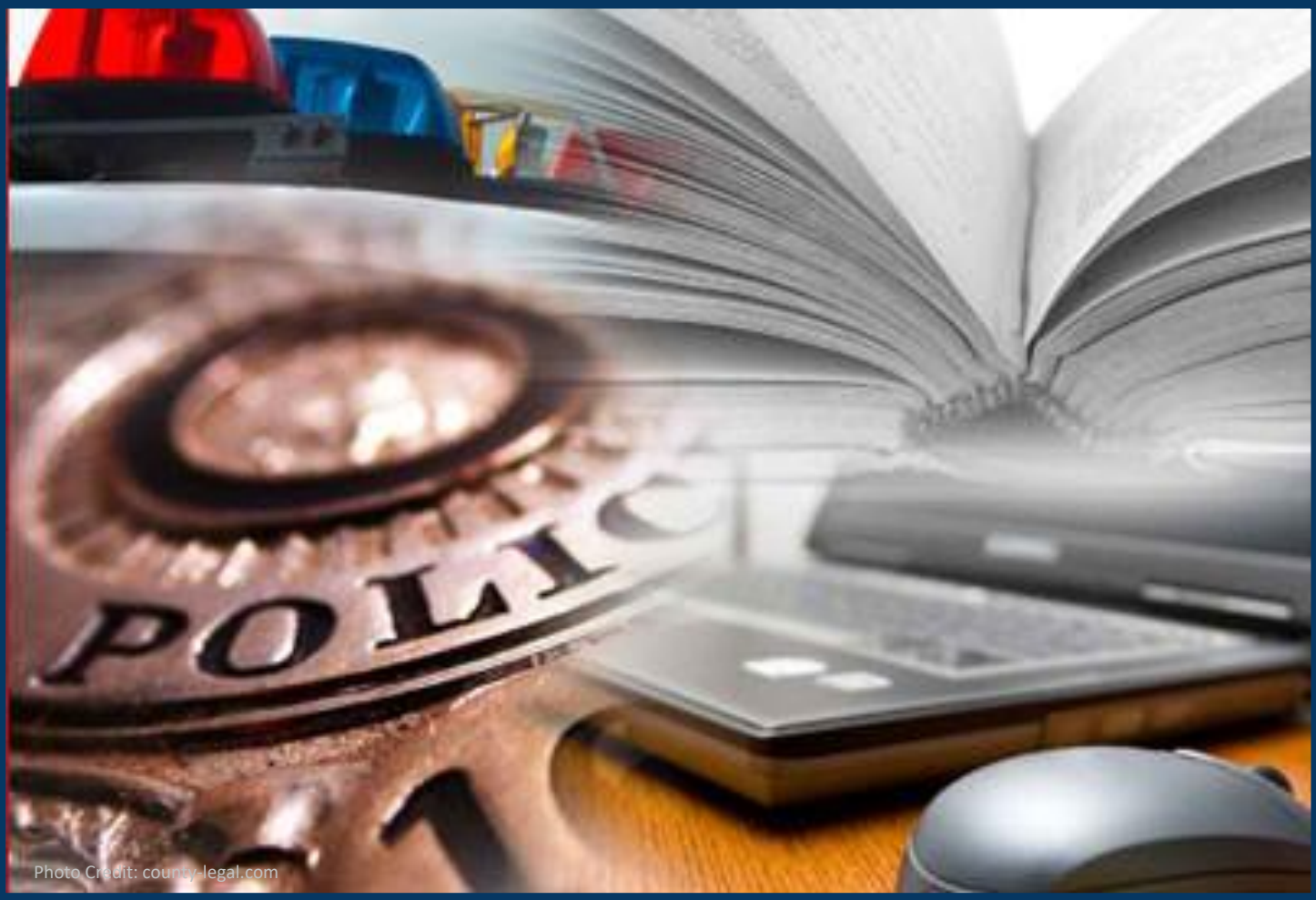

Policing around the Nation: Education, Philosophy, and Practice

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Executive Summary

This report describes the findings of a recent survey of a nationally-representative sample of local law enforcement agencies on the role of higher education in policing. The survey was completed by 958 agencies (116 which employ 250 or more officers and 842 which employ fewer than 250 officers) from every state in the nation. This is the largest and most comprehensive non-governmental study ever conducted on the role of higher education in policing on a national level. It is also the first study in forty years to provide substantial information about higher education policy and practice in small departments.

The last national data was collected in 1988 and much has changed since that time. Policing has evolved as a profession and officers are held to higher standards than ever before; at least that is what we believe and what anecdotal evidence suggests to be true. The purpose of the study is two-fold: (1) to gain an accurate, contemporary picture of higher education in policing, including an understanding of department and environmental factors that may influence higher education policy & prevalence in law enforcement agencies and (2) to learn about the prevalence of other special policies, procedures, and resources that are important to the police function but vary by department, and may be correlated with higher education policy. It aims to significantly improve our knowledge about police education, philosophy, and practice.

This report does not ask, nor answer, whether officers with a college degree are *better* than officers without a college degree on any measure. It does not venture into the weeds of the higher education debate. What it does is provide us data to begin to understand how higher education might be relevant to the practice of policing. Researchers asked agencies a plethora of questions about officer education levels, education requirements for hiring/promotion, education incentives, and training as well as questions about the organization's philosophy, how it practices policing, the politics it operates within, and the mechanisms it has in place to be accountable to its jurisdiction's citizenry.

The study revealed many interesting findings, including the fact that the Chief's/Sheriff's education level makes a big difference in how an agency operates – the philosophy that guides the agency, the strategies it uses, the programs it implements, and the policies it adopts. Beyond that, some of the most interesting findings are:

- Consistent with LEMAS data, the vast majority (81.5%) of surveyed agencies require only a high school diploma to be hired. A small percent of agencies require recruits to have earned some college credits (6.6%), a 2-year degree (10.5%), or a 4-year degree (1.3%).
- Agency minimum education requirements are primarily dictated by state standards, as only 13% of agencies choose to deviate and require more education per department policy than

is required by state law. Agencies which have collective bargaining are the most likely to require higher education standards than state law.

- A college degree is generally not required to become a police officer, however it can be highly important for promotion, especially at the rank of Lieutenant (2nd level supervisor) and above. Agencies led by a CEO with a master's degree or higher are the most likely to require higher levels of education to promote, as are agencies in certain states (for example California and Massachusetts).
- Only 13.3% of agencies surveyed have considered requiring a four-year degree for new recruits. Agencies headed by a college-educated CEO are the most likely to have considered increasing minimum education standards to a four-year degree. Many agencies do not think a four-year college degree is necessary to hire high quality candidates and are concerned about being able to afford higher salaries to recruit college-educated officers. Another major concern is that requiring a four-year degree would shrink the available applicant pool to the point that agencies could not hire.
- Almost every U.S. law enforcement officer (93.8%) has easy access to a brick and mortar institution that awards a two-year degree and 83.1% have easy access to an institution that awards four-year degrees.
- There is little consensus about which *perceived* advantages of hiring college-educated officers are *actual* benefits of hiring college-educated officers. The two perceived benefits that a majority of respondents agreed are actual benefits are that college-educated officers are better report writers (61.6%) and better able to use modern technology (46.1%). Respondent perceptions of college-educated officers was highly and significantly correlated with CEO education level.
- More than half (55.8%) of agencies provide at least one incentive to officers to pursue higher education. This percentage, however, is highly variable across the 50 states. Larger agencies, municipal agencies, those that have collective bargaining, and those headed by a CEO with a graduate degree are the most likely to offer incentives to pursue higher education. The most popular incentives are tuition assistance/reimbursement (38.6%) and educational pay incentives (33.7%).
    - Almost three-quarters (73.5%) of agencies pay officers an extra 1%-7.49% for having a bachelor's degree. Most (37.2%) agencies pay officers 1%-2.49% more for a four-year degree than an AA or high school diploma (whichever is the agency's minimum).
- Of those agencies that offer tuition reimbursement, 35.0% offer it to officers upon hire, 10.8% require officers pass their training period, 39.2% require officers pass their probationary period, and 13.8% require officers to be employed for a certain period of time

(usually a year). Also, 73.3% of agencies will reimburse officers for any "work related" college and 29% will reimburse officers for "any college class."

- Only 4.2% of agencies pay the college at the time of enrollment for officers' classes, the rest (95.8%) reimburse officers for out-of-pocket expenses. Most agencies (81.6%) require officers to show passing grades in order to be reimbursed and many agencies stated that the amount reimbursed is partially (or wholly) determined by the grade the officer earned in the course.
- The annual tuition cap for most agencies is between $1,000 and $5,000 annually, however many agencies stated that the benefit is budget dependent and/or that there is a single pot of money that is made available annually for all employees who are eligible and submit a claim until the funds are depleted.
- Slightly more than half (51.8%) of sworn officers in the United States have at least a two-year degree, 30.2% have at least a four-year degree, and 5.4% have a graduate degree. This varies considerably by state, region, agency size, CEO education level, union presence, and department type.
- For example, 31.6% of officers employed by municipal agencies hold a bachelor's degree or higher compared to 21.1% of officers employed by county agencies.
- Small and medium sized agencies serving populations less than 100,000 have a higher proportion of officers with two-year degrees and larger agencies serving populations over 100,000 have a higher proportion of officers with four-year degrees.
- Agencies which have collective bargaining have significantly higher percentages of officers with two-year and four-year degrees.
- Agencies headed by a CEO with a graduate degree employ a significantly higher percentage of officers with at least a four-year degree (43.7%) compared to agencies headed by a CEO with a four-year degree (32.9%), a two-year degree (13.8%), or a high school diploma (18.1%).
- The states with the greatest percent of officers with four-year degrees or higher are: Massachusetts (49.0%), New Jersey (46.1%), Minnesota (42.0%), and California (39.5%). Massachusetts and New Jersey also have the largest percentage of officers with a master's degree or higher (14.6% and 13.6% respectively).
- Today, 17.1% of CEOs (chiefs and sheriffs) have a high school diploma, 19.0% have a two-year degree, 28.7% have a four-year degree, 32.1% have a master's degree, and 3.0% have a doctorate or other terminal degree (for example, J.D.).
    - Currently, 72.5% of CEOs with a high school diploma lead agencies which serve

populations less than 10,000. In comparison, 25.7% of CEOs with a master's degree, 50.2% of CEOs with a four-year degree, and 63.9% of CEOs with a two-year degree lead agencies which serve populations less than 10,000.

- Agencies which have collective bargaining are more likely to be led by a CEO with a master's degree or higher (42.9% vs 26.5%), as are municipal agencies (38.2% vs 20.8%).
- Agencies in the Northeast employ a significantly higher percentage of CEOs with a master's degree or higher (46.7% vs 35.1% average) and agencies in the Midwest employ a significantly lower percentage (25.1%).
- Almost every agency (96.7%) has a required field training program for new recruits. Approximately half (48.1%) of agencies' new recruit field training programs are between 11 and 16 weeks but they vary from less than 2 weeks to more than 26 weeks. Almost all (93.9%) agencies which hire lateral officers, have a (usually mandatory) field training program for them.

- Officers were most likely to receive additional training (beyond state requirements) on handling mental health crisis situations. Almost half of agencies (45.3%) provided extra training on the topic to all or almost all of their patrol officers and another 25.5% provided additional training to a small percentage of officers.
- Approximately one-third of agencies provided additional training to all or nearly all of their patrol officers on procedural justice principals (35.0%), community policing (36.2%), and implicit bias (37.1%).
- Less than one-quarter of agencies provided additional training to most or all of their patrol officers on handling non-violent protests/civil disobedience (22.3%) and problem oriented policing/problem solving (19.6%).
- Officers were least likely to have received additional training on intelligence-led or evidence-based policing (mapping, hotspots, etc.). Only 10.9% of agencies provided additional training on the topic to all or almost all of their patrol officers while 31.2% provided no additional training on the topic to any officers.
- Almost every respondent agency (99.5%) said they practice community policing, at least to some degree. Almost 85% of agencies expect patrol officers to routinely engage in problem solving, 75.5% work with other public and private entities when problem solving and include COP in the job description of patrol officer. Moreover, 59.1% of agencies give special recognition to officers for especially good community police work, 58.8% have neighborhood watch, 50.3% utilize crime analysis to identify crime trends and/or predict patterns, 50.5% include COP criteria in employee performance measures, 49.7% hold regularly scheduled meetings between police and community members, 44.0%. use

alternatives to motor patrol to increase positive contact with members of the community, and 43.5% incorporate "dedicated problem solving time" into officers' schedules.

- In terms of popular policing strategies, almost every respondent (91.5%) stated that their agency uses direct patrol, 61.7% uses hot spots policing, 55.8% uses situational crime prevention, 39.4% uses foot patrol, 36.3% uses a trespass affidavit program, 30.4% uses crime prevention through environmental design (CPTED), and 27.8% uses heavy enforcement of misdemeanors/summonses in targeted areas. The least popular strategies are civil gang injunctions (6.2%), exclusion orders (9.6%), and heavy use of pedestrian stops in targeted areas (10.4%).
- Most agencies now have a department website (87.6%) as well as use social media (87.9%) to communicate with the public. By far, the most popular social media type is Facebook/Google+ which is used by 81.6% of agencies. The next most popular is Twitter, which is used by 37.8% of agencies.
- Forty percent of agencies nationwide have a mental health crisis response team, 55% of which include a mental health professional. About a third (30.9%) of these dedicated teams are on duty 24/7. Of the 59.9% of agencies which do not have a specialized team, two-thirds (68.9%) have trained all patrol officers and 17.4% have trained some officers in handling mental health crises.
    - Larger agencies are significantly more likely than smaller agencies to have a specialized mental health response team. Three-quarters (73.0%) of agencies serving populations greater that 100,000 has a special team, in comparison to 45.0% of agencies serving 25,000-999,999 and 29.9% of agencies serving less than 25,000.
    - There is also a significant linear association with CEO education level as well, with agencies headed by a CEO with a graduate degree the most likely to have a specialized mental health response team.
    - About three-quarters of county agencies (75.6%) and agencies in the West (71.4%) are fortunate enough to have a mental health professional on their team, in comparison to 50.5% of municipal agencies and 48.8% of agencies in other regions.
- Just one in ten agencies (10.4%) has specially trained officers to work with individuals experiencing homelessness. Two-thirds (68.7%) of these agencies have a team of officers and one-third (31.3%) has a single homeless liaison officer.
    - Whether an agency has specially trained officers is highly dependent on whether their community has a problem with homelessness, 45.3% of agencies which categorize homelessness as a "major problem" have specially trained officers in comparison to 8.2% of agencies which categorize homelessness as a "minor problem" and 2.9% of agencies which say homelessness is "not an issue."

- Whether an agency has any homeless liaison officers is also linked to (a) population size (the larger the population, the larger the percentage of agencies which has a homeless outreach officer/team), (b) where the agency is located (highest percent in the West and Southeast, lowest in the Midwest), and (c) CEO education level (16.2% of agencies headed by a CEO with a graduate degree compared to 4.3% of CEOs with a high school diploma).

- A small percentage of agencies reported experiencing external pressure to generate revenue and/or report low crime statistics. The greatest external pressure is on agencies to generate revenue by issuing fines/citations, 16.8% of agencies reported experiencing at least a small amount of pressure in this category. Small municipal agencies were the most likely to report feeling external pressure to generate revenue through fines/citations. The agencies that reported any pressure to generate revenue through asset forfeiture were significantly more likely to be large agencies. Few agencies reported any external pressure (11.9%) or internal pressure (10.6%) to report low crime statistics. Whether an agency uses a Compstat-like system did not have a statistically significant effect on whether they described any external pressure to report low crime.

- Most agencies (56.5%) use an early intervention system to identify officers with potential for misconduct. Larger agencies and those headed by a CEO with a graduate degree are the most likely to use an early intervention system.

- Almost one in every seven agencies nationwide (13.5%) has a citizen oversight committee or civilian review board. While city and county agencies are equally likely to have a mechanism for citizen oversight, larger agencies are much more likely than smaller agencies to have this accountability mechanism.

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Introduction

Policing at the dawn of the 20th century was not the highly skilled and specialized profession it is today. In fact, many citizens did not trust or respect the police because officers lacked training and there was a pervasive culture of corruption within law enforcement. As one of the main reformers of the time, August Vollmer (Chief of Berkeley, CA Police Department from 1905 to 1932 and "father of modern policing") strongly believed that well educated and trained police officers were the key to a more professional and respected police force. He and other reformers worked tirelessly toward this goal and Vollmer personally helped establish three separate police programs at different colleges throughout the U.S.; including a law enforcement training program at UC Berkeley in 1916, a criminology program at University of Chicago, and the first two-year college police program that led to an A.A. degree in Police Training at San Jose State University (formerly State Teachers College at San Jose) in 1930 (Gardiner and Hickman, 2017; San Jose State University, 2005; Vila and Morris, 1999). The Wickersham Commission, appointed by President Hoover between 1929 and 1931 to examine law enforcement practices, agreed that the selection, education, and training of officers was crucial to improving the practice of policing and made recommendations to advance each.

Although officer selection and training programs improved, there was minimal movement on the education front. Fast-forward about thirty-five years and the increasing crime rate and urban riots of the 1960s pushed the education issue to the forefront (Roberg and Bonn, 2004). The President's Commission on Law Enforcement and the Administration of Justice (1967) advocated for college-educated officers as a solution to the growing crisis of confidence in policing and in response, Congress passed the Omnibus Crime Control and Safe Streets Act (OCCSSA) of 1968 which created the Law Enforcement Assistance Administration (LEAA) and provided federal funding for education, research, and equipment. This led to a large increase in the number of colleges offering police science or criminal justice degree programs. Regrettably, some of the programs were non-rigorous extensions of police academy curriculum which hindered attempts to increase education standards for entry-level officers (Roberg & Bonn, 2004; Sherman & the National Advisory Commission on Higher Education for Police Officers, 1978). While poor quality instruction is no longer a pervasive issue, research on police education has yet to produce the clear, unequivocal results that many U.S. police leaders desire in order to change policy. Still, the value of a college-degree for officers holds much appeal; especially in light of the varied and complex tasks that today's police officers are expected to perform (tasks that were not expected of officers thirty years ago).

The Difference of a Degree

Research evidence on the value of a bachelor's degree for police officers is not indisputable; some studies find positive benefits but other studies find no correlation. On the whole, more research indicates positive effects than no correlation or negative consequences. Even though they typically receive higher salaries, research suggests that college-educated officers (those with a bachelor's degree or higher) save departments money. This is because, according to research, college-educated officers take fewer sick days, have fewer on-the-job injuries and accidents, and have fewer individual liability cases filed against them (Carter & Sapp, 1989; Cascio, 1977; Cohen & Chaiken, 1972). They also may be better employees; research finds that college-educated officers are better report writers, more innovative, more reliable, more committed to the agency, more likely to take on leadership roles within the department, and more likely to be promoted than officers without a college degree (Carlan & Lewis, 2009; Cohen & Chaiken, 1972; Krimmel, 1996; Trojanowicz & Nicholson, 1976; Whetstone, 2000; Worden, 1990). If degree holding officers are truly better report writers, that could translate into better investigations, higher court case filings, fewer evidentiary constitutional challenges, fewer false confessions or wrongful convictions, and/or more successful prosecutions.

Research has also found that college-educated officers have fewer complaints and disciplinary actions against them, use force less often, and when they do use force they use lower levels of force than officers without a college degree (Chapman, 2012; Cohen & Chaiken, 1972; Fyfe, 1988; Kappeler et al., 1992; Lersch & Kunzman, 2001; Manis, Archbold, & Hassell, 2008; Roberg & Bonn, 2004; Rydberg & Terrill, 2010; Wilson, 1999). These particular benefits may be especially valuable for agencies which serve poor, majority-minority communities where police-community relations are more likely to be strained than wealthy, homogenous communities. Some research also suggests that college-educated officers may be less resistant to change and more likely to embrace new methods of policing (Roberg and Bonn, 2004); characteristics which might be particularly valuable in agencies committed to newer and more innovative policing strategies, such as community policing, problem solving, intelligence-led policing, democratic policing and procedural justice principles.

On the flip side, Paoline and colleagues (2015) found that college-educated patrol officers may be less satisfied with their jobs, hold less favorable views toward management, and be less public-service oriented than their non-college educated peers. They hypothesize that these views may be a function of their sample, as the patrol officers with the most education held greater promotional aspirations and expectations than their less educated peers (Gau et al., 2013) yet were at the bottom of the organizational hierarchy (Paoline et al., 2015). It is possible, they suggest, that their survey tapped into the frustrations of educated officers being passed over for promotion.

Prevalence of Degree Holders

Despite our knowledge about the benefits of college educated law enforcement officers and the increasing focus on intelligence-led policing and problem solving, few departments require a college degree and there is little information about how many officers actually hold four-year degrees. In 1960, the percent of degree holders in the U.S. general population (8%) was nearly triple the percent of officers with a college diploma (3%) (Rydberg & Terrill, 2010; U.S. Census, 2006). The proportion of police officers with a college degree (8.9%) continued to trail behind the general population (13.3%) in 1974, but the degree of difference shrank by almost half (Rydberg & Terrill, 2010; U.S. Census, 1974). By 1988, 22.6% of sworn officers in the nation were college graduates and for the first time, the percentage of officers with degrees was higher than the general population, which was at 20.3% (Carter & Sapp, 1990; U.S. Census, 1989).

More recently, a few researchers have reported the education status of survey respondents in their studies of sworn officers. Although none of these findings are generalizable to the entire United States, they are informative and reveal two things about the state of education in policing: (1) the percentage of college-educated officers is increasing, and (2) there is great variability between departments (Gardiner, 2015). Recent research suggests the percent of college-educated officers ranges from 11.6% to 65.2% in the study agencies and varies by factors that could include size of agency, location and type of jurisdiction, demographics of population served, starting salary, and minimum education requirements to get hired and/or promoted (Gardiner, 2015; Gardiner and Hickman, 2017; Hilal & Densley, 2013). On average, it appears that between 25% and 45% of officers around the nation have a college-degree.

Minimum Education Requirements

According to the latest Law Enforcement Management and Administrative Statistics Survey (LEMAS) data, no sheriffs' departments and only 1% of police departments in the United States require a four-year college degree for employment as a police officer; most of these serve a population between 250,000 and 999,999 (Burch, 2012; Reaves, 2015). Fully 82% of police and 89% of sheriffs' agencies across the nation only require a high school diploma (or equivalent). LEMAS data tell us that larger agencies often have more stringent education qualification requirements than do smaller agencies. For example, 36% of police departments and 22% of sheriffs' departments that serve a population size of 1,000,000 or more require at least some college (Burch, 2012; Reaves, 2015). While a college degree is usually not required to become a police officer, it is often required to promote through the ranks. A recent study of California law enforcement agencies found that merely one-third of agencies would promote an officer with only a high school diploma to sergeant and most agencies in the study required a four-year degree to promote to lieutenant (Gardiner, 2015).

Current Study

The current study surveyed a nationally-representative sample of local (municipal and county) law enforcement agencies in the United States[1] about the education levels of sworn officers in the agency and the education incentives available to them as well as agency level factors that may be associated with hiring educated officers.

An annually-updated, comprehensive list of local law enforcement agencies was purchased from the National Public Safety Information Bureau (NPSIB) to create the sampling frame. The original list provided by NPSIB contained 12,147 municipal law enforcement agencies and 3,096 county sheriff's departments for a total of 15,244 agencies. Of these, 11,358 (74.5%) contained email addresses[2]. The number of officers in each department was provided for 11,074 (97.5%) of the 11,358 cases. For the remaining 311 departments, the number of officers was imputed based on other available data, including jurisdiction population size, department type, and region.

All 491 agencies with (or estimated to have) 250 or more officers were retained in the list and invited to participate in the study. The remaining 10,867 departments with (or estimated to have) fewer than 250 officers were stratified by agency size and region then 4,409 agencies were randomly selected to participate, bringing the total number of agencies in the frame to 4,900.

These records were uploaded to the Qualtrics server. An advance notification email was sent out to all agencies in the frame. This notification email informed potential respondents of the need for and purpose of the survey, the level of involvement being requested, and that the data they provided would be kept completely confidential. One week later, an invitation email containing similar information to the notification email and a direct link to the web survey was sent out. Once the survey link was clicked, the respondent's email address was automatically entered into the database, and the respondent was taken to the first page of the survey. The survey was initially sent to a subset of 500 randomly selected departments. When it was determined that the survey was functioning properly, and all data were being recorded as planned, the survey was sent to the remaining departments in the sampling frame.

Throughout the course of data collection, reminder emails (which also contained the link to the survey), were sent out to those agencies in the sampling frame for which a representative had not yet completed the survey. The length and phrasing of the reminder emails were modified slightly in each subsequent version in an attempt to maximize their effect. In addition to the reminder emails, two rounds of reminder calls were made to all agencies with 250 or more

[1] Some primary state agencies were also invited to participate in the research but only 10 completed the survey. For this reason state agency data were removed and are not included in the sampling frame for this report or analysis.
[2] Initially, efforts were made to obtain email addresses for those 3,886 agencies that did not have this information through internet searches. When this method did not yield many valid emails, these efforts were abandoned.

officers that had not completed the survey and to one quarter (selected at random) of those agencies with fewer than 250 officers that had not completed the survey.

In total, 958 agencies (out of 4,900) completed the survey, for a response rate of 19.6%. As would be expected, response rate varied by region and was highest for those agencies located in the West (27.4%; *n*=242), likely because of the close proximity of these departments to the lead researcher's university. It was lowest for those agencies in the South (16.7%; *n*=154). The response rates for the Southeast, Midwest, and Northeast were 17.9% (*n*=182), 18.1% (*n*=236), and 18.6% (*n*=144) respectively. Likewise, response rate was positively correlated to agency size, with the largest agencies (more than 250 officers) having the highest response rate at 41.0% (*n*=127) and the smallest agencies (10 or fewer officers) having the lowest response rate (15.4%; *n*=263). Agencies with 11 to 50 officers had a 20.9% response rate (*n*=416), followed by agencies with 51 to 100 officers (23.2%; *n*=94), and agencies with 101 to 250 officers (24.8%; *n*=64). It is noteworthy that responding agencies represent more than one-third of all local police and sheriffs' departments employing more than 250 officers, one-tenth of all local agencies employing 100-249 officers, and one out of every 12 agencies employing 50-99 officers (Burch, 2016; Reaves, 2015). All 50 states are represented.

In accordance with LEMAS data, the greatest proportion of agencies were municipal police departments (*n* = 733; 76.5%), followed by nearly one-fifth (*n* = 175; 18.1%) that were county sheriff's departments/offices. Smaller proportions were municipal (*n* = 14; 1.4%) and county (*n* = 4; 0.4%) public safety departments, while nine (0.9%) were county police departments. Sixteen were other types of departments (12 of which were state agencies that were removed for this report). The sizes of population served by the departments in the survey sample roughly correspond to Census data which show most jurisdictions in the United States are quite small (see Table 1).

Table 1: Sizes of Populations Served by Departments in the Survey Sample

Population Size	Count	Percent
Under 2,500	145	15.2%
2,500 to 9,999	280	29.3%
10,000 to 24,999	197	20.6%
25,000 to 49,999	109	11.4%
50,000 to 99,999	73	7.6%
100,000 to 249,999	70	7.3%
250,000 to 499,999	43	4.5%
500,0000 to 999,999	28	2.9%
1,000,000 or more	11	1.2%
Overall	**956**	**100.0%**

The survey was extensive and included 7 questions pertaining to officer education, 25 questions about department education requirements and incentives, 12 questions about training, 17

questions regarding agency operating philosophy and practices, and 16 questions pertaining to politics and accountability. The web-based survey was administered by the Social Science Research Center at Cal State Fullerton using Qualtrics. It was in the field for 23 weeks in 2016.

As with any study of this nature, the current study is limited by responder knowledge and the accuracy of data provided by each agency. While the vast majority of agencies appeared to provide valid data, there were some instances in which provided data did not "make sense." In these cases, the person who completed the survey for the agency was contacted for clarification and the reporting error was fixed or the suspect data were removed from the analysis. In some cases, when the survey respondent was unable to be reached, a logical decision was made regarding removing invalid data or "correcting" an obvious data entry error.

Of the 958 agencies which completed the survey, 10 completed the survey twice. If the answers to the questions matched, one "completion" was kept and the other discarded (4). If the answers to the questions did not match, both "completions" were discarded, as it was impossible to determine which set of answers was most accurate (6 agencies representing 12 "completions"). Additionally, 18 agencies answered only a few questions about the agency (for example, type of agency and region) but did not answer any questions related to education or agency philosophy or practice; these cases were removed from the data set. Finally, for the current report, state agencies were removed from the dataset (12 agencies). The final dataset for this report includes the responses from 912 agencies.

Education

The main purpose of this study is to gain an accurate, contemporary picture of education in policing, including an understanding of department and environmental factors that may influence education policy & prevalence in law enforcement agencies. Toward that end, this section presents the research findings related to minimum education requirements, perceptions of college-educated officers, agency-related educational incentives, and the percentage of officers with a college degree. Each of these topics is examined by agency size (population served), region, unionization, CEO education, and type of agency, when relevant. Data tables of significant correlations are located in Appendices A-F.

Minimum Education Requirements

Consistent with LEMAS data, the vast majority (81.5%) of surveyed agencies require only a high school diploma to be hired (see Table 2). A small percentage of agencies requires recruits to have earned some college credits (6.6%), a 2-year degree (10.5%), or a 4-year degree (1.3%).

Table 2: Minimum Education Requirement of Local Agencies in U.S.[3]

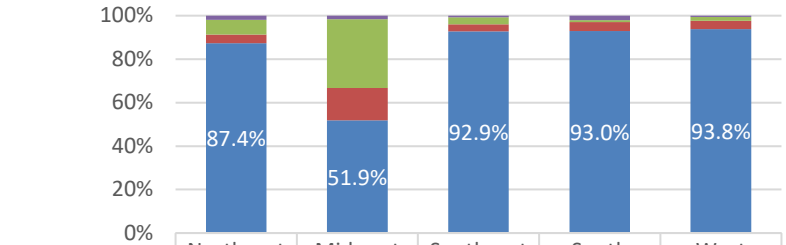
	High School Diploma	Some College	2 year Degree	4 year Degree	Master's Degree
Entry level Officer	81.5%	6.6%	10.5%	1.3%	
Lateral Officer	81.7%	6.7%	10.1	1.5%	
Detective	81.4%	7.0%	10.1%	1.4%	
Sergeant	68.1%	11.4%	17.2%	3.2%	
Lieutenant	62.0%	9.1%	15.0%	13.5%	.4%
Command Staff	55.4%	7.3%	13.6%	22.9%	.7%
Chief/Sheriff	44.9%	5.8%	8.2%	35.9%	5.2%

Agency minimum education requirements are primarily dictated by state standards, as only 13% of agencies choose to deviate and require more education per department policy than is required by state law. Interestingly, agencies which have collective bargaining are the most likely to require higher education standards than state law; 18.5% of "union" agencies require more than the state's minimum education level while only 7.2% of "non-union" agencies do (χ^2=18.642; p<.001). Agencies in Colorado, Florida, and Illinois are more likely to require more than the state's minimum education than agencies in other states.

[3] Throughout this report, police and sheriffs' departments' data are combined.

As Figure 1 shows, agencies in the Midwest are the most likely to require recruits to attend college. This is due to the fact that only two states (both of which are in the Midwest) require recruits to have any college credits to be hired as a sworn officer. Minnesota requires an AA degree & Wisconsin requires 60 college credits but not necessarily an associate's degree and allows recruits five years after hire to obtain the units. Also, Michigan has a dual track program that requires "pre-recruits" who complete basic academy as part of a college program to obtain an AA but allows departments to hire officers with a high school diploma and put them through the academy. Competition for entry-level police officer and sheriff's deputy jobs are highly competitive in some areas which means some agencies can be selective and hire only candidates who meet higher than minimum standards. Thus, respondents were asked about their agency's official "written policy" regarding minimum education requirements for hiring and promotion as well as their agency's unofficial "practice" concerning minimum education standards for hiring and promotion (see Figures 1 and 2). Surprisingly, only 46 agencies (6.8%) said they expect a higher level of education in practice than in their official written policy[4]. These agencies are located primarily in the Northeast and the West. Additionally, agencies that serve a population of 25,000-49,999 residents appear to be more likely than others to expect a higher level of education in practice than policy.

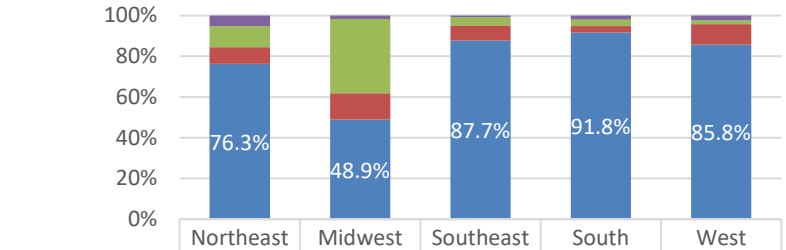
Figure 1: Minimum Education per Dept. Written Policy by Region



	Northeast	Midwest	Southeast	South	West
4-year Degree	1.9%	1.6%	0.8%	2.0%	0.6%
2-year Degree	6.8%	31.7%	3.2%	1.0%	1.7%
Some College	3.9%	14.8%	3.2%	4.0%	3.9%
HSD	87.4%	51.9%	92.9%	93.0%	93.8%

HSD Some College 2-year Degree 4-year Degree

Figure 2: Minimum Education per Dept. Practice by Region



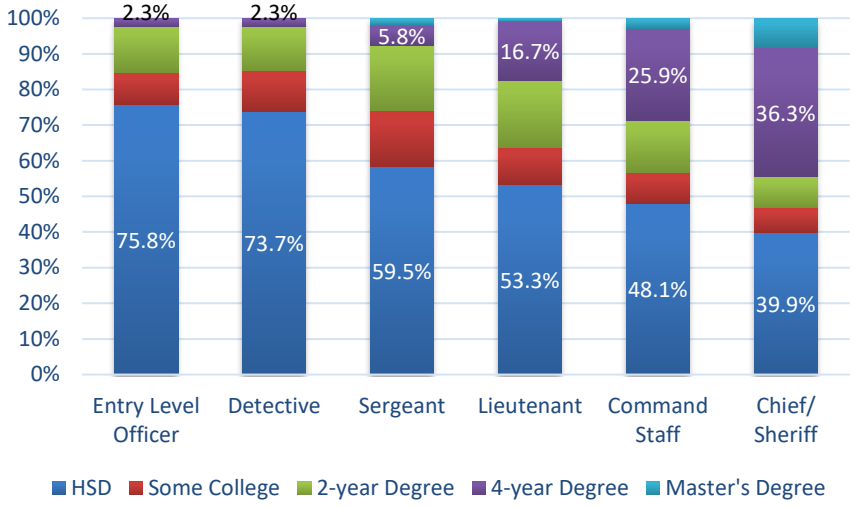
	Northeast	Midwest	Southeast	South	West
4-year Degree	5.2%	1.7%	0.8%	2.1%	2.4%
2-year Degree	10.3%	36.5%	4.1%	3.1%	1.8%
Some College	8.2%	12.9%	7.4%	3.1%	10.1%
HSD	76.3%	48.9%	87.7%	91.8%	85.8%

HSD Some College 2-year Degree 4-year Degree

[4] Comparing agency's responses to this question to their reported number of officers with degrees suggests there are many more agencies which have higher "in practice" standards. Future research will examine this more closely.

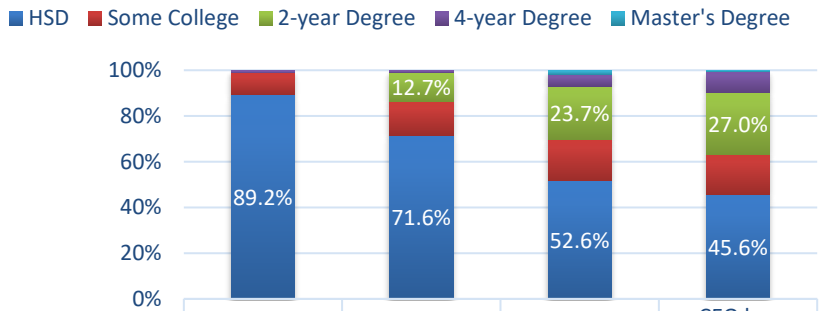
As can be seen in Table 2 (above) and Figure 3, while a college degree is generally not required to become a police officer, it becomes more important for promotion, especially at the rank of Lieutenant (2nd level supervisor) and higher. While national averages are portrayed in Figure 3 and Table 2, the reality is that the importance of a four-year college degree for promotion is highly varied by state. For example, 16.7% of local law enforcement agencies require a four-year degree to be promoted to lieutenant in practice; however in California, 51.5% of agencies expect it.

Figure 3: Dept. Practice Minimum Education Requirements by Position



The minimum education required to promote is not linked with unionization, but it is highly correlated to the education level of the agency's CEO (chief or sheriff). As Figures 4 and 5 illustrate, agencies with a high school educated CEO are highly unlikely to require anything more than a high school diploma to promote. On the other hand, agencies overseen by a CEO with a master's degree or higher are the most likely to require higher levels of education to promote. For example, only 10.8% of agencies headed by a high school educated CEO require anything more than a high school diploma to promote to sergeant. Meanwhile, 28.4% of agencies headed by a CEO with a two-year degree, 47.4% of

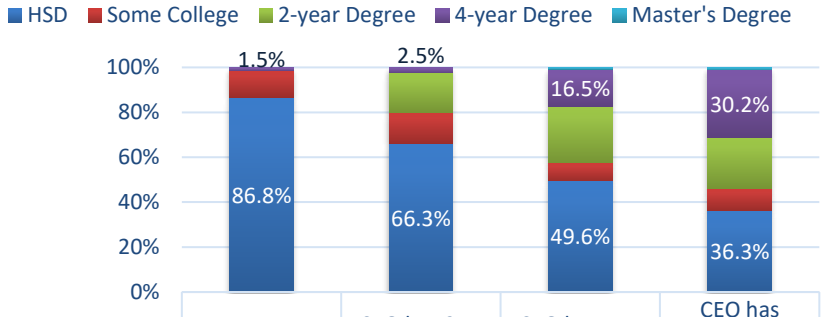
Figure 4: Minimum Education Required to Promote to Sergeant in Practice by CEO Education Level



	CEO has HSD	CEO has 2-yr Degree	CEO has 4-yr Degree	CEO has Master's Degree +
Master's Degree	0.0%	0.0%	2.0%	0.5%
4-year Degree	1.2%	1.0%	5.1%	9.3%
2-year Degree	0.0%	12.7%	23.7%	27.0%
Some College	9.6%	14.7%	18.6%	17.6%
HSD	89.2%	71.6%	52.6%	45.6%

agencies headed by a CEO with a four-year degree, and 54.4% of agencies headed by a CEO with a master's degree or higher require more than a high school diploma to promote to sergeant (χ^2= 72.020, p<.001). Differences between the minimum education level required to promote to lieutenant (2nd level supervisor) are even more pronounced, as 31.3% of agencies headed by a CEO with a master's degree or higher require officers to have at least a bachelor's degree to promote to lieutenant, compared to 1.5% of agencies headed by a CEO with a high school diploma, 2.5% of agencies headed by a CEO with a two-year degree, and 17.3% of agencies headed by a CEO with a four-year degree (χ^2= 86.328, p<.001).

Figure 5: Minimum Education Required to Promote to Lieutenant in Practice by CEO Education Level



	CEO has HSD	CEO has 2-yr Degree	CEO has 4-yr Degree	CEO has Master's Degree +
Master's Degree	0.0%	0.0%	0.8%	1.1%
4-year Degree	1.5%	2.5%	16.5%	30.2%
2-year Degree	0.0%	17.5%	25.2%	22.5%
Some College	11.8%	13.8%	7.9%	9.9%
HSD	86.8%	66.3%	49.6%	36.3%

Exceptional Candidates

Almost one-quarter (22.8%) of agencies has a written policy that allows the agency to hire exceptional candidates who lack the minimum education required. This does not vary much by region or size, population served, or CEO education level. There are no differences between municipal and county agencies, nor union and non-union agencies. There are however some differences between states, with agencies in Colorado, Connecticut, Idaho, Louisiana, Michigan, and Oregon being the most likely to be able to waive education requirements for exceptional individuals.

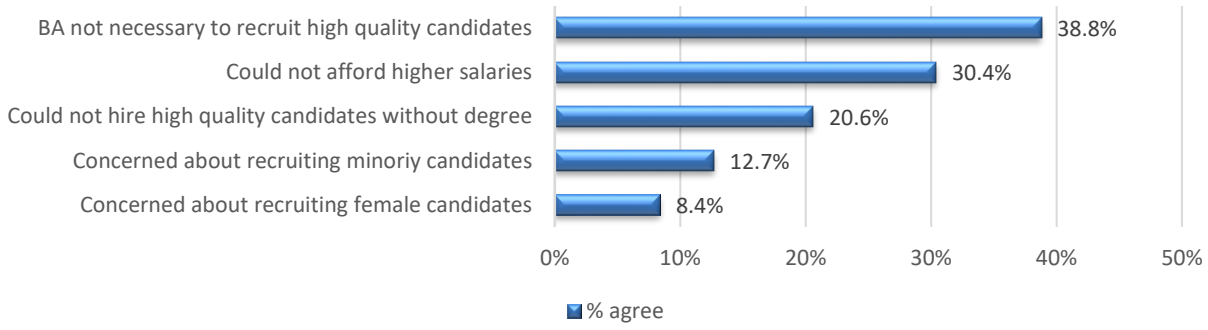
Additionally, as would be expected, the likelihood that an agency will waive minimum education requirements is significantly correlated with minimum education requirements. Specifically agencies which require at least some college (39.1%) or a two-year degree (37%) are about twice as likely to be able to hire exceptional candidates without the requisite academic units as are agencies which only require a high school diploma (18.6%), with agencies requiring a four-year degree falling in the middle (22.2%) (χ^2= 21.088, p<.001). Of agencies that can waive educational requirements, 88.9% can do so for individuals with military experience, 66.7% can waive requirements for prior law enforcement experience, 29.0% can waive requirements for computer

experience, and 22.2% can waive requirements for corporate experience. Some agencies can also waive education requirements for previous dispatch or other civilian law enforcement experience, being bilingual, law enforcement-fire-EMS training, specialty skills (such as interviewing, accident reconstruction, or logistics), or previous employment in a trade requiring an apprenticeship.

Agency Concerns about Requiring a Four-year Degree

Only 13.3% of agencies surveyed have considered requiring a four-year degree for new recruits. As with requiring a degree to promote to sergeant or lieutenant, agencies headed by a college-educated CEO are more likely than agencies headed by a high school educated CEO to have

Figure 6: Top Concerns about Requiring a 4-year Degree



considered increasing minimum education standards to a four-year degree (χ^2= 33.579, p<.001). Specifically, 4% of agencies headed by a CEO with a high school diploma have considered requiring a four-year degree to be hired, while 6.6% of agencies headed by a CEO with a two-year degree, 11.2% of agencies headed by a CEO with a four-year degree, and 22.8% of agencies headed by a CEO with a master's degree or higher have considered raising standards.

The reason that many agencies do not require a four-year degree is because they simply do not think a four-year college degree is necessary to hire high quality candidates (38.8%; see Figure 6). Moreover, many agencies adamantly stated that having a college degree does not mean a candidate is a high quality candidate or will do well in a law enforcement career. In the words of two agencies, "a college degree does not ensure common sense" and "we find that some highly educated candidates lack street [sense] and tend to talk above the average citizen." Still another agency took issue with poor quality college education and stated, "We have found that people who've made their way through four years of college and were graduated just for showing up to class are not necessarily the right candidates for a law enforcement job."

Many agencies (30.4%) are also concerned about being able to afford the higher salaries to recruit college-educated officers. Several small agencies also mentioned the problem they would encounter trying to retain college-educated officers who seek higher pay and more opportunities

for promotion and specialty assignments in larger departments. For these agencies, requiring a four-year degree would prove to be a great burden, especially long term due to officer turnover. Moreover, agencies are concerned about not being able to hire high quality applicants that lack a four-year degree, in particular veterans and others with in-demand skills and qualities. They are also highly concerned with shrinking their pool of applicants. Despite no specific check box for this concern, 37 agencies voluntarily commented that this very real issue is their number one reason for not increasing minimum education standards to require a four-year degree. In the words of one agency, "We have a difficult enough time finding and hiring applicants with a high school diploma that raising the educational requirements would effectively end our recruitment efforts." Interestingly, agencies are not really concerned about a shrinking pool of minority or female applicants, just the overall applicant pool.

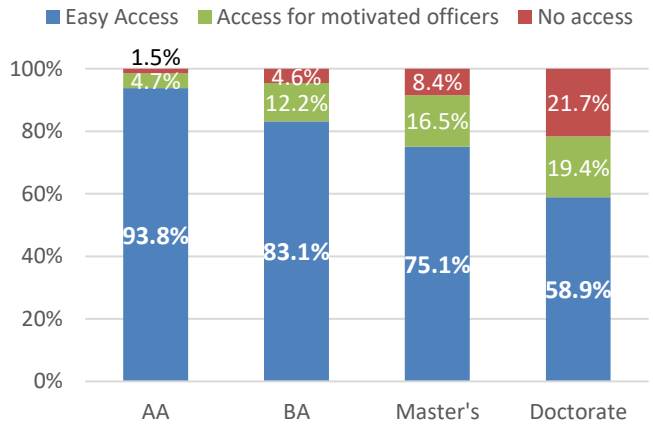
Finally, a large number of agencies surveyed do not require a four-year degree because their minimum standards are tied to state or civil service standards and they are not allowed to deviate from them. Other reasons given by agencies for not requiring a four-year degree include "the economic status of the community and lack of a local university," "less debt for entry level jobs," wanting to consider the "total package, including education, work experience, military experience, life experience," having to hire for "dual job duties: fire and law enforcement," and "the economy." It is clear from the comments that the decision to set specific minimum education standards must take into consideration the unique circumstances of local agencies of all different sizes and landscapes. What is right for a medium-large agency in a university-rich, economically-advantaged environment is not the same as what is right for a very small department in a sparsely populated and/or economically-disadvantaged area. While college education has the potential to improve policing, there are limits and legitimate constraints. Thus making a sweeping recommendation for all agencies in the U.S. is impractical and ill-advised.

Of the very few (9) agencies that responded to questions about their experience requiring a bachelor's degree, four had no trouble recruiting qualified candidates and four recruited higher quality candidates than when agency standards were lower. Only one agency stated they had to increase pay to recruit applicants with a four-year degree. However, three agencies reported they had trouble recruiting both minority and female candidates, and one agency had too few candidates to fill positions but that the candidates that did apply were higher quality.

Access to College

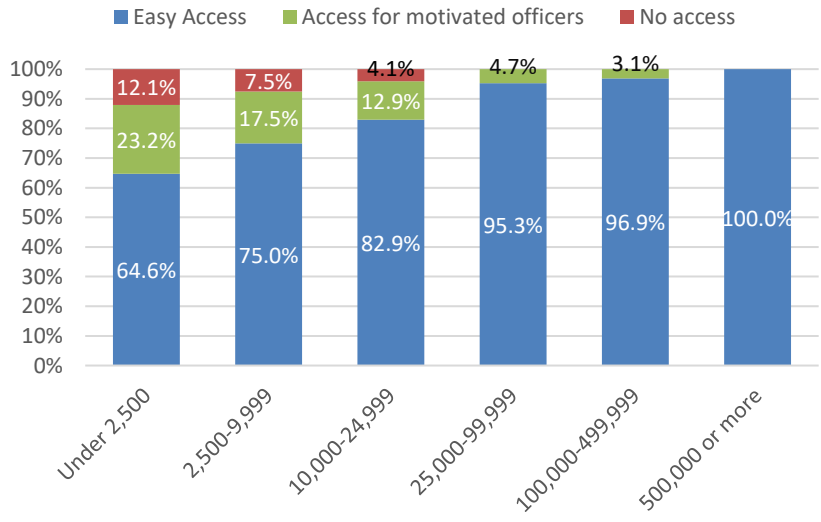
Another important consideration in this discussion, and one that is absent from the literature, is officers' access to an academic degree granting institute. How many officers have access to a college that confers two-year, four-year, or post-graduate degrees? While online education has improved access to college for full-time workers and others living in sparsely populated areas in the United States, it isn't for everyone. In this study, respondents were asked about the availability of "accessible" colleges in their area, meaning those that the "typical officer could gain admission to and afford." Easy access means agencies have a degree-granting institution in their jurisdiction or within "easy commuting distance." Access for motivated officers means that there is a college "outside the jurisdiction that is not easily commutable but is commutable for motivated officers."

Figure 7: Officer Access to College Offering Specific Degree



Almost every U.S. law enforcement officer (93.8%) has easy access to an institution that awards a two-year degree. Regardless of how this issue was examined (region, type of agency, etc.), more than 90% of agencies in every category have a two-year degree granting institution within easy commuting distance. The one exception is agencies which serve a population less than 2,500, where 83.9% of agencies are within easy commuting distance and 13.4% are within commuting distance for motivated officers. Thus, access to a two-year degree program should not be seen as an impediment to raising education standards for most agencies considering such a move.

Figure 8: Access to Four-year Degree Institution by Population Served Size

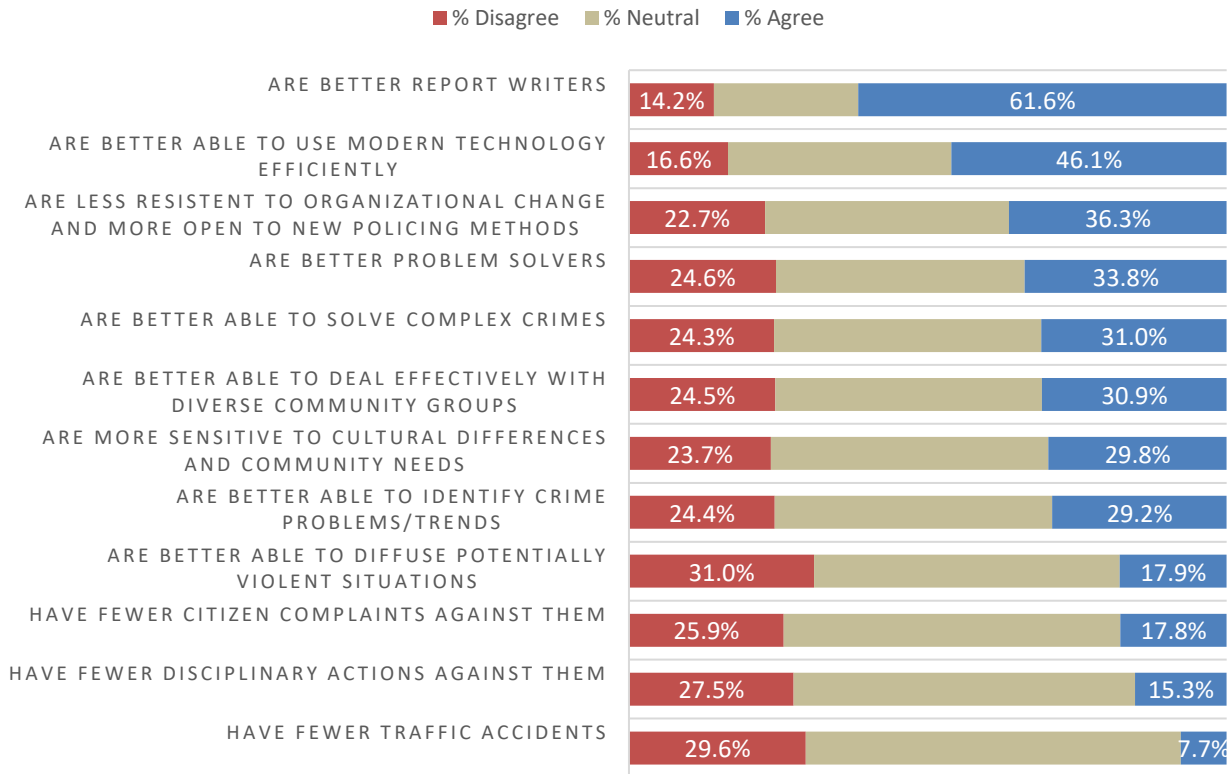


As Figure 7 illustrates, college becomes slightly less accessible as the degree one wants to pursue becomes more advanced. Still, the vast majority of officers have easy access to college, should they wish to earn a degree at a "brick and mortar" college (rather than pursue a degree online). Officers working for agencies which serve very small populations are less likely than other officers to have a college offering bachelors or masters programs within an easily commutable distance. Figure 8 depicts access to colleges offering a four-year degree (bachelors) by the size of population served. As can be seen, virtually every officer working for an agency serving 25,000 or more residents has easy access to a bachelor's degree granting institute

Perceptions of College-educated Officers

Previous research has found that college-educated officers have some benefits over non-college educated officers. While this study is not intended to discern whether there are actual benefits to hiring college-educated officers, respondents were asked about their *perceptions* of college educated officers in their agency compared to officers with only the minimum education level required to be hired by their agency. As can be seen in Figure 9, there is little consensus about which *perceived* advantages of hiring college-educated officers are *actual* benefits of hiring college-educated officers.

Figure 9: As compared to officers with only the minimum education requirements, officers with a four-year degree...



The one perceived benefit that most respondents agreed is an actual benefit is that college-educated officers are better report writers (61.6%). This is not an insignificant finding given the importance of good report writing skills for arrest and prosecution. A little less than half (46.1%) of respondents agreed that college-educated officers are better able to use technology and about one-third agreed that college educated officers are less resistant to organizational change and more open to new policing methods (36.3%) and that they are better problem solvers (33.8%). Respondents were more likely to disagree with suggestions that college-educated officers are better able to diffuse potentially violent situations (31.0% disagreed), or that they have fewer traffic accidents (29.6%), disciplinary actions (27.5%), or complaints filed against them (25.9%). Some respondents commented that college-educated officers are better communicators and better leaders and that they score higher on promotional exams or that they are more "professional" or "socially polished". Still more respondents stated that these are *individual* characteristics that are not necessarily correlated to having a college degree.

As might be expected, respondent perceptions of college-educated officers were very strongly correlated with CEO education level (all 12 statements were statistically significant at $p<.001$, χ^2 ranged from 30.792 to 107.738, median=72.982; see Appendix B). In most cases, the responses from agencies headed by a CEO with a master's degree or higher were directly and completely opposite of responses from agencies headed by a CEO with a high school diploma. For example, 54.4% of respondents from agencies headed by a CEO with a high school diploma[5] *disagreed* that college-educated officers are better problem solvers while 51.1% of respondents from agencies headed by a CEO with a master's degree or higher *agreed* with the statement (χ^2= 107.738, $p<.001$). Meanwhile only 11.5% of respondents from agencies headed by a CEO with a master's degree or higher *disagreed* that college-educated officers are better problem solvers and 12.6% of respondents from agencies headed by a CEO with a high school diploma *agreed* with the statement. Similarly, responses from agencies headed by a CEO with a two-year degree were often, but not always, mirror images of responses from agencies headed by a CEO with a four-year degree, though the differences were not as dramatic as those agencies headed by CEO's with education levels at the extreme (HSD, master's or higher). This suggests that the answers, rather than reflecting actual differences, are likely tapping into the personal attitudes and opinions of the respondents/administrations toward education (both positive & negative).

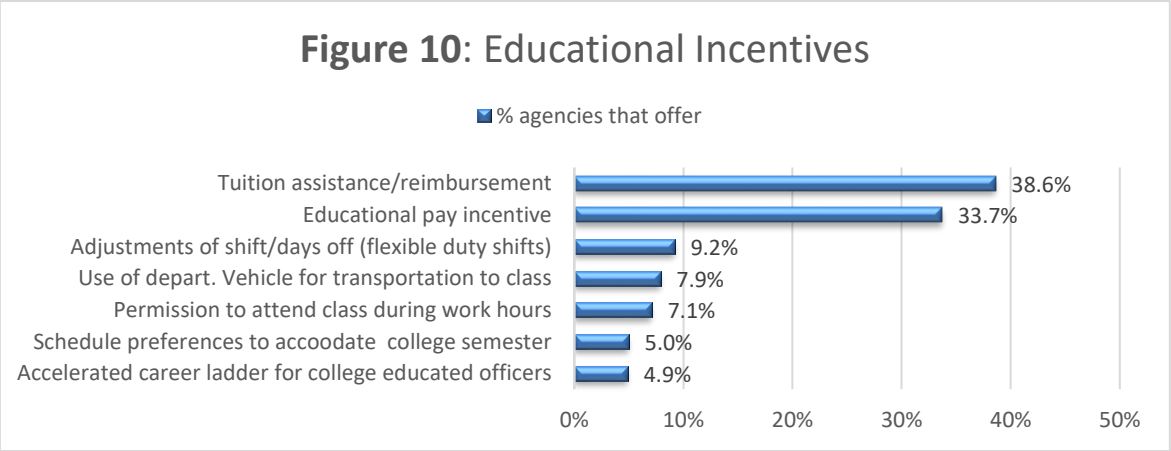
Still, there was some congruence on a few questions that suggests responses to those statements may indicate actual differences that surpass personal opinions. For example, there were two statements in which a higher percentage of agencies headed by a CEO with a high school diploma agreed than disagreed, college educated officers are better report writers and better able to use modern technology efficiently. Similarly, there was only one statement that agencies headed by a CEO with a master's degree or higher disagreed more than they agreed, educated officers get in fewer traffic accidents. On its face, this suggests there may be more veracity in these statements than some of the others.

[5] The invitation to participate in the research was sent to the CEO, who then completed the survey or delegated the task to his/her designee.

Interestingly, the order of support for these statements is almost identical to the responses from a sample of California agencies asked the same question (Gardiner, 2015). California respondents (police chiefs and sheriffs and their designees) also were in strongest agreement about college-educated officers being better report writers. With two small exceptions (solving complex crime and diffusing potentially violent situations), the order of statements from most agreement to least agreement was identical between the two studies. This provides some indication of where chiefs and sheriffs see value in a college education and where they do not.

Agency-provided Educational Incentives

Even though there is not great consensus about how college improves officer performance, there is agreement that a college education is valuable. More than half (55.8%) of agencies provide at least one incentive to officers to pursue higher education. This percentage, however, is highly variable across the 50 states. For example, in some states all or almost all responding agencies offer educational benefits. This includes, 100.0% of respondent agencies from Connecticut (*n*=9), 96.0% from Florida (*n*=24), 90.9% from Oregon (*n*=11), 90.5% from California (*n*=42), and 88.2% from Washington (*n*=17). While at the same time, only 36.4% of respondent agencies from Utah (*n*=11), 36.1% from Illinois (*n*=36), 35.3% from Colorado (*n*=17), 33.3% from Iowa (*n*=12), 30.0% from Wisconsin (*n*=30), 25.0% from Kansas (*n*=8), and no agencies from South Dakota (4) provide educational incentives. Where one lives and works matters considerably. Agencies in the Northeast are the most likely to offer educational incentives (68.9%) and those in the Midwest are the least likely (42.7%) (χ^2=22.128, *p*<.01).



As might be expected, larger agencies are significantly more likely than smaller agencies to offer incentives for officers to earn their degree (χ^2=107.095, *p*<.001). Whereas 93.1% of agencies which serve a population of at least 500,000 offer incentives, only 19.3% of agencies which serve a population less than 2,500 offer any. There is also a correlation with CEO education level; 76.2% of agencies headed by a CEO with a graduate degree offer incentives in comparison to 35.7% of agencies headed by CEOs with a high school diploma or two-year degree χ^2=78.751,

$p<.001$)[6]. Municipal agencies are also significantly more likely than county agencies to offer incentives (59.1% vs 40.3%; $\chi^2=14.625$, $p<.001$), as are agencies which have collective bargaining (66.7% vs 43.8%; $\chi^2=34.717$, $p<.001$). See Appendices A - E for data.

The most popular incentives are tuition assistance/reimbursement (38.6%) and educational pay incentives (33.7%), both of which are discussed in detail below. Other incentives offered by agencies include allowing officers to adjust their shift or days off to accommodate their class schedule (9.2%), allowing officers use of a department vehicle to drive to class (7.9%), permission to attend class during work hours (7.1%), schedule preference to accommodate the class semester (5.0%), and an accelerated career ladder for officers with a college degree (4.9%). See Figure 10 above.

Educational Pay Incentives

Almost one-third of agencies pay college-educated officers extra money for having a four-year degree or higher. Again, this varies tremendously by state ($\chi^2=219.625$, $p<.001$). Some states did not have single agency report that it offers this benefit (Alaska, Colorado, Hawaii, Maryland, Minnesota, Montana, New Hampshire, North Dakota, South Dakota, Vermont, and Wyoming). Additionally, officers working in Arkansas, Arizona, Idaho, Iowa, Illinois, Kentucky, Michigan, Nebraska, Ohio, South Carolina, Tennessee, Utah, West Virginia, and Wisconsin are particularly unlikely to work for an agency that offers this benefit (fewer than 25% of agencies in these states offer pay incentives). Conversely, officers in California, Connecticut, Florida, Massachusetts, and Washington are very likely to have this benefit (more than 75% of agencies in these states offer pay incentives). Looking at this from the regional level, agencies in the Northeast are the most likely to offer pay incentives (50%) and agencies in the Midwest are the least likely (14.6%) ($\chi^2=46.116$, $p<.001$).

Officers who work for agencies with collective bargaining are likewise more likely to receive this benefit (42.5% vs 22.9%; $\chi^2=27.690$, $p<.001$), as are those who work for municipal agencies (35.6% vs 25.6%; $\chi^2=6.540$, $p<.05$). Agency size also matters, with agencies that serve populations of 50,000-249,999 being the most likely to offer extra pay (59.1% in comparison to 9.2% of agencies which serve populations less than 2,500, 32.4% of agencies which serve populations of 2,500-49,999, and 48.3% of agencies serving populations of 250,000 or greater) ($\chi^2=71.575$, $p<.001$). As will be a consistent pattern in this report, educational pay incentives are equally strongly correlated with CEO education level – the higher the CEOs education level, the more likely the agency is to offer educational pay incentives: 14.4% of agencies headed by a CEO with a high school diploma, 18.3% of agencies headed by a CEO with a two-year degree, 30.7% of agencies headed by a CEO with a four-year degree, and 53.1% of agencies headed by a CEO with a graduate degree offer incentives ($\chi^2=71.720$, $p<.001$).

[6] CEO education and agency size (size of population served) are highly correlated; there are significantly more CEOs with a graduate degree who work for large agencies and significantly more CEOs with a high school diploma that work for small agencies. Disentangling the effects requires additional analyses to be completed in the future.

Figure 11: Amount of Extra Pay for Officers with a 4-year Degree

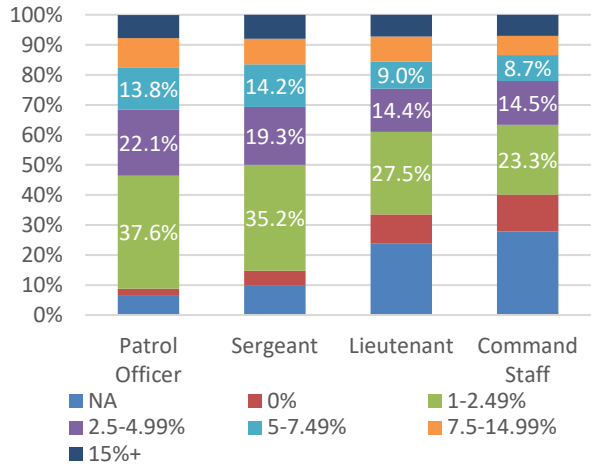
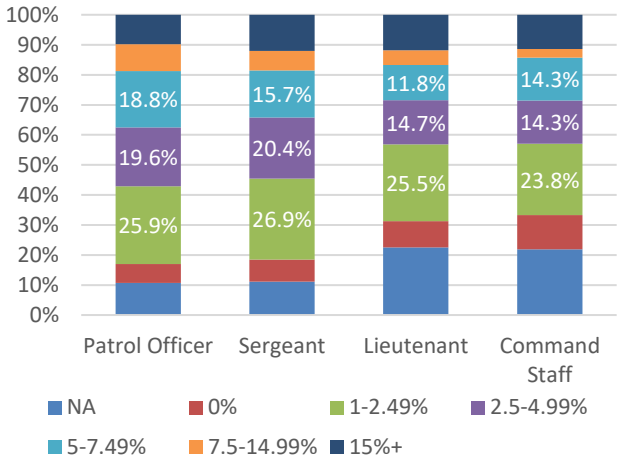


Figure 12: Amount of Extra Pay for Officers with a Master's Degree



As can be seen in Figure 11[7], the average extra pay for having a bachelor's degree is 2.5%-4.99%, however a handful of agencies (all of which are unionized) increase an officer's pay 15% of more. Almost three-quarters (73.5%) of agencies pay an extra 1%-7.49%, with most (37.2%) paying 1%-2.49% more for a four-year degree than an AA or high school diploma (whichever is the agency's minimum). The patterns are similar for other ranks as well as for officers with a master's degree or doctorate. Although 6.3% of agencies do not pay officers with a master's degree more than officers with a bachelor's degree, those officers who work for these agencies can expect to earn 5%-7.49% more on average than their colleagues with a bachelor's degree. Similarly, 14.3% of agencies do not pay officers with a doctorate or other terminal degree more than officers with a master's degree but those that do, pay officers with a doctorate about 5.0%-7.49% more on average.

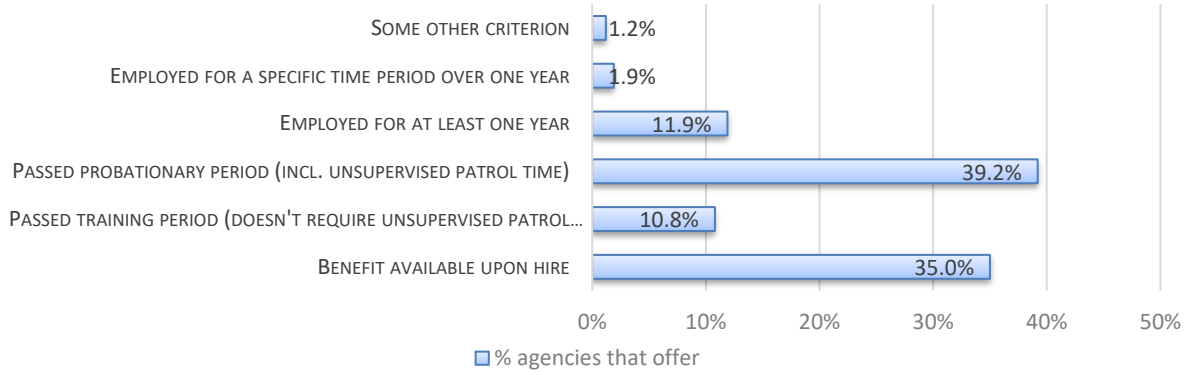
Tuition Assistance/Reimbursement

Tuition assistance or reimbursement is the most popular educational incentive offered by local U.S. law enforcement agencies. This benefit also varies across states but not as dramatically as the educational pay incentive benefit (χ^2=84.052, p<.01). Every respondent agency in Alaska and Hawaii offers this benefit as do 88.9% of respondent agencies in Connecticut. However, no respondent agencies in Alabama, Mississippi, North Dakota, Nevada, South Dakota, Vermont, or West Virginia and fewer than 20% of agencies in Arkansas, Indiana, Massachusetts, Montana, and New Mexico offer tuition assistance. In general, between one-third and two-thirds of

[7] Not applicable (NA) includes agencies which require a four-year degree to get hired (or that require that degree for promotion), those that do not have a particular rank in their organizational structure, and those which have a complex system than cannot easily fit into the parameters of the question.

agencies in other states offer the benefit. There are no statistically significant differences between different regions but municipal agencies are twice as likely as county agencies to offer this benefit (42.2% vs 21.8%; χ^2=17.889, p<.001). Again, this benefit is strongly correlated with agency size (χ^2=66.686, p<.001) and CEO education (χ^2=49.599, p<.001). Larger agencies, and those headed by a CEO with a graduate degree, are significantly more likely to offer tuition assistance than small agencies and those headed by a CEO with a high school diploma. For example, 12.8% of agencies serving a population less than 2,500 offer tuition assistance in comparison to 72.7% of agencies which serve a population of 1,000,000 or more. Similarly, 22.2% of agencies headed by a CEO with a two-year degree offer tuition assistance in comparison to 55.6% of agencies headed by a CEO with a master's degree or higher. See Appendices A and B for data.

Figure 13: Qualifies for Tuition Reimbursment



In order to learn more about this incentive, the survey asked several probing questions to ascertain who is eligible for this benefit, which classes qualify, how long it takes for officers to get reimbursed, and whether there are any annual or lifetime limits on how much an officer can get reimbursed for tuition. As Figure 13 shows, 35.0% of agencies offer tuition reimbursement to officers upon hire, 10.8% of agencies require officers pass their training period, 39.2% of agencies require officers pass their probationary period, and 13.8% of agencies require officers to be employed for a certain period of time (usually one year).

Table 3 and Figure 14 show which courses generally qualify for reimbursement. Respondents were asked to "check all that apply" but some respondents who selected "any college class, regardless of whether it leads to a degree or professional certificate" or "any college class that is considered 'work-related', regardless of whether it leads to a degree or professional certificate" did not select any other options (for example college class that leads to 2-year, 4-year, graduate degree). For this reason, responses are reported in three categories (a) the agencies that selected the option, (b) agencies that did not select the option but did select "any class", and (c) agencies that did not select the option but did select "any work-related class"[8].

[8] Cases in which a particular option was selected in addition to "any class" and/or "any work class" was fixed so there is no double (or triple) counting.

Figure 14: Courses that Qualify for Reimbursement

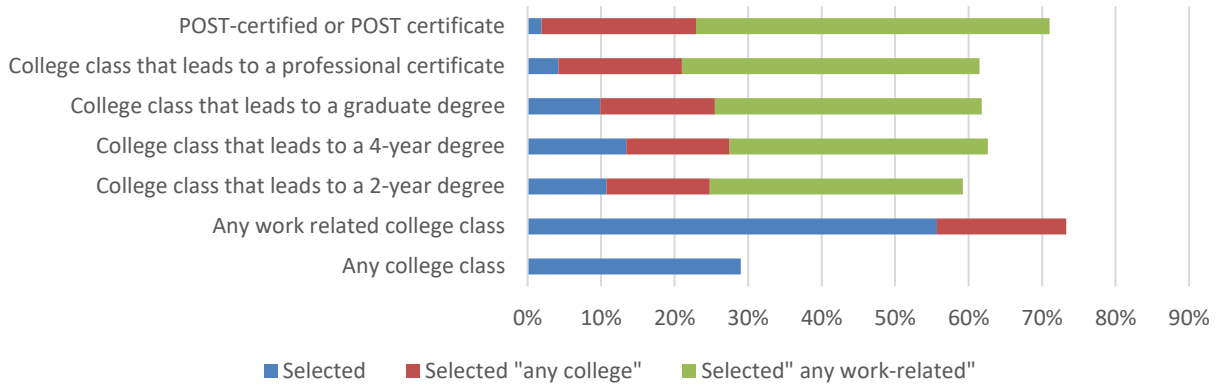


Table 3: Courses that Qualify for Reimbursement

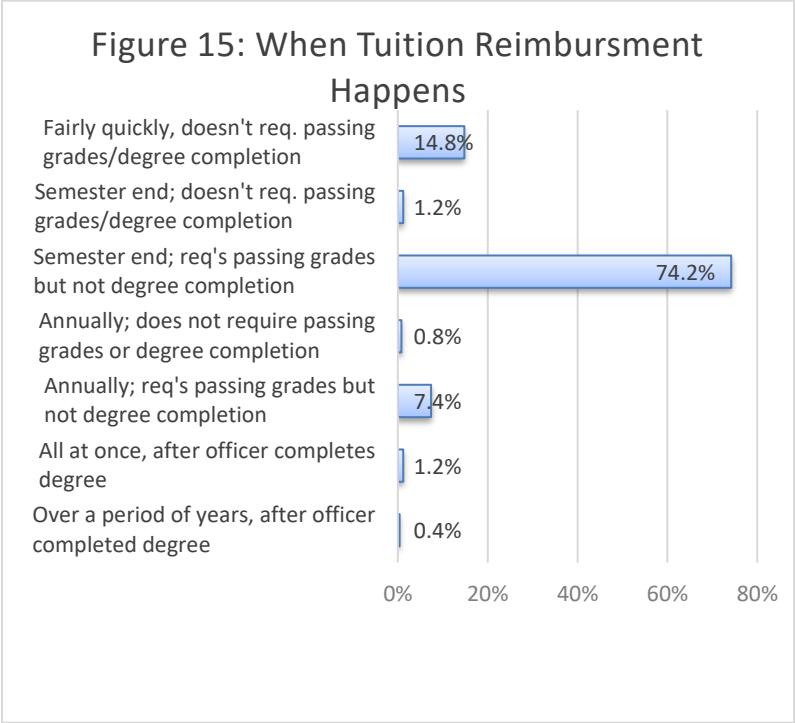
	Agencies selected option	Add'l agencies pay for "any college"	Add'l agencies pay for "work-related"	Total %
Any college class	29.0%			29.0%
Any "work related" college class	55.7%	17.6%		73.3%
… Leads to 2-yr degree	10.7%	14.1%	34.4%	59.2%
… Leads to a 4-yr degree	13.4%	14.1%	35.1%	62.6%
… Leads to graduate degree	9.9%	15.6%	36.3%	61.8
… Leads to professional certificate	4.2%	16.8%	40.5%	61.5%
POST-certified or POST certificate	1.9%	21.0%	48.1%	71.0%

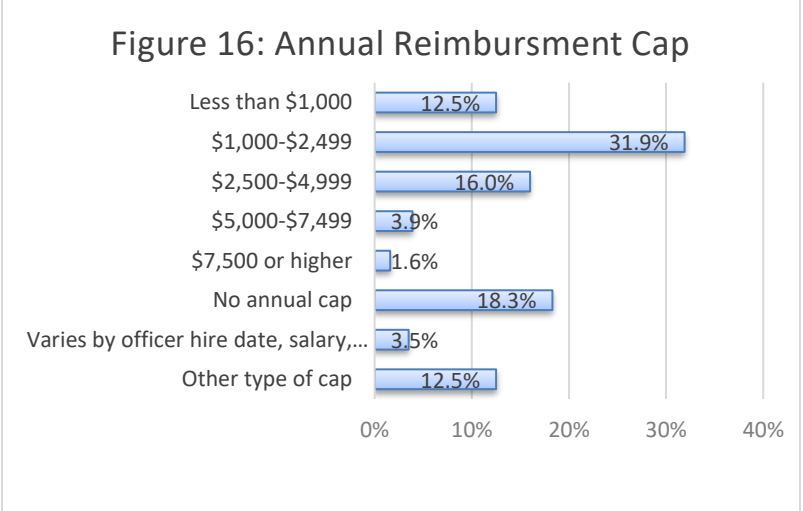
Almost three-quarters (73.3%) of agencies will reimburse officers for any "work related" college and 29% will reimburse officers for "any college class." As long as college classes are deemed "work-related", agencies are equally likely to pay for classes that lead to a two-year, four-year, or graduate degree or a professional certificate. A slightly larger percentage of agencies (71.1%) will pay for a POST-certified college course.

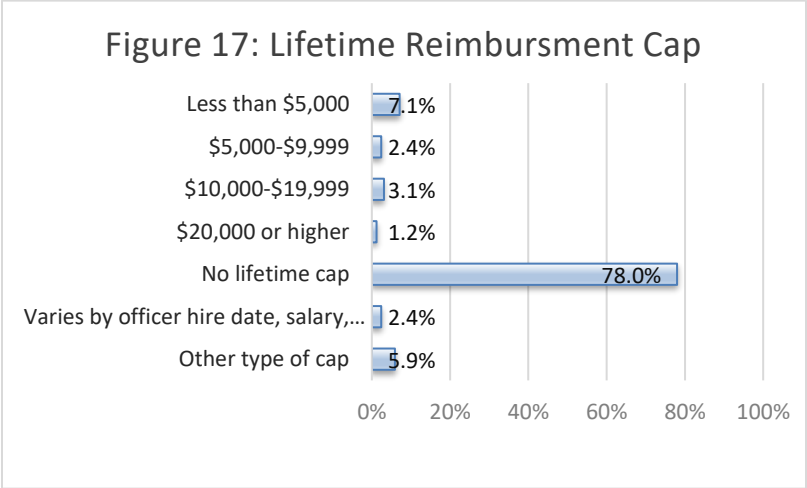
Only 4.2% of agencies pay the college at the time of enrollment for officers' classes, the rest (95.8%) reimburse officers for out-of-pocket expenses. As Figure 15 illustrates, almost all agencies which offer this benefit reimburse officers reasonably quickly (90.2% do so within a semester). A small percentage (8.2%) reimburse officers once per year and a handful (1.6%) reimburse officers after they completed their degree. Most agencies (81.6%) require officers to show passing grades in order to be reimbursed. In fact, several agencies stated that the amount reimbursed is partially (or wholly) determined by the grade the officer earned in the course.

Figures 16 and 17 show the annual and lifetime tuition caps for this benefit. For 60.3% of officers, the annual cap is less than $5,000 with most agencies offering between $1,000 and $3,000 annually. Almost one in five agencies (18.3%) has no official annual cap and one in eight (12.5%) has some other type of cap. Some agencies limit the annual cap to a certain number of classes or units or have different caps based on the degree being pursued. Others tie the annual cap to the state university system, providing either the full cost or a portion thereof. For many agencies, there is a single pot of money that is made available annually for all employees who are eligible and submit a claim.

Three-quarters (78.0%) of agencies do not have an official lifetime cap on the benefit but this is probably a little misleading as many respondents said tuition reimbursement is based on the availability of funds each year. In the words of one respondent, "When the money is gone, it's gone." Thus, it appears that most agencies regulate tuition reimbursement expenditures using annual caps, rather than lifetime caps, and by allocating a set amount each fiscal year.



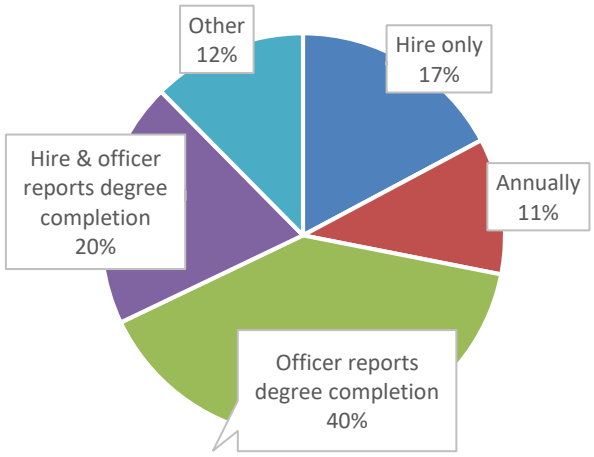




Percentage of Sworn Officers with College Degrees

About two-thirds (65.3%) of surveyed agencies capture information about officer education level, of those 69.3% capture it in hardcopy form (file in a cabinet) and 23.6% capture it in a computerized file. About half (54.8%) of the agencies which capture this information say they capture it upon hire, 21.6% update it annually, 8.5% update it when the officer is promoted, and 83.3% update when the officer reports degree completion (see Figure 18). In total, 411 agencies representing a comprehensive swath of U.S. law enforcement provided valid officer education data[9].

Figure 18: When Agencies Capture Officer Education



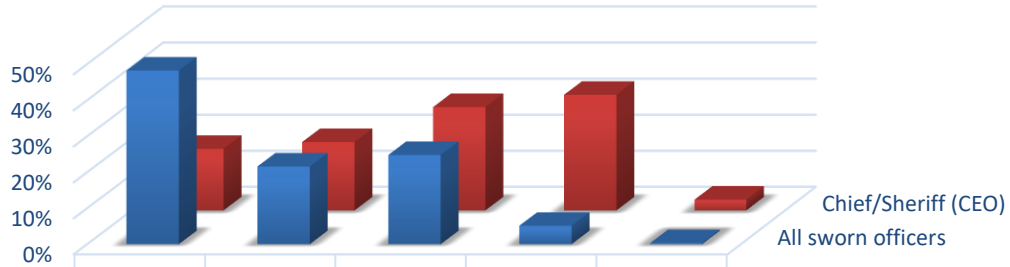
Today, slightly more than half (51.8%) of sworn officers have at least a two-year degree, 30.2% have at least a four-year degree, and 5.4% have a graduate degree (see Figure 19). This varies considerably by region, agency size, CEO education level, union presence, and department type (see Appendices A-E). For example, 31.6% of officers employed by municipal agencies hold a bachelor's degree or higher compared to 21.1% of officers employed by county agencies, $F(2,407)=3.755$, $p=<.05$. Interestingly, while agencies of different sizes have approximately the same percentage of officers with at least an AA degree (47.9%-57.5%), small agencies serving populations less than 100,000 have a higher proportion of officers with two-year degrees, $F(8,402)=2.941$, $p=<.01$, and larger agencies serving populations over 100,000 have a higher proportion of officers with four-year degrees, $F(8,402)=2.309$, $p=<.05$.

Agencies in the Northeast have the highest percentage of officers with a four-year degree or higher (39.3%), $F(4,406)=23.440$, $p<.001$. Those in the Midwest have the largest percentage of officers with a two-year degree (32.7%) which is driven by Minnesota, Wisconsin, and Michigan which require most or all new recruits have at least an AA degree, $F(4,406)=13.875$, $p<.001$. Additionally, Appendix F provides data on select states (those with at least 10 agencies that reported officer education level). As this appendix shows there is tremendous variation between states. For example, nearly half (49.0%) of officers in Massachusetts hold a bachelor's degree or higher, a percentage that is considerably greater than the national average. New

[9] Agencies provided the number of sworn officers as well as the number of officers with a specific degree (two-year, four-year, masters, and doctorate/other terminal degree). From these numbers a percentage of officers with a college degree was calculated. Department provided data was visually inspected for obvious errors (for example, numbers that were completely unbelievable) and accepted as valid in all but a few cases where suspicious data were removed.

Jersey, Minnesota, and California are not far behind with 46.1%, 42.0%, and 39.5% of officers holding at least a four-year (respectively). Massachusetts and New Jersey also have the largest percentage of officers with a master's degree or higher (14.6% and 13.6% respectively).

Figure 19: Average Education Level of Officers & CEOs

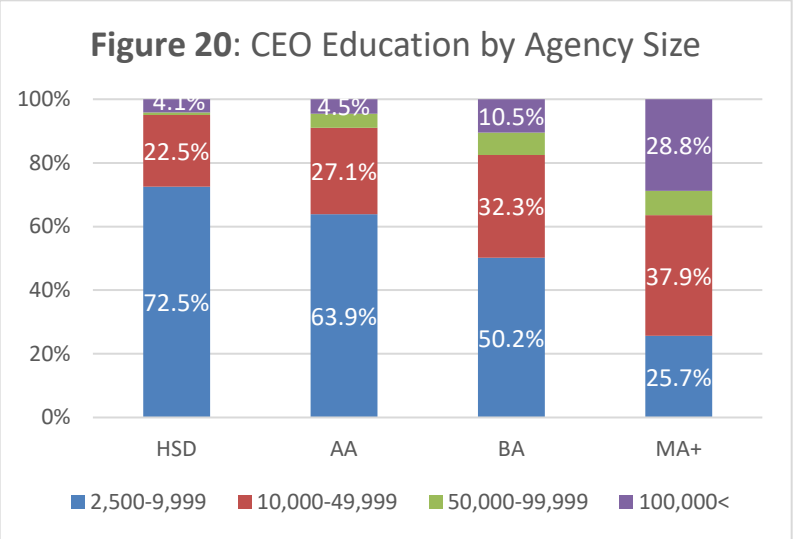


	HSD	2 yr degree	4 yr degree	Master's	Doctorate
All sworn officers	48.2%	21.6%	24.8%	5.1%	0.3%
Chief/Sheriff (CEO)	17.1%	19.0%	28.7%	32.1%	3.0%

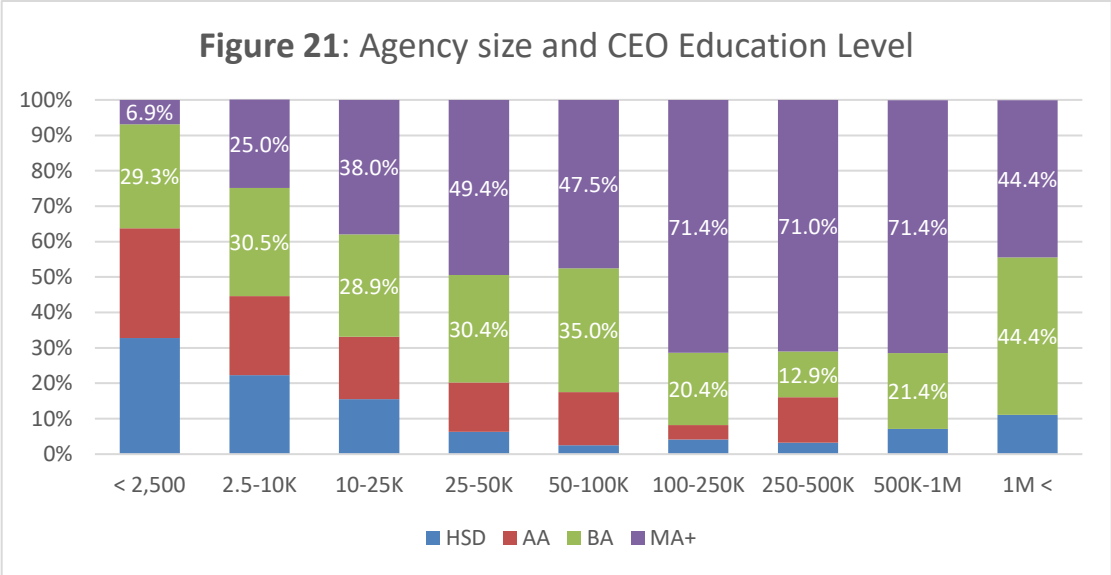
The strongest correlations are for union presence and CEO education level (see Appendices B and E). Agencies with collective bargaining have a significantly higher percentage of officers with two-year and four-year degrees. For example, 60.8% of "union" agencies have at least a two-year degree in comparison to 41.4% of non-union agencies, $F(1,396)=47.231$, $p<.001$, and 36.3% of officers working for "union" agencies have at least a four-year degree in comparison to 23.1% of non-union agencies $F(1,396)=30.859$, $p<.001$. Similarly, agencies headed by a CEO with a graduate degree employ a significantly higher percentage of officers with at least a four-year degree (43.7%) compared to agencies headed by a CEO with a four-year degree (32.9%), a two-year degree (13.8%), or a high school diploma (18.1%), $F(3,395)=39.700$, $p<.001$.

CEO Education

One of the most interesting findings of this research is not only the variability of CEO education but also the potential relevance of CEO education for virtually every issue examined. As Figure 19 shows, 17.1% of CEOs (chiefs and sheriffs) have a high school diploma, 19.0% have a two-year degree, 28.7% have a four-year degree, 32.1% have a master's degree, and 3.0% have a doctorate or other terminal degree (for example, J.D. or Psy.D.). Importantly, CEO education is highly correlated with agency size ($\chi^2= 142.563$, $p<.001$). Almost three-quarters (72.5%) of CEOs with a high school diploma lead an agency which serves a population less than 10,000 and 90.8% lead an agency which serves a population less than 25,000 (see Figure 20, Appendix B). In comparison, one-quarter (25.7%) of CEOs with a master's degree, half (50.2%) of CEOs with a four-year degree, and about two-thirds (63.9%) of CEOs with a two-year degree lead an agency



which serves a population less than 10,000 (see Figure 20 and Appendix B). Another way to look at it is by agency size. Nearly three-quarters of agencies which serve populations of 100,000 to 1,000,000 are led by a CEO with a master's degree in comparison to 6.9% of very small agencies (see Figure 21). Thus, any issue that is associated with either or both CEO education or agency size may be masked or amplified because of the strength of this correlation. When possible, the stronger of the two relationships is reported so that readers can discern which factor (CEO education or agency size) is likely having a greater impact on the issue being examined[10].



Although CEO education and agency size are intricately tied, CEO education is not significantly correlated with CEO gender or CEO race. But it is significantly associated with whether an agency has collective bargaining, agency type, and region. Agencies which have collective bargaining are more likely to be led by a CEO with a master's degree or higher (42.9% vs 26.5%; χ^2= 40.955, p<.001), as are municipal agencies (38.2% vs 20.8%; χ^2= 14.699, p<.05). Likewise, agencies in the Northeast employ a significantly higher percentage of CEOs with a master's degree or higher (46.7% vs 35.1% average) and agencies in the Midwest employ a significantly lower percentage (25.1%; χ^2= 28.420, p<.01).

[10] Future analyses will study the complexity of this relationship and how it affects other issues of concern.

Training

This study also examined the training policies and practices of law enforcement agencies. Specifically, questions were asked about field training for new recruits and lateral transfers as well as continuing education for all officers. The results are below.

Field Training Programs

Almost every agency (96.7%) has a required field training program for new recruits. The length of the supervised portion of the field training program varies considerably between agencies, from less than two weeks to more than 26 weeks. The most popular length of supervised field training for new recruits is 11-12 weeks, with 20.7% of agencies' programs falling in this range. It also happens to be the median length with half of remaining agencies' programs being shorter than this (39.7%) and half being longer (39.6%). Approximately half (48.1%) of agencies' programs for new recruits are between 11 and 16 weeks (Figure 22).

In addition to requiring new recruits to pass a supervised field training program, 93.9% of agencies which hire lateral officers[11] offer a supervised field training program for them. The vast majority (96.9%) of which make it mandatory. As might be expected, the average length of training for these officer is less than new recruits (Figure 23).

Agencies which serve larger populations tend to have longer field training programs, as do agencies in the West, in particular California.

Figure 22: New Recruit Supervised Field Training Length

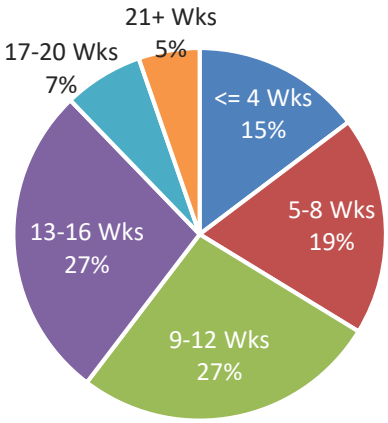
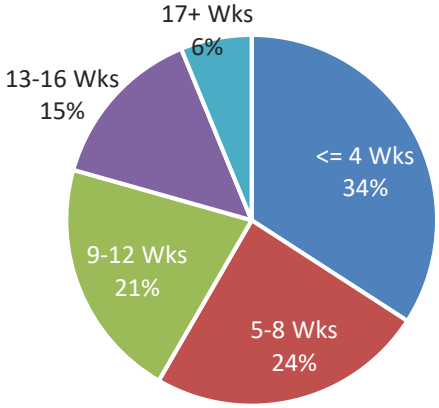


Figure 23: Lateral Officer Supervised Field Training Length



[11] A lateral officer is a new hire who is trained and worked for another law enforcement agency as a sworn officer prior to being hired by the new agency.

Special Topic Training

Each year, officers are required to participate in a specified amount of additional training, both to learn new things as well as to keep their skills "fresh." The amount of training and the topics are generally stipulated by state standards and vary. Agencies have some latitude in the training they offer. This survey attempted to ascertain how much *additional training* (beyond their state's requirements) patrol officers/deputies across the U.S received in the prior two years on specific topics, including implicit bias, procedural justice principles, community policing principles/engaging with the community, problem oriented policing/problem solving, intelligence-led and evidence-based policing, handling mental health crisis situations, and handling non-violent protests/civil disobedience.

Despite much attention on intelligence-led and evidence-based policing, problem solving, implicit bias, procedural justice, and handling protests, few officers received special training on these topics. Officers were most likely to have received additional training on handling mental health situations and least likely to have received additional training on intelligence-led policing. They also received the most additional training on handling mental health crises and the least additional training on intelligence-led policing and handling protest activity.

There were some differences in training offered between agencies of various sizes and in different regions of the U.S. but there were no differences between county agencies and municipal agencies. Also, in every training topic category, agencies headed by a CEO with a graduate degree were more likely to offer training on the subject and train all/almost all of their patrol officers on that subject than were agencies headed by a CEO with less than a master's degree. There were no differences in the length of training offered by agencies based on CEO education level.

Table 4: Percent of Officers Receiving Additional Training

	None	1%-25%	26%-50%	51%-75%	76%-100%
Implicit Bias	23.7%	27.6%	7.4%	4.2%	**37.1%**
Procedural Justice Principles	16.5%	30.4%	12.3%	5.9%	**35.0%**
Community policing principles/ Engaging with the community	9.9%	31.0%	15.5%	7.4%	**36.2%**
Problem oriented policing/ Problem solving	24.0%	**34.5%**	15.5%	6.5%	19.6%
Intelligence-led or Evidence-based policing	31.2%	**37.5%**	14.5%	6.0%	10.9%
Handling mental health crisis situations	3.6%	25.5%	16.3%	9.3%	**45.3%**
Handling non-violent protests/ Civil disobedience	25.9%	**33.4%**	12.1%	6.3%	22.3%

Table 5: Amount of Additional Training Most Officers Received on Topic						
	< 1 Hour	**1-2 Hours**	**3-4 Hours**	**5-8 Hours**	**9-12 Hours**	**13+ Hours**
Implicit Bias	8.7%	**43.4%**	26.3%	17.4%	2.8%	1.4%
Procedural Justice Principles	5.8%	**38.8%**	23.9%	24.1%	3.6%	3.8%
Community policing/Engaging with the community	6.6%	**32.5%**	31.9%	18.3%	5.2%	5.4%
Problem oriented policing/ Problem solving	18.2%	**34.9%**	22.7%	17.0%	3.1%	4.1%
Intelligence-led or Evidence-based policing	19.4%	**37.1%**	22.3%	13.5%	3.4%	4.2%
Handling mental health crisis situations	4.2%	22.9%	**25.5%**	22.0%	5.5%	19.8%
Handling non-violent protests/ Civil disobedience	20.6%	**35.0%**	19.1%	18.6%	2.7%	4.0%

Implicit Bias

As can be seen in Table 4, almost one-quarter (23.7%) of agencies provided officers no additional training on implicit bias beyond their state's requirements. Given the relatively recent ascent of this topic in policing, it is likely that few states require officers have any training on this topic, which means that these officers probably have received no training at all on the topic. Roughly another quarter (27.6%) of agencies trained only a select few officers on the topic, while a little more than a third (37.1%) of agencies provided extra training to all/almost all of their patrol officers on implicit bias (see Table 4).

There was not much variability by region but agencies in the southeast were most likely to have provided additional training on this topic to all/almost all of their patrol officers (47.8% of agencies compared to 37.1% of all agencies). Likewise, agencies serving a population of 250,000-499,999 were the most likely to have trained all/almost all of their patrol officers on the issue of implicit bias (60.0% of agencies compared to 37.1% of all agencies). Approximately half of agencies serving a population of 25,000-49,999 or 100,000-249,999 (54.3% and 48.8% respectively) trained all/almost all of their patrol officers on the topic.

Of the agencies that provided additional training on implicit bias, 52.1% of agencies spent no more than two hours on the topic and another 26.3% spent 3-4 hours on the topic (see Table 5).

Procedural Justice Principles

Similar to training on implicit bias, approximately one-third of agencies (35.0%) provided additional training on procedural justice principles to all or nearly all of their patrol officers.

Slightly less than one-third (30.4%) of agencies provided additional training to only a select few officers and 16.5% of agencies provided no additional training on procedural justice principles (see Table 4). There was not a tremendous amount of variation by region but, again, agencies in the Southeast were the most likely to have provided additional training on this topic to all/almost all of their patrol officers (44.6%). Also, agencies serving a population of 250,000-499,999 or 25,000-49,999 were the most likely to train all/almost all of their patrol officers on procedural justice principles (58.3% and 48.5% of agencies respectively, compared to 35.0% of all agencies).

Of the agencies that provided additional training on procedural justice principles, 38.8% of agencies spent 1-2 hours on the topic, 23.9% spent 3-4 hours, and another 24.1% provided an additional 5-8 hours of training on the topic (see Table 5).

Community Oriented Policing

Similar to implicit bias and procedural justice training, approximately one-third (36.2%) of agencies provided additional training on community policing principles to all or nearly all of their patrol officers. Slightly less than one-third of agencies (31.0%) provided additional training to only a select few officers and only 9.9% of agencies provided no additional training on community policing (see Table 4).

Again, agencies in the Southeast were most likely to have provided additional training on community policing to all/almost all of their patrol officers (46.0%). Almost half of agencies in the West (47.1%) did not provide additional training on this topic at all or provided it to only a small group of officers. These trends may reflect state standards. It may be that states in the West require a higher number of hours devoted to this topic than do states in the Southeast. It could also reflect values of individual respondent agencies, amount of required training on other topics (which leaves little room for other topics), size of agencies in each region, or other issues. Once again agencies serving a population of 250,000-499,999 were the most likely to have trained all/almost all of their patrol officers on community policing principles (58.3%, compared to 36.2% of all agencies). Also, agencies serving 25,000-99,000 were more likely than other agencies to have provided additional training on the topic to all or almost all of their officers (47.1% and 52.8% respectively).

Of the agencies that provided additional training on community policing principles, 32.5% of agencies spent an extra 1-2 hours on the topic, 31.9% spent an additional 3-4 hours, and another 18.3% provided an additional 5-8 hours of training on the topic (see Table 5). Although agencies serving a population of 500,000-999,999 were more likely to have provided training to all/almost all of their patrol officers, the training was very short, with 37.5% of agencies having spent less than one hour on the topic (in comparison to 6.6% of other sized agencies which devoted less than one hour to training).

Problem Oriented Policing/Problem solving

Less than one in five agencies (19.6%) provided additional training on problem oriented policing/problem solving to all/almost all of their patrol officers. Nearly one-quarter (24.0%) of agencies provided no additional training on the subject and about one-third (34.5%) provided additional training to only a handful of officers. As with the previous topics, there is little variation between agencies in different regions but agencies in the Southeast consistently were more likely than other regions to have trained all/almost all of their patrol officers. Also, agencies serving a population less than 2,500 were the least likely to have provided additional training on problem solving.

Of the agencies that provided additional training on problem oriented policing/problem solving, 53.1% of agencies spent no more than two hours on the topic and another 22.7% spent 3-4 hours on the topic (see Table 5). Slightly less than one-quarter of agencies (24.2%) provided more than four hours of training on this topic. Agencies were quite consistent in the amount of additional training they provided on problem solving and who they provided it to.

Intelligence-led Policing/Evidence-based Policing

Officers were least likely to have received additional training on intelligence-led or evidence-based policing (mapping, hotspots, etc.). Fully two-thirds of agencies provided either no additional training on the topic (31.2%) or provided additional training to only a small percent of officers (37.5%). Meanwhile, only 10.9% of agencies provided additional training on the topic to all or almost all of their patrol officers. Agencies serving a population of 250,000-499,999 were the most likely to have trained all/almost all of their patrol officers on intelligence-led policing (30.4% in comparison to 10.9% of other agencies).

Of the agencies that provided additional training on intelligence-led or evidence-based policing, 19.4% of agencies provided less than one hour of additional training, 37.1% spent 1-2 hours on the topic, and another 22.3% spent 3-4 hours on the topic (see Table 5). Similar to problem solving, slightly more than one-fifth of agencies (21.2%) provided more than four hours of extra training on this topic. There were no differences between agencies on amount of training provided on the topic.

Handling Mental Health Crises

Officers were most likely to receive additional training on handling mental health crisis situations. Almost half of agencies (45.3%) provided additional training on the topic to all or almost all of their patrol officers. Only 3.6% did not provide additional training to any of their officers and 25.5% provided additional training to only a small percent of officers.

As with the previous topics, there is little variation between agencies in different regions but agencies in the Southeast were more likely than other regions to train all/almost all of their

patrol officers (59.1%). Every agency serving a population size over 250,000 provided additional training on handling mental health crisis situations to at least some officers. Almost two-thirds (65.8%) of agencies serving a population of 50,000-99,999 provided training to all/almost all of their patrol officers, as did 60,0% of agencies serving a population of 250,000-499,999, 57.7% of agencies serving a population of 25,000-49,999, and 57.1% of agencies serving a population of 1,000,000 or more.

Of the agencies that provided additional training on handling mental health crisis situations, 70.5% provided between one and eight hours of training; 22.9% of agencies spent 1-2 hours on the topic, 25.5% allocated 3-4 hours, and 22.0% spent 5-8 hours training officers how to handle situations involving a person having a mental health crisis. Additionally, 19.8% of agencies, of all different sizes, provided more than 12 hours of training on the subject, including 38.5% of agencies serving a population size of 500,000-999,999. Agencies in the Southeast were the most likely to provide extensive training, with 26.7% of agencies of all sizes in the Southeast providing 17 or more hours of additional training on the subject.

Handling Non-violent Protests/Civil Disobedience

In light of recent increased protest activity, it might seem surprising that less than one-quarter of agencies (22.3%) provided additional training on handling non-violent protests/civil disobedience to most or all of their patrol officers (see Table 4). Moreover, 25.9% did not provide additional training to any of their officers on this issue and 33.4% provided additional training to only a small percent of officers.

Every agency serving a population size over 1,000,000 provided additional training on handling non-violent protests/civil disobedience to at least some of their patrol officers. Almost half (44.0%) of agencies serving a population of 250,000-499,999 provided training to all/almost all of their patrol officers, as did more than one-third (35.1%) of agencies serving a population of 50,000-99,999, 30.9% of agencies serving a population of 25,000-49,999, and 30.2% of agencies serving a population of 100,000 -249,999.

Of the agencies that provided additional training on handling non-violent protests, 74.8% provided between one and four hours of training; 20.6% of agencies spent less than one hour on the topic, 35.0% spent 1-2 hours on the topic, and 19.1% allocated 3-4 hours to training officers on how to handle non-violent protests and civil disobedience (see Table 5). Agencies in the Midwest provided the least amount of additional training; 67.9% provided no more than 2 hours in comparison to 55.6% of agencies in all regions which provided that amount.

Philosophy and Practice of Policing

In order to better understand how officer education fits in with the practice of policing, respondents were asked about their agency's organizational philosophies as well as how their agency practices policing –the strategies that are most often used, the special teams that may exist, its investigation practices and policies, and how the agency communicates with its citizenry. This section reports on the prevalence of these policies and practices.

Importance of Organizational Philosophies

Respondents were asked "how important is each of the following organizational philosophies in terms of how [their agency] sets priorities, allocates resources, and works to reduce crime." They were asked about traditional law enforcement (professional model of policing), community policing (emphasis on soliciting community input and partnerships), problem oriented policing (emphasis on long-term problem identification and solving), broken windows policing (emphasis on order maintenance policing), and intelligence-led/data-driven policing (prioritizes using data to drive crime responses [ex. Mapping, hotspots, crime analysis, Compstat]). Respondents were able to categorize the importance of philosophies as: not important, a little important, important, highly important, or the most important: primary philosophy used to guide operational decisions.

Table 6: Importance of Organizational Philosophies

	Not Important	A little Important	Important	Highly Important	Most Important
Traditional Law Enforcement	1.1%	8.0%	46.9%	31.8%	12.1%
Community Policing	.5%	1.6%	24.6%	40.9%	32.4%
Problem Oriented Policing	1.0%	4.3%	32.8%	54.8%	7.1%
Broken Windows Policing	6.0%	16.3%	45.6%	31.0%	1.1%
Intelligence-led/Data driven	7.3%	18.3%	35.9%	34.3%	4.2%

As can be seen from Table 6, respondents rated community policing as the most important philosophy. Almost three-quarters (73.3%) of agencies rated it as highly important or most important. The second most important, according to respondents, is problem oriented policing (61.9% rated it as highly or most important). These are followed by traditional policing (43.9%), intelligence-led/data-driven policing (38.5%), and then broken windows policing (32.1%).

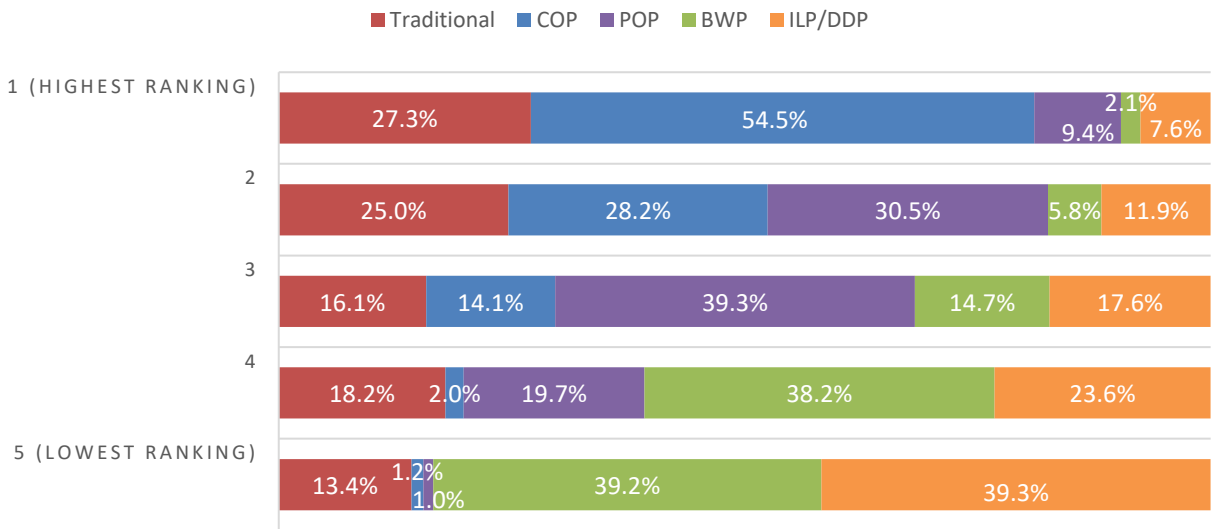
A higher percentage of municipal agencies than county agencies rated as highly important or most important community policing (75.3% vs. 63.8%; χ^2=17.335, p<.05) and broken windows

policing (35.6% vs. 16.2%; χ^2=20.581, p<.01). There are no statistically significant differences by region but there are statistically significant differences according to CEO education level. As with other topics in this report, how important an agency says a particular philosophy differs considerably by how much education the agency's CEO has. For example, the more education a CEO has, the more likely the agency's respondent rated community policing as highly important or most important (64.4% HSD, 65.5% AA, 72.8% BA, 82.3% MA+) (33.196, p=.001). The pattern for problem oriented policing was almost identical (53.7% HSD, 53.1% AA, 57.1% BA, 73.3% MA+) (χ^2=34.540, p=.001) while the pattern for traditional policing was opposite (49.4% HSD, 46.4% AA, 46.4% BA, 38.3% MA+) (χ^2=23.864, p<.05). Although there are some small differences between how agencies of different sizes rate the various organizational philosophies, most differences are not statistically significant, or barely reach statistical significance. Thus, while CEOs with a high school diploma are more likely to lead small agencies, differences in ratings appear to be more related to CEO education level than agency size.

Ranking[12]

Respondents were also asked to rank the organizational philosophies in order of importance for their agency (in terms of setting priorities and allocating resources). As can be seen in Figure 24 below, community policing was ranked most important by the largest number and percentage

FIGURE 24: Ranking of Organizational Philosophies



of agencies (54.5%), followed by traditional policing (27.3%). While 82.7% of respondents ranked community policing as first or second most important, they were more uncertain where to place traditional policing, with 52.3% placing it in the top two spots and 47.7% placing amongst the

[12] Ranking percentages do not equal 100% because not every respondent ranked every philosophy. Philosophy percentages do add up to 100%.

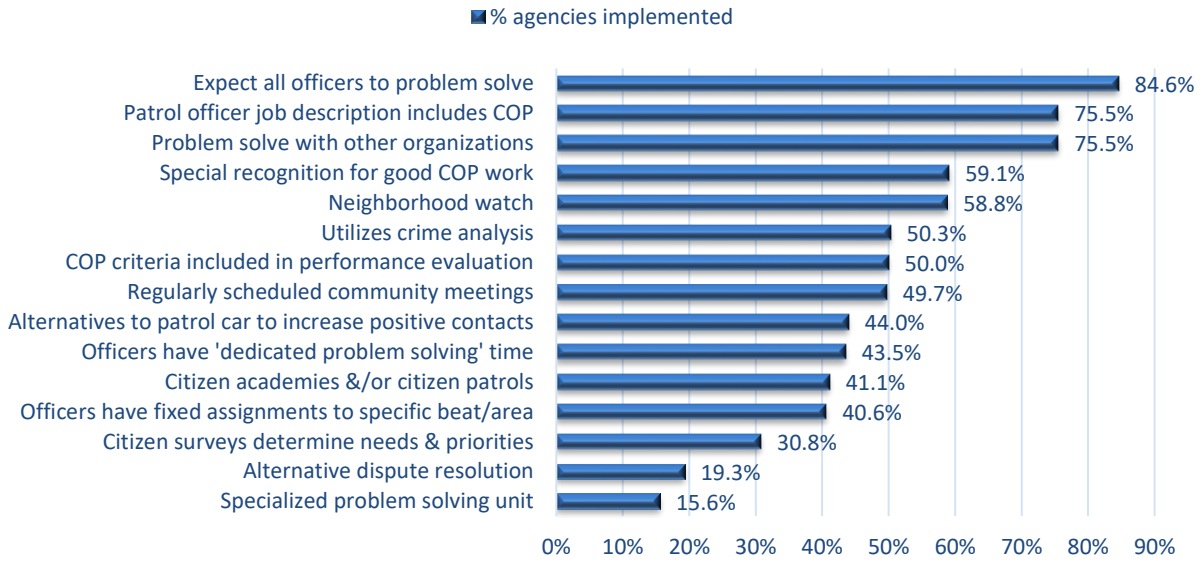
bottom three. There was similar disagreement about where to place intelligence-led/data driven policing, with two-thirds (65.9%) ranking it fourth or fifth and one-third (34.1%) ranking it amongst the top three. There was more agreement on problem oriented policing, which most (69.8%) ranked as second or third most important, and broken windows policing which most (77.4%) ranked fourth or fifth most important.

There were some differences in ranking based on agency size and CEO education. Almost every agency serving a population of over 100,000 ranked broken windows policing as fourth or fifth most important (in comparison to approximately 70% of smaller agencies; χ^2=56.420, p<.01)and 44% of these larger agencies ranked intelligence-led/data driven policing as first or second most important (in comparison to 13.7% of smaller agencies; χ^2=132.677, p<.001). Meanwhile, 51.1% of agencies serving a population less than 100,000 ranked traditional policing as first or second most important in comparison to 34.1% of larger agencies (χ^2=64.007, p<.01). As would be expected, there are similar differences based on CEO education level; however the differences are less significant which suggests that agency size is a larger factor on ranking.

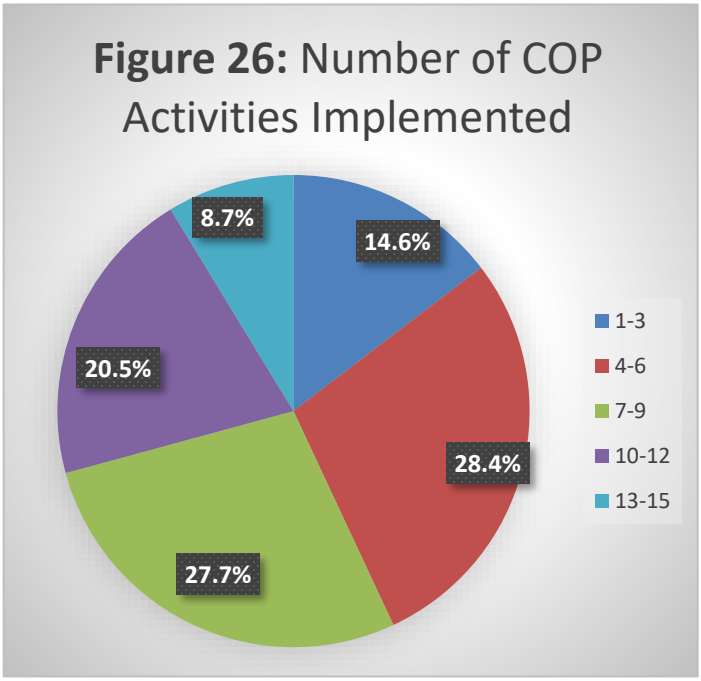
Implementation of COP Activities

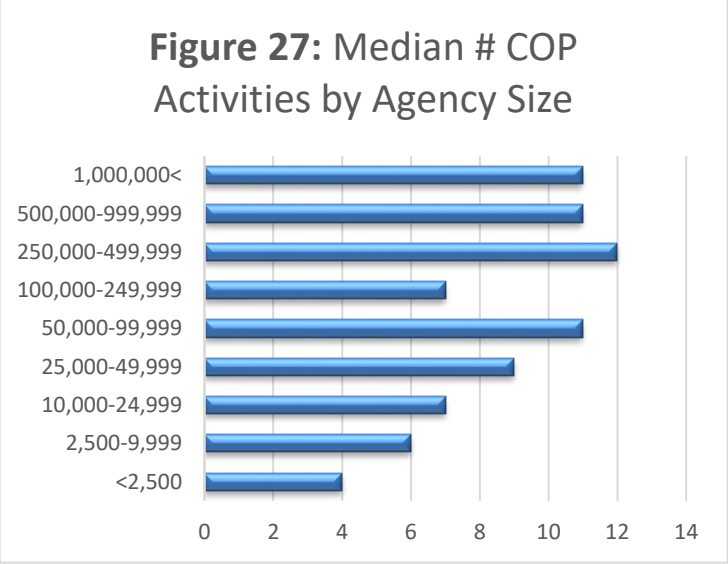
According to the latest LEMAS data, two-thirds of agencies nationwide practice community policing, with large agencies more likely than small agencies to incorporate into their mission statement as well as train officers in its principles (Reaves, 2015). Of the 616 agencies in this study which answered this question, only 3 stated they do not practice community policing; this suggests that 99.5% of respondent agencies practice community policing, at least to some degree. Note that this is the same number of agencies (3) that said community oriented policing is "not important at all" in terms of how the agency sets priorities and allocates resources.

Figure 25: Popular COP Activities



This percentage dramatically differs from the LEMAS study, probably because the studies asked very different questions. The LEMAS study asked whether agencies had a mission statement that incorporated COP, a formal written COP plan, and full-time COP officers while this study asked about specific organizational policies/expectations and operational practices. As can be seen in Figure 25, almost 85% of agencies expect patrol officers to routinely engage in problem solving (84.6%). Additionally, three-quarters of agencies work with other public and private entities when problem solving (75.5%) and include COP in the job description of patrol officer (75.5%). Almost three-fifths of agencies give special recognition to officers for especially good community police work (59.1%) and have neighborhood watch (58.8%). Half of respondent agencies utilize crime analysis to identify crime trends and/or predict patterns (50.3%), include COP criteria in employee performance measures (50.0%), and hold regularly scheduled meetings between police and community members (49.7%). It is encouraging that 44.0% of agencies extensively use alternatives to motor patrol to increase positive contact with members of the community and 43.5% incorporate "dedicated problem solving time" into officers' schedules. As Figure 26 illustrates, two-thirds of agencies have implemented six or more COP activities, with most implementing between 6 and 11. A small percentage of agencies have implemented more than 12 activities (14.7%) or fewer than 4 (14.6%).





Given the correlation between CEO education level of perceived importance of community policing and problem oriented policing, it is no surprise that CEO education level is also highly correlated with the implementation of most COP activities. In fact, the only activity it is not highly correlated with is including COP in the patrol officer's job description. All other activities are significantly correlated in a linear fashion to CEO education level (χ^2= 14.310 - 113.270, p<.01). It is also linked to how

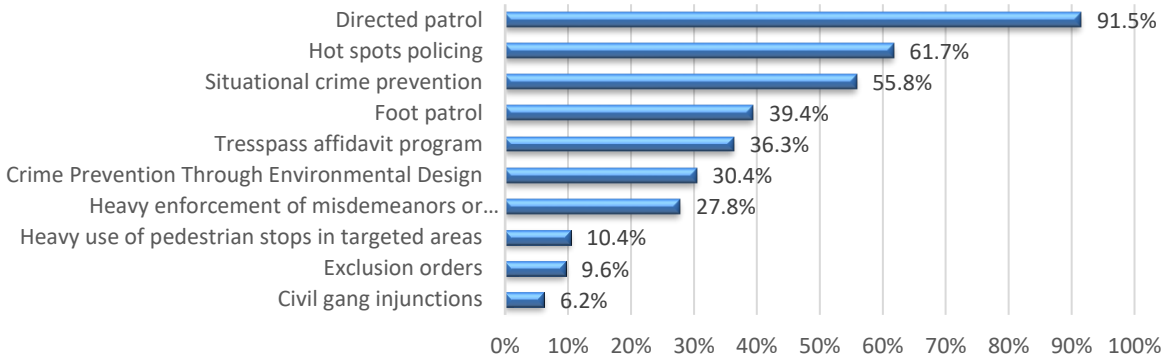
many COP activities an agency implements; agencies headed by CEOs with a high school diploma or two-year degree implement five activities on average, agencies headed by CEOs with a four-year degree implement seven activities on average, and agencies headed by CEOs with a graduate degree implement 10 activities on average (χ^2=169.413, p<.001).

The number of COP activities implemented and which COP activities are implemented is also highly correlated to agency size, generally though not always in a linear fashion. Figure 27 provides a reasonable illustration of a pattern common to this data, which is contained in Appendix A. Agencies serving populations 50,000 or more implement 11-12 activities on average while smaller agencies implement seven on average.

Most Popular Routine Policing Strategies

Respondents were also asked to identify which popular policing strategies their department uses regularly. Almost every respondent (91.5%) stated that their agency uses direct patrol, 61.7% use hot spots policing, and 55.8% uses situational crime prevention. The least popular strategies are civil gang injunctions (6.2%), exclusion orders (9.6%), and heavy use of pedestrian stops in targeted areas (10.4%). It is interesting that almost three times more agencies use heavy enforcement of misdemeanors in targeted areas (27.8%) than use pedestrian stops (10.4%).

Figure 28: Percent of Agencies which Use Strategy on a Regular Basis



CEO education level is correlated with the use of some strategies (hot spots, civil gang injunctions, situational crime prevention [SCP], and crime prevention through environmental design [CPTED]) but not others (heavy use of pedestrian stops, foot patrol, and directed patrol). Agencies headed by CEOs with a two year degree are the most likely to use heavy enforcement of misdemeanors/summonses in targeted areas than are any other agencies, 40.2% of agencies headed by a CEO with an AA use the strategy compared to 26.0% of agencies headed by a CEO with a high school diploma, 26.4% of agencies headed by a CEO with BA, and 25.3% of agencies headed by CEO with MA or higher (χ^2=9.223, p<.05).

As would be expected, some strategies are more likely to be used in certain types of agencies. In particular, foot patrol is practiced by 43.6% of municipal agencies but only 20.7% of county agencies (χ^2=20.043, p<.001) and CPTED is practiced in 32.7% of municipal agencies compared to 18.9% of county agencies (χ^2=12.746, p<.01). There are also many regional and agency size differences. For example, foot patrol is most likely to be found in the Southeast (46.7% use) and least likely to be found in the South (25.0% use) (χ^2=11.434, p<.05). It is also not likely to be found in agencies which serve a population of 10,000-24,999 (29.5%), 25,000-49,999 (30.6%), or 1,000,000 or more (0%) (χ^2=22.561, p<.01). Similarly, agencies in the Southeast (11.7%) and West (9.8%) are most likely to use civil gang injunctions while agencies in the Northeast (1.1%) and Midwest (1.9%) are least likely to use them (χ^2=20.311, p<.001). They are very unlikely to be used in agencies serving populations less than 50,000 (fewer than 3% use them) but somewhat likely to be found in agencies serving more than 100,000 people (21.2%-33.3%). See Appendices A-D.

Responding to Mental Health Crises/Homelessness

Respondents were asked whether their agency has a specialized mental health response team for dealing with individuals experiencing a mental health crisis. Only 40.1% of agencies nationwide have such a team, 55% of which include a mental health professional. About a third (30.9%) of these dedicated teams are on duty 24/7, while others are on duty during peak hours (18.9%), on call, or on a different schedule. Of the 59.9% of agencies which do not have a specialized team, two-thirds (68.9%) have trained all patrol officers and 17.4% have trained some officers in handling mental health crises.

As might be expected, larger agencies are significantly more likely than smaller agencies to have a specialized mental health response team (χ^2=69.081, p<.001). While 73.0% of agencies serving a population of 100,000 or greater has a special team, only 45.0% of agencies serving 25,000-999,999 and 29.9% of agencies serving less than 25,000 have a special mental health response team. There is also a significant linear association with CEO education level as well, with agencies headed by a CEO with a graduate degree the most likely to have a specialized team (53.2% compared to 31%; χ^2=29.233, p<.001). However, the strength of association for agency size is much greater and likely has a stronger effect than CEO education on this practice.

A higher percentage of agencies in the Southeast (52.5%) and West (43.8%) have specialized teams than do agencies in the South (27.1%). Furthermore, county agencies and those in the West are the most likely to have a mental health professional on their response team. About three-quarters of county agencies (75.6%) and agencies in the West (71.4%) are fortunate enough to have a mental health professional on their team, in comparison to 50.5% of municipal agencies and 48.8% of agencies in other regions. See Appendices A - D for data.

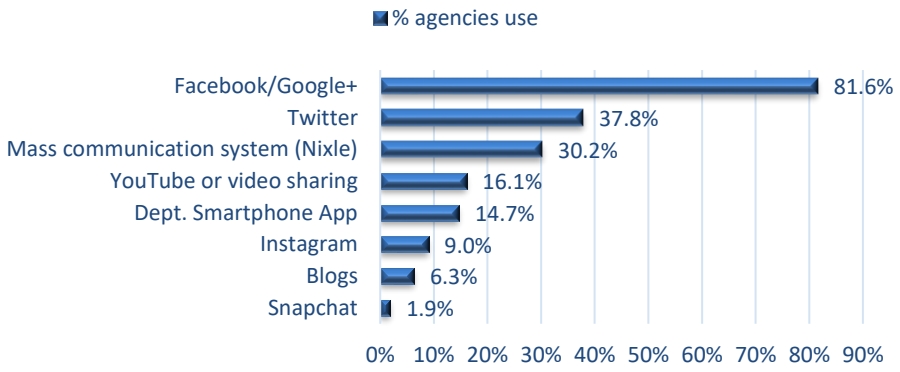
Just one in ten agencies (10.4%) has specially trained officers to work with individuals experiencing homelessness. Two-thirds (68.7%) of these agencies have a team of officers and one-third (31.3%) has a single homeless liaison officer. Whether an agency has specially trained

officers is highly dependent on whether their community has a problem with homelessness (χ^2=116.826, p<.001). For example, 45.3% of agencies which categorize homelessness as a "major problem" have specially trained officers in comparison to 8.2% of agencies which categorize homelessness as a "minor problem" and 2.9% of agencies which say homelessness is "not an issue." Besides the obvious, whether an agency has any homeless liaison officers is linked to (a) population size (the larger the population, the larger the percentage of agencies which has a homeless outreach officer/team) (χ^2=82.458, p<.001), (b) where the agency is located (19.6% of agencies in the West and 14.3% in the Southeast compared to 3.1% in the Midwest, 6.3% in the South, and 6.5% in the Northeast) (χ^2=28.957, p<.001), and (c) CEO education level (16.2% of agencies headed by CEO with graduate degree compared to 8.0% of CEOs with a two-year degree, 6.9% of CEOs with a four-year degree, and 4,3% of CEOs with a high school diploma) (χ^2=15.130, p<.01). See Appendices A, B, and C for data.

Most Popular Social Media

Many agencies now communicate with community members using social media. Respondents were asked to identify which popular social media sites are used by their agency. As Figure 28 shows, Facebook/Google+ is the most popular (81.6%), with more than twice as many agencies using one of these platforms than the next most popular app, Twitter (37.8%). The least popular social media platforms are Snapchat (1.9%) and blogs (6.3%). Most agencies (59.3%) use one or two methods to communicate with the public, 7.9% use more than four methods, and 12.1% of agencies do not use social media at all.

Figure 29: Popular Social Media



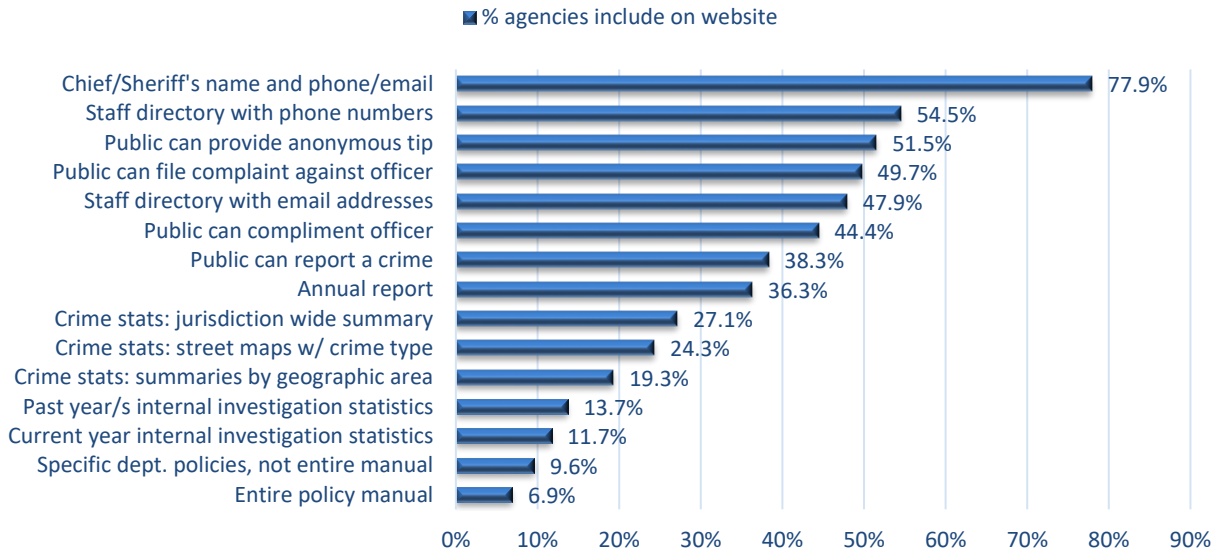
As might be expected, social media use is significantly and positively correlated with size of population served for every category of social media. Most, but not all, social media types are also correlated with geographic region, CEO education, and size of agency (larger agencies and those headed by CEOs with a master's degree or higher are more likely to use social media).

Agency Website Content

Most agencies now have a department website to provide information to the public. Similar to social media, only 12.4% of respondents stated that their agency does not have a website. Figure

30 shows the most popular content contained on agency websites. Approximately three-quarters (77.9%) of agencies provide the chief's/sheriff's name with a way to contact him/her. About 70% of agencies provide crime statistics in some form on their website; 27.1% provide a jurisdiction-wide summary, another 19.3% provide summaries of specific geographic areas within their jurisdiction, and 24.3% provide street-level maps with crime type and approximate location.

Figure 30: Agency Website Content



Most agencies (61.7%) also provide a staff directory with contact information; 21.1% provide either a phone number or email address and 40.6% provide both forms of contact information. Approximately half of agencies allow members of the public to provide an anonymous tip (51.5%) or file a complaint against an officer (49.7%) via their website but ironically, only 44.4% allow members of the public to compliment an officer using the website. Less than one in five agencies provide on their website some or all of their department policies (9.6% and 6.9% respectively) or any internal investigations statistics (8.9% provide either current or past year and 8.3% provide both current and past year). With few exceptions, website content is not correlated to agency type or geographic region but it is strongly and positively related to both agency size and CEO education level. See Appendices A and B for more information.

Investigative Practices

In recent years there has been considerable attention on the issue of false convictions and investigative practices that increase the likelihood of a false conviction occurring. There is also substantial information of investigative practices that prevent false convictions from occurring. Respondents were asked about their agency's policies on some of these practices (see Table 7). It should be noted that there were some common errors in the data which could not be easily fixed without altering the meaning of the data so they were left, in their authentic form. For

example, some respondents were not aware that department policy was dictated by state law (they answered "department requires practice" instead of "state law requires practice") or vice versa (they answered "state law requires practice" when they should have answered "department requires practice"). It appears that a handful of respondents were unaware of state law regarding investigative practices, as some answered that their agency has "no official policy" when in fact, state law requires the practice. This last error may be because the department actually has no official policy or because the person answering the survey was unaware of recent changes to state laws in this developing area. Thus, these data should be interpreted with caution and should be seen as a general indicator of practice, rather than an absolute authority on the subject.

Table 7: Investigative Practices

	No official policy	Dept. recommends practice	Dept. requires practice	State law requires practice
Blind administration of photo lineup	42.0%	14.1%	22.9%	21.1%
Sequential photo lineup	44.2%	13.9%	24.4%	17.5%
Electronic recording: Photo lineup	47.0%	24.2%	21.6%	7.2%
Electronic Recording: Adult Felony suspect interrogation	8.8%	34.4%	37.4%	19.4%
Electronic Recording: Adult Misd. suspect interrogation	21.2%	39.5%	31.4%	7.9%
Electronic Recording: Juvenile Felony suspect interrogation	15.4%	31.1%	33.8%	19.6%
Electronic Recording: Juvenile Misd. suspect interrogation	24.1%	36.1%	27.4%	12.4%
Juvenile suspect confer with trusted adult prior to waiving Miranda	28.2%	24.9%	22.7%	24.2%
Witness Instructions	21.9%	24.4%	38.6%	15.2%
Confidence Statements	43.4%	20.4%	24.7%	11.6%

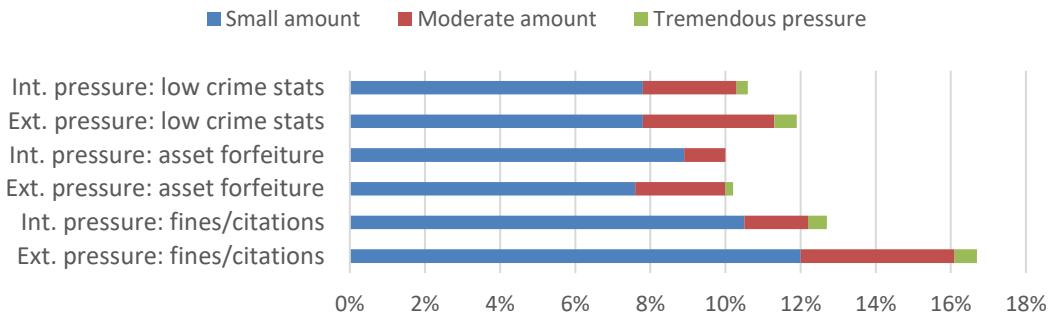
Politics and Accountability in Policing

Democratic policing, which has gained steam recently, places a premium on accountability, transparency, and procedural justice. Additionally the influence of politics on policing has been a topic that has garnered some special interest in the past few years. For these reasons, this study examined these issues through the eyes of law enforcement agencies.

Politics

In the early years (19th century and early 20th century), policing and politics were intertwined. Much effort, however, was expended by early progressive reformers to rid the profession of undue outside influence. These reformers handed the professional torch to later generations of law enforcement leaders to continue the fight to improve and professionalize the industry we know and appreciate today. To gauge whether, and to what degree, politicians' pressure law enforcement leaders to achieve certain outcomes, respondents were asked questions pertaining to external and internal pressure to generate revenue and report low crime rates.

Figure 31: Agencies Reporting any Political Pressure



Pressure to Generate Revenue

A small percentage of agencies reported experiencing external pressure to generate revenue and/or report low crime statistics (Figure 31). The greatest external pressure is on agencies to generate revenue by issuing fines/citations, 16.8% of agencies reported experiencing at least a small amount of pressure in this category. Agencies were least likely to feel pressure to generate revenue through asset forfeiture (only 10.1% reported any pressure in this category), however this may change if asset forfeiture rules become favorable toward law enforcement in the future.

Municipal agencies were more likely than county agencies to report feeling external pressure to generate revenue through fines/citations, with 19.9% of municipal agencies reporting pressure in comparison to 7.3% of county agencies (χ^2=14.22, p<.05). Likewise, the smallest agencies were the most likely to report external pressure to generate revenue through fines/citations, with 26.6% of agencies serving populations less than 2,500, 18.6% of agencies serving a population of 10,000-24,999, and 16.4% of agencies serving a population of 2,500-9,999 reporting pressure in

comparison to 11.5% of all other agencies (χ^2=40.525, p<.05). Meanwhile, the agencies that reported any pressure to generate revenue through asset forfeiture were significantly more likely to be large agencies (χ^2=100.06, p<.001). One-quarter (24%) of agencies serving a population of 100,000-249,999 reported some amount of pressure as did 18.5% of agencies serving a population over 500,000. In most cases, this external pressure led to internal pressure on field personnel. See Appendices A -C.

Pressure to Report Low Crime Statistics

Few agencies reported any external pressure (11.9%) or internal pressure (10.6%) to report low crime statistics. Whether an agency uses a Compstat-like system did not have a statistically significant effect on whether they described any external pressure to report low crime. However, agencies which use a Compstat-like system were somewhat more likely to state there was internal pressure to report low crime statistics than agencies without a management accountability system (15.7% compared to 9.7%; χ^2=7.706, p<.10). There were no other statistically significant differences between agencies of different types or sizes, in different regions, or headed by CEOs of different educational backgrounds.

Accountability

Respondents were asked about their agency's accountability mechanisms, specifically whether their agency has an early intervention system in place to identify officers with potential for misconduct and whether their agency has a citizen oversight committee or civilian review board.

Early Intervention Systems

Most agencies (56.5%) use an early intervention system to identify officers with potential for misconduct. Larger agencies are significantly more likely than smaller agencies to use an early intervention system (χ^2=44.438, p<.001). Likewise, there is a linear association with CEO education level as well, with agencies headed by a CEO with a graduate degree the most likely to use an early intervention system (69.7% compared to 47.2% of other agencies; χ^2=29.522, p<.001). Once again, readers should be mindful that the strength of association for agency size is greater and may have a stronger effect than CEO education on this practice. Where an agency is located is also important, 67.8% of Southeast agencies use an early intervention system in comparison to 51.0% of Midwest agencies (χ^2=9.904, p<.05). See appendices for data.

Citizen Oversight

Almost one in every seven agencies nationwide (13.5%) has a citizen oversight committee or civilian review board. While city and county agencies are equally likely to have a mechanism for citizen oversight, larger agencies are more likely than smaller agencies to have this accountability mechanism (χ^2=57.668, p<.001). There is clear distinction between agencies which serve a population of greater or less than 100,000 people, whereas 35.6% of the larger agencies but only 9.1% of the smaller agencies have citizen oversight. There are no differences between agencies in different regions or headed by CEOs of varying education levels.

Conclusion

Overall, this report has provided much information about the role and influence of higher education in law enforcement across the nation. One of its major strengths is that the sample is both large and nationally representative of the very diverse landscape of law enforcement in America. Not only does it provide a general "average" for local law enforcement agencies, which may or may not be particularly useful, it provides averages for different types and sizes of agencies, different regions, and according to whether there is a collective bargaining unit. CEO education was not a planned comparison variable but its effect on almost every other variable is a very interesting finding (one that requires much more research to reveal its unique effects, outside of agency size).

This report demonstrates, in visual terms, how local law enforcement agencies of various sizes and types and in different parts of the county vary, sometimes dramatically sometimes very little, on issues of higher education. This report is the beginning. Future research is required to disentangle the various effects found. The eventual goal of this study is to ascertain whether having a high percentage of college-educated officers is correlated with specific positive outcomes at the agency level.

Does patrol officer education level make a difference? This study was not designed to answer that question but it is clear from the current study that CEO education makes a big difference in how an agency operates – the philosophy that guides the agency, the strategies it uses, the programs it implements, and the policies it adopts.

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Appendix A - Significant Correlations: Size of Population Served

	< 2,500	2,500-9,999	10,000-24,999	25,000-49,999	50,000-99,999	100,000-249,999	250,000-499,999	500,000-999,999	1,000,000 +	Statistical Significance
Minimum Education Requirement *n*	113	213	143	75	43	53	28	15	9	NS
High school diploma	85.0%	81.2%	76.9%	81.3%	79.1%	90.6%	85.7%	73.3%	77.8%	
Some college	6.2%	8.9%	5.6%	6.7%	4.7%	0%	3.6%	20.0%	11.1%	
Two year degree (AA)	8.8%	9.9%	14.7%	9.3%	16.3%	5.7%	7.1%	6.7%	11.1%	
Four-year degree (BA)	0%	0%	2.8%	2.7%	0%	3.8%	3.6%	0%	0%	
Educational Incentives *n*	109	208	146	78	41	52	31	18	11	
Any educational incentive	19.3%	49.5%	61.6%	64.1%	75.6%	75.0%	83.9%	94.4%	90.9%	χ^2=107.09 <.001
Educational pay incentive	9.2%	25.5%	39.0%	38.5%	56.1%	61.5%	48.4%	44.4%	54.5%	χ^2=71.575 <.001
Tuition reimbursement	12.8%	33.2%	39.7%	53.8%	58.5%	42.3%	67.7%	55.6%	72.7%	χ^2=66.686 <.001
Accelerated career ladder	1.8%	1.0%	4.8%	10.3%	7.3%	11.5%	9.7%	11.1%	9.1%	χ^2=22.786 <.01
Adjust shifts/days off (flexible duty shifts)	5.5%	10.6%	8.9%	12.8%	4.9%	9.6%	9.7%	11.1%	9.1%	NS
Schedule preferences to accommodate college	3.7%	5.8%	4.1%	10.3%	4.9%	3.8%	3.2%	0%	0%	NS
Permission to attend class during work hours	9.2%	5.3%	6.8%	7.7%	12.2%	5.8%	3.2%	18.2%	7.1%	NS
Use of dept. vehicle for transportation to class	5.5%	7.7%	4.8%	7.7%	14.6%	5.8%	9.7%	27.8%	27.3%	χ^2=21.213 <.01
Average Educational Level *n*	77	155	97	39	20	15	8 (Pop: 250k+)			
% officers with any degree (AA or higher)	54.3%	47.9%	53.3%	57.5%	56.2%	48.3%	50.6%			NS
% officers with BA or higher	23.4%	26.3%	36.5%	39.0%	40.5%	31.1%	38.3%			F=3.07(8) <.01
% officers: Highest degree is AA	30.9%	21.6%	18.0%	18.5%	15.7%	17.3%	12.3%			F=2.91(8) <.01
% officers: Highest degree is BA	19.7%	21.9%	28.5%	30.5%	34.0%	27.0%	31.4%			F=3.31(8) <.01
% officers: Highest degree is MA	3.6%	4.0%	6.6%	8.3%	6.1%	4.0%	6.2%			NS
% officers: doctorate/terminal degree	0.0%	0.4%	0.3%	0.1%	0.4%	0.2%	0.8%			NS

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	< 2,500	2,500-9,999	10,000-24,999	25,000-49,999	50,000-99,999	100,000-249,999	250,000-499,999	500,000-999,999	1,000,000 +	Statistical Significance
CEO Education *n*	116	220	142	79	40	49	31	14	9	χ^2=142.56 <.001
High School Diploma	32.8%	22.3%	15.5%	6.3%	2.5%	4.1%	3.2%	7.1%	11.1%	
Two-year Degree	31.0%	22.3%	17.6%	13.9%	15.0%	4.1%	12.9%	0.0%	0.0%	
Four-year Degree	29.3%	30.5%	28.9%	30.4%	35.0%	20.4%	12.9%	21.4%	44.4%	
Master's Degree or higher	6.9%	25.0%	38.0%	49.4%	47.5%	71.4%	71.0%	71.4%	44.4%	
COP Activities *n*	93	184	128	70	39	50	26	19	7	
COP incl. job description	75.3%	78.8%	74.2%	74.3%	74.4%	68.0%	80.8%	78.9%	57.1%	NS
COP incl. performance review	33.3%	52.2%	50.0%	60.0%	53.8%	50.0%	73.1%	42.1%	28.6%	χ^2=21.010 <.01
All officers expected to problem solve	71.0%	87.5%	82.0%	92.9%	89.7%	84.0%	88.5%	94.7%	85.7%	χ^2=21.348 <.01
Special recognition for good COP work	32.3%	52.7%	57.8%	75.7%	69.2%	84.0%	84.6%	78.9%	57.1%	χ^2=63.490 <.001
Utilizes crime analysis	22.6%	35.9%	48.4%	57.1%	76.9%	84.0%	92.3%	94.7%	100%	χ^2=119.45 <.001
Extensive alternatives to motor patrol to increase positive community contacts	25.8%	43.5%	40.6%	48.6%	56.4%	58.0%	65.4%	47.4%	57.1%	χ^2=25.518 <.01
Officers have 'dedicated problem solving time'	29.0%	42.9%	46.1%	41.4%	59.0%	44.0%	50.0%	68.4%	42.9%	χ^2=17.470 <.05
Specialized problem solving unit	1.1%	2.2%	7.0%	21.4%	46.2%	44.0%	53.8%	42.1%	71.4%	χ^2=163.05 <.001
Alternative dispute resolution	10.8%	14.7%	18.0%	27.1%	28.2%	22.0%	30.8%	36.8%	42.9%	χ^2=20.449 <.01
Citizen surveys set priorities	18.3%	17.4%	34.4%	32.9%	35.9%	52.0%	73.1%	57.9%	57.1%	χ^2=64.862 <.001
Regularly scheduled community mtgs	20.4%	37.0%	46.1%	61.4%	76.9%	82.0%	88.5%	89.5%	85.7%	χ^2=112.05 <.001
Neighborhood watch	26.9%	47.8%	56.3%	78.6%	79.5%	92.0%	96.2%	73.7%	85.7%	χ^2=108.31 <.001
Citizen academies/citizen patrols	3.2%	19.6%	46.1%	55.7%	84.6%	74.0%	92.3%	84.2%	85.7%	χ^2=199.26 <.001
Problem solve with other organizations	55.9%	72.8%	72.7%	85.7%	84.6%	94.0%	88.5%	89.5%	85.7%	χ^2=40.257 <.001
Officers have fixed assignment to specific beat/area	15.1%	23.9%	34.4%	48.6%	61.5%	90.0%	80.8%	94.7%	85.7%	χ^2=154.41 <.001

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	< 2,500	2,500-9,999	10,000-24,999	25,000-49,999	50,000-99,999	100,000-249,999	250,000-499,999	500,000-999,999	1,000,000 +	Statistical Significance
Policing Strategies *n*	97	190	129	72	39	52	27	19	9	
Foot Patrol	43.3%	45.3%	29.5%	30.6%	43.6%	38.5%	48.1%	63.2%	0%	χ^2=22.561 <.01
Directed Patrol	81.4%	91.1%	96.1%	93.1%	92.3%	96.2%	88.9%	94.7%	100%	χ^2=19.207 <.05
Hot Spots Policing	27.8%	54.2%	36.6%	76.4%	84.6%	86.5%	77.8%	94.7%	77.8%	χ^2=93.278 <.001
Civil Gang Injunction	1.0%	2.1%	3.1%	2.8%	12.8%	21.2%	22.2%	15.8%	33.3%	χ^2=63.225 <.001
Heavy use of pedestrian stops in targeted areas	3.1%	10.5%	7.8%	13.9%	15.4%	11.5%	18.5%	15.8%	33.3%	χ^2=16.153 <.05
Heavy enforcement of misdemeanors/ summonses in targeted areas	25.8%	30.5%	34.9%	29.2%	12.8%	19.2%	14.8%	21.1%	44.4%	NS
Trespass Affidavit Program	19.6%	35.3%	37.2%	38.9%	51.3%	48.1%	40.7%	36.8%	55.6%	χ^2=20.646 <.01
Exclusion Orders	4.1%	7.9%	9.3%	13.9%	17.9%	13.5%	11.1%	15.8%	0%	NS
Situational Crime Prevention	34.0%	53.7%	64.3%	68.1%	69.2%	50.0%	51.9%	57.9%	100%	χ^2=38.102 <.001
Crime Prevention Through Environmental Design	14.4%	20.5%	29.5%	38.9%	48.7%	57.7%	44.4%	42.1%	55.6%	χ^2=53.837 <.001
Social Media *n*	96	191	130	72	39	52	28	19	8	
Twitter	8.3%	20.4%	35.4%	51.4%	66.7%	73.1%	78.6%	84.2%	100%	χ^2=157.69 <.001
Facebook/Google+	52.1%	79.1%	87.7%	90.3%	94.9%	92.3%	96.4%	94.7%	100%	χ^2=79.902 <.001
Instagram	1.0%	1.6%	5.4%	9.7%	15.4%	21.2%	42.9%	26.3%	62.5%	χ^2=108.09 <.001
Snapchat	0%	0%	1.5%	1.4%	7.7%	3.8%	10.7%	5.3%	0%	χ^2=26.948 <.01
Blogs	1.0%	2.6%	4.6%	6.9%	7.7%	13.5%	14.3%	31.6%	37.5%	χ^2=50.996 <.05
YouTube of video sharing	1.0%	4.2%	9.2%	18.1%	33.3%	44.2%	53.6%	57.9%	75.0%	χ^2=154.47 <.001
Mass communication system (Nixle)	16.7%	27.2%	32.3%	36.1%	38.5%	34.6%	35.7%	47.4%	50.0%	χ^2=16.891 <.05
Department Smartphone App	5.2%	14.2%	11.5%	19.4%	20.5%	26.9%	21.4%	10.5%	25.0%	χ^2=18.493 <.05

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	< 2,500	2,500-9,999	10,000-24,999	25,000-49,999	50,000-99,999	100,000-249,999	250,000-499,999	500,000-999,999	1,000,000 +	Statistical Significance
Website Content *n*	84	182	128	69	39	51	27	19	7	
No Department Website	46.4%	12.1%	8.6%	1.4%	5.1%	0%	0%	0%	0%	χ^2=115.69 <.001
Chief/Sheriff name and phone/email	41.7%	73.6%	85.9%	92.8%	89.7%	96.1%	85.2%	84.2%	85.7%	χ^2=94.083 <.001
Staff directory with phone numbers	27.4%	51.1%	56.3%	72.5%	66.7%	68.6%	63.0%	57.9%	42.9%	χ^2=42.575 <.001
Staff directory with email addresses	26.2%	52.7%	51.6%	66.7%	48.7%	47.1%	33.3%	42.1%	0%	χ^2=37.017 <.001
Crime Stats: jurisdiction wide summary	4.8%	15.4%	30.5%	40.6%	33.3%	41.2%	59.3%	57.9%	57.1%	χ^2=73.340 <.001
Crime Stats: geographic area summaries	1.2%	9.9%	18.0%	24.6%	28.2%	33.3%	51.9%	57.9%	71.4%	χ^2=86.605 <.001
Crime Stats: street maps w/crime type	0%	12.1%	20.3%	46.4%	28.2%	51.0%	51.9%	57.9%	71.4%	χ^2=112.55 <.001
Annual report	6.0%	25.8%	37.5%	42.0%	59.0%	62.7%	66.7%	68.4%	71.4%	χ^2=90.227 <.001
Specific department policies	1.2%	5.5%	5.5%	10.1%	17.9%	27.5%	22.2%	21.1%	28.6%	χ^2=45.634 <.001
Department's entire policy manual	0%	3.8%	7.0%	8.7%	5.1%	7.8%	25.9%	36.8%	0%	χ^2=51.516 <.001
Internal investigation stats: current year	0%	6.6%	11.7%	18.8%	10.3%	23.5%	37.0%	26.3%	0%	χ^2=47.693 <.001
Internal investigation stats: past year	0%	8.2%	11.7%	21.7%	23.1%	23.5%	37.0%	31.6%	14.3%	χ^2=46.772 <.001
Citizens can file complaint against officer	19.0%	37.4%	50.0%	72.5%	59.0%	76.5%	66.7%	89.5%	85.7%	χ^2=91.686 <.001
Citizens can compliment officer	15.5%	33.0%	48.4%	63.8%	59.0%	62.7%	55.6%	78.9%	71.4%	χ^2=72.364 <.001
Citizens can report crime	14.3%	27.5%	37.5%	50.7%	51.3%	58.8%	70.4%	73.7%	57.1%	χ^2=68.823 <.001
Citizens can provide anonymous tip	15.5%	42.9%	53.9%	68.1%	69.2%	70.6%	74.1%	89.5%	71.4%	χ^2=86.947 <.001

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Other Topics		< 2,500	2,500-9,999	10,000-24,999	25,000-49,999	50,000-99,999	100,000-249,999	250,000-499,999	500,000-999,999	1,000,000 +	Statistical Significance
Compstat	*n*	86	183	125	71	37	48	27	17	7	
COMPSTAT-like system		1.2%	8.7%	14.4%	31.0%	40.5%	62.5%	77.8%	76.5%	71.4%	χ^2=180.53 <.001
Mental Health	*n*	96	189	129	72	39	50	27	18	9	
Special Mental Health Team		25.0%	30.7%	32.6%	47.2%	41.0%	70.0%	81.5%	72.2%	66.7%	χ^2=69.081 <.001
Homeless Outreach	*n*	96	190	129	72	39	51	28	19	9	
Specially trained officers: homeless		5.2%	3.2%	6.2%	5.6%	20.5%	33.3%	25.0%	36.8%	44.4%	χ^2=82.458 <.001
External Pressure: Fines/Cites	*n*	97	189	129	73	38	51	28	19	8	
Any pressure (small, moderate, or tremendous)		26.8%	16.4%	18.6%	13.7%	10.5%	11.8%	10.7%	5.3%	12.5%	χ^2=40.525 <.05
External Pressure: Asset Forfeiture	*n*	97	189	129	73	38	50	28	19	8	
Any pressure (small, moderate, or tremendous)		9.3%	10.6%	7.0%	5.5%	7.9%	24.0%	7.1%	15.8%	25.0%	χ^2=100.06 <.001
Internal Pressure: Fines/Cites	*n*	97	189	129	73	38	50	28	19	8	
Any pressure (small, moderate, or tremendous)		18.6%	15.4%	12.4%	9.6%	5.3%	4.0%	10.7%	5.3%	25.0%	χ^2=47.099 <.01
Internal Pressure: Asset Forfeiture	*n*	97	189	129	73	38	50	29	19	8	
Any pressure (small, moderate, or tremendous)		7.2%	7.9%	9.3%	9.6%	5.3%	24.0%	10.3%	15.8%	25.0%	χ^2=30.678 <.05
Early Intervention System	*n*	94	186	129	69	38	52	28	19	8	
Early Intervention System		38.3%	48.9%	55.8%	59.4%	68.4%	80.8%	82.1%	78.9%	75.0%	χ^2=44.438 <.001
Citizen Oversight Committee	*n*	96	186	128	70	38	50	29	18	7	
Citizen Oversight Committee		12.5%	9.1%	5.5%	11.4%	7.9%	40.0%	27.6%	33.3%	42.9%	χ^2=57.668 <.001

Appendix B - Significant Correlations: CEO Education Level

	HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
Minimum Education Requirement *n*	111	123	194	230	χ^2=29.676 <.001
High school diploma	93.7%	80.5%	81.4%	76.1%	
Some college	6.3%	8.1%	5.7%	7.0%	
Two year degree (AA)	0%	11.4%	12.4%	13.5%	
Four-year degree (BA)	0%	0%	0.5%	3.5%	
Educational Incentives *n*	104	126	192	239	
Any educational incentive	37.5%	34.1%	52.6%	76.2%	χ^2=78.751 <.001
Educational pay incentive	14.4%	18.3%	30.7%	53.1%	χ^2=71.720 <.001
Tuition reimbursement	26.9%	22.2%	36.5%	55.6%	χ^2=49.559 <.001
Accelerated career ladder	1.0%	1.6%	4.2%	8.4%	χ^2=13.300 <.01
Adjust shifts/days off (flexible duty shifts)	9.6%	4.8%	8.9%	12.1%	NS
Schedule preferences to accommodate college	2.9%	1.6%	8.3%	5.9%	χ^2=8.345 <.05
Permission to attend class during work hours	8.7%	8.7%	4.7%	7.5%	NS
Use of dept. vehicle for transportation to class	10.6%	4.8%	7.3%	9.2%	NS
Average Educational Level *n*	64	81	129	125	
% officers with any degree (AA or higher)	35.1%	45.8%	54.3%	60.1%	F=12.428(3) <.001
% officers with BA or higher	18.1%	13.8%	32.9%	43.7%	F=39.700(3) <.001
% officers: Highest degree is AA	17.0%	32.1%	21.3%	16.4%	F=10.788(3) <.001
% officers: Highest degree is BA	15.1%	12.2%	29.6%	32.4%	F=25.932(3) <.001
% officers: Highest degree is MA	2.8%	1.4%	3.0%	10.9%	F=28.034(3) <.001
% officers: doctorate/terminal degree	0.2%	0.1%	0.4%	0.4%	NS

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		HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
Collective Bargaining	*n*	115	128	188	237	χ^2=40.955 <.001
Yes		34.8%	43.0%	60.6%	66.2%	
No		65.2%	57.0%	39.4%	33.8%	
Agency Size (Population served)	*n*	120	133	201	246	χ^2=142.56 <.001
Less than 2,500		31.7%	27.1%	16.9%	3.3%	
2,500-9,999		40.8%	36.8%	33.3%	22.4%	
10,000-24,999		18.3%	18.8%	20.4%	22.0%	
25,000-49,999		4.2%	8.3%	11.9%	15.9%	
50,000-99,999		0.8%	4.5%	7.0%	7.7%	
100,000-249,999		1.7%	1.5%	5.0%	14.2%	
250,000-499,999		0.8%	3.0%	2.0%	8.9%	
500,000-999,999		0.8%	0.0%	1.5%	4.1%	
1,000,000 or more		0.8%	0.0%	2.0%	1.6%	
Agency Type	*n*	120	133	200	244	χ^2=14.699 <.05
Municipal		77.5%	75.2%	79.0%	88.9%	
County		21.7%	24.1%	20.5%	10.7%	
Other		0.8%	0.8%	0.5%	0.4%	
Region	*n*	120	133	200	246	χ^2=28.420 <.01
Northeast		15.8%	7.5%	14.0%	20.3%	
Midwest		22.5%	33.8%	32.5%	18.7%	
Southeast		14.2%	19.5%	17.5%	20.3%	
South		20.0%	15.8%	13.0%	12.6%	
West		27.5%	23.3%	23.0%	28.0%	

Appendix B

	HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
COP Activities *n*	93	109	168	218	
COP incl. job description	71.0%	76.1%	73.2%	78.9%	NS
COP incl. performance review	61.3%	64.2%	47.0%	40.4%	χ^2=22.245 <.001
All officers expected to problem solve	77.4%	78.0%	81.5%	94.5%	χ^2=25.436 <.001
Special recognition for good COP work	41.9%	47.4%	56.0%	73.4%	χ^2=36.148 <.001
Utilizes crime analysis	39.8%	29.4%	41.1%	70.2%	χ^2=63.285 <.001
Extensive alternatives to motor patrol to increase positive community contacts	39.8%	35.6%	38.1%	53.7%	χ^2=14.310 <.01
Officers have 'dedicated problem solving time'	33.3%	33.0%	44.6%	51.4%	χ^2=14.368 <.01
Specialized problem solving unit	2.2%	6.4%	9.5%	28.0%	χ^2=52.111 <.001
Alternative dispute resolution	9.7%	11.0%	19.0%	26.1%	χ^2=17.180 <.01
Citizen surveys set priorities	18.3%	18.3%	23.8%	48.8%	χ^2=45.027 <.001
Regularly scheduled community meetings	25.8%	31.2%	47.0%	69.7%	χ^2=71.569 <.001
Neighborhood watch	43.0%	48.6%	56.0%	71.1%	χ^2=28.184 <.001
Citizen academies/citizen patrols	11.8%	18.3%	38.1%	66.1%	χ^2=113.270 <.001
Problem solve with other organizations	62.4%	66.1%	76.2%	86.2%	χ^2=27.759 <.001
Officers have fixed assignment to specific beat/area	18.3%	26.6%	35.7%	58.3%	χ^2=58.142 <.001

Appendix B

	HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
Policing Strategies *n*	96	112	174	221	
Foot Patrol	32.3%	37.5%	41.4%	41.6%	NS
Directed Patrol	90.6%	92.0%	90.8%	92.3%	NS
Hot Spots Policing	40.6%	57.1%	56.9%	74.7%	χ^2=35.969 <.001
Civil Gang Injunction	1.0%	3.6%	6.9%	8.6%	χ^2=8.285 <.05
Heavy use of pedestrian stops in targeted areas	8.3%	8.0%	12.1%	11.3%	NS
Heavy enforcement of misdemeanors/ summonses in targeted areas	26.0%	40.2%	26.4%	25.3%	χ^2=9.223 <.05
Trespass Affidavit Program	30.2%	35.7%	29.3%	45.7%	χ^2=13.593 <.01
Exclusion Orders	6.3%	8.9%	8.6%	12.7%	NS
Situational Crime Prevention	47.9%	48.2%	56.3%	62.9%	χ^2=9.565 <.05
Crime Prevention Through Environmental Design	12.5%	15.2%	27.6%	48.4%	χ^2=61.224 <.001
Social Media *n*	95	112	176	222	
Twitter	17.9%	16.1%	34.1%	58.6%	χ^2=80.645 <.001
Facebook/Google+	68.4%	74.1%	85.2%	87.4%	χ^2=21.932 <.001
Instagram	1.1%	1.8%	8.0%	15.8%	χ^2=28.111 <.001
Snapchat	1.1%	0%	1.1%	3.2%	NS
Blogs	4.2%	2.7%	2.8%	11.7%	χ^2=17.822 <.001
YouTube of video sharing	4.2%	6.3%	12.5%	27.9%	χ^2=43.469 <.001
Mass communication system (Nixle)	21.1%	20.5%	28.4%	38.7%	χ^2=16.768 <.01
Department Smartphone App	12.6%	15.3%	11.9%	17.6%	NS

Appendix B

	HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
Website Content *n*	86	105	172	217	
No Department Website	24.4%	21.9%	11.0%	4.6%	χ^2=32.155 <.001
Chief/Sheriff name and phone/email	57.0%	68.6%	81.4%	86.6%	χ^2=37.353 <.001
Staff directory with phone numbers	40.7%	45.7%	57.6%	61.3%	χ^2=14.541 <.01
Staff directory with email addresses	38.4%	35.2%	54.7%	52.5%	χ^2=14.882 <.01
Crime Stats: jurisdiction wide summary	16.3%	15.2%	26.2%	35.0%	χ^2=19.712 <.001
Crime Stats: geographic area summaries	10.5%	6.7%	19.2%	27.2%	χ^2=24.226 <.001
Crime Stats: street maps w/crime type	10.5%	10.5%	20.3%	37.3%	χ^2=42.126 <.001
Annual report	22.1%	21.0%	34.3%	49.3%	χ^2=34.543 <.001
Specific department policies	3.5%	4.8%	9.3%	14.3%	χ^2=12.165 <.01
Department's entire policy manual	4.7%	3.8%	3.5%	10.6%	χ^2=10.468 <.05
Internal investigation stats: current year	2.3%	10.5%	10.5%	16.6%	χ^2=12.873 <.01
Internal investigation stats: past year	8.1%	10.5%	7.0%	22.1%	χ^2=23.087 <.001
Citizens can file complaint against officer	29.1%	41.0%	45.3%	65.4%	χ^2=40.657 <.001
Citizens can compliment officer	29.1%	36.2%	40.1%	59.4%	χ^2=32.067 <.001
Citizens can report crime	29.1%	29.5%	37.2%	44.7%	χ^2=10.272 <.05
Citizens can provide anonymous tip	34.9%	40.0%	49.4%	66.4%	χ^2=34.529 <.001

Appendix B

Other Topics		HSD	2-year Degree	4-year Degree	Masters or higher	Statistical Significance
Compstat	*n*	85	107	171	215	
COMPSTAT-like system		8.2%	9.3%	17.0%	38.6%	χ^2=55.836 <.001
Mental Health	*n*	94	112	173	220	
Special Mental Health Team		30.9%	32.1%	30.1%	53.2%	χ^2=29.233 <.001
Homeless Outreach	*n*	94	112	174	222	
Specially trained officers: homeless		4.3%	8.0%	6.9%	16.2%	χ^2=15.130 <.01
Early Intervention System	*n*	93	109	171	218	
Early Intervention System		44.1%	45.0%	50.3%	69.7%	χ^2=29.552 <.001

Appendix C - Significant Correlations: Region						
	Northeast	Midwest	Southeast	South	West	Statistical Significance
Minimum Education Requirement *n*	103	183	126	100	178	χ^2=160.44 <.001
High school diploma	87.4%	51.9%	92.9%	93.0%	93.8%	
Some college	3.9%	14.8%	3.2%	4.0%	3.9%	
Two year degree (AA)	6.8%	31.7%	3.2%	1.0%	1.7%	
Four-year degree (BA)	1.9%	1.6%	0.8%	2.0%	0.6%	
Educational Incentives *n*	106	178	127	104	177	
Any educational incentive	68.9%	42.7%	59.8%	52.9%	59.9%	χ^2=22.128 <.001
Educational pay incentive	50.0%	14.6%	37.0%	42.3%	36.2%	χ^2=46.116 <.001
Tuition reimbursement	42.5%	33.7%	46.5%	30.8%	40.1%	χ^2=8.632 <.10
Accelerated career ladder	.9%	2.8%	9.4%	3.8%	6.8%	χ^2=12.428 <.05
Adjust shifts/days off (flexible duty shifts)	8.5%	7.3%	10.2%	13.5%	8.5%	NS
Schedule preferences to accommodate college	2.8%	3.9%	3.9%	7.7%	6.8%	NS
Permission to attend class during work hours	2.8%	3.4%	13.4%	9.6%	7.3%	χ^2=15.342 <.01
Use of dept. vehicle for transportation to class	4.7%	3.4%	19.7%	8.7%	5.6%	χ^2=31.871 <.001
Average Educational Level *n*	75	116	68	67	82	
% officers with any degree (AA or higher)	57.9%	67.8%	39.3%	32.8%	49.0%	F=23.44(4) <.001
% officers with BA or higher	39.3%	35.2%	22.8%	21.2%	27.9%	F=8.461(4) <.001
% officers: Highest degree is AA	18.5%	32.7%	16.5%	11.7%	21.1%	F=13.88(4) <.001
% officers: Highest degree is BA	28.5%	30.8%	19.0%	17.5%	23.7%	F=6.48(4) <.001
% officers: Highest degree is MA	10.3%	4.1%	3.8%	3.6%	3.9%	F=7.95(4) <.001
% officers: doctorate/terminal degree	0.6%	0.3%	0.0%	0.1%	0.3%	NS

Appendix C

	Northeast	Midwest	Southeast	South	West	Statistical Significance
CEO Education *n*	107	183	128	102	179	χ^2=28.420 <.01
High School Diploma	17.8%	14.8%	13.3%	23.5%	18.4%	
Two-year Degree	9.3%	24.6%	20.3%	20.6%	17.3%	
Four-year Degree	26.2%	35.5%	27.3%	25.5%	25.7%	
Master's Degree or higher	46.7%	25.1%	39.1%	30.4%	38.5%	
Policing Strategies *n*	93	159	120	96	163	
Foot Patrol	41.9%	40.9%	46.7%	25.0%	40.5%	χ^2=11.434 <.05
Directed Patrol	91.4%	91.2%	92.5%	87.5%	93.3%	NS
Hot Spots Policing	60.2%	54.1%	72.5%	55.2%	65.6%	χ^2=12.686 <.05
Civil Gang Injunction	1.1%	1.9%	11.7%	4.2%	9.6%	χ^2=20.311 <.001
Heavy use of pedestrian stops in targeted areas	7.5%	3.8%	17.5%	11.5%	12.3%	χ^2=15.660 <.01
Heavy enforcement of misdemeanors/ summonses in targeted areas	23.7%	25.8%	25.0%	27.1%	33.1%	NS
Trespass Affidavit Program	24.7%	25.8%	50.0%	33.3%	45.4%	χ^2=28.868 <.001
Exclusion Orders	10.8%	5.0%	10.0%	3.1%	17.2%	χ^2=19.268 <.01
Situational Crime Prevention	62.4%	56.6%	52.5%	51.0%	55.8%	NS
Crime Prevention Through Environmental Design	25.8%	34.6%	39.2%	14.6%	32.5%	χ^2=18.229 <.01

Social Media *n*	92	161	120	96	163	
Twitter	46.7%	29.8%	43.8%	33.3%	38.0%	<.05
Facebook/Google+	87.0%	78.3%	83.5%	81.3%	80.4%	NS
Instagram	5.4%	4.3%	12.4%	13.5%	9.2%	<.05
Snapchat	1.1%	0%	4.1%	2.1%	2.5%	NS
Blogs	4.3%	3.1%	12.4%	3.1%	8.0%	<.05
YouTube of video sharing	14.1%	9.3%	23.1%	14.6%	18.4%	<.05
Mass communication system (Nixle)	34.8%	31.7%	25.6%	19.8%	35.6%	=.05
Department Smartphone App	14.1%	6.2%	21.7%	15.6%	17.2%	<.01

Appendix C

Other		Northeast	Midwest	Southeast	South	West	Statistical Significance
Compstat	*n*	89	155	117	88	156	
Compstat-like system		26.7%	15.0%	38.9%	18.7%	20.9%	χ^2=23.435 <.001
Mental Health	*n*	92	158	118	96	162	
Special Mental Health Team		38.0%	34.2%	52.5%	27.1%	43.8%	χ^2=17.795 <.01
Team includes mental health professional		54.3%	47.1%	44.3%	56.0%	71.4%	χ^2=11.797 <.05
Homeless Outreach	*n*	93	159	119	96	131	
Specially trained officers: homeless		6.5%	3.1%	14.3%	6.3%	19.6%	χ^2=28.957 <.001
Early Intervention System	*n*	91	157	115	96	161	
Early Intervention System		60.4%	51.0%	67.8%	52.1%	53.4%	χ^2=9.904 <.05

Appendix D - Significant Correlations: Type of Agency				
	Municipal	**County**	**Other**	**Statistical Significance**
Minimum Education Requirement *n*	565	118	4	NS
High school diploma	80.4%	85.6%	100%	
Some college	7.3%	4.2%	0%	
Two year degree (AA)	10.8%	10.2%	0%	
Four-year degree (BA)	1.6%	0%	0%	
Educational Incentives *n*	562	124	3	
Any educational incentive	59.1%	40.3%	66.7%	χ^2=14.625 <.01
Educational pay incentive	35.6%	25.0%	66.7%	χ^2=6.540 <.05
Tuition reimbursement	42.2%	21.8%	33.3%	χ^2=17.889 <.001
Accelerated career ladder	5.3%	2.4%	0%	NS
Adjust shifts/days off (flexible duty shifts)	9.6%	8.1%	0%	NS
Schedule preferences to accommodate college	5.7%	2.4%	0%	NS
Permission to attend class during work hours	6.6%	9.7%	0%	NS
Use of dept. vehicle for transportation to class	6.8%	12.1%	33.3%	χ^2=6.715 <.05
Average Educational Level *n*	354	53		
% officers with any degree (AA or higher)	53.0%	44.7%		NS
% officers with BA or higher	31.6%	21.1%		F=3.76(2) <.001
% officers: Highest degree is AA	21.4%	23.6%		NS
% officers: Highest degree is BA	26.0%	18.0%		NS
% officers: Highest degree is MA	5.4%	2.8%		NS
% officers: doctorate/terminal degree	0.3%	0.3%		NS

Appendix D

	Municipal	County	Other	Statistical Significance
CEO Education *n*	568	125	4	χ^2=14.669 <.05
High School Diploma	16.4%	20.8%	25.0%	
Two-year Degree	17.6%	25.6%	25.0%	
Four-year Degree	27.8%	32.8%	25.0%	
Master's Degree or higher	38.2%	20.8%	25.0%	

Appendix E - Presence of Collective Bargaining (Unionization)			
	Yes	**No**	**Statistical Significance**
Minimum Education Requirement *n*	364	296	χ^2=44.960, <.001
High school diploma	73.1%	91.2%	
Some college	8.2%	5.4%	
Two year degree (AA)	17.3%	2.0%	
Four-year degree (BA)	1.4%	10.5%	
Educational Incentives *n*	372	288	
Any educational incentive	66.7%	43.8%	χ^2=34.717, <.001
Educational pay incentive	42.5%	22.9%	χ^2=27.690, <.001
Tuition reimbursement	46.2%	30.9%	χ^2=15.965, <.001
Accelerated career ladder	4.8%	5.2%	NS
Adjust shifts/days off (flexible duty shifts)	8.3%	9.7%	NS
Schedule preferences to accommodate college	4.3%	6.3%	NS
Permission to attend class during work hours	4.0%	11.5%	χ^2=13.274, <.001
Use of dept. vehicle for transportation to class	5.4%	11.5%	χ^2=8.130, <.01
Average Educational Level *n*	213	185	
% officers with any degree (AA or higher)	60.8%	41.4%	F=47.231(1), <.001
% officers with BA or higher	36.3%	23.1%	F=30.859(1), <.001
% officers: Highest degree is AA	24.5%	18.3%	F=8.173(1), <.01
% officers: Highest degree is BA	30.1%	18.4%	F=33.189(1), <.001
% officers: Highest degree is MA	5.9%	4.4%	NS
% officers: doctorate/terminal degree	0.2%	0.3%	NS
CEO Education *n*	356	302	χ^2=40.955 <.001
High School Diploma	10.9%	24.8%	
Two-year Degree	15.0%	24.2%	
Four-year Degree	31.1%	24.5%	
Master's Degree or higher	42.9%	26.5%	

Appendix F - Average Officer Education Level: Select States							
		% with AA or higher	% with BA or higher	% with AA (Highest)	% with BA (Highest)	% with MA (Highest)	% PhD, JD, Etc.(Highest)
California	*n = 12*	50.3%	39.5%	10.8%	30.6%	8.5%	0.4%
Florida	*n = 10*	49.0%	30.1%	18.1%	25.6%	5.3%	0.0%
Illinois	*n = 24*	57.3%	35.3%	22.0%	30.1%	4.7%	0.5%
Massachusetts	*n = 15*	63.2%	49.0%	14.1%	34.4%	13.9%	0.7%
Michigan	*n = 13*	76.6%	34.4%	42.1%	30.6%	3.8%	0.0%
Minnesota	*n = 15*	98.8%	42.0%	56.9%	37.4%	4.5%	0.0%
North Carolina	*n = 15*	47.7%	26.3%	21.5%	21.4%	4.9%	0.0%
New Jersey	*n = 10*	55.7%	46.1%	9.6%	32.6%	13.1%	0.5%
Ohio	*n = 33*	44.7%	29.2%	15.5%	25.2%	3.3%	0.7%
Pennsylvania	*n = 26*	58.3%	37.9%	20.4%	29.6%	8.4%	0.0%
Texas	*n = 40*	30.1%	21.5%	9.4%	17.6%	3.8%	0.2%
Washington	*n = 11*	57.6%	33.1%	24.6%	29.4%	3.5%	0.2%
Wisconsin	*n = 24*	89.3%	37.1%	52.2%	32.6%	4.4%	0.0%