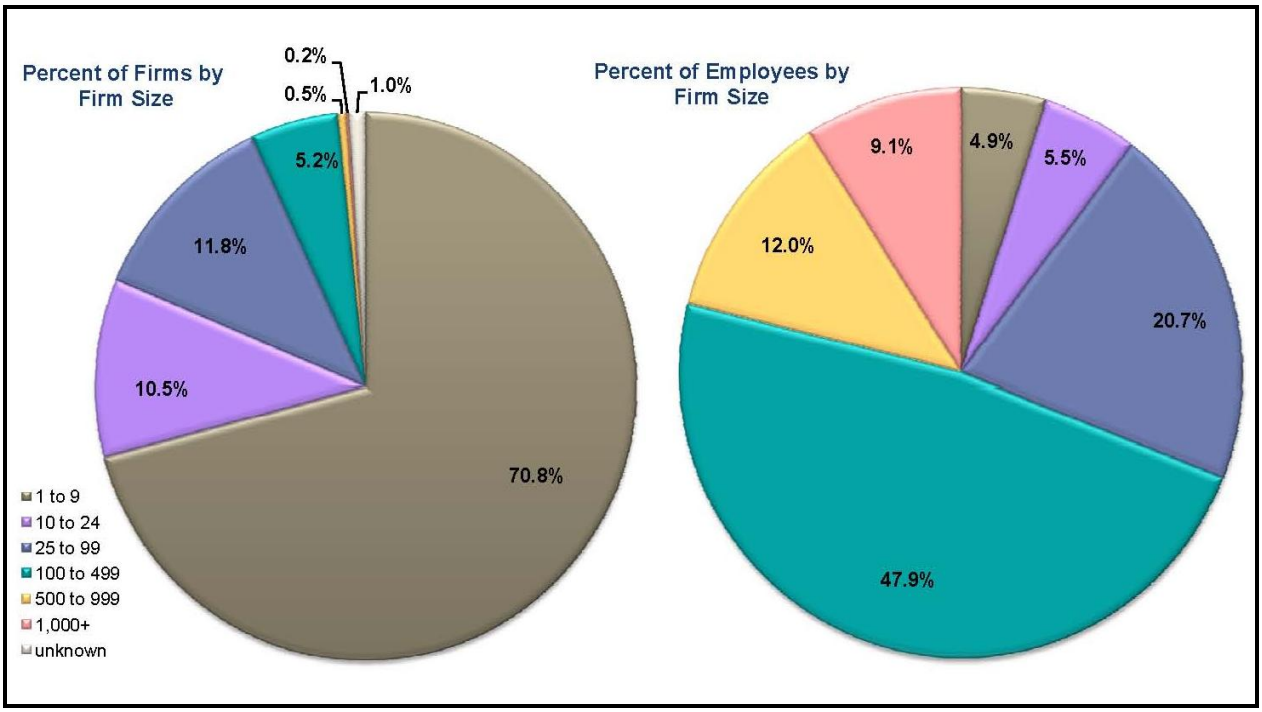


Sources: Census County Business Patterns (2007); Dun & Bradstreet (2002–2009); U.S. Census Bureau, Economic Census (2002, 2007); Hallcrest Report I (Cunningham et al., 1985); Hallcrest Report II (Cunningham et al., 1990); RAND (Bird et. al., 1971).

corresponds with this time period, more private security firms were created. These firms dissolved with the beginning of the drawdown of U.S. soldiers.

When designing an establishment survey, a key decision is whether the unit of measurement is the establishment itself or the persons of interest within the establishment. Figure 3 provides two charts that illustrate how this impacts the design of future surveys. One chart shows the distribution of contract firms while the other shows the distribution of employees of contract firms (Dun & Bradstreet, 2010). As in other industries, approximately 80% of contract firms employ 1 to 9 employees while approximately 70% of the employees of contract firms are employed by firms with 100 or more employees. Therefore, to understand the contract firms themselves, it is necessary to include small establishments in the sample. However, if the goal of the study is to understand the officers themselves, then it may be possible to exclude, or minimize the focus on, smaller establishments, as most contract employees work in a relatively small percentage (20%) of contract firms.

Figure 3. Distribution of Establishments and Employees by Size of Firm (Number of Employees)



Source: Dun & Bradstreet (2009).

4.2 Private Security Employment

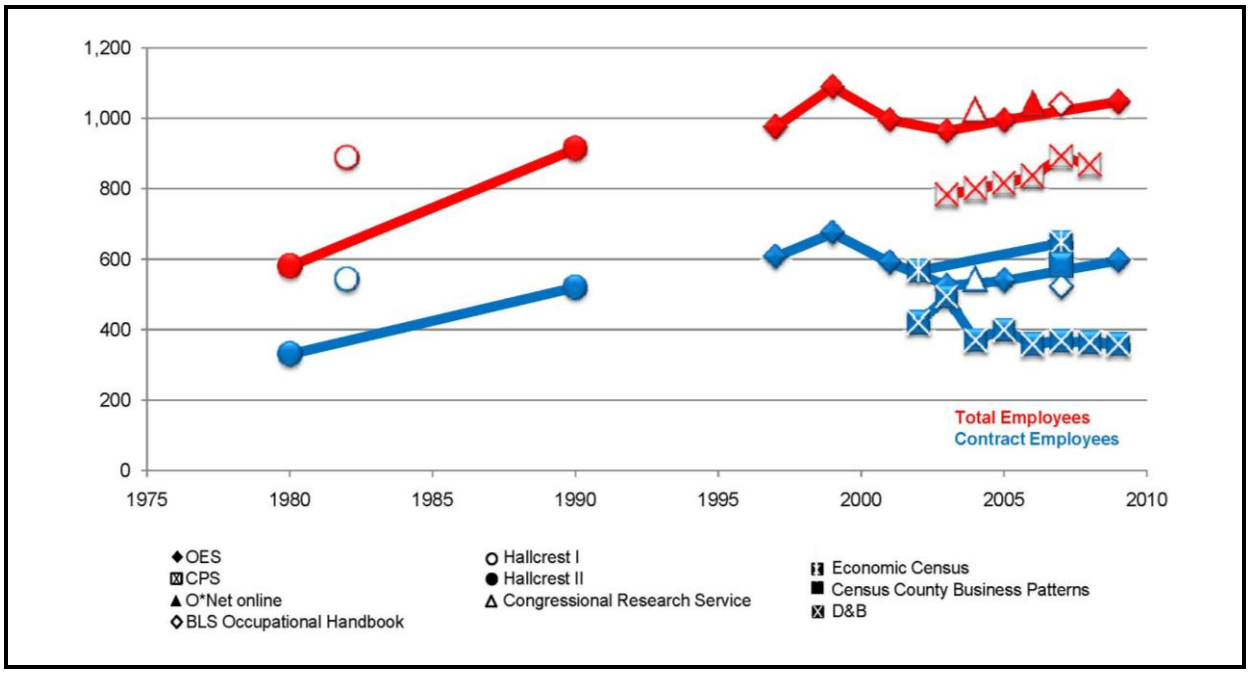
Figure 4 presents the total number of private security officers in the United States across all industries over time and the number of officers employed by contract firms. Ten sources have tracked either the total number of private security officers in the United States or the number of security officers employed by contract firms.[2] From 1980 to 2010 for both total employment and employment within contract firms, there was an increase of about 80% in the number of employees. However, most of this growth occurred during the 1980s and 1990s, with limited to no growth over the past 10 years. Moreover, since 1997 about 60%

[2] Sources:

Total Employment: Bureau of Labor Statistics Occupational Outlook Handbook (2007–2008), Current Population Survey (BLS, 2010b), The Hallcrest Report I (Cunningham, Taylor, & Hallcrest Systems, Inc., 1985), The Hallcrest Report II (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990), Occupational Employment Statistics (BLS, 2010c), O*NET OnLine (2008), Parfomak (2004).

Contract Employment: Bureau of Labor Statistics Occupational Outlook Handbook (2007–2008), Dun & Bradstreet (2003–2010), The Hallcrest Report I (Cunningham, Taylor, & Hallcrest Systems, Inc., 1985), The Hallcrest Report II (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990), Occupational Employment Statistics (BLS, 2010c), Parfomak (2004b), U.S. Census Bureau County Business Patterns (2007), U.S. Census Bureau Economic Census (2002, 2007).

Figure 4. Total Number of Private Security Officers and Contract Security Officers in the United States by Data Source, 1980–2009



Sources: Bureau of Labor Statistics Occupational Outlook Handbook (BLS, 2009c); Census County Business Patterns (2007); Congressional Research Service (2004); Current Population Survey (BLS, 2010b); Dun & Bradstreet (2009); U.S. Census Bureau, Economic Census (2002, 2007); The Hallcrest Report I (Cunningham et al., 1985); The Hallcrest Report II (Cunningham et al., 1990); BLS (2010c); O*NET OnLine (2006); RAND (Bird et. al., 1971).

of private security officers have been employed by a contract security firm. This implies that the remaining 40% are proprietary security officers.

Although these trends in private security employment have been consistent, the estimates for each type of employment (i.e., total in the United States and contract) have varied by about 200,000 employees in a given year. This variation is likely due to three primary factors. First, as with any survey data, there is sampling error, or variation, in the data resulting from the sampling of the target population (i.e., not everyone in the population of interest was directly contacted). Therefore, it may be that if the confidence intervals around these estimates were known, the differences would not be seen as statistically nonsignificant. Unfortunately, the standard errors necessary to calculate the confidence intervals for these estimates are not always provided.

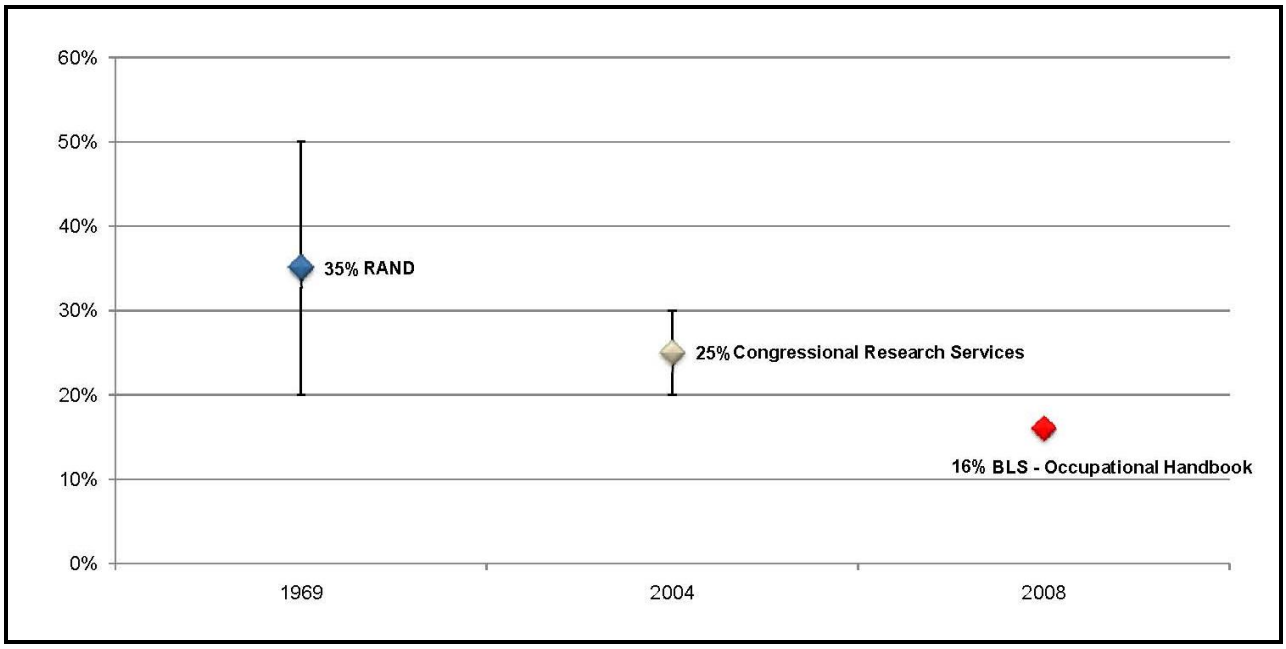
Another possible explanation for variations between estimates relates to differences in how the data are collected by each secondary source. For example, the Occupational Employment Statistics (OES) survey samples business establishments while the Current Population Survey (CPS) samples households. The choice of frame and sampling unit can greatly impact the estimates derived from a survey. A third possible reason for these differences is definitional. As noted in Section 1.2, each secondary data source uses slightly

different definitions of the private security industry and the contract security industry. These definitional differences can significantly alter nationwide estimates.

Three secondary sources provide data on the percentage of private security officers that work part-time. As seen in Figure 5, each source provides data at a different time point. Comparison across estimates suggests that the overall percentage of security officers who work part-time may be decreasing (Kakalik & Wildhorn, 1971a, 1971b, 1971c, 1971d; Parfomak, 2004a; BLS, 2009b). However, these estimates come from sources that provide a wide range in which the true estimate may lie. The data from RAND estimated that between 20% and 50% of private security officers in 1969 worked part-time (Kakalik & Wildhorn, 1971a, 1971b, 1971c, 1971d). Similarly, the Congressional Research Service provided an estimate of anywhere between 20% and 30% in 2004 (Parfomak, 2004a). The BLS Occupational Outlook Handbook (2009b) did not provide a confidence interval for its estimate. Thus, if the lower bound of the confidence interval for each time point is the correct estimate, then the trend is flat; however, if the upper bound is more accurate, then the decrease in those working part time is even more dramatic than the figure suggests. According to the CPS (BLS, 2010b), 16.2% of workers were part time in 2004 and 16.1% were part time in 2008. Therefore, while the percentage of security officers who worked part time was historically higher than the national average it has decreased to the same level as the national average in recent years.

When comparing the estimates over time, it is important to understand how each source defines part-time work. For example, one source may include only those persons who work solely as private security officers, but do not work enough hours per week to be considered full-time, whereas, another source may include persons who "moonlight" as private security officers, such as off-duty police officers. Our review of the source methodologies found that the Congressional Research Service clearly indicates that its definition of part-time worker includes off-duty police officers. The other two sources hint at this, but do not directly state it. For example, the BLS Occupational Handbook indicates that part-time workers are "supplementing their primary occupation," but it does not state whether that occupation includes off-duty police officers. Moreover, RAND simply states that part-time workers "usually work on weekends" and that "younger part-timers are sometimes students, teachers, and military personnel."

Figure 5. Percentage of Private Security Officers Who Work Part Time, 1969–2008



Sources: Bureau of Labor Statistics Occupational Outlook Handbook (BLS, 2009b), Congressional Research Service (2004), RAND (Bird et. al., 1971).

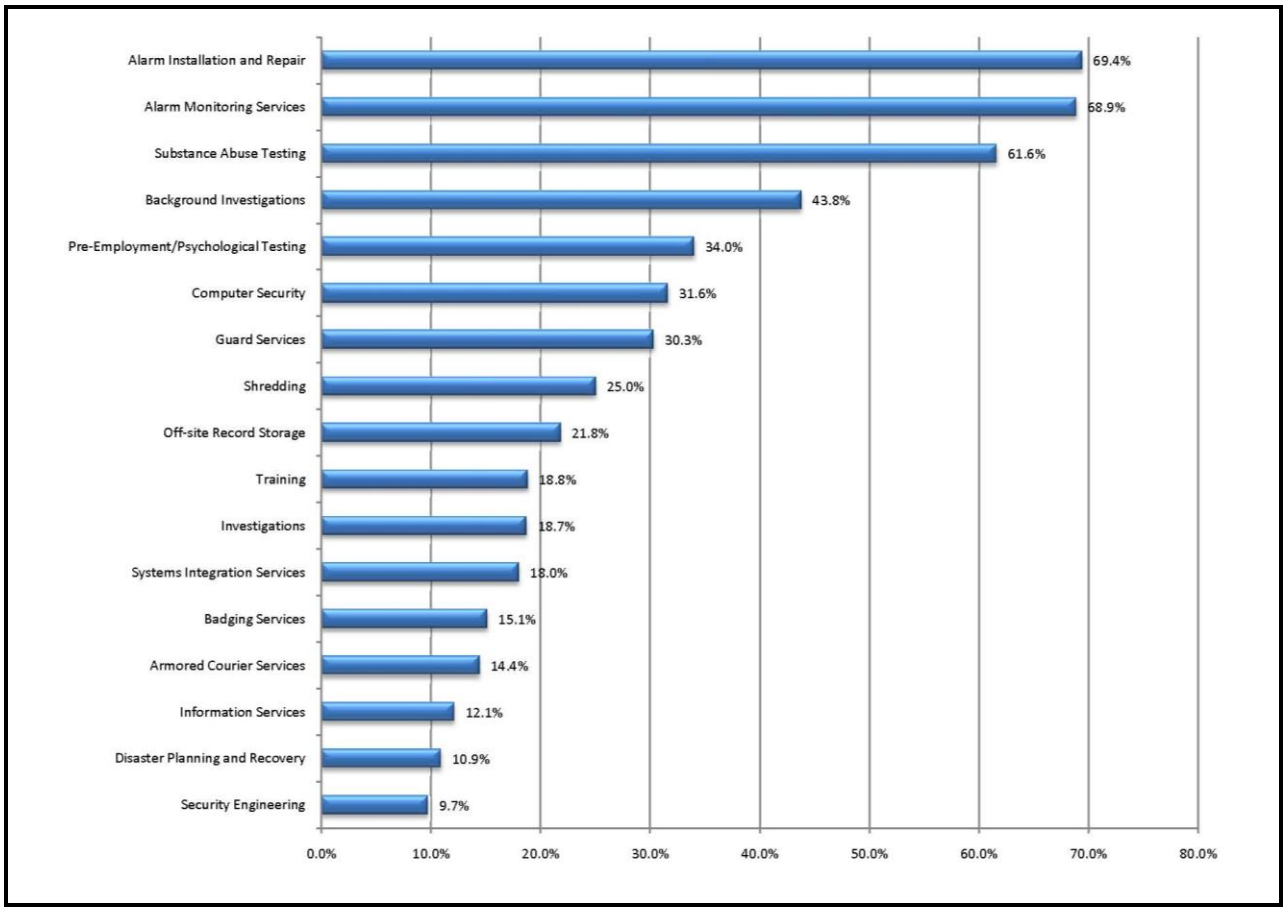
Note: Error bars are due to standard errors.

4.3 Services Performed by Private Security Organizations

Private security organizations provide a variety of services, including guard services, alarm monitoring, investigation, armored transport, correctional facilities management, systems integration and management, security consulting, pre-employment screening, information security, and others.

In 2005, 34.5% of private security functions were outsourced to a contract firm (Figure 1). The percentage of companies indicating that they outsource a particular security function is provided in Figure 6. Alarm installation, maintenance, and repair (69.4%) and alarm monitoring services (68.9%) were most often outsourced, followed by substance abuse testing (61.6%) and background investigations (43.8%). Guarding services were outsourced to a contract firm by 30.3% of the responding companies (The ASIS Foundation, 2005).

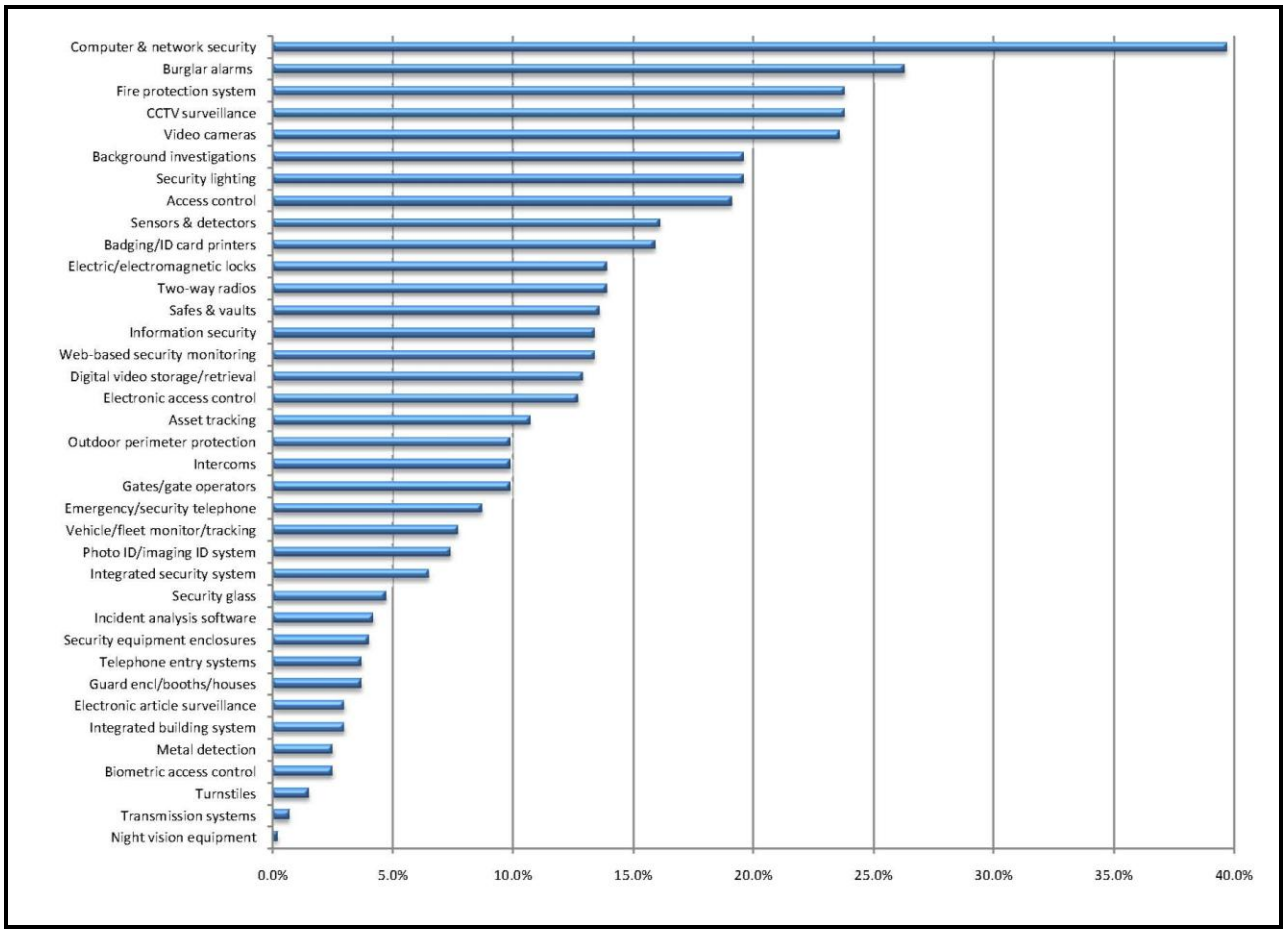
Figure 6. Percentage of Companies Outsourcing Security Services by type of Service, 2005



Source: The ASIS Foundation, 2005.

In 2005, the ASIS survey also collected data on security-related technologies that companies had purchased or planned to purchase in the near future (The ASIS Foundation, 2005). As shown in Figure 7, computer and network security system technology had been purchased or was in the purchase plan for the greatest percentage of companies (39.7%), followed by monitoring and alarm technology such as burglar alarms (26.3%), closed circuit television (23.8%), fire protection systems (23.8%), and video cameras (23.6%).

Figure 7. Percentage of Companies That Have Purchased or Plan to Purchase Security-Related Technology, 2005



Source: The ASIS Foundation, 2005.

4.3.1 Guard Services

A survey of managers of security services companies reported that guarding (35% unarmed guards and 11% armed guards) represents nearly half of the services provided by security firms (La Vigne, Hetrick, & Palmer, 2008). According to the National Association of Security Companies (Security Solutions, 2006), between 11,000 and 15,000 private security companies employ more than 1 million guards in the United States.

Although some guards may be armed, in 1985 Cunningham and colleagues noted that the number of armed guards was following a downward trend (p. 55). Guards are used in a variety of sectors to protect people and property (e.g., critical infrastructure, commercial, institutional, and residential) and have increasingly been used to support law enforcement and emergency personnel as well as to protect military bases throughout the world (Security Solutions, 2006). In fact, employing guards to protect executives is becoming more popular among companies in the United States, as top executives are viewed as

valuable assets (Lerer, 2007). Some companies, such as Oracle and Ford Motor, spend more than $1 million annually to provide security services for top executives. Executive protection typically involves screening visitors at gatehouses, guarding the perimeter of executives' personal homes, providing 24-hour protection, and accompanying them on out-of-town trips (Lerer, 2007).

4.3.2 Alarm Monitoring

Alarm services, commonly used in retail, residential, and manufacturing markets, involve the use of sensors to detect intrusion and transmit a signal at the premises or a remote location (Cunningham et al., 1985). Central stations, which operate 24 hours a day, can monitor a variety of alarms and then alert the appropriate parties, including the police, fire, and emergency medical services (p. 60). In 2006, alarm installations were fairly evenly split among residential customers (33%), commercial customers (37%), and large industrial customers (30%) (the 2006 installation business report from *Security Sales & Integration, 26*[13], as cited by Electronic Security Association, n.d.).

4.3.3 Investigation

In 2008, around 45,500 private detectives and investigators were employed in the United States by private detective agencies, state and local government, department stores, financial institutions, insurance agencies, and employment security services (Editors of McGraw-Hill and the U.S. Department of Labor, Bureau of Labor Statistics, 2008). Private investigators are hired to collect information through observation and interviews to solve noncriminal cases, including missing persons, medical malpractice, domestic or marital issues, product liability, and more (Cunningham et al., 1985; Dempsey, 2008). Additionally, private corporations or organizations may hire private investigators for criminal cases such as credit card fraud, internal theft, insurance fraud, and in some cases corporate intelligence and industrial espionage (Dempsey, 2008; Gill & Hart, 1999).

4.3.4 Armored Transport

According to the Gale Group (2010), approximately 150 armored transport companies exist in the United States. Armored transport firms traditionally provide "armored vehicles and armed personnel (often interstate) to protect and deliver currency, coins, securities, bonds, gold, silver, and other precious metals, credit cards, jewelry and other items of high intrinsic value" (Cunningham et al., 1985). These activities may include counting, sorting, and packaging the currency from automatic teller machines or emptying parking meters (p. 66). The security provided by these firms comes with great risks because of the dangers involved in transporting these materials. According to Dempsey (2008) 70 armed robberies occur each year in the armored transport industry resulting in an average of 5 deaths of armored transport personnel.

4.3.5 Correctional Facilities Management

Although controversial, privately run prisons and jails have been expanding since the 1980s. Private corrections companies typically take on one of two types of agreements: (1) they are contracted to manage a government prison, or (2) they provide inmate housing (in-state and out-of-state) in private-run correctional facilities (Gilroy, Summers, Randazzo, & Harris, 2010). In an effort to save money and relieve overcrowded prison systems, governments are increasingly outsourcing their corrections services to private companies. In addition to operating correctional facilities, private corrections facilities also operate under performance-based contracts (i.e., rehabilitation programs, healthcare, educational and vocational training, state-of-the-art facilities, and more efficient operations). In 2007, an average of 8% of all prisoners (7% state and 16% federal) were incarcerated in private facilities (State University of New York at Albany, 2008, table 6.32.2007). The Corrections Corporation of America (CCA), which houses approximately 75,000 inmates in more than 60 facilities, reports that it is the largest private corrections system in the nation (Taub, 2010) and the fourth-largest prison system behind the federal government and two states (Corrections Corporation of America, 2008). CCA guards are assigned to provide security for housing units, monitor inmates, conduct perimeter checks, and report and document incidents. In addition to managing prison, jail, and detention facilities, the company also specializes in the design and construction of facilities and inmate transportation. The GEO Group, another industry leader in private corrections, manages more than 53,000 beds in 15 states, accounting for 25% of the industry's bed market share. GEO provides correctional and detention services for federal, state, and local government agencies at the minimum, medium, and maximum security levels (The GEO Group, 2010).

While private corrections systems are popular, some have argued that the actual cost savings have yet to be determined (Steinbauer, 2009). Corrections officer unions and high-profile media incidents have caused some to reassess the benefits of private correctional facilities. The incentive to cut costs and remain competitive has highlighted the potential to compromise professionalism, staffing levels, and quality of service (Zito, 2003). Accountability and oversight have also raised concerns as most contracts require government monitoring, internal audits and compliance reviews, which can become costly compared to regulation in public correctional facilities (Zito, 2003; Gilroy et. al, 2010).

4.3.6 Systems Integration and Management

The goal of systems integration is to merge existing systems (e.g., video surveillance, access control, intrusion detection) through a computerized process so that data are captured once and stored in a central location. One integrated system could address multiple functions, such as information security, physical security, fire safety, and many others (Dempsey, 2008).

4.3.7 Security Consulting

Security consultants work in diverse fields, including engineering, security management, crisis management, and computer security (Cunningham et al., 1990). The services consulting firms offer may include designing security systems and developing specifications for technological and physical security measures, conducting security training, administering polygraph and psychological stress evaluations, and providing expert advice on loss prevention and risk management (Hess, 2009).

4.3.8 Pre-Employment Screening

Organizations may feel the need to screen potential employees before making a job offer. The most common screening techniques include testing instruments, such as a polygraph or psychological stress exam, and background investigations (Cunningham et al., 1985). Background checks may be performed to protect an employer from damages arising from negligent hiring lawsuits and résumé fraud or to comply with laws requiring screening for certain positions (e.g., anyone who works with children). Employers may seek an employee's credit history, criminal record and sex offender registration, education records, personal references, and more (Privacy Rights Clearinghouse, 2009).

4.3.9 Information Technology Security

Implementing procedures to safeguard "corporate information from unauthorized access, modification, destruction, or disclosure, whether accidental or intentional," is critical (Peltier, 2005, p. 11). In fact, a study conducted by the Computer Security Institute revealed that breach of information security has cost some companies more than $2 million in losses (Gordon & Loeb, 2002). Chief security officers, or chief information security officers, are usually responsible for protecting an organization's digital assets. They ensure that the organization's security systems are properly maintained, monitor user access and network security, and protect video surveillance equipment and access control systems (CSO Security and Risk, 2008).

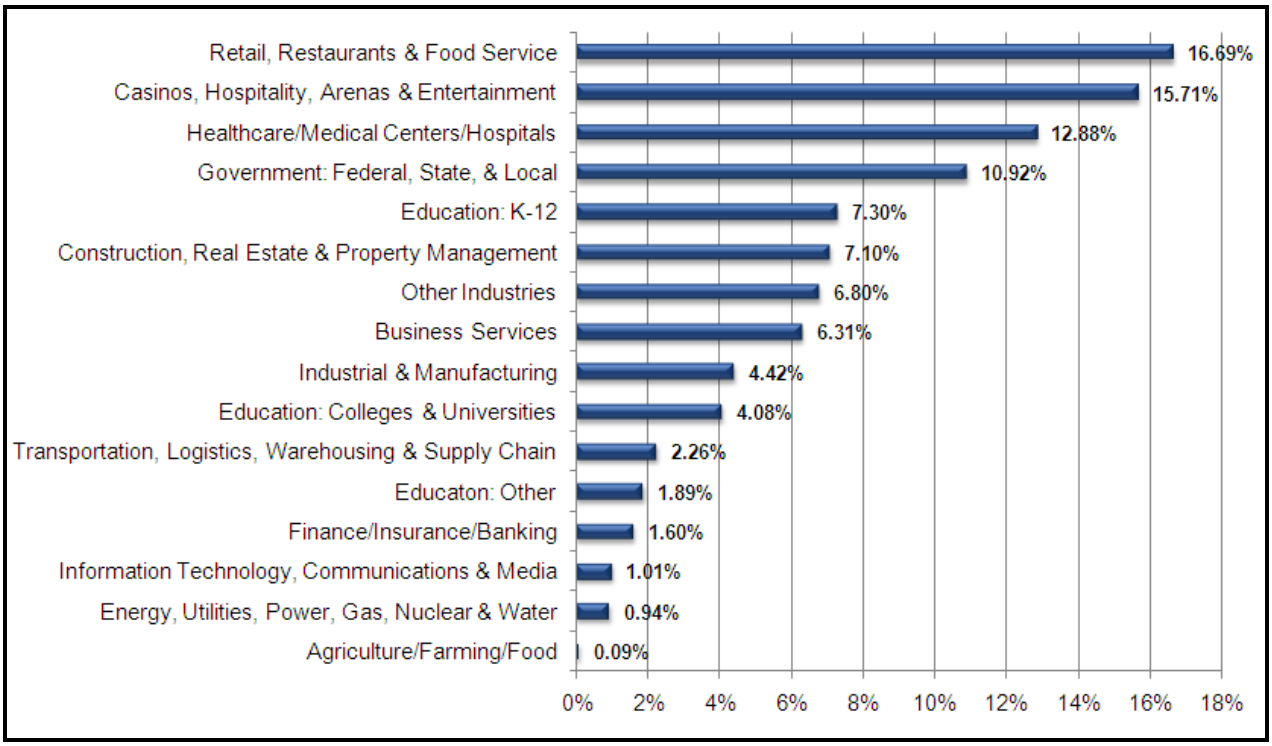
4.4 Markets for Private Security

Various markets, including critical infrastructure, commercial, institutional, and residential, employ private security for the services described above. As of 2007, "the nonresidential market accounted for three-quarters of all private security services demand" (Freedonia Group, 2008, pg. 1). The trend is expected to continue, as growth in the nonresidential market is expected through 2012 (Freedonia Group, 2008).

Figure 8 shows the distribution of proprietary security officer employment by industry (BLS, 2010c). This figure gives an indication of which industries are most likely to have their own security departments, but not necessarily the most security (i.e., the contract security officers utilized by these industries are not accounted for in the distribution). Most

proprietary security officers are employed in Retail/Restaurants/Food Services (16.7%), Casinos/Hospitality/Arenas/Entertainment (15.7%), Healthcare/Medical Centers/Hospitals (12.9%), and Government (10.9%).

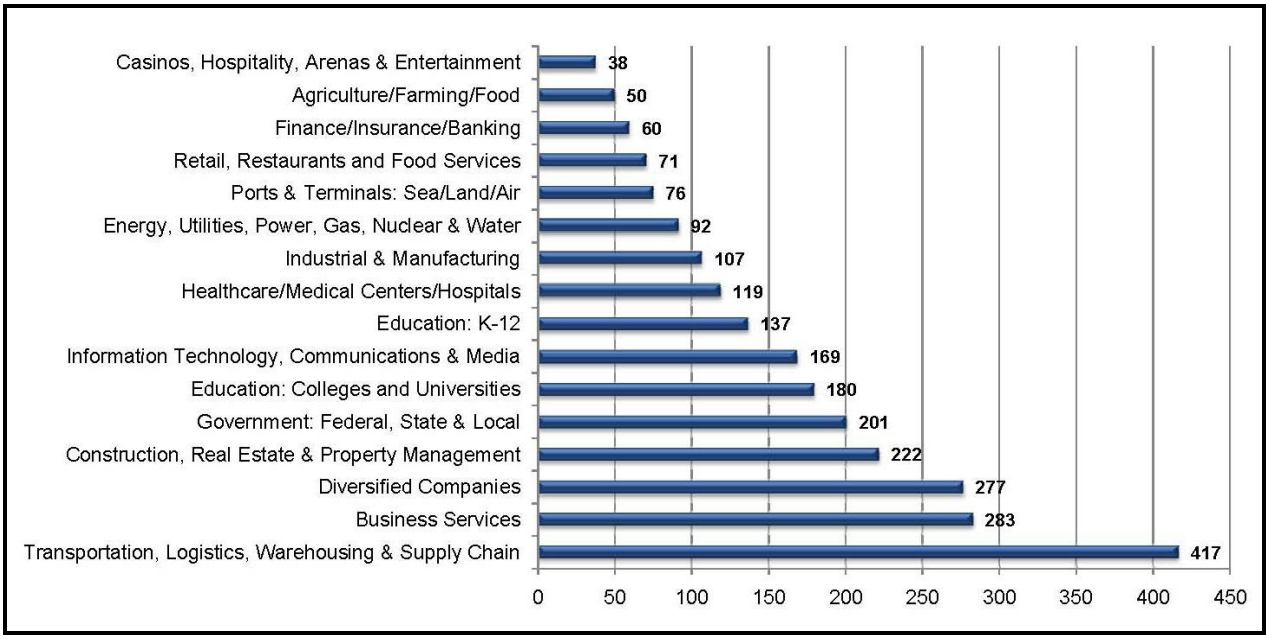
Figure 8. Number of Proprietary Security Officers per Employee by Industry Sector, 2009



Source: Occupational Employment Statistics (OES) survey (BLS, 2010c).

In addition to knowing the distribution of proprietary security officers across industries, it is also useful to determine the concentration of security officers within an industry. Figure 9 illustrates the number of security officers per total employees in an industry sector. This figure is based on all security officers used by companies in an industry (i.e., contract and proprietary security officers). According to *Security Magazine*, in 2009, casinos and the hospitality sector had the largest concentration of security officers, with one security officer for every 38 employees. The transportation sector had the lowest concentration with one security officer for every 417 employees (McCourt, 2009). These ratios are a measure of

Figure 9. Number of Employees per Security Officer by Industry Sector, 2009



Source: *Security Magazine* (McCourt, 2009).

concentration and not the total number of security officers in a sector. This means that a sector with a low concentration may employ more security officers in terms of absolute numbers, but the fact that the industry has so many other employees results in a low concentration level.

4.4.1 Critical Infrastructure

Critical infrastructure includes industry and manufacturing, utilities, and transportation. In the United States, the vast majority of critical infrastructure is owned and operated by the private sector (Law Enforcement-Private Security Consortium, 2009) and requires private security for protection (Hess, 2009). According to the Congressional Research Service (Parfomak, 2004a), approximately 50,000 security guards protect critical infrastructure in the United States. The National Infrastructure Protection Plan (NIPP), established in 2009, built a partnership of government agencies and private sector entities to enhance protection of critical infrastructure and key resources. Private security is necessary to protect large sectors of our critical infrastructure, including industry and manufacturing, utilities, and transportation (Hess, 2009). In manufacturing facilities and warehouses, internal theft is a significant threat. Businesses may also need to secure against crimes such as sabotage and espionage. Certain facilities, such as chemical plants and utilities facilities, are also potential sites of terrorist activities. As for transportation, a variety of security services are used to protect cargo, mass transit, airports, and airline transportation. Private security guards are commonly hired by air carriers to conduct passenger and baggage checks; however, federal law enforcement officers usually provide overall airport security (Hess, 2009). Mass transit

also makes use of private security. For example, the Amtrak Police Department is a private-sector police force with more than 300 sworn officers (International Association of Chiefs of Police, 2004). Some local transit systems also hire private guards. After shootings on city buses in Durham, North Carolina, private police were hired to work in conjunction with city police officers in terminals and on buses (Goldstein, 2007).

4.4.2 Commercial

Commercial security encompasses a range of markets, including offices and office buildings, financial institutions, retail, and other businesses (e.g., lodging and hospitality, food service, entertainment). The primary threat to office buildings is burglary and theft (Hess, 2009). Common measures taken to protect against this type of loss include access controls (e.g., identification card or fob readers, coded access, biometric access), closed circuit television (CCTV) surveillance, and security guards.

Financial institutions also suffer from losses involving theft (e.g., cash and stocks) and regularly use guards and alarm monitoring systems. Larger financial institutions may also hire investigators devoted to investigating identity theft and fraud, especially since the federal government has reduced the number of federal investigators devoted to these crimes (Goldstein, 2007). Following the FBI's reorganization after the 9/11 attacks, 2,400 agents were transferred to counterterrorism units, and replacements were not hired for identity crime and fraud investigations (Shukovsky, Johnson, & Lathrop, 2007).

Retailers face a number of security issues, including shoplifting, vandalism, and employee theft (Hess, 2009). To deter shoplifting, approximately 37% of retailers use uniformed security guards (Dempsey, 2008). Other methods include physical controls, such as alarms and surveillance equipment. Other commercial markets, such as hotels and restaurants, increasingly use CCTV monitoring systems to monitor common areas against theft and vandalism (Hess, 2009).

4.4.3 Institutional

Visitor control, internal and external theft, and fire are the major security concerns of hospitals and other healthcare facilities (Hess, 2009), which may use security guards to patrol the hallways and control access. Risks at educational institutions include the safety of students and staff, violence, vandalism, and theft. To address these concerns, access control, lighting, and security guards may be used in some facilities. For example, the Mackinac Center (1998) reported that districts in New York City hired guards after experiencing problems with school violence. Because of their open environments, colleges and universities use both proprietary and contractual security personnel to secure their facilities (Hess, 2009).

4.4.4 Residential

Private security may also be necessary in public and private housing. Indeed, the installation of residential security systems more than doubled over a 5-year period in the 1990s (Brown, 1997; Dempsey, 2008). Other measures taken by homeowners may include special locks and lighting, safes, and large dogs (Hess, 2009). Some gated communities may also hire security guards to patrol the premises and monitor entrances. Similarly, some public housing authorities use access control and CCTV surveillance services.

4.4.5 Government

Federal and local governments also seek the services of private security companies. In the 1950s, the city of Kalamazoo, Michigan, hired private police officers as deputy sheriffs; it is thought to have been the first local government agency to do so (Joh, 2005). By the 1990s, an estimated 45% of all local governments outsourced some of their services to private police, compared with a reported 27% in the 1980s (Sklansky, 2006). These practices are not uncommon as more private security guards are hired to guard government buildings, public housing communities, and public parks (Sklansky, 2006).

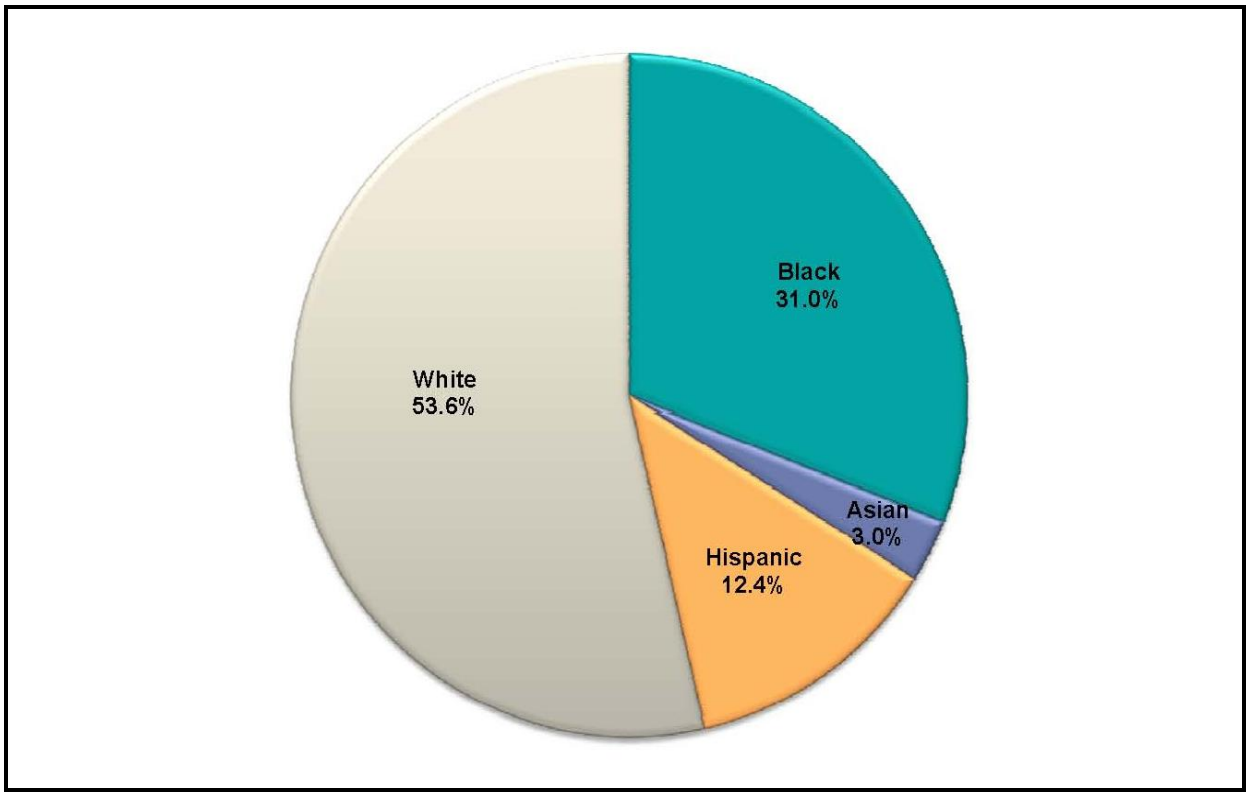
The federal government manages its own law enforcement agency, known as the Federal Protective Service (FPS), through the Department of Homeland Security. According to its Web site, the FPS employs 15,000 contract security personnel to guard more than 9,000 federal government buildings and occupants, critical infrastructure, and other assets (Federal Protective Service, 2010). Wackenhut Corporation has contracts to provide security guards for the Liberty Bell in Philadelphia and to screen visitors at the Statue of Liberty in New York City (Goldstein, 2007). Privatization of military functions has also seen an upswing. According to Dickinson (2005), an estimated 20,000 individuals have been hired as contract private military guards in Iraq. Private military guards may "provide logistical support to armed forces and also perform protection, training, consulting, and planning services…. [and] some… actually engage in combat under contract" (Goodsell, 2007).

4.5 Demographics

The main sources for demographic information on private security officers are the CPS and O*NET OnLine. These sources directly interviewed guards and, therefore, were able to obtain detailed demographic information about guards specifically.

The CPS provides data on the distribution of private security officers by race. In 2008, about 53% of private security officers were white, 31% were black, and the remaining 16% were Hispanic or Asian (Figure 10) (BLS, 2010b). The race distribution for the general workforce is 70% white, 11% black, 14% Hispanic, and 5% Asian.

Figure 10. Distribution of Security Officers by Race, 2008

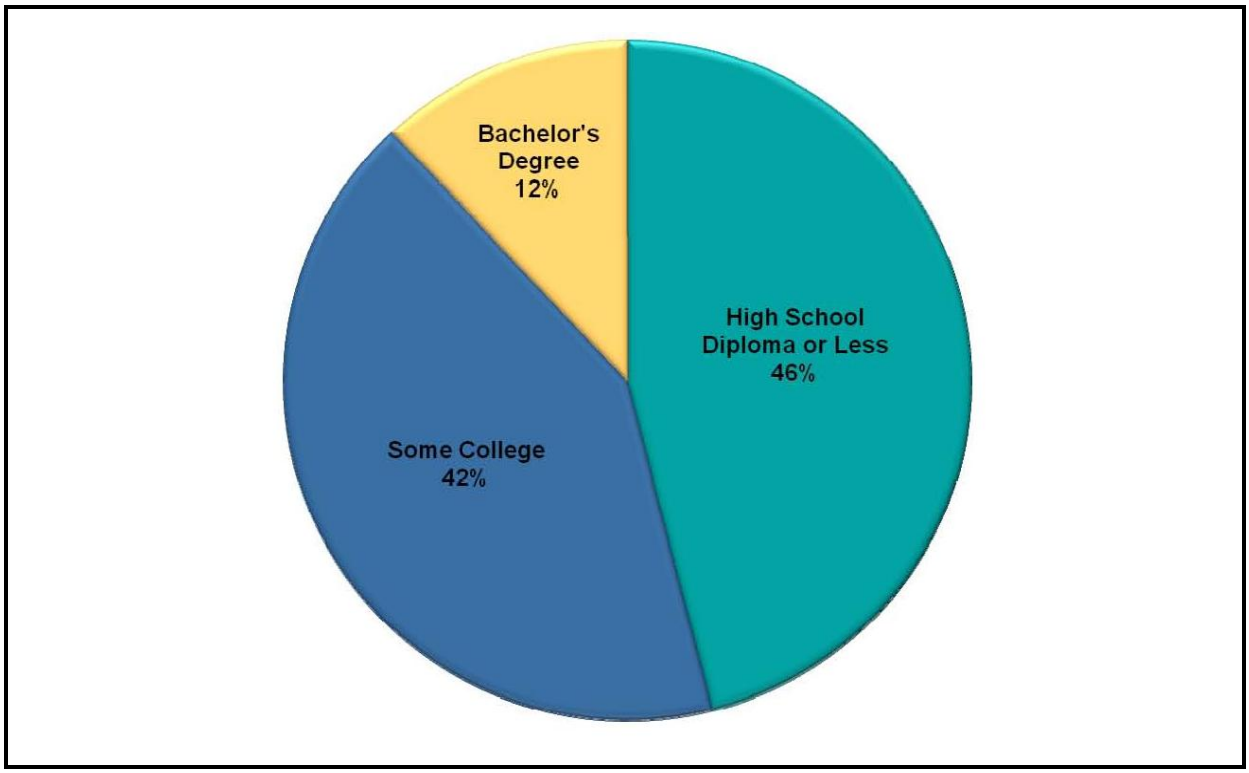


Source: Current Population Survey (BLS, 2010b)

Note: Current Population Survey data are for security guards and gaming surveillance officers.

According to O*NET data, in 2008, 46% of security officers had a high school education or less, 12% had a bachelor's degree, and 42% had completed at least some college (Figure 11) (O*NET OnLine, 2008). According to the American Community Survey (2008) 35% of the overall workforce obtained an associate's degree or higher, 20% had some college, and 45% had a high school diploma or less. Both the CPS and O*Net Online involve survey data, and therefore, their estimates have an unreported amount of sampling error around them.

Figure 11. Distribution of Security Officers by Highest Level of Education Obtained, 2008

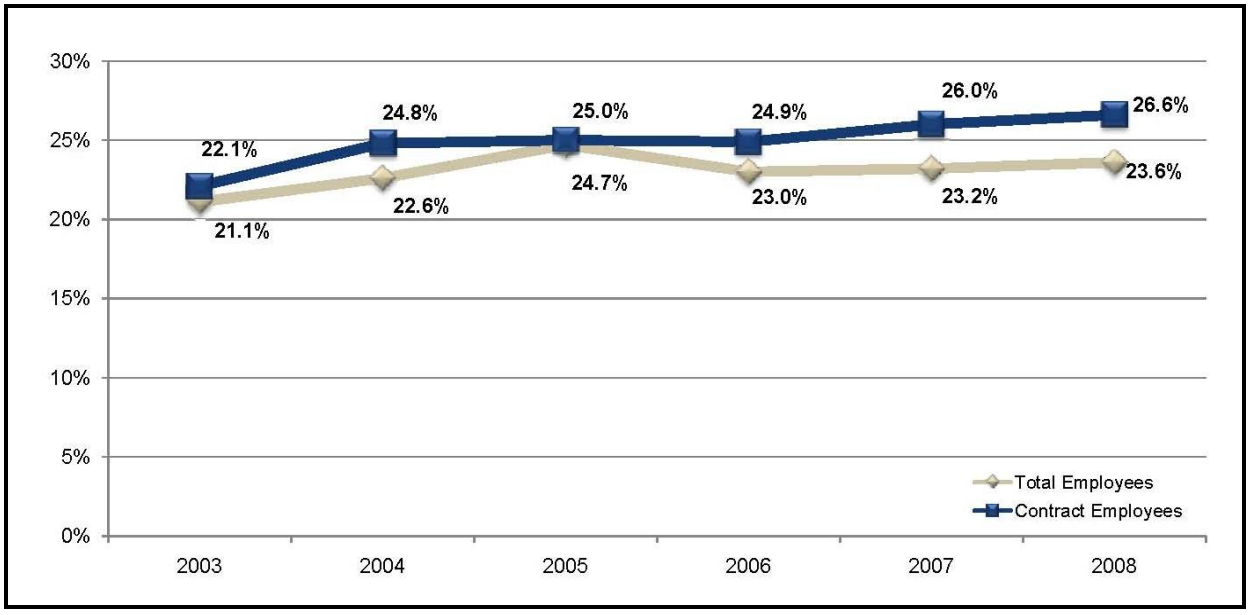


Source: O*NET OnLine (2008).

The CPS also collected data for the years 2003 to 2008 on the gender of all private security officers and of employees of contract firms (BLS, 2010b). The gender distribution for all private security officers is based on an occupation-level estimate, and estimates of the percentage of female employees in contract firms are based on an industry-level estimate. This means that contract firm estimates include all of the other occupations employed in the investigation and security services industry, such as administrative assistants and sales representatives. However, the vast majority of the employees in the industry are security guards. As shown in Figure 12, the percentage of private security officers who are female increased slightly over time from 21% in 2003 to 23% in 2008. Among those employed by contract security firms, the percentage that is female is slightly higher, ranging from 22% to

26% between 2003 and 2008, respectively. However, the percentage of women in the general workforce remained around 47% from 2003 to 2009.[3]

Figure 12. Percentage of Total Private Security Officers and Contract Security Officers Who Are Female, 2003–2008



Source: Current Population Survey (BLS, 2010b).
Note: Current Population Survey data are for security guards and gaming surveillance officers.

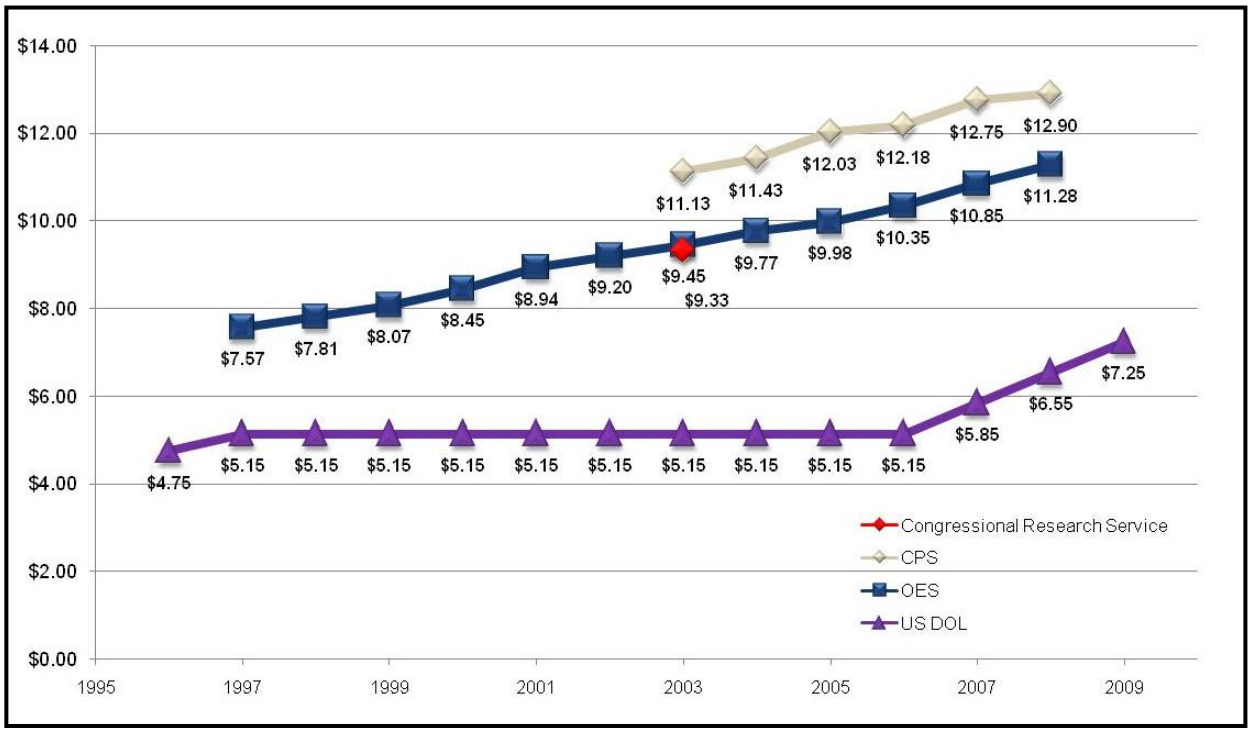
One demographic characteristic that is not available from any secondary data source is the distribution of private security officers by age. This information is of interest because it can provide some insight into the type of individuals who work as private security officers. For example, age can be used as a proxy for years of experience. If the mode age is in the early 20s, then one may infer that a large portion of private security officers only have a few years of experience. In addition, compared with an older skewing population, a younger skewing population may have different implications on the expected growth of the occupation or the type of individuals becoming private security officers. For instance if the mode age of the occupation is in the 50s or 60s, then one may infer that a large portion of the occupation will be retiring in the next few years, creating a potential shortfall in the number of private security officers that will be needed in the next 5 or 10 years.

Salary data, in the form of a median hourly wage, are available over time from several sources. Figure 13 presents the median hourly wage over time as collected by the OES survey (BLS, 2010c) and the CPS (BLS, 2010b). According to both sources, the hourly wage

[3] Because these data come from a single source, the same methodology was used to create the estimates each year. Therefore, any differences over time are either true changes or attributable to sampling error. Because the table from which these data were obtained did not provide standard errors, conclusively determining the exact reason for the change over time is not possible.

increased by about 3% to 5% per year (the Congressional Research Service provided a single point estimate in 2003 that was close to the OES estimate). However, although the percentage change is similar between these sources, the wages themselves are different,

Figure 13. Median Hourly Wage by Data Source, 1997–2008



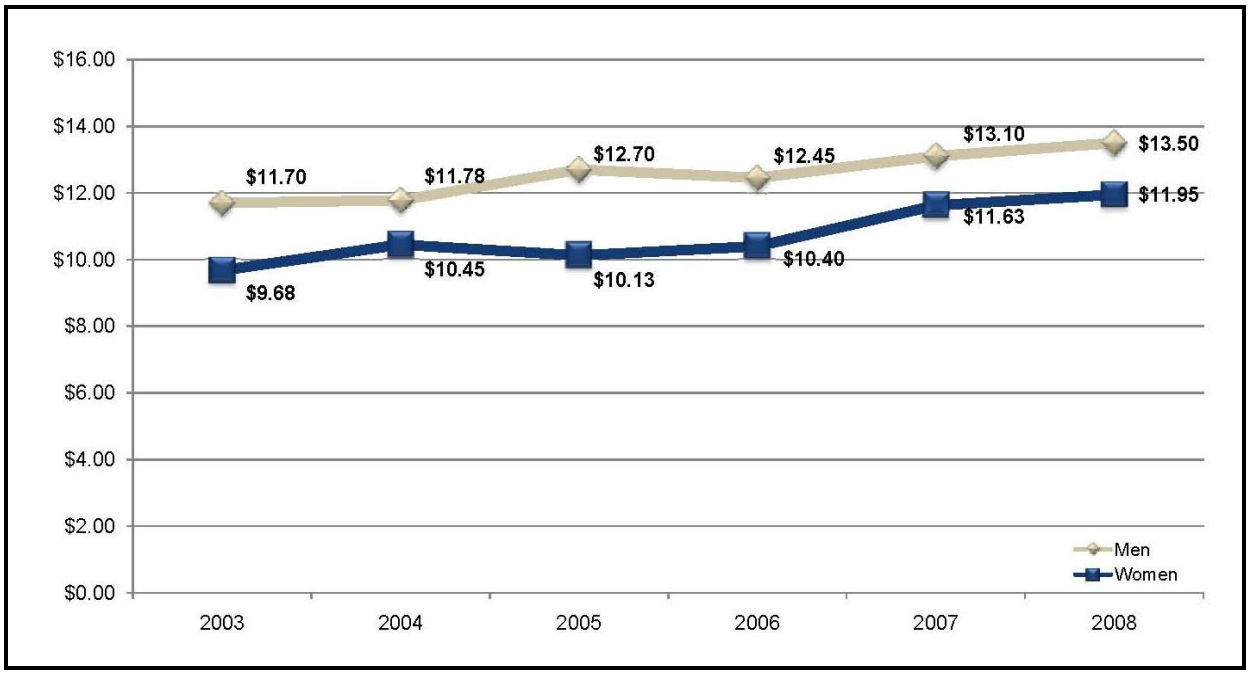
Sources: Congressional Research Service (Parfomak, 2004a), Current Population Survey (BLS, 2010b), Occupational Employment Statistics Survey (BLS, 2010c), U.S. Department of Labor (n.d., data for 1996–2009).

with the CPS wage being consistently higher. This difference is likely tied directly to how each of these sources publishes estimates. The OES survey publishes data for private security guards, but the CPS publishes data for private security guards *and* gaming surveillance officers. The inclusion of gaming surveillance officers in the CPS estimates pushes the median wage up when compared to the OES estimates. There is a steady increase in hourly wages from 1997 through 2008, despite a constant federal minimum wage from 1997 through 2006. After 2006, wages appear to increase at the same rate as the minimum wage (U.S. Department of Labor, n.d.).

As of May 2008, median salary for private security professionals is $23,460, with pay scales ranging from $16,680 to more than $39,360 a year (BLS, 2009b). The median salary for private security is significantly lower than for public police. According to the BLS (2009c), the median salary for public patrol officers is $51,410 per year as of May 2008, and the pay scale for law enforcement ranges from about $30,000 to $114,000 per year (BLS, 2009c). Private security companies submit bids to win contracts, and the industry is very competitive; thus low contract bids lead to low wages for the guards (Margasak, 2007).

In addition to the overall median hourly wage, the CPS breaks down the median hourly wage by gender for private security guards and gaming surveillance officers. Figure 14 presents the wages by gender from 2003 to 2008 (BLS, 2010b). The data indicate that the wage gap has varied between 13% and 25% during this 6-year period. The large fluctuations in this gap from year to year are partly due to sampling error, and therefore, wages probably do not really increase or decrease as dramatically in a single-year period as could be inferred from the data.

Figure 14. Median Hourly Wage by Gender, 2003–2008



Source: Current Population Survey (BLS, 2010b).
Note: Current Population Survey data are for security guards and gaming surveillance officers.

This analysis found no available data on security personnel benefits. None of the sources covered fringe benefits, such as paid time off (vacation and sick leave), health insurance, and other types of insurance such as disability and life. These types of data are difficult to accurately measure in a general population survey because of the amount of specificity necessary to provide useful information. For example, since most large companies offer

such insurance, reporting the percentage of private security officers that receive health insurance is of less utility than information on the level of benefits offered. However, respondents may not be able to provide this level of detail, increasing the potential for measurement error. Therefore, data on benefits are best collected at the company level by a human resources representative, provided the company is willing to share this information.

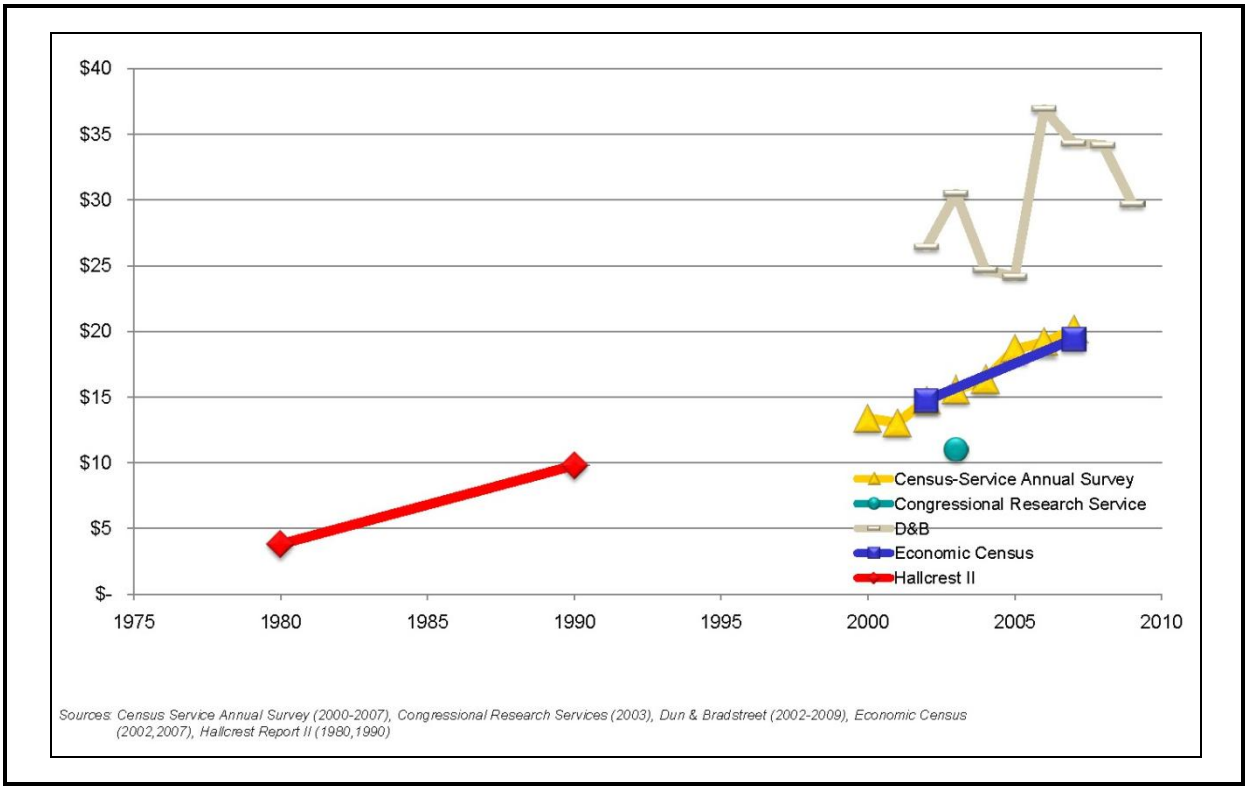
4.6 Revenue

Annual revenue for the private security industry is difficult to measure accurately because it is largely contingent on how the industry is defined. A broader definition of the industry will result in a higher estimate of the total revenue simply because the revenue of more companies will be included. Figure 15 presents the total revenue (in billions) for contract security firms over time. In general, revenue has increased anywhere from 400% to 600% since 1980.[4] This fluctuation is driven largely by how the contract security industry is defined, because that determines the set of businesses from which the revenue estimates are drawn. For instance, in 2003 three sources provided total revenue data among contract security firms with estimates that vary by up to $20 billion. At the high end, D&B estimated total revenue for the contract security industry at $30.5 billion dollars (D&B, 2003–2009). As indicated in Table 2 this estimate includes a wide range of private security industries including, but not limited to, security guarding firms, armored car firms, and detective service firms. The Congressional Research Service produced the lowest revenue estimate at $11.0 billion (Parfomak, 2004a). This estimate was based on a search of administrative records and focused solely on private security guarding firms.

As indicated in Tables 1 and 2, the Congressional Research Service has the most restrictive definition of private security contract firms, focusing solely on guarding, while the Census Service Annual Survey has a slightly broader definition, and D&B has the broadest definition. As expected, the revenue estimates correspond to these definitions, with the Congressional Research Service estimate being the smallest, followed by the Census Service Annual Survey estimate and D&B with the highest estimate. Furthermore, even within a single source, revenue data can have large fluctuations. For instance, the D&B revenue estimates fluctuate greatly between 2003 and 2009. These fluctuations in revenue correspond directly with the fluctuations in the number of contract security firms identified by D&B in Figure 2.

[4] Sources: Dun & Bradstreet (2003–2010), The Hallcrest Report II (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990), Parfomak (2004), U.S. Census Bureau Economic Census (2002, 2007), U.S. Census Bureau Service Annual Survey (2007).

Figure 15. Annual Revenue Earned Among Contract Security Firms by Data Source (in Billions), 1980–2009

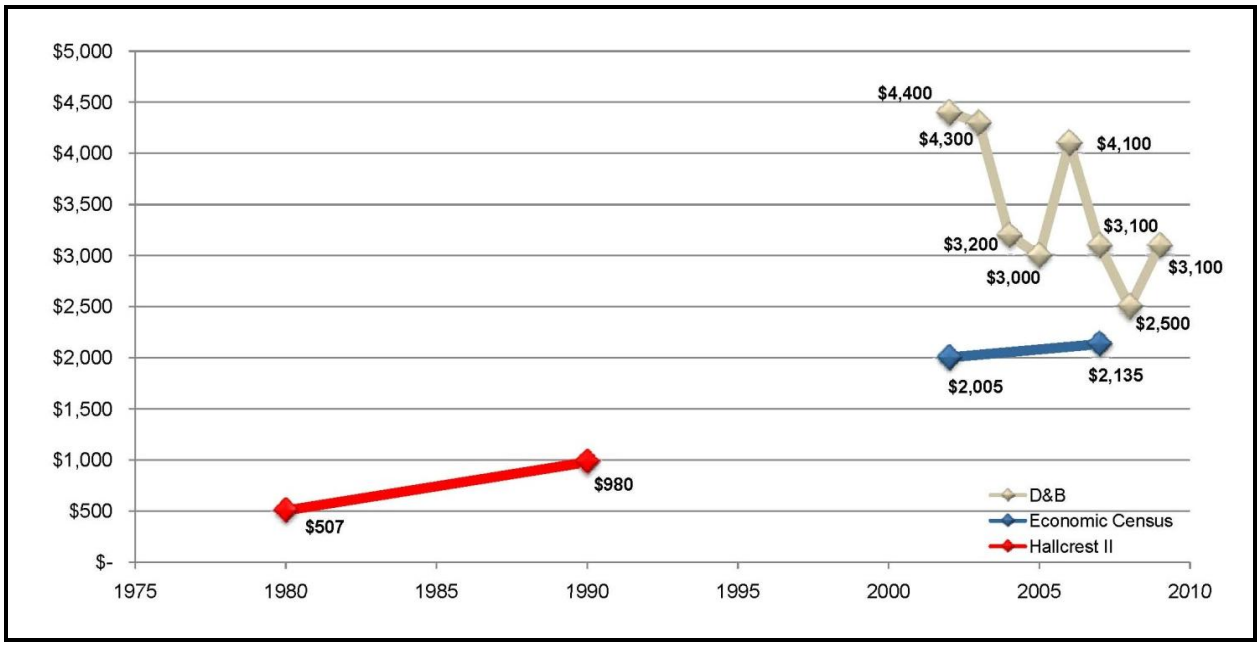


Sources: Census Service Annual Survey (2000–2007); Congressional Research Service (2003); Dun & Bradstreet (2002–2009); U.S. Census Bureau, Economic Census (2002, 2007); The Hallcrest Report II (Cunningham et al., 1990).

Figure 16 attempts to control for both the across- and within-source variations in the number of contract firms by measuring a mean annual revenue per contract security firm (in thousands). The number of sources in this figure is less than the number in Figure 15 because the number of contract firms included in the revenue total is not available for all sources. This information was available only from three sources.[5] The D&B data still fluctuate greatly from year to year, but in a different pattern compared to total annual revenue. Since controlling for the number of firms does not impact the upward trend, something else, like how revenue data are collected, must be influencing the D&B revenue data.

[5] Sources: Dun & Bradstreet (2003–2010), The Hallcrest Report II (Cunningham, Strauchs, Van Meter, & Hallcrest Systems, Inc., 1990), U.S. Census Bureau Economic Census (2002, 2007)

Figure 16. Average Annual Revenue per Contract Security Firm by Data Source (in Thousands), 1980–2009

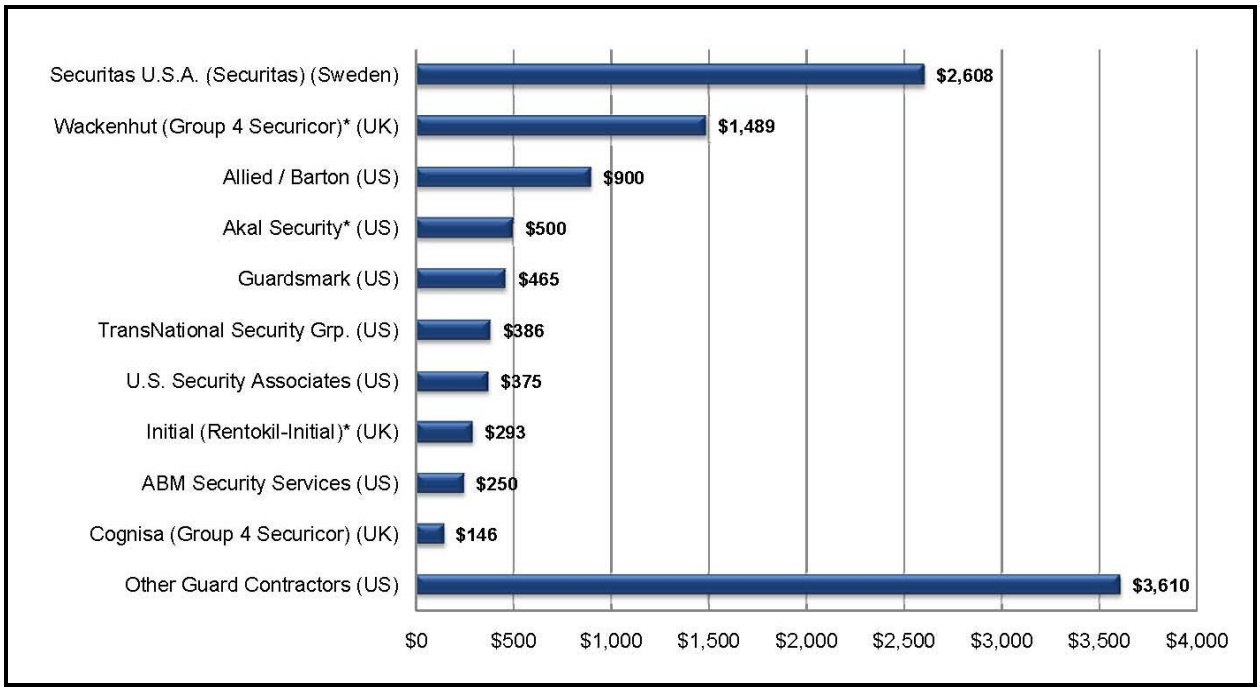


Sources: Dun & Bradstreet (2002–2009); U.S. Census Bureau, Economic Census (2002, 2007); Hallcrest Report II (Cunningham et al., 1990).

Figure 17 looks at the revenue for the largest contract security firms. The 10 largest companies (in terms of revenue) comprise 67% of the total revenue earned by contract security firms (Parfomak, 2004a). The largest, Securitas USA, comprises 23.6% of the total revenue earned by this industry. While this figure is only a snapshot in time and the exact revenue figures may change from year to year, it is likely that the proportion of total revenue earned by the largest companies remains relatively constant over time.

The growth in private security has been driven by the increasing level of outsourcing of security functions for a number of areas (Greene, 2006). These areas include private security hired to protect commercial offices, entertainment districts, and warehouses, as well as the privatization of public safety functions in corrections and policing and the growing emphasis on infrastructure protection. The increased use of closed-circuit television has further fueled an increased demand for privately security staff to monitor video and surveillance equipment.

Figure 17. Annual Revenue (in millions) by Largest Contract Security Firms, 2003



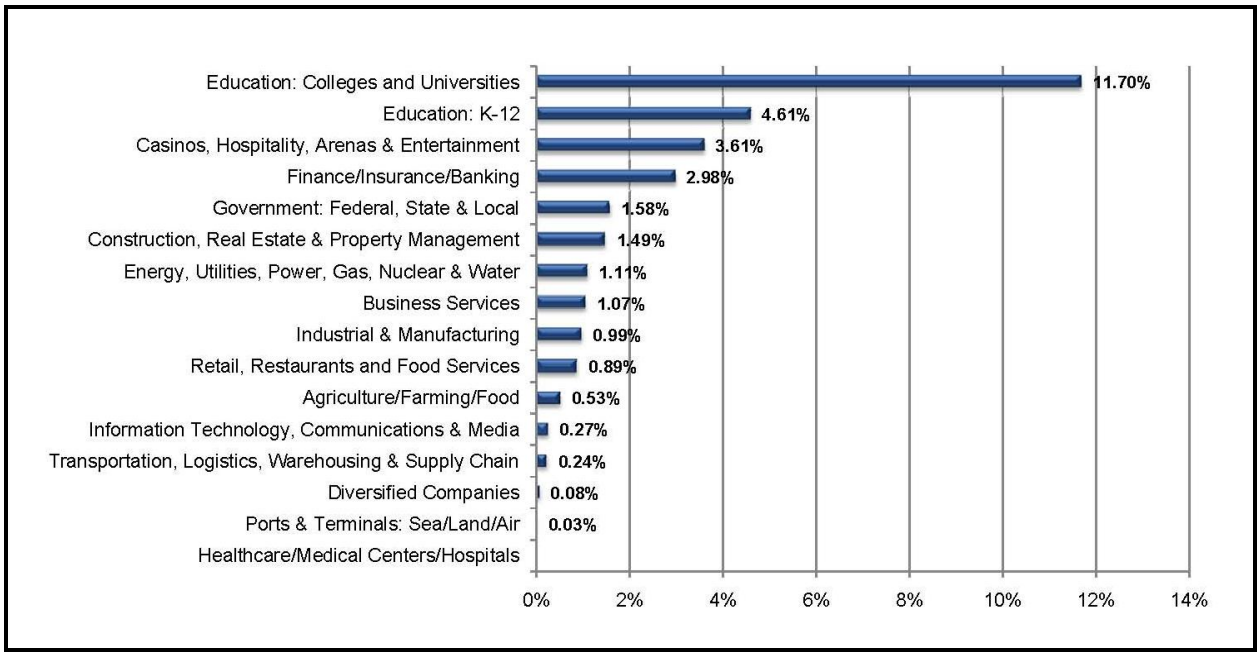
Source: Parfomak (2004a).

Note: Financial reporting period may vary by company due to differing accounting practices. Statistics include North American guard operations outside the United States.

4.7 Expenditures

Like revenue, expenditures are directly related to the size of an industry. Therefore, when comparing expenditures across industry segments, it is important to standardize the expenditure amounts. However, as shown in Figures 18 and 19, the manner in which the expenditures are standardized can alter the interpretation of the data. *Security Magazine*'s annual survey of the top 500 security firms estimates the amount of spending on security-related services by revenue and by the number of employees (McCourt, 2009). When security expenditures are standardized by total company revenue, colleges and universities spend the most on security. However, when expenditures are standardized by number of total employees, the energy industry outspends the next nearest industry by approximately 350%. Furthermore, by this measure colleges and universities spend the ninth largest amount on security.

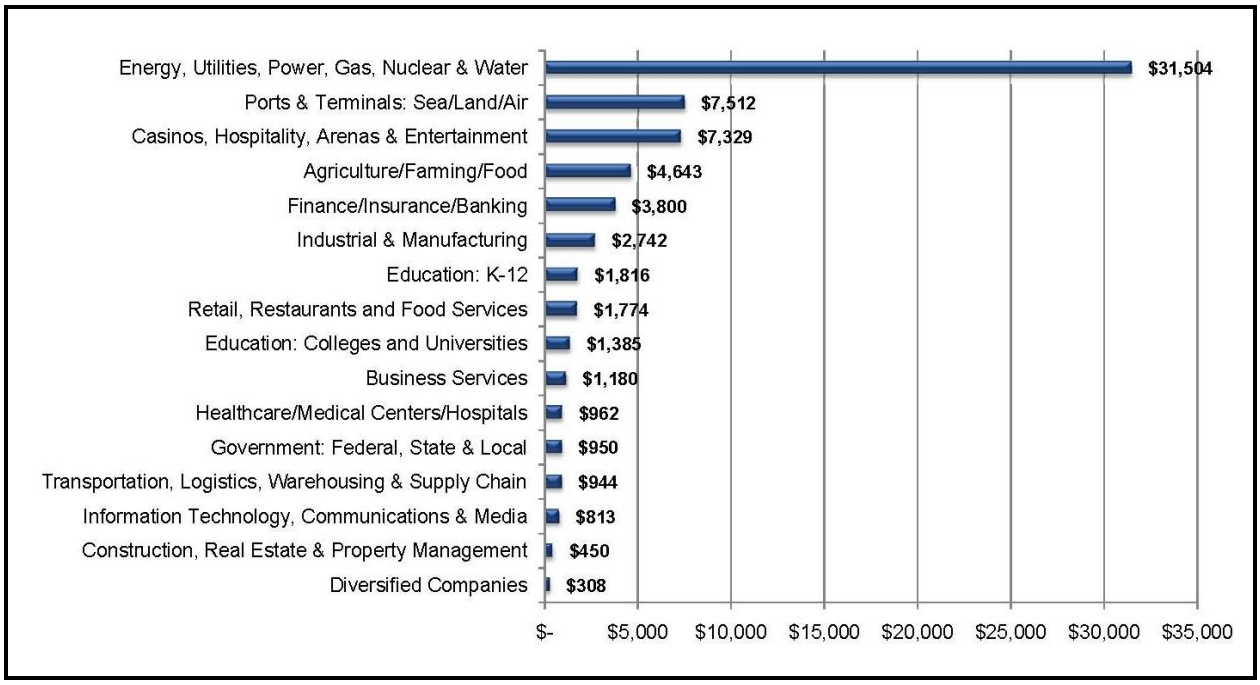
Figure 18. Spending on Security as a Percentage of Revenue by Industry Sector, 2009



Source: *Security Magazine* (McCourt, 2009).

Note: Healthcare/Medical Centers/Hospitals industry not available from source.

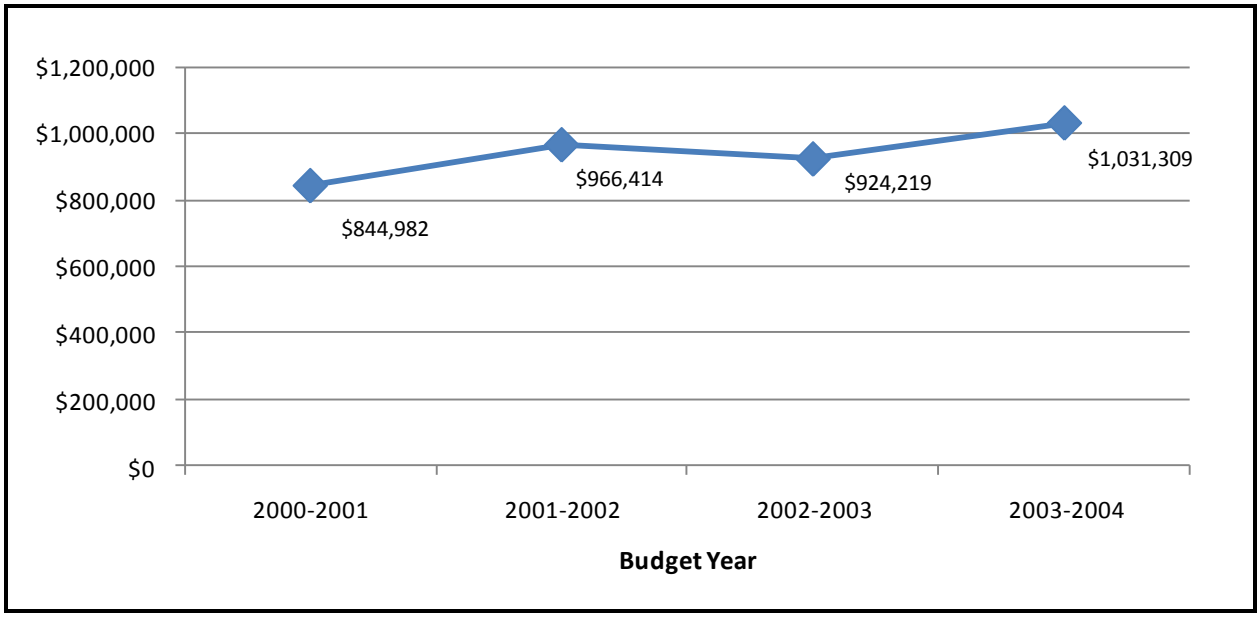
Figure 19. Spending on Private Security per Employee by Industry Sector, 2009



Source: *Security Magazine* (McCourt, 2009).

The ASIS Scope and Emerging Trends survey (ASIS Foundation, 2005) examined the amount companies have budgeted for security-related services over time. The survey collected data on the security budgets of responding companies for each of the years 2000 to 2004, allowing for comparisons among a set of companies over time. Figure 20 shows these security budgets increased 22% between the 2000–2001 and 2003–2004 budget years. There was a slight decrease of 4% between the 2001–2002 and 2002–2003 budget years.

Figure 20. Average Security Budget by Budget Year



Source: ASIS Foundation Scope and Emerging Trends, 2005.

5. THE RELATIONSHIP BETWEEN PRIVATE SECURITY AND LAW ENFORCEMENT

More than 1 million private security personnel work directly for U.S. companies (BLS, 2009c). In comparison, as of 2008, more than 883,000 sworn law enforcement officers were employed by federal, state, or local agencies, including municipal police departments, sheriff's departments, and federal law enforcement agencies, as well as other investigative and enforcement agencies and bureaus (BLS, 2009b). Public law enforcement serves the public at large and is primarily concerned with enforcing the laws, preventing crime, investigating crime, and apprehending criminal suspects (Cassidy, Brandes, & LaVegila, 1993). Meanwhile, private security operates "on behalf of private interests" and owes its allegiance to clients and employers (Cunningham et al., 1985). Private security is focused on three main components: physical security, information security, and personnel security (Cunningham et al., 1985).

Besides the differences in allegiance and focus, public and private security also differ in their jurisdictions. Private security personnel can be hired by an organization that operates across city, county, state, and even national borders (Connors, Cunningham, & Ohlhausen, 1999). Police departments, on the other hand, are responsible for a particular jurisdiction, which could be a county, town, city, or state, depending on the type of agency.

Private	← Security Services →	Public
Client	**Input**	Citizen
Crime Prevention	**Role/Function**	Crime Prevention
Specific	**Targets**	General
Profit-Oriented Enterprise	**Delivery System**	Government
Loss Reduction/Asset Protection	**Output**	Enforcement/Apprehension

Source: National Advisory Committee on Criminal Justice Standards and Goals (1976).

Despite these differences between private security and public law enforcement, their missions are not in conflict but are in fact complementary and often closely related. As such, a range of benefits can come from enhanced cooperation (Cunningham et al., 1985; Connors et al., 1999; Morabito & Greenberg, 2005). Rapid and consistent communication between private security and the police, for example, can help minimize response time for crimes in progress and also reduce the number of calls for service for situations such as false alarms in nonemergency situations. Private security can also play an important role in emergency response by developing response plans and advanced strategies for coordinating evacuations and responses to various types of natural and manmade emergencies. Additionally, private security can help protect the country's extensive range of critical infrastructure and share intelligence with law enforcement, which may include providing timely and regular reports on suspicious activity and other behaviors that could represent

early warning signs for possible emerging threats (Morabito & Greenberg, 2005). Some private security entities have rapidly increased the technology they use and have become extremely specialized in handling complex crime problems, including cybersecurity. Law enforcement agencies can leverage these resources both to better understand crime that occurs across a variety of settings and to develop effective prevention strategies.

5.1 History of Collaboration: Private Security and Law Enforcement

Despite all the advantages that strong collaboration between private security and law enforcement brings, relationships between these public and private entities have not always been strong (Connors, Cunningham, Ohlhausen, Oliver, & Van Meter, 2000). Some of the early, more formal, examples of cooperation originated in the defense industry, which contributed to the development of the American Society for Industrial Security (ASIS) in the mid-1950s (Connors, Cunningham, & Ohlhausen, 1999). During the 1960s, private security personnel were perceived as insignificant in the policing industry. Despite revolutionary growth, scholars, policymakers (Shearing, 1992), and public law enforcement officers often ignored the contributions of private security (Youngs, 2004). In the 1970s, some perceptions began to improve between the two sides, although general feelings of mistrust continued (Youngs, 2004). During this period, hijackings began to emerge as a growing problem; in response, local police officers were placed at security checkpoints in U.S. airports to search travelers to identify armed suspects who were attempting to board airplanes. This new role for public law enforcement contributed to staffing shortages, and police departments began to look for alternative strategies for staffing airline security checkpoints. In response, airports began to use private security officers to help offset security demands.

In the early 1970s, the Law Enforcement Alliance of America (LEAA) contracted with the Private Security Advisory Council (PSAC) to assess the level of cooperation between law enforcement and private security, with the goal of enhancing the role of private security in crime prevention (LEAA, 1977). The 1976 report from the PSAC brought to the surface the long-standing frictions that existed between private security and law enforcement. The PSAC also sought to identify programs and policies that would allow for improved coordination and published a number of reports on false alarms, the regulation of private security, crime prevention through environmental design, ethics for security staff, the legal authority of private security personnel, and the development of private security training curricula.

Changes in the policing movement during the 1980s and 1990s, such as problem-oriented and community policing, helped reinvigorate past efforts to improve cooperation between law enforcement and private security. For instance, in the 1980s, the Washington Law Enforcement Executive Forum was created to provide conflict resolution between law enforcement and the business community in the state. Other areas in the United States

followed, developing private security liaison committees within the National Sheriffs Association (NSA), International Association of Chiefs of Police (IACP), and ASIS. To further improve cooperation, Operation Partnership at the Federal Law Enforcement Training Center (FLETC) provided 3-day training sessions to law enforcement and private security personnel in the 1990s. These sessions included the history and operations of both industries, trends, and cooperative agreements that could move both forward in the future (Connors et al., 1999).

The September 11, 2001, attacks on the United States further highlighted the need to coordinate more effectively across private and public sectors on homeland security matters. This need is especially pronounced because private industry controls and protects more than 85% of the nation's critical infrastructure (U.S. Government Accountability Office, 2006). Public law enforcement has made great strides in obtaining terror-related and potential terrorist attack information; however, it has been reluctant to share this information with private industry. Private corporations have complained that they do not receive timely threat information from law enforcement, yet they also fear that any information they themselves give to law enforcement may end up disseminated to the public (Morabito & Greenberg, 2005). The Department of Homeland Security (DHS) has recommended that public law enforcement and private security enter into cooperative agreements to effectively address homeland security needs.

The ASIS survey included several questions regarding how private security managers and departments interacted with law enforcement agencies. Over half of the respondents indicated that they contacted local law enforcement agencies at least once per year (Figure 21). The respondents indicated that they had less contact with federal or state law enforcement agencies, with only 15.5% and 17.5% reporting at least one contact per year with federal and state law enforcement agencies, respectively. Among the private security companies that contacted law enforcement officials for security-related reasons, alarm response (64.0% of companies) was the most common reason for the contact.

The ASIS survey (2005) also found that 9.4% of private security companies contacted some level of law enforcement for homeland security issues while 6.7% of private security companies contacted law enforcement for issues related to terrorism (Figure 22). However, the ASIS survey does not indicate which level of law enforcement the private security officers contacted (i.e., local, state, or federal).

Figure 21. Percentage of Private Security Companies That Contacted Public Law Enforcement Agencies at Least Once per Year, 2005

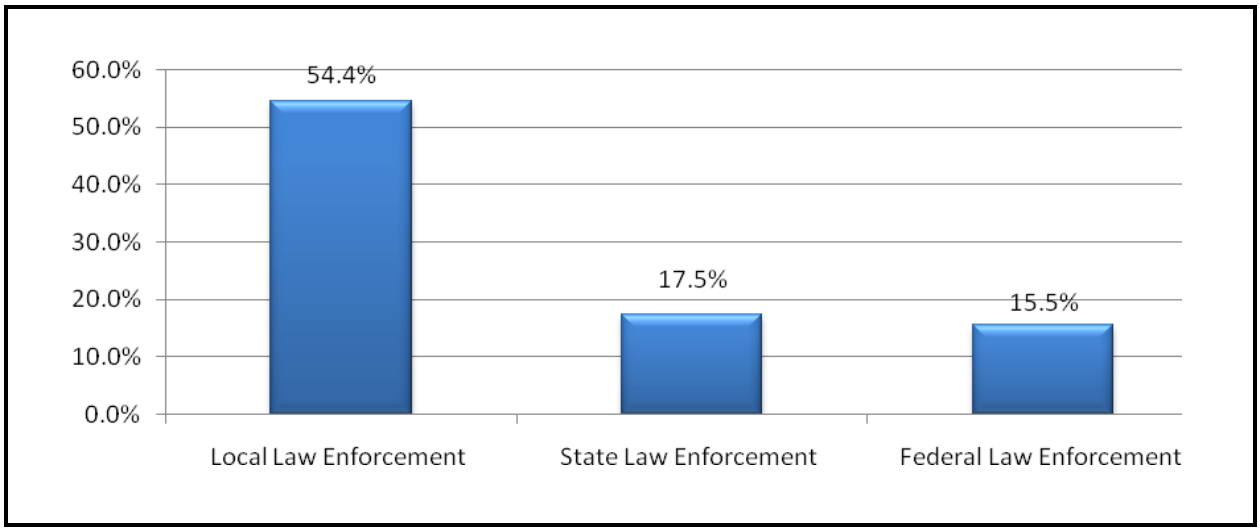
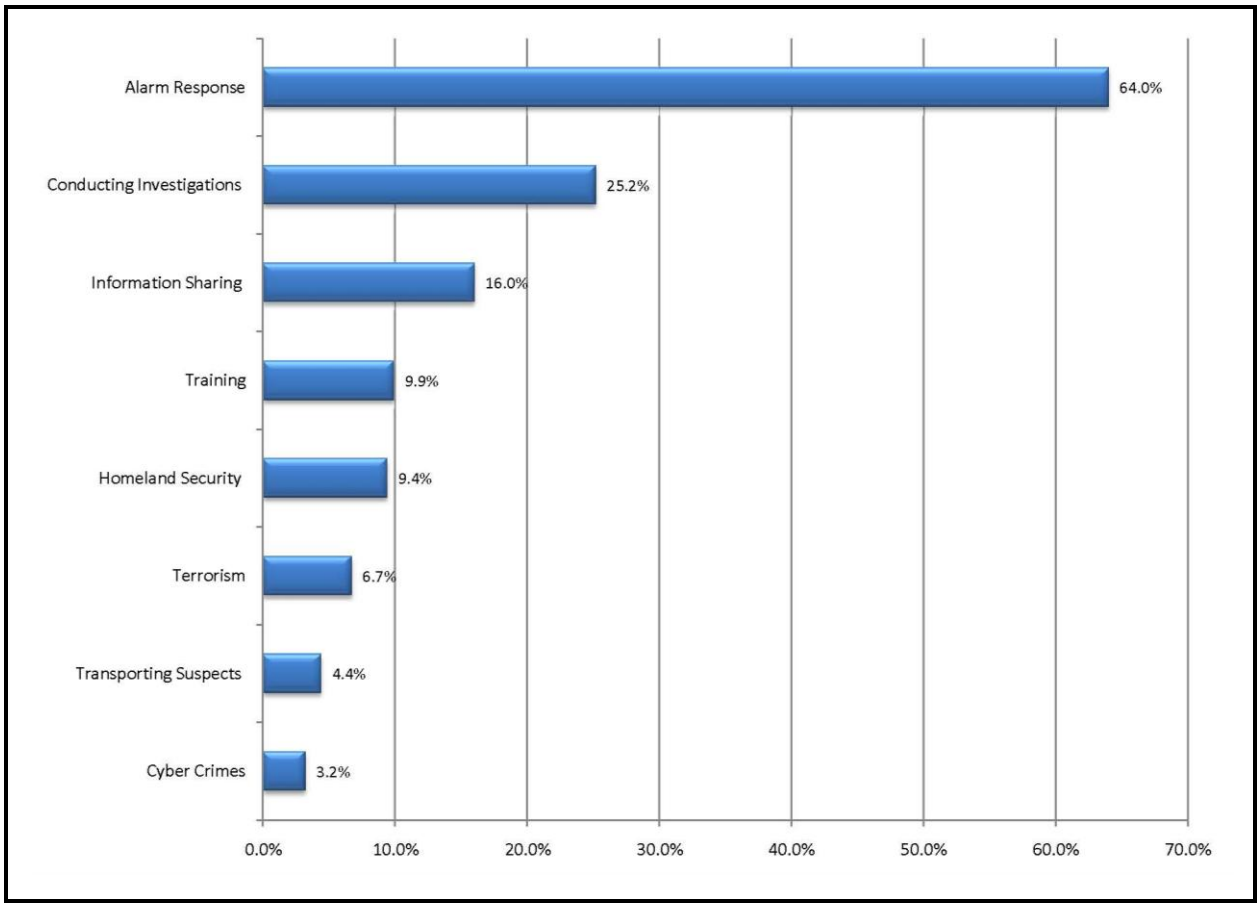


Figure 22. Percentage of Private Security Companies Reporting Specific Types of Security-Related Contacts with Law Enforcement, 2005



5.2 Issues and Challenges for Cooperation

Conflict between private security and public law enforcement is a recurring theme throughout the literature (Cunningham et al., 1985; LEAA, 1977). Even though the need for cooperation has been nationally recognized, the two groups are often "not confident in each other" (Hess, 2009). Generally, the difficulties that have arisen between private security and law enforcement can be traced to a limited number of inhibiting factors (Cunningham et al., 1985).

One factor centers around problems with unclear and poorly defined roles and responsibilities, especially for private security. Law enforcement agencies are generally unfamiliar with the extensive range of roles covered within private security or with the expertise and technical requirements necessary to perform these roles. Hallcrest I characterized this factor as "role conflict" (Cunningham et al., 1985). In many instances, law enforcement officers make assumptions about the entire private security industry based on their limited experiences with lower paid and lesser trained security guards (Cunningham et al., 1985). This unfamiliarity and limited appreciation or knowledge of roles contributes to a lack of trust and a lack of respect between the public and private entities (LEAA, 1977). As reported in the Hallcrest national surveys, a sizable percentage of law enforcement respondents reported that private security was generally "ineffective" in helping to reduce the volume of crime and in crime prevention and crime control functions (Cunningham et al., 1985). Findings such as these are somewhat surprising, because a sizable percentage of individuals who work in private security have some experience working in public law enforcement. As an example, more than half of proprietary security managers who responded to the Hallcrest I national surveys reported having at least some experience in public law enforcement (Cunningham et al., 1985).

Others have argued that competition between private security and law enforcement also fuels problems. According to a 2004 National Policy Summit, the primary barriers to effective collaboration include lack of information sharing, mistrust, and misinformation (IACP, 2004). Police officers feel that private security personnel generally lack education and training and are threats to their policing domain (professionals versus nonprofessionals). Private security personnel believe that public law enforcement officers have limited knowledge about the private security industry and do not appreciate the important role they play in solving and preventing crime.

To eliminate some of these challenges, both law enforcement and private security are responsible for educating one another on their capabilities. At the 2004 National Policy Summit, it was noted that information seminars presented at law enforcement conferences and private security conferences were largely similar. By having professionals from both industries present at the conferences, there is an opportunity to cross-train and network.

Another recommendation from the Summit was for private security and law enforcement to participate in information-sharing activities face-to-face before a crisis situation.

5.3 Private Security–Law Enforcement Partnerships

Partnerships between law enforcement and private security are not a new phenomenon. For instance, the IACP's Private-Sector Liaison Committee was founded in 1986, and ASIS International's Law Enforcement Liaison Council has also been in existence for nearly 25 years. Currently, public–private cooperation takes many forms, ranging from national information-sharing programs (such as the federal Information Sharing and Analysis Centers, or ISACs) to local-level operational partnerships (such as the nation's approximately 1,200 business improvement districts). However, some findings suggest that limited percentages of law enforcement agencies fully participate in formal collaborations with private security. For example, the 2004 National Policy Summit found that only 5% to 10% of police chiefs or sheriffs were participating in active partnerships with private security (Morabito & Greenberg, 2005). Similarly, emergency response exercises tend to include police, fire, public health, and other governmental authorities but often leave out private security.

In recent years, however, both police departments and private security have paid greater attention to collaboration, information sharing, and partnership. Connors and colleagues (2000) acknowledge that the legal powers and training of police officers combined with the size, resources, and technical expertise of private security can create a successful relationship for emergency response efforts. The Department of Justice reported that, in 2000, more than 60 private security–policing partnership programs were in operation. In the 2009 Operation Partnership report, The Law Enforcement–Private Security Consortium reported that as of 2006, there were more than 450 established private security–law enforcement partnerships. The consortium suggests that the success of these partnerships hinges on several key factors, including

- a compelling mission to keep members interested and attract new members;
- external support of models for formation;
- strong, active founders, leaders, and facilitators;
- regular communication (meetings, trainings, newsletters, e-mail, websites, etc.); and
- established methods to sustain structure and sufficient resources.

FLETC's Operation Partnership, one example of an effective collaboration program, was established to provide joint training to public law enforcement and private security managers from a given area to create cooperative agreements with each other (Dempsey, 2008). In 1991, Philadelphia created the City Center District (CCD), which combines a police substation and private security firm. Law enforcement and private security work together on

issues like terrorism, emergency preparedness, and fighting everyday crime (Center City District and Central Philadelphia Development Corporation, 2010). In 2005, a survey of 339 ASIS security companies revealed that between 21% and 27% established partnerships with law enforcement for traffic control, vulnerability and risk assessment, VIP or executive protection, or disaster management programs (ASIS Foundation, 2005).

Private security companies have also been given police powers to assist sworn officers with certain functions, often to reduce costs and improve services in a particular area (Greene, 2006). For example, the Minneapolis Police Department SafeZone program hires private security officers to help patrol downtown areas (Center for Problem Oriented Policing, 2007). The program has been credited with reducing targeted violent crimes and automobile crimes and increasing arrests for quality-of-life crimes. Private security officers are also hired by police agencies or by private businesses to provide security for apartment complexes, universities, hospitals, retail or commercial areas, nightclubs, and public transportation.

Public-private partnerships have also come in the form of police departments' privatizing certain functions. Functions that are typically noncriminal in nature, such as prisoner transport, alarm response, and jail and court security, can be provided by private security officers (Dempsey, 2008). Al Youngs (2004), chief of the Lakewood, Colorado, Police Department, noted that privatizing certain functions of the police department increases the number of law enforcement officers on the street and decreases crime rates at a lower cost than employing only public officers. For example, crime scene processing can take up to 2 days and requires 24-hour security. Hiring a private security guard at $29 per hour instead of an off-duty officer at $37 per hour would save a department 22% of the security cost.

According to the Law Enforcement-Private Security Partnership Consortium (2009), there are numerous benefits to creating partnerships between private security and law enforcement. For one, the contacts and professional relationships established can open the door to future training and career opportunities, provide opportunities to develop an inventory of specialized skills, and improve trust and confidence on both sides. Public law enforcement agencies can possibly reduce costs by releasing certain functions (i.e., security on public transit systems) to private security. In addition, private security has more resources and technology to address high-tech, financial, and intellectual property crimes. Finally, these partnerships play an integral role in emergency management planning and response, information and intelligence sharing, and stronger community policing efforts.

5.4 Private Security's Policing Roles and Powers

Private security powers refers to a private security officer's authority to use force, detain suspects, and carry and use firearms. Private security staff have some control over who accesses a property for which they are responsible; however, the public police cannot

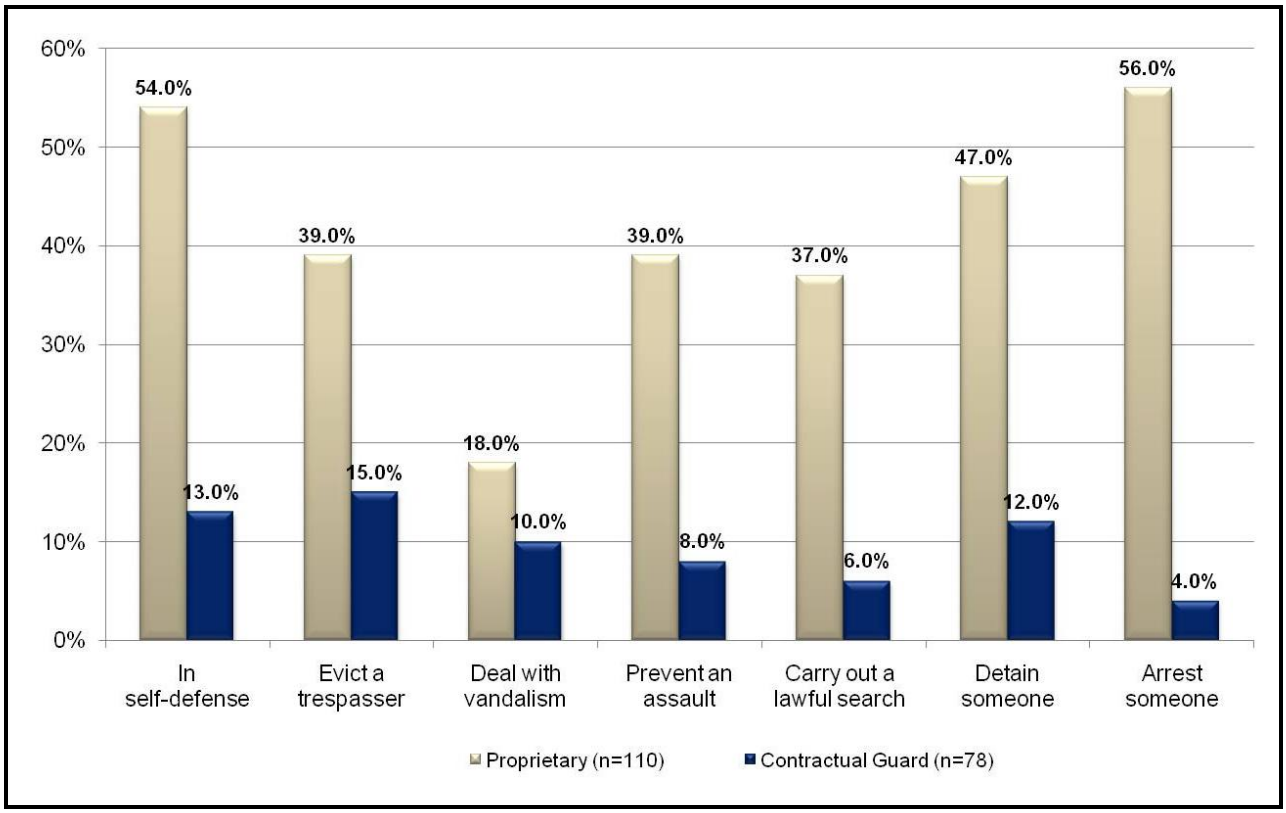
control who lives and operates in their jurisdiction. According to Pastor (2003), the public safety roles private security officers fill on patrol can be divided into three broad categories: traditional security functions (i.e., observe and report), maintenance of order, and law enforcement functions. Private security personnel can also provide substantial assistance to the police by providing comprehensive and accurate investigative reports of incidents.

Similar to data on demographics in private security, information on private security powers—including a security officer's ability to use force, detain suspects, and carry and use forearms—can be more easily obtained from data sources that directly survey private security officers rather than broad industry-level surveys. As with questions on fringe benefits, general population surveys typically do not ask targeted questions related to the roles and powers of private security officers. In fact, even among more targeted private security surveys, only one data source, the Hallcrest I report (Cunningham et al., 1985), provides data related to private security powers.

Nonsworn security guards usually have only limited legal authority. In most states, security officers (similar to other citizens) can make arrests when a crime is committed in their presence (Hess, 2009); the suspicion that a crime has been committed is not sufficient to make an arrest. Furthermore, in some states, private security personnel may make arrests only for felonies, and then must immediately turn the suspect over to a police officer.

Figure 23 presents the percentage of officers who reported using force by type of job situation and by type of officer (contract or proprietary). The figure shows that proprietary security officers used force more often than contract security officers in each type of job situation. However, because the sample included a disproportionately large number of proprietary security officers with weapons training, these results may be biased and not representative of all proprietary and contract security officers.

Figure 23. Percentage of Officers Reporting Use of Force by Security Situation and Type of Officer



Source: Hallcrest Report I (Cunningham et al., 1985).

Unlike police officers, who have considerable protections from personal liability, private security personnel who take innocent persons into custody can be liable for making improper arrests (Carlson, 1995). Dempsey (2008) noted in his book, *Introduction to Private Security,* that "false-arrest lawsuits are a common problem for security operators" (p. 99). Frequently, guards and the companies that employ them are held liable for anything that happens within the realm of their supervision.

Some state and local governments grant "special police" status to private security personnel, allowing them to have search and arrest powers. Railroad police are perhaps the most popular type of privatized law enforcement. Fixler and Poole (1988) explain that "[special police] legislation was originally based on problems of interstate operation and the lack of public police protection in some areas." By deputizing private security as "special police," organizations are afforded the same type of protection in-house that would be offered by public law enforcement. For example, North Carolina's Capitol Special Police, who guard the state government complex, are contract police officers who have investigative and arrest powers. To become deputized in North Carolina, a private police officer must undergo at least 432 hours of instruction (Joh, 2005, p. 179). Private police officers who

meet the instructional requirements are authorized by the state's attorney general and are granted full police powers under North Carolina General Statute 74E-6. According to a 1985 Department of Justice study, 29% of proprietary security managers throughout the U.S. reported that their personnel were deputized, compared with 14% of contract security managers (Fixler & Poole, 1988).

5.4.1 Officers Moonlighting in Private Security

Police officers in some departments often "moonlight" as private security officers. While working at off-duty security jobs, these police officers wear official police uniforms and drive police vehicles. They also retain "full police powers" while moonlighting (Kakalik & Wildhorn, 1971b). Nearly all police departments require that officers obtain approval before working in a private security capacity. In some jurisdictions, the police unions can help arrange assignments of off-duty officers to private companies. In other instances, the police department actually serves as "the broker between the private employers and the off-duty officers" (Dempsey, 2008). Some police departments cap the number of hours officers are allowed to moonlight to decrease the risk of their being ineffective in their primary duties (Kakalik & Wildhorn, 1971b).

Moonlighting poses some problems, especially in issues of liability. For example, if an officer makes a mistake, the police department and the private company must determine who should be responsible. They must also decide who pays for sick or disability leave. Some states have enacted statutes that determine the officer's duty to act while off-duty; others without such legislation must rely on judicial interpretation. "A police officer will be deemed to be acting under the color of law when he is 'acting in his official capacity or while exercising his responsibilities pursuant to state law'" (West v. Atkins, 487 U.S. 42, 50 [1988], cited in Scarry, 2007). Scarry went on to lay out several criteria that the courts use to determine whether moonlighting officers were acting under the color of law:

- There is a department policy requiring officers to be on duty at all times;
- The officer displayed a department-issued badge;
- The officer identified himself or herself as a police officer;
- The officer carried or used his or her department-issued weapon; and
- The officer placed the individual under arrest.

The decline in state and municipal budgets has led to more officers seeking off-duty employment in private security. However, many police departments have banned officers from moonlighting as private security because of the potential conflicts of interest serving public and private clients (Young, 2006). Opponents of moonlighting have also cited decreases in productivity in normal duties and fatigue, among others, as reasons for police departments to bar moonlighting (Brunet, 2008).

6. REGULATION AND TRAINING OF PRIVATE SECURITY SECTORS

6.1 Legislation

The role of private security in the community closely mirrors that of public police. They are increasingly employed for detection and prevention of criminal activity and law enforcement (Nemeth, 2004). However, unlike public police, they are not bound by a set of statutes or consistent standards of practice. According to the Private Security Advisory Council (PSAC), the private security industry has failed to "promote [a] high level, sophisticated standard of educational requirements" because of this lack of consistent regulation (Nemeth, 2004). Nonetheless, there has been an increase in legislation and ordinances—either contemplated or already enacted—that mandate such standards (O'Connor, et. al, 2008). The Private Security Officer Employment Standards Act of 2002, which requires a review of security officers' criminal histories, shows "formidable federal involvement" on regulation (Nemeth, 2004).

As of yet, there is no national agreement on regulation; the states vary greatly in their requirements. For example, some states have no regulatory oversight, whereas some regulate armed guards only. Some use local police forces to help regulate private firms, whereas others promote the industry's self-regulation. Some have no continuing education requirements; very few states require licensing examinations (Nemeth, 2004). As the responsibilities of individuals in the private security industry grow, governing policy and legislation will become more important.

6.2 Licensure and Certification

Researchers have recommended that private security licensing and regulation start at the state level for proprietary and contract security (Kakalik & Wildhorn, 1971b; Wildhorn, 1975); federal regulation may be too difficult, as state and federal laws are not aligned. As an example of state regulation, licensure is available for private security firms and organizations who hire private detectives, private security contractors, and private alarm contractors. Florida has even created licensure for repossession activity, school security guards, the carrying and use of firearms, and security managers (Nemeth, 2004).

Licensing and regulation vary widely from state to state. All but nine states have requirements that either private security companies or private security officers be licensed in some manner.[6] Some states require all security officers to be licensed while others

[6] Alaska Department of Public Safety (n.d.), Arkansas State Police (2006), California Department of Consumer Affairs Bureau of Security and Investigative Services (2010), Connecticut Department of Public Safety (2010), Florida Department of Agriculture and Consumer Services (2004), Georgia Secretary of State Board of Private Detectives and Security Agencies (2008), Illinois Department of Financial & Professional Regulation (2010), Iowa Department of Public Safety Administrative Services Division (2006), Kansas Bureau of Investigation (n.d.), Kentucky Board of Licensure for

require only contract security officers or only those carrying firearms on the job to have licenses. At the company level, 33 states require only contract security firms to be licensed while proprietary companies with their own security force are not required to be licensed. Figure 24 shows the general licensing requirements of private security officers by state. Figure 25 shows the general licensing requirements of private security firms by state. Non-security firms that directly employ private security officers do not have licensing or registration requirements except in Illinois, South Carolina, Tennessee, Montana, Oregon, and Georgia. The most likely reason for this is that it is easier to regulate all companies in a single industry, such as the contract security industry, than all industries where companies may or may not employ security officers.

It is difficult to generalize licensing requirements because the regulations vary from state to state. Table 7 presents the licensing requirements for officers in the ten most populous states.[7] Seven of the states require all contract officers to be licensed or registered, two states (Pennsylvania and Georgia) require only armed contract officers to be licensed, and one state (Michigan) requires contract firms only to submit a list of employees on a quarterly basis. Only two states (California and New York) require all proprietary officers to be licensed. Five states require proprietary officers to be licensed if they are armed officers.

Private Investigators (2010), Louisiana State Board of Private Security Examiners (n.d.), Maine State Police (2005), Maryland State Police (2005), Michigan Department of Energy, Labor & Economic Growth (2010), Mississippi Department of Public Safety (n.d), Missouri Division of Professional Registration (n.d.), Montana Department of Labor & Industry Board of Private Security (n.d.), Nebraska Secretary of State (n.d.), Nevada Private Investigators Licensing Board (n.d.), New Hampshire Economic and Labor Market Information Bureau (n.d.), New Jersey State Police (2010), New Mexico Regulation & Licensing Department (n.d.), New York State Department of State Division of Licensing Services (n.d.), New York State Division of Criminal Justice Services (n.d.), North Carolina Department of Justice (n.d.), Ohio Department of Public Safety (n.d.), Oklahoma Council on Law Enforcement Education and Training (2010), Pennsylvania State Police (2010), South Carolina Law Enforcement Division (2006), State of Alabama (1975), State of Arizona Department of Public Safety Licensing Unit (2008), State of Colorado (2010), State of Delaware (n.d.), State of Hawaii Department of Commerce & Consumer Affairs Professional and Vocational Licensing (2010), State of Indiana Private Investigator & Security Guard Licensing Board (n.d.), State of Massachusetts Public Safety (2010), State of Minnesota Board of Private Detective and Protective Agent Services (n.d.), State of New Hampshire (n.d), State of North Dakota Private Investigation and Security Board (2008), State of Oregon DPSST Private Security (n.d.), State of Rhode Island Office of the Attorney General (n.d.), State of Washington Department of Regulation and Licensing (n.d.), Tennessee Department of Commerce and Insurance (n.d.), Texas Department of Public Safety Private Security Bureau (2010), Utah Division of Occupational and Professional Licensing (2010), Vermont Secretary of State Office of Professional Regulation (2009), Virginia Department of Criminal Justice Services (2010), Washington State Department of Licensing (2010), West Virginia Secretary of State (2010), Wyoming Attorney General (n.d.), IASIR (2009).

[7] California Department of Consumer Affairs Bureau of Security and Investigative Services (2010), Texas Department of Public Safety Private Security Bureau (2010), New York State Department of State Division of Licensing Services (n.d.), New York State Division of Criminal Justice Services (n.d.), Florida Department of Agriculture and Consumer Services (2004), Illinois Department of Financial & Professional Regulation (2010), Pennsylvania State Police (2010), Ohio Department of Public Safety (n.d.), Michigan Department of Energy, Labor & Economic Growth (2010), Georgia Secretary of State Board of Private Detectives and Security Agencies (2008), North Carolina Department of Justice (n.d.), IASIR (2009).

Figure 24. Licensing Requirements for Security Officers by State, 2009

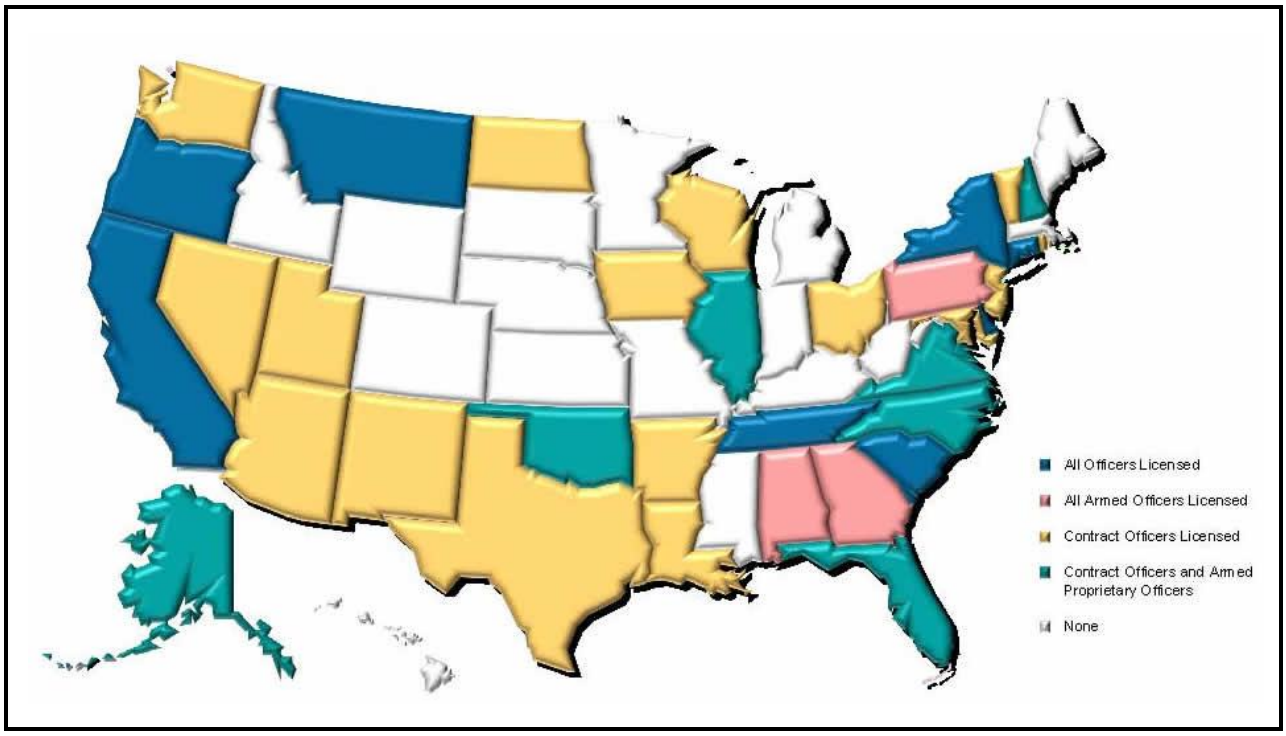


Figure 25. Licensing Requirements for Companies Employing Security Officers by State, 2009

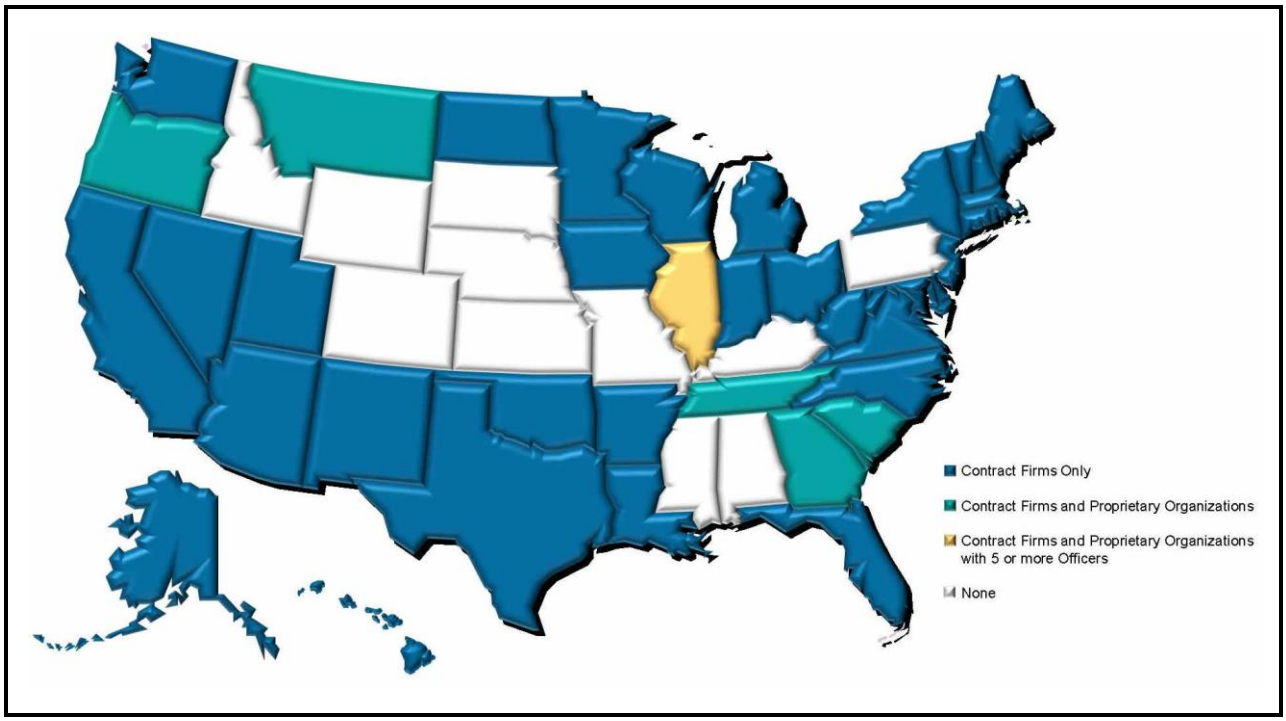


Table 7. State Licensing Requirements in the 10 Most Populous States, 2010

State	Licensing/Registration Required (Contract)	License/Registration Required (Proprietary)	License/Permit for being Armed	Time License/ Registration Valid (Years)	Time Firearms Permit/ License Valid (Years)	Initial Required Training (Hours)	Firearms Training (Hours)	Minimum Age	Criminal Background Check Required
California	X	X	x	2	2	40	14	18	x
Texas	X		x	2	2	30	10–15	18	x
New York	X	X	x	2	2	24	47	18	x
Florida	X	if armed	x	2	7	40	28	18	x
Illinois	X	if armed	x	3	1	20	40	18 (unarmed) 21 (armed)	x
Pennsylvania	if armed	if armed	x		5		40	18	x
Ohio	X		x	1	1		20		x
Michigan	Contract firms must submit quarterly rosters								
Georgia	if armed, but min. training requirement for unarmed (no registration)	if armed, but min. training requirement for unarmed (no registration)	x		2	24	15	18 (unarmed) 21 (armed)	x
North Carolina	X	if armed	x	1	1	16	20	18 (unarmed) 21 (armed)	x

Seven states require a minimum amount of training for proprietary officers to obtain a license. Nine states have minimum training requirements for armed officers. However, the amount of required training ranges from 16 hours (North Carolina) to 40 hours (California and Florida). Once licensed, the period in which the license needs to be renewed ranges from 1 year (Ohio and North Carolina) to 3 years (Illinois). All states except Michigan and Ohio have a minimum age requirement of 18 years of age for security officers. Three states (Illinois, Georgia, and North Carolina) further require that armed officers must be at least 21 years of age.

In addition to regulating the officers themselves, states have various regulations for companies that employ security officers and the employees they hire to manage those officers. Table 8 presents the licensing requirements for companies and security managers

Table 8. Licensing Requirements for Companies and Security Managers in 10 Most Populous States, 2009

State	License Required (Contract Firms)	License Required (Proprietary Organizations)	Time License Valid (Years)	Minimum Insurance Requirement	Min Experience for Manager (Years)	License Exam for Manager	Minimum Age for Manager	Criminal Background Check Required for Manager
California	x		2	x	1	x	18	x
Texas	x		1	x	3	x	21	x
New York	x	must provide proof of insurance, but no other requirements	2	x	2	x	25	x
Florida	x		3	x	2	Exam required for manger's license, but can be a manager with 2 years as a licensed security officer	18	x
Illinois	x	if 5 or more armed guards or financial institution with any armed guards, must register	3	x	1 (bachelor's) 2 (associate's) 3 (otherwise)	x	21	x
Pennsylvania								
Ohio	x		1	x	2	x		x
Michigan	x		2	x	2 or 4 with bachelor's degree in police administration or industrial security		25	x
Georgia	x	x	2	x	2 or 4 with degree in criminal justice or a related field	x	18	x
North Carolina	x		2	x	3 (hours of experience granted for college degrees)		18	x

in the 10 most populous states.[8] Except for Pennsylvania, the most populous states require that contract firms be licensed. However, only Georgia requires all companies with proprietary officers to be licensed. Licenses are valid for between 1 (Texas and Ohio) and 3 (Florida and Illinois) years. In terms of security managers, all states except Pennsylvania have experience requirements. Four of the states (Illinois, Michigan, Georgia, and North Carolina) have tiered experience requirements where the years of experience decreases for individuals with a post-secondary degree. In addition to education, seven states require an exam for an officer to become a manager (Pennsylvania, Michigan, and North Carolina do not). Moreover, while all but one state has an age requirement for being an officer, only eight of the states have a minimum age requirement to be a security manager ranging from 18 (California, Florida, Georgia, and North Carolina) to 25 (New York and Michigan).

States have created regulatory agencies to administer standards of practice. These commissions work with government officials to oversee the industry and verify that state laws are being followed. For example, Minnesota established the Board of Private Detective and Protective Agent Services to regulate policies, licensing, and training for private security officers under the Protective Agent Services Act (O'Connor, Lippert, Spencer, & Smylie, 2008). Similarly, most states have established boards or commissions to administer licensing and regulate education and training requirements for proprietary and private security agencies, according to the International Association of Security and Investigative Regulators (IASIR, 2009).

Just as the licensing requirements vary from state to state, members of licensing boards also vary, such as in the following examples:

- Hawaii's Board of Private Detectives and Guards is composed of one private detective, one security guard, two chiefs of police, two members of the public, and the Director of Commerce and Consumer Affairs (Hawaii Department of Commerce and Consumer Affairs, Section on Professional and Vocational Licensing, 2009).
- The Delaware Board of Examiners of Private Investigators and Security Agencies is a nine-member board. The Superintendent of the Division of State Police (or designee) and the Attorney General (or designee) are members. The governor appoints the remaining members: three residents of Delaware, two licensed private investigators, and two licensed contract security guards. The private investigators and security guards must not be employed by any member of the board and must each have 5 consecutive years of experience in the field (State of Delaware, 2010).

[8] California Department of Consumer Affairs Bureau of Security and Investigative Services (2010), Texas Department of Public Safety Private Security Bureau (2010), New York State Department of State Division of Licensing Services (n.d.), New York State Division of Criminal Justice Services (n.d.), Florida Department of Agriculture and Consumer Services (2004), Illinois Department of Financial & Professional Regulation (2010), Pennsylvania State Police (2010), Ohio Department of Public Safety (n.d.), Michigan Department of Energy, Labor & Economic Growth (2010), Georgia Secretary of State Board of Private Detectives and Security Agencies (2008), North Carolina Department of Justice (n.d.), IASIR (2009).

These two licensing examples show how different boards can be from state to state. Despite the variation in licensing requirements, in general, regulations imposed on private security officers who are authorized to carry weapons and use force and on owners of private security contract companies are stricter than those placed on companies with in-house security (Nemeth, 2004). Although licensing boards are critical to regulation of private security, there are issues of uniformity and consistency still to be resolved.

Proprietary guards receive little to no state oversight and usually follow whatever standards are set by their employers (Hess, 2009). For example, as of 2008, as few as 2% of proprietary security guards in California were licensed to work in the state (Davidson, 2008). California companies that hire unlicensed proprietary guards incur no penalty, only a concern of increased liability insurance costs. In contrast, Davidson (2008) notes that contract security firms are used to comply with California's licensing and regulation laws; their incentive is the $5,000 penalty imposed for the employment of each unlicensed guard. To address this issue, the state of California has written new legislation, effective January 1, 2011, to regulate proprietary security personnel. These regulations include proprietary guard and employer registration with the Department of Consumer Affairs, required training within 6 months of registration, and penalties between $250 and $1,000 for noncompliance (McLeod, 2009).

Certifications are not mandatory for all individuals in private security, although an estimated 55% of guards are required by their employers to maintain some type of certification (Daniels, 2007; Hess, 2009). The number and variety of certifications available through professional and trade organizations have increased (Brennan & Walker, 2006). The types of available certifications vary. ASIS International, for example, offers the Certified Protection Professional (CPP) as a transferrable validation of an individual's knowledge and skills and a representation that he or she is "Board Certified in Security Management." In 2005, nearly 10,000 professionals had earned the CPP designation (Bernard, 2005). Currently, 11% of security employers require the ASIS CPP certification, while another 49% require other types of association certifications (Daniels, 2007; Hess, 2009). Certifications allow employers to show that, in addition to meeting their state's licensure requirements, they are hiring competent and professional individuals.

6.3 Hiring and Background Check Practices

Prescreening of personnel is becoming more thorough in the private security industry; criminal histories and fingerprint checks are becoming the norm (BLS, 2009b). The nature of the job makes it essential for background checks to include measures of the applicant's personality. Thorough background checks are critical because employers have an obligation to the people they serve (Moore, 1988). Therefore, they want to ensure that the individuals they hire are competent and mentally fit to handle the daily duties of their jobs.

State and federal statutes generally require criminal background checks for private security professionals. As with licensing and regulation, the actual categories examined for background checks vary by state. State legislation typically emphasizes normal categories such as age, experience, references, education and training, and licensure. However, a more comprehensive background check should verify identification, records of conviction and litigation, credit and financial history, education, personal and business references, neighborhood information, previous and current employment, and the employer's opinion of the applicant (Nemeth, 2004). A new law, The Private Security Officer Employment Authorization Act, enacted in December 2004 as Section 6402 of the Intelligence Reform and Terrorism Prevention Act of 2004, provided authority for states to perform fingerprint-based checks of state and national criminal history records to screen prospective and current private security officers. The checks performed under the Act are not mandatory, however, and employers may decline to participate or may allow employment while the results of the check are pending. Under the Act, states may also decline to participate (although the state's governor must issue an order to that effect; *H.R. 2703: The Private Security Officer*, 2008). Providing the private security industry with direct access to FBI-maintained criminal histories allows employers to conduct more exhaustive background checks, which may reveal problems not found through one-state background checks (U.S. Department of Justice, Office of the Attorney General, 2006).

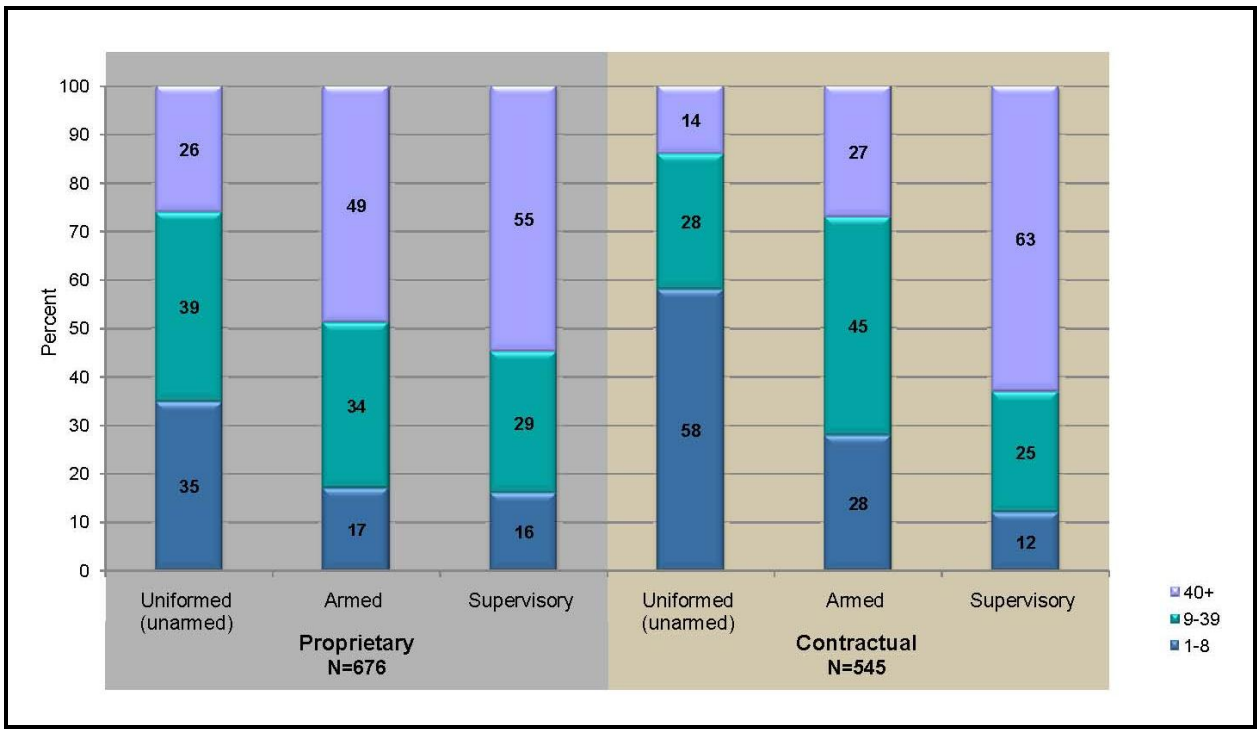
6.4 Training for Private Security

Training for private police is a concern for civil libertarians. Many private security personnel are temporary or part-time employees who are often underpaid and untrained for their work (Nemeth, 2004). According to an article in the *Washington Post,* training is not regulated by at least 10 states in the United States (Goldstein, 2007). Highly publicized events regarding crimes committed by private security professionals perpetuate the stereotype that large proportions of employees in the industry are mentally unbalanced (Carlson, 1995). Stories of embezzlement, injury to third parties, false imprisonment, false arrests, and even deadly force have been reported in court cases (Behar, 1992; Moore, 1988). More often than not, these acts can be attributed, at least in part, to poorly trained personnel.

Many employers provide training to newly hired private security personnel as well as some level of on-the-job training; however the total amount of training guards receive varies across employers and states (Dempsey, 2008). Individual state licensing boards monitor and determine training and education requirements for private security officers. Some states require training for all security officers, whereas others require training only if firearms are carried (Moore, 1988). A RAND study on private security determined that 65% of private security personnel had received no training before beginning their job assignments.

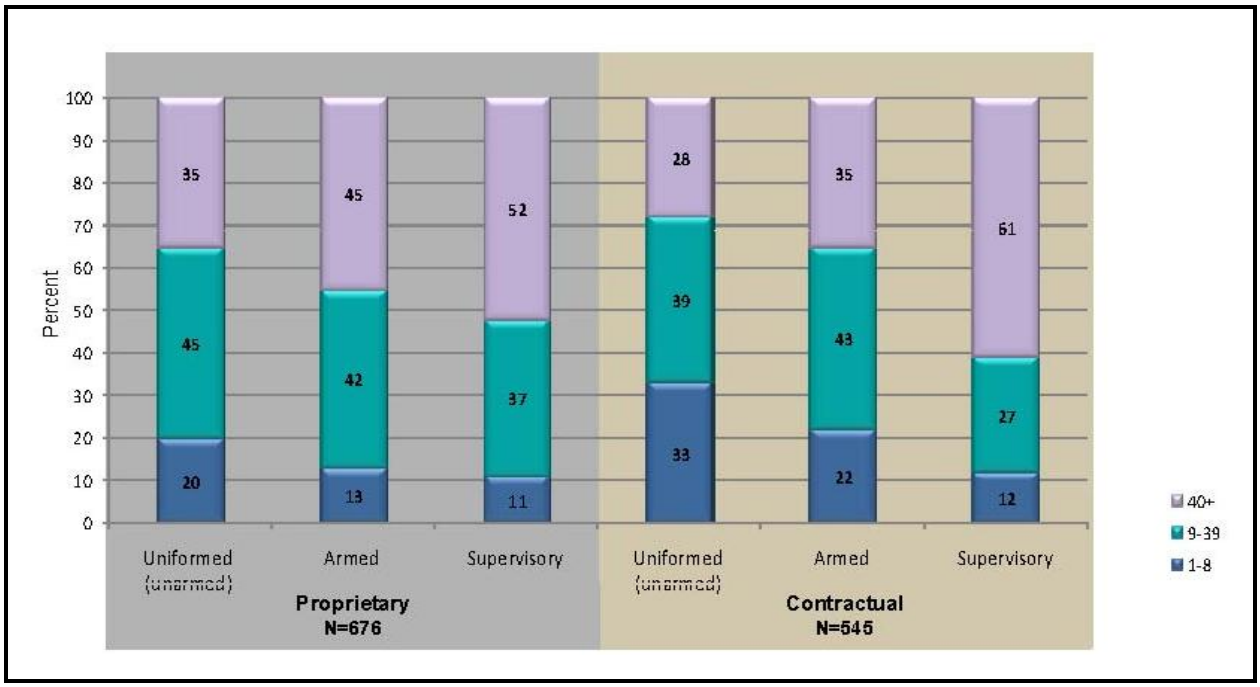
The most recent information on training comes from the Hallcrest I report from the mid-1980s (Cunningham et al., 1985). It should be noted that this information may be dated and should be considered with caution. Figures 26 and 27 present the number of training hours received before obtaining a job as a security officer and the number of training hours received on the job, respectively, by type of employer (i.e., contract firm or proprietary) and type of work performed (i.e., unarmed officer, armed officer, or supervisory). Both of these tables show that the amount of pre-employment classroom training and on-the-job training, regardless of type of employer, increased from unarmed officers to armed officers and was highest among those in supervisory roles.

Figure 26. Hours of Pre-Employment Assignment Classroom Training Received by Type of Officer and Position, 1982



Source: Hallcrest I Report (Cunningham et al., 1985).

Figure 27. Hours of On-the-Job Training Received by Type of Officer and Position, 1982

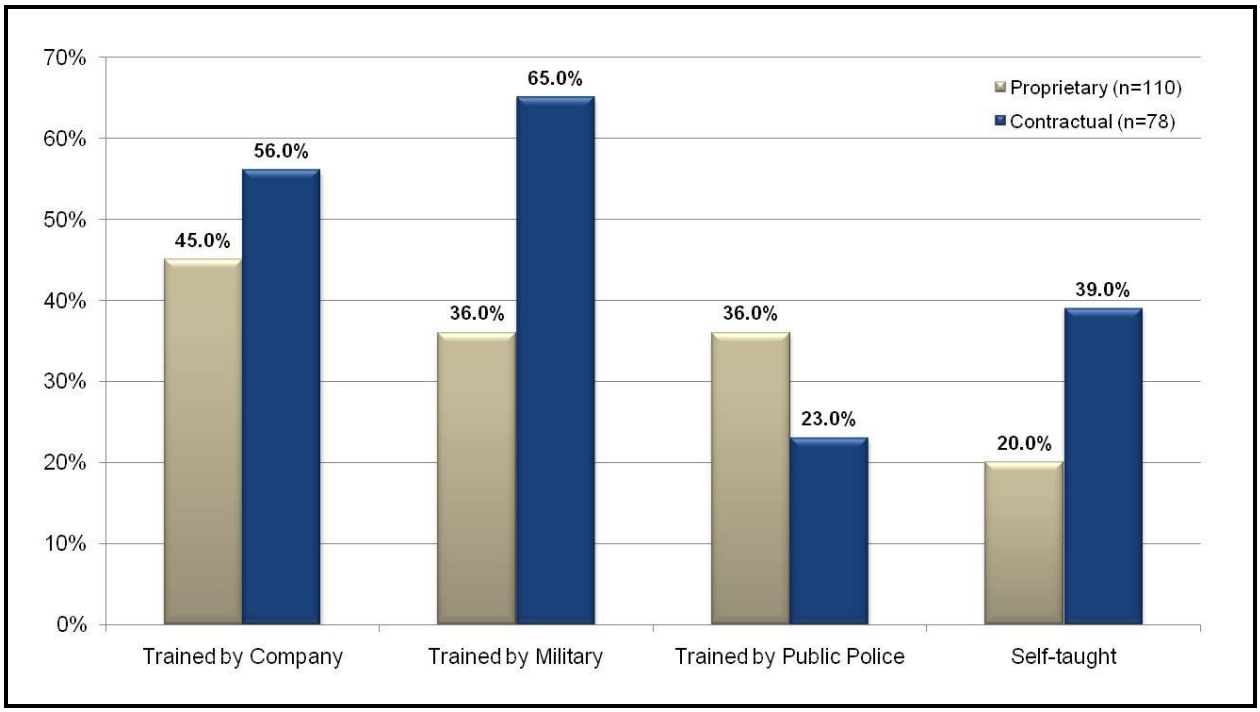


Source: Hallcrest I Report (Cunningham et al., 1985).

Armed security guards receive more intensive training on weapons retention and use of force than unarmed guards (Dempsey, 2008). Even though almost 50% of private security guards were reported to carry firearms, fewer than 20% reported that they had received firearms training (Nemeth, 2004). Figure 28 presents the source of firearms training received during the security officer's lifetime by type of employer (Cunningham et al., 1985). As with the other training statistics, these data are over 30 years old and, therefore, may no longer be accurate.

Because their lack of skill could lead to mishandling their weapons, untrained guards who carry firearms assume an increased risk of injury to themselves and others and liability to their employers (Hess, 2009). In addition to being trained on how to use their weapons, officers should also know the legal basis for when to use to their weapon. In the court case *Giant Food, Inc. v. Scherry* (1982:483), an armed security guard in the store parking lot fired two shots at an armed robber who had left the store. The first shot hit the robber's car; the second went through Geraldine Scherry's apartment. The security guard's negligence in firing resulted in severe stress and medical problems for Ms. Scherry. The court recognized Giant Food's negligence in training the security guard (Moore, 1988).

Figure 28. Percentage of Officers Receiving Firearms Training by Type of Officer and Training Source, 1982



Source: Hallcrest I Report (Cunningham et al., 1985).

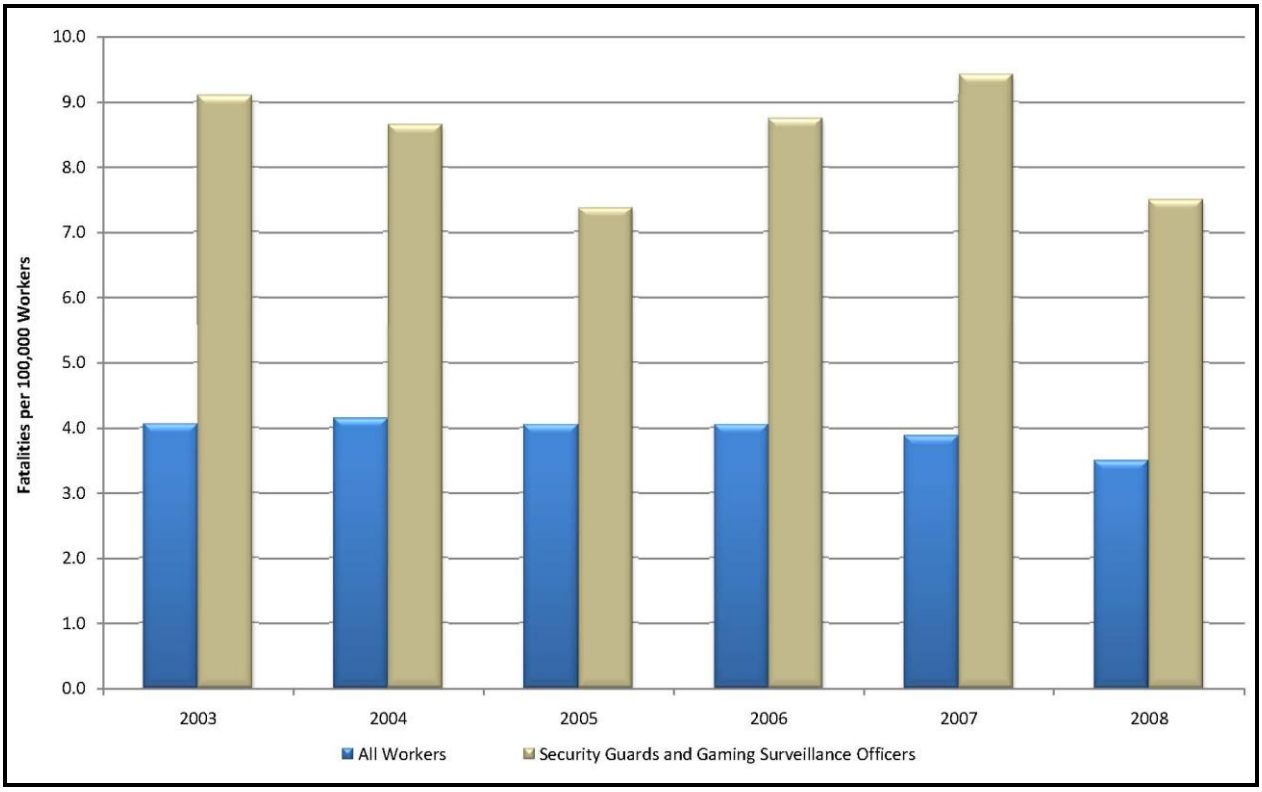
Critics argue that there is a lack of training and education standards in the private security industry. The PSAC has recommended minimum standards, including classroom training in criminal justice and weapons handling in addition to weapons proficiency (Nemeth, 2004). ASIS International (2009b) has written voluntary training guidelines that are intended to provide regulating bodies with consistent standards for security services. These guidelines recommend that security guards receive 48 hours of training within the first 100 days of employment. The guidelines also suggest that security guards pass a written or performance examination covering topics such as information sharing with law enforcement, crime prevention, evidence handling, the use of force, court testimony, report writing, communication skills, and emergency response. In addition, ASIS International recommends annual refresher training and additional firearms training for armed officers.

An increasing number of states are making continuing education a legal requirement for retention of licensure (BLS, 2009b) and certification (Dempsey, 2008). The number of programs is growing and the offerings include both continuing education programs and college majors with special focus on security. In the United States, college degree programs in private security increased from 5 in 1970 to 46 in 1990 (Dempsey & Forst, 2008). More training and opportunities for continuing education will be needed as individuals in the private security industry seek to display increased competency and professionalism.

7. SAFETY

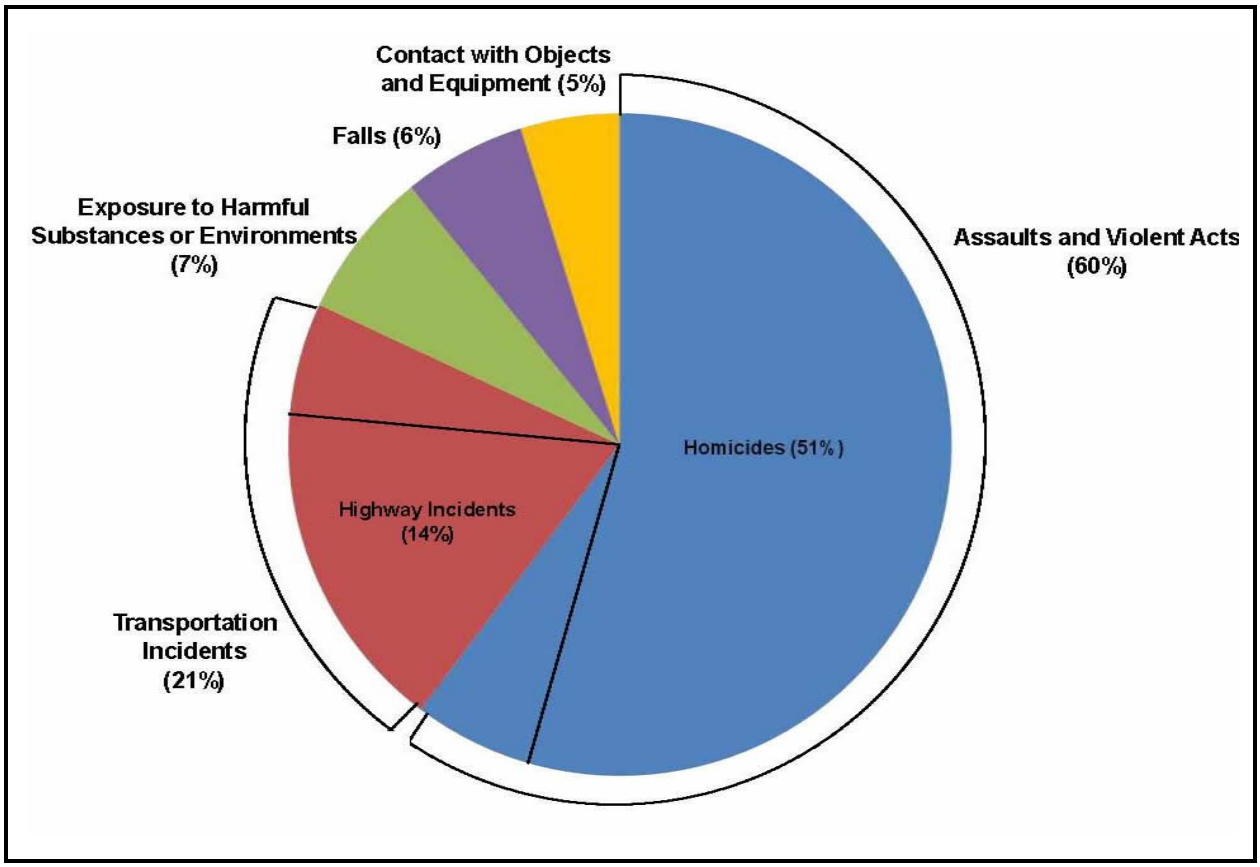
Occupational safety relates to activities that cause a person to miss work in the future. These activities include workplace injuries from minor accidents, such as a fall, to workplace fatalities. Data on security officer fatalities, injuries, and illnesses that require a worker to miss at least 1 day of work are available through two Bureau of Labor Statistics studies. Figure 29 shows the number of fatalities per 100,000 workers for security guards and gaming surveillance officers compared to all workers (BLS, 2010a). With the exception of 2005, the fatality rate for security guards and gaming surveillance officers is at least twice as high as the rate for all workers. As shown in Figure 30, in 2007 51% of fatalities among security guards and gaming surveillance officers were defined as homicides while an additional 9% of fatalities were due to violent acts other than homicide (e.g., manslaughter) (BLS, 2009a).

Figure 29. Fatalities per 100,000 Workers Among Security Guards and Gaming Surveillance Officers and All Workers by Year



Source: (BLS, 2010a).

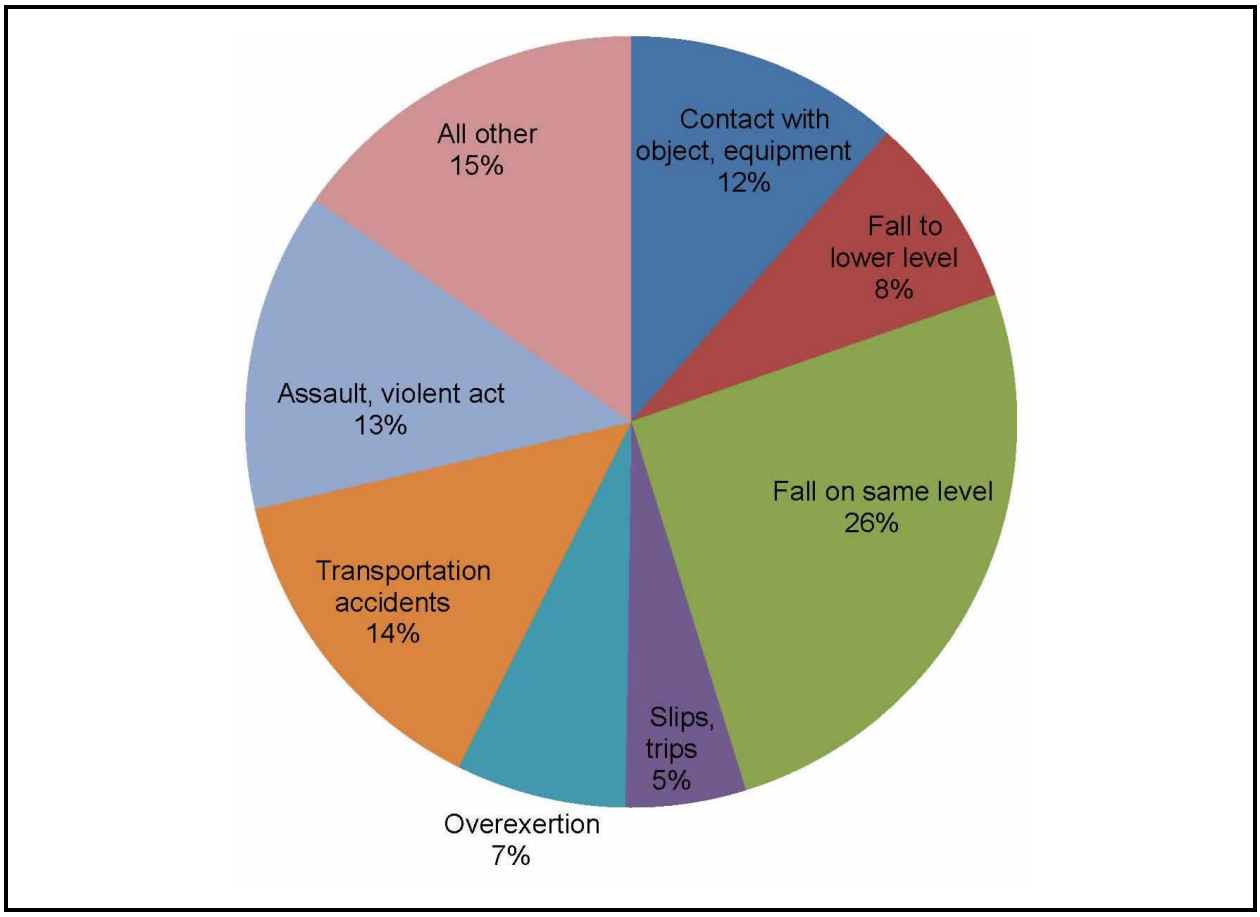
Figure 30. Causes of Fatalities Among Security Guards, 2007



Source: BLS (2009a).

Figure 31 provides a distribution of the causes of injuries and illnesses that required a security guard to miss at least 1 day of work (BLS, 2009a). Falls were the most common cause of injury, making up 34% of the cases. The rate of days missed for a nonfatal injury was 107.8 per 10,000 full-time security guards in 2007. This was 11.8% lower than the average across all private industries, which had a rate of 122.2 per 10,000 workers. In 2007, when an injury occurred, the median number of days missed was 8 (BLS, 2009a).

Figure 31. Causes For Nonfatal Injuries or Illnesses Among Security Guards, 2007



Source: BLS (2009a).

8. CONCLUSION

Private security organizations play a number of important roles in the United States, ranging from guard and investigative services to alarm monitoring, armored transport, and security consulting. The growth in private security has been driven in part by the increasing level of outsourcing of security functions in areas including commercial security, the privatization of corrections and certain policing functions, and infrastructure protection. In addition, relationships between public and private security agencies have improved in recent years, as both police departments and private security have paid greater attention to collaboration, information sharing, and partnership. The annual revenue for private security firms has also been on the rise, with recent estimates for the total annual revenue of private security ranging from $19 billion to $34 billion.

Yet, leaders in the industry remain concerned about the nation's ability to provide qualified, well-trained private security officers. While 31 states require some form of licensing or registration for contract private security guards, only 18 states require all armed guards to be licensed. Furthermore, proprietary guards receive very little oversight and typically follow whatever standards are established by their employers.

Oversight by regulatory boards and the push for state and federal regulation suggests that government involvement is necessary. As the industry improves training, education, and personnel practices, the public can become more confident in the individuals hired to protect them. Although debates continue on how to regulate the private security industry, it is clear that more detailed and timely information is needed to better understand how the industry looks today and how it is changing. Governing policy and legislation will also become more important with the increase in responsibilities of individuals in the private security industry.

As this review indicates, data are available on many aspects of the private security industry. However, some aspects of the private security industry have not been studied in detail, while others have been studied but the existing data are either inconsistent or outdated. Based on the review of secondary data sources, the following conclusions can be generated:

1) **Employee demographics.** In the area of employee demographics, several government surveys provide data on private security officers. Because these are periodic surveys, trends could be reported for several employee characteristics, and the different approaches used by the data sources allowed for the information to be analyzed separately for contract security and proprietary security officers. In general the quality of the data collected by these surveys is very high; however, variability in the methods and definitions of private security utilized by each survey resulted in differences in the estimates. One notable demographic characteristic for which data were not available was the distribution of private security officers by age.

2) **Budgeting and licensing.** A significant amount of information related to budgeting and licensing was available on contract security firms; however less information was available for companies with a proprietary security force. Several sources also collected revenue data among contract security firms. These data have been collected across time allowing for trends to be observed. However, the revenue estimates varied greatly between sources and, as a result, the data should be used cautiously. For companies with proprietary security, one source (McCourt, 2009) provided two different statistics by which security spending could be measured. However, the source did not detail how it developed the published statistics. Another source provided historical information on companies' security budgets, but due to low response rates in the survey the specific budget estimates must be interpreted with caution.

3) **Private security powers.** Very little comprehensive data has been collected in the area of private security powers. One data source (McCourt, 2009) was identified, but the available information was almost 30 years old. Furthermore, the data were based on a small case study, resulting in estimates that are not generalizable. Therefore, this is an area where there is a significant need for additional and more current information.

4) **Security operations.** Data on several security operations topics were available, but from only one of two sources. While the design of the ASIS Scope and Emerging Trends survey was methodologically sound, the achieved response rate creates a potential for biased estimates. Furthermore, because survey weights were not used, unequal response patterns across industry segments could exacerbate the potential bias in estimates that used data from all industries. However, if the respondents were skewed toward one or two industry sectors, the estimates may be representative only of those sectors and not the universe of businesses.

Given these findings, we recommend any future study of the private security industry incorporate the following four suggestions.

1) **Develop a clear definition of private security.** It will be critical for a national data collection effort, such as the NPSS, to develop a concise definition of private security and to understand how that definition may produce data that differ from those currently available. Furthermore, the secondary data can be used for a reliability analysis of common survey items. Although some information on demographic and employment characteristics is available, inclusion of similar items in the NPSS will allow for important comparisons to existing surveys. If the definitions of private security and the collection period of the secondary data source are similar, then the new study estimates should be within sampling variation of the secondary data source.

2) **Cover a broad range of topics.** Our review of the available data found that the primary focus of the secondary data sources is not private security (each source provides only one or two statistics on private security). Because of the differing definitions being used, it is not always appropriate to combine information across sources to obtain a more complete story on private security officers and the industries that employ them. A future study focused on private security should cover a broad range of topics, including demographics, training, budgeting, and safety. By covering all of these topics under a single survey, a more comprehensive understanding of security officer characteristics and their work environment can be developed.

3) **Utilize a rigorous and defensible data collection methodology.** The review of the methodologies used by secondary data sources demonstrates the challenges associated with developing a study that can be generalized to the entire private security industry. Methodologically sound studies with high response rates (e.g., government surveys) are often too broad, covering multiple industries and providing only general information on private security officers and the private security industry. In comparison, studies that focused specifically on the private security industry often had methodological flaws that limited their generalizablity. To fully understand the private security industry, future studies need to be focused like the Hallcrest and ASIS studies, but also overcome their methodological and response rate challenges. To accomplish this, careful consideration needs to be given to the development of a national sampling frame. The frame must provide good coverage of the companies to which inference will be drawn. Furthermore, data collection procedures should include nonresponse follow-up to ensure a reasonable response rate (i.e., 70% or higher).

   One key to high cooperation rates is identifying the correct point of contact for the survey. The ASIS survey provides the distribution of the survey respondents' titles (see Table 9). This information may be useful in identifying the best point of contact within a company, leading to higher response rates. As the table shows, the point of contact in non-security firms was someone whose main function was something other than the daily oversight of the company's security. This indicates that obtaining buy-in from non-security professionals at most companies will be critical to obtaining a reasonable response rate. Thus, when designing the NPSS, it will be important to review the methods used to minimize nonresponse, incorporate approaches that appear successful, and develop additional approaches that can be adopted.

Table 9. Distribution of Survey Respondents' Titles in the ASIS Scope and Emerging Trends Survey, 2005

Title	Percentage of respondents
Chief security officer	4.7
Security management	13.2
Security services/products	0.2
Security supervisor	9.4
Consultant	1.0
Architect/engineer	2.7
Executive/financial management	38.7
Other	27.3

4) **Conduct the survey periodically.** As the trend data obtained in the secondary data analysis indicate, private security is a growing and rapidly changing industry. Therefore, while a single study examining a point in time is useful, a periodic study that looks at the industry in a consistent manner over time will provide greater insight into the industry and how it is evolving. Periodic studies can either follow the initial cohort over time through re-interviews or draw distinct nationally representative samples. Following a nationally representative cohort of companies improves the assessment of change because baseline measurements are known. However, if there is significant attrition from the cohort, biases can be introduced. New nationally representative samples would reduce the problem of attrition, but it would be more difficult to determine whether a change in the estimates is caused by time or sampling error. Regardless of the approach taken, a set of studies over time will better inform how private security is being utilized in the United States and the resulting economic and policy implications.

In today's post-9/11 era, private security guards have a more critical role in homeland security and public safety than ever before. Every day, they are responsible for the protection of critical infrastructure, intellectual property, and millions of lives. Despite their increasing presence, much remains unknown about the industry, including a clear definition of private security and a comprehensive analysis of the industry's current state. This literature review and secondary data analysis provides a general synopsis of what is currently known about the private security industry and the data sources used to describe the trends and characteristics of the field. The review documents the strengths and limitations of secondary data, as well as recommendations for how future data collection efforts can build on previous studies to produce higher quality and more consistent data on the private security industry over time. By improving upon past data collection efforts,

future studies can increase knowledge across the private security industry and provide more accurate and practical information for all stakeholders.

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