

# Appropriate Staffing Levels for Law Enforcement

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## Abstract

*Analyzing police staffing models can lead to innovative ways to increase staffing levels. Most agencies across the country determine their staffing needs by either allocating a certain number of officers per capita, determining minimum staffing levels, budget allocations, or workload analysis. Agencies do not consider the thousands and sometimes millions of transient populations that visit or live in their jurisdiction. A more comprehensive approach would be to analyze police staffing levels to determine which staffing model best fits the agency and implement alternative staffing measures. Many agencies are now alleviating demands on their sworn officers by hiring non-sworn civilians to work calls for service. Non-sworn civilians can also serve as ambassadors at community engagements. These new ideas are generating additional staffing for agencies to maximize their community policing strategies.*

## Introduction

The American people depend on police to maintain public safety and social order. One of the most critical components of ensuring a sufficient police force is staffing allocation. Police staffing is always changing due to retirements, potential qualified applicants, and current events involving police reform and social injustice. In recent years, police across the country have been delegated additional duties along with crime enforcement tasks. These additional tasks can be based on the needs and expectations of the community and the department's administration. Traditionally, police staffing models in the United States are determined by one of five common measurements: officers per capita, minimum staffing personnel, crime trends, budget allocations, and workload. There are no federal guidelines which identify which model should be used for appropriate staffing levels, and it should be discouraged to make the determination based upon one specific method.

The per-capita approach does not consider the transient population which may include university students and population in surrounding cities that commute daily to the city. These cities may subsequently have a daily population that is substantially different than their census-based population. If these cities with a high transient population determine the size of their police force based upon the per-capita approach, the agencies may not be staffing enough officers. Police departments often compare communities, like their size and geography, to determine their own staffing needs; however, they fail to take into consideration transient populations. This can be ineffective due to a failure to account for the differences in variables between cities such as crime trends and workload. Another method that factors in population is the minimum staffing personnel model.

The minimum staffing model utilizes what an agency views as the absolute minimum number of officers to perform basic agency functions. The model is constrained by the ability to hire and keep police officers. In many instances, law enforcement agencies are experiencing retention and recruitment issues and may not be able to staff the minimum level of officers. Agencies are commonly offering hiring bonuses and other attractive benefits to be more competitive with other agencies. An additional method, basing staffing levels solely on crime trend models, can also be problematic because other expectations from the community and administration may be overlooked. In many agencies, personnel are required to conduct additional initiatives such as community policing or staffing schools with resource officers which would require more sworn personnel.

The last method, determining staffing based solely upon budget allocations, may also be problematic. Budget allocations differ from each municipality, year to year, due to the amount of money each municipality receives in taxes, state funded projects, or lost revenue. Some municipalities experience larger deficits than others. For example, in other economic downturns, the pandemic has reduced state and local revenue. Federal aid to state and local governments has exceeded projected revenue losses, that aid is set for one-time, and state and local governments are expected to face shortfalls for many years to come.

A more comprehensive approach would be to analyze police staffing based on actual workload and implement alternative delivery systems. Many agencies are now doing this by hiring non-sworn civilians to work calls for service which alleviates demands on their sworn officers. Non-sworn civilians can also serve as community service officers, public information officers, and forensic specialists. These new ideas are generating additional staffing for agencies to maximize their staffing and community policing strategies.

The size and priorities of a police department and the different services they provide reflect the community they represent. Determining the appropriate staffing model to fit an agency's needs can be challenging. The big question for police department administrations is "how many officers does your city need and how do you allocate the officers to maximize your communities' objectives?" Throughout this paper, comparisons will be made of staffing numbers of the Tallahassee Police Department and other agencies based on staffing models. These methods will be analyzed, and a determination will be made if other alternative systems would be beneficial for staffing.

## **Literature Review**

Many police departments across the country use the per capita approach to determine appropriate staffing for their agencies. This approach is when you compare the population to officer ratio. The International Association of Chiefs of Police (IACP) published an article that presented a 2003 Bureau of Justice Statistic (BJS) study that reported the average ratio of full-time officers per 1,000 residents. Police departments were categorized by the amount of people that are served in the community, ranging from 250,000 or greater, to smaller communities of 1,000 to 2,499 residents. According to the article, the ratio of full-time officers per 1,000 residents ranges from 1.8 to 2.6 officers per

1,000 residents (Delisi, 2006). This is an average of 2.5 full time officers per 1,000 residents (McCabe, 2013). Larger populations in America with a population greater than one million have considerably more resources and greater service capacity than those that have a population of 2,500 or less (Delisi 2006). Those that have 2,500 or less rely heavily on outside agencies to provide services beyond police officers regular duties (Delisi, 2006).

A 2020 University of North Florida (UNF) study on manpower analysis determined the average officer to resident ratio based upon geographical regions of the United States. The Northeast had 2.7 officers per 1,000 citizens, the Midwest had 2.2 officers per 1,000 residents, the West had 1.6 officers per 1,000 residents and the South 2.5 per 1,000 residents (Vose et al.,2020). The regional data from the study was obtained through the Federal Bureau of Investigation (FBI) (Vose et al.,2020). The study determined that it is important to compare staffing to comparable cities in your geographical area. In the UNF study, a comparison was also completed by using Florida Department of Law Enforcement (FDLE) data. The UNF study compared St Johns, Putnam, Flagler, and Volusia County which neighbor one another. In the study, St Johns County had 1.48 officers per 1,000 residents, Putnam County had 2.06 officers per 1,000 residents, Flagler County had 1.70 officers per 1,000 residents and Volusia County had 1.82 officers per 1000 residents (Vose et al.,2020). The use of the per capita model to dictate staffing allocation rests on the assumption that all population numbers represent the same demand for police services. For instance, it is likely a growing city will need more officers; however, a city that has a decline in their population, a high unemployment rate, and adverse economic and social conditions will need fewer due to a population decrease (Vose, et al.,2020). Another example in the state of Florida, The Villages, is a retirement community in Central Florida that has a population of roughly 79,077 residents (United States Census 2019). Few would think that 79,000 senior citizens would need more law enforcement officers than a city with the same population that is plagued by violent crime. There are countless law enforcement agencies that rely on the per capita model to determine staffing allocations. This method is a very simple way of comprehending and applying, however, it is equally inefficient and unreliable. The IACP does not recommend this method for staffing allocation (McCabe, 2013).

The minimum staffing approach is when agencies and command staff estimate how many police officers, they need to deploy at any given time to maintain officer safety and provide an acceptable amount of protection for the public (Wilson & Weiss, 2014). There are no standards for setting the minimum staffing levels and it differs from agency to agency; however, agencies often have minimum staffing levels listed in their policies or collective bargaining agreement. Agencies will often use the amount of crime reported, the number of calls for service, or the population of the city to determine minimum staffing. In some instances, agencies determine minimal staffing without any factual basis and only what they perceive. When you see a high number of officers in smaller communities it is likely a result of minimum staffing requirements (Hollis & Wilson, 2015).

The minimum staffing model can increase overtime budgets due to setting staffing levels too high or too low (Wilson & Weiss, 2014). If agencies use the minimum staffing model as their optimal staffing level, then eventually officers may get burnt out due to rising overtime hours. The number of extra overtime hours takes a toll on officers' fatigue and can eventually be hazardous to the officer and cause liability towards the agency.

The minimum staffing level approach is often described as problematic. Setting staffing levels for a fixed period tends to limit responsiveness to emergent and changing crime patterns and service demands (Vose et al., 2020).

In the 20<sup>th</sup> century, the primary goal of police agencies was crime reduction. Crime trends became the benchmark for police staffing. The more crime reported the more officers were needed to combat the crime. Research has shown that this model is an inefficient approach to staffing law enforcement. When the police are effective at reducing crime, fewer officers are needed. Using this model essentially provides incentives for poor performance and disincentives for good performance (McCabe, 2013). Additional shortcomings have been identified when using crime trends to include noting that police staffing responsive to crime trends is to reactionary and oriented towards neither optimal law enforcement performance nor community needs over time (McCabe, 2013). Crime rates are influenced by many other factors than just the response by the police. Many criminologists reduce the role of police entirely when it comes to crime rates in a community (McCabe, 2013). Using crime trends to staff a police agency is not the recommended approach. This staffing model is rarely used anymore across the United States.

The budget allocations model is like the minimum staffing model. In this approach the government predetermines a specific level of staffing that fits within the city budget. Budget allocations is a common model used in police staffing. It consists of examining the prior budget year in context with the current financial situation and staffing decisions are based on prior fiscal reports (McCabe, 2013). There are approximately 15,766 law enforcement agencies in the United States and the majority of these agencies fall under the jurisdiction of local government. This data is broken down between 12,656 local agencies, 3,061 sheriff's/county departments, 49 state police agencies, 1,326 special jurisdiction agencies and 623 Texas constable agencies (Delisi, 2006). Local authorities represent 98% of all law enforcement agencies in the United States. The local governments determine personnel, salary, equipment, and all other things related to police expenditures (Delisi, 2006).

Communities faced with difficult budgetary decisions often look at police agencies for potential cutbacks, however government officials do not want to risk harm to the community by cutting police funding. Some communities are growing at such a high rate that government is having difficulties funding the services needed for the growing population (McCabe, 2013). Budgetary decisions are critical and providing the correct level of police staffing is one of the most difficult and important jobs of government leaders. The danger here is that staffing decisions can become politicized or predicated on an artificial figure. The ability of a community to pay for services in previous years, or a change in political administrations, is not necessarily a sound foundation on which to make police staffing decisions.

The workload analysis model is a more comprehensive approach and often called a supply and demand of police resources. This model analyzes the number of calls for service and considers specialty units, community policing obligations, and operational commitments placed on the department (Vose et al., 2020). The workload model estimates future staffing needs of departments by modeling the level of current activity (Wilson & Weiss, 2014). A workload analysis will help determine the need for additional

resources, measuring productivity and detecting crime trends. This model can be used throughout the agency from the patrol level through command staff.

The importance of the workload-based approach to staffing is evidenced by it being codified as a standard by the Commission on Accreditation for Law Enforcement Agencies in 2006 (Wilson & Weiss, 2014). Typical workload models are complicated and require a vast number of calculations. There is no set rule on how to perform a workload-based assessment and it is often difficult for police administrators. The community may not agree with the way the police administrators decide to allocate their resources; the community may want to see more law enforcement in a specific area due to high crime and the police administrators would rather have officers conducting community policing at local neighborhood centers. The U.S. Department of Justice Community Oriented Policing Service advises that allocation models based on workload and performance objectives are preferable to other methods that might not account for environment and agency specific variables (Wilson & Weiss, 2014). There are many variables when assessing the workload model and a single variable should not be used to determine an agency staffing level.

Workload analysis can lead to innovative ways to address police staffing issues. The COPS Office and the Michigan State Police University School of Criminology partnered together to research the current staffing landscape and how it relates to community policing. Many agencies are now alleviating demands on their sworn officers by hiring non-sworn civilians to work calls for service. Non-sworn civilians can also serve as community service officers (Wilson & Weiss, 2014). These new ideas are generating additional staffing for agencies to maximize their community policing strategies (Wilson & Weiss, 2014).

Law enforcement agencies devote a large amount of their time to community outreach initiatives. According to the Bureau of Justice Statistics, nearly 80% of law enforcement agencies regularly meet with neighborhood organizations (Delisi, 2006). These organizations include business groups, senior citizen groups, domestic violence groups, youth services organizations, religious groups, and tenant associations. Approximately 76-100% of police departments that have more than 250,000 residents have regular meetings to conduct citizen police academies, community policing techniques, citizen survey, and crime related problems (Delisi, 2006).

Police department command staff often require young officers to conduct data driven policing while on patrol. The administration wants to see high numbers of arrests, citations, and reports written. This type of policing does indicate productivity and drive; however, it only measures a small part of what police officers do daily. What about gaining the community satisfaction and trust by doing community policing and community engagement? Community engagement activities make a huge contribution to building and maintaining relationships and community trust. When an officer goes out of their way to participate in something that is important to a certain segment of the community, it shows that the officer really cares about the members of that community, not just about enforcing laws (Cognae, 2015).

Many law enforcement agencies have disclosed that community policing and problem-solving efforts are being compromised due to lack of staffing and budget cutbacks. Specialized units like housing, schools, and other community-oriented programs have suffered. An increase in job duties due to budget cuts has reduced the

time police officers usually spend interacting with members of the community. Some of the duty's officers have been previously assigned and no longer perform can be transferred to non-sworn employees (Wilson & Weiss, 2014).

Non-sworn employees in law enforcement have been used across the nation for decades. Today, it's how the civilians are being utilized that is different than before. Civilians in the past used to be primarily dispatchers and records technicians. Police are now using civilians to perform a variety of jobs that allow police officers to focus on the tasks that require a sworn police officers presence. (Tyner, 2021). There is an increased need for law enforcement to be active in the community by providing community service. Uniformed law enforcement is important for community engagements, but civilian employees can also work together with sworn officers to assist with the responsibilities. By pairing civilians with sworn law enforcement, they can oversee community resource centers; bike, and foot patrol; respond to crime scenes; work closely with neighborhood associations for quality-of-life issues; and participate in demonstrations throughout the community to promote law enforcement. Civilians can oversee coordinating sworn law enforcement presence at community engagements and demonstrations. Civilian personnel can also be trained as community service officers to respond to delayed calls for service and traffic crashes. There are more than one million full time law enforcement officers in America. Approximately 70% of those are sworn officers with arrest powers. The other 30% of those officers are full time civilian employees (Delisi, 2006)

In addition, civilian staff are being used for crime scene, mental health teams, misdemeanor criminal investigations, victim advocates, and public information to assist sworn personnel (Tyner, 2021). These civilian roles are allowing departments to free sworn officers for other work or to fill positions for which it is proving difficult to recruit and maintain officers (Elkins, 2021).

Now that we have analyzed the five police staffing models and other alternative staffing options, we will explore whether additional staffing has a negative effect on crime rates. Adding additional police officers to a department would theoretically allow officers to arrest more criminals and deter other criminals from engaging in criminal activity (Lee et. al 2016). An expected result would be a decrease in crime through deterrence and incapacitation (Lee et. al 2016). However, a review of empirical research regarding the effect of police staffing on crime yielded mixed results. A meta-analysis conducted by (Lee et. al 2016) found that in most studies, an increase in police staffing did not cause a statistically significant reduction in crime. Commensurately, (Lee et. al 2016) found that the "overall effect size for police force size on crime is negative, small, and not statistically significant." Conversely, a 2015 meta-analysis and review conducted by Carriaga and Worrall found that there was a small but statistically significant impact on crime reduction (Carriaga & Worrall, 2015).

At most, research indicates that increasing staffing levels over a baseline per capita approach only creates a minor reduction in crime; in some cases, the reduction is not significant. It should be noted that the research is based entirely upon case studies of law enforcement agencies rather than experiments. This means that there has been minimal variation in the amount of sworn law enforcement agencies over the per capita model (Lee et. al 2016) and more research may be needed to see if a significant increase over the per capita model would cause a significant reduction in crime. A city may not have the funding, support, need or resources available to increase their police force size

enough to create a negative effect on crime. The research results do not reflect whether a significant increase in police force will yield a significant decrease in crime. In addition, changing policy and strategy is likely to have a greater impact on crime than adding more police. Some police strategies can be effective at reducing crime or disorder. Systematic reviews of hot spots policing, focused deterrence, problem-oriented policing, and third-party policing, provide evidence for the comparative effectiveness of these strategies (Carriaga & Worrall, 2015).

## Methods

This research was conducted to determine how agencies establish staffing levels and whether transient populations and community-oriented policing are considered when determining these numbers. A survey was sent out to police agencies across Florida with similar demographics to the Tallahassee Police Department. These agencies were selected based upon city municipalities, geographical region, population including transient size, and sworn personnel size. Agencies were also included that differed in size, region, and population type to control for confounding variables. The surveys were emailed to the selected agencies accreditation managers and a link was provided for an internet version of the questionnaire. The surveys were sent out to the following agencies:

Lake City P.D.	Quincy P.D.
Tallahassee P.D.	Gainesville P.D.
Jacksonville Beach P.D.	Ocala P.D.
St. Augustine P.D.	Plant City P.D.
Tampa P.D.	Palatka P.D.
Clearwater P.D.	Pinellas Park P.D.
Largo P. D.	St Petersburg P.D.
Haines City P.D.	Lakeland P.D.
Winter Haven P.D.	Cocoa P.D.
Melbourne P.D.	Palm Bay P.D.
Vero Beach P.D.	Clermont P.D.
Leesburg P.D.	Apopka P.D.
Ocoee P.D.	Orlando P.D.
Winter Park P.D.	Pensacola P.D.
Kissimmee P.D.	St Cloud P.D.
Altamonte Springs P.D.	Sanford P.D.
Fort Pierce P.D.	Port St. Lucie P.D.
Daytona Beach P.D.	Coconut Creek P.D.
Coral Springs P.D.	Davie P.D.
Fort Lauderdale P.D.	Hollywood P.D.
Miramar P.D.	Pembroke Pines P.D.
Plantation P.D.	Sunrise P.D.
Aventura P.D.	Coral Gables P.D.
Doral P.D.	Miami Beach P.D.
Miami Gardens P.D.	Miami P.D.

Key West P.D.  
Jupiter P.D.  
West Palm Beach P.D.  
Cape Coral P.D.  
Panama City Beach P.D.

Delray Beach P.D.  
Palm Bach Gardens P.D.  
Naples P.D.  
Fort Myers P.D.  
Panama City P.D.

This study was designed to measure how agencies are structured regarding personnel. Initially, the respondent was asked to provide the number of sworn personnel for their agency. A question was also asked to determine whether an agency utilizes non-sworn personnel such as community service technicians. If the respondent selected “yes” they were able to provide a text explanation. The study further measured the amount of sworn vacancies each agency had. The respondent was asked to select the model(s) that their agency uses to determine appropriate staffing levels. The choices included per capita, minimum staffing levels, crime trends, budget allocation, and workload analysis. The respondent was able to select an individual choice, all of the above, or a combination of two or more answers. The respondent was asked to provide the number of additional transient population in their jurisdiction and the number of calls for service from the previous calendar year. The respondent was asked if their agency had a community-oriented policy program and if so, did they use non-sworn staffing to fill those needs. All the data derived from the survey was supplemented with research derived from the U.S. Census report to include city population size to determine the number of sworn officers per capita.

A weakness in the construct of the research is due to reliability. The person answering the survey may not be privy to how the staffing levels were determined or may not be aware of all the variables that were taken into consideration. In addition, there may not be documentation on how those decisions were made. Additionally, the survey relies on a person responding. Some agencies may not be aware of how staffing levels were determined or there may not have been a method used at all; these agencies may be less likely to respond to the survey which could skew data. Larger agencies may have personnel that work in specific bureaus that handle this specific data whereas smaller agencies may not; again, this may lead to a lower response amongst smaller agencies.

## **Results**

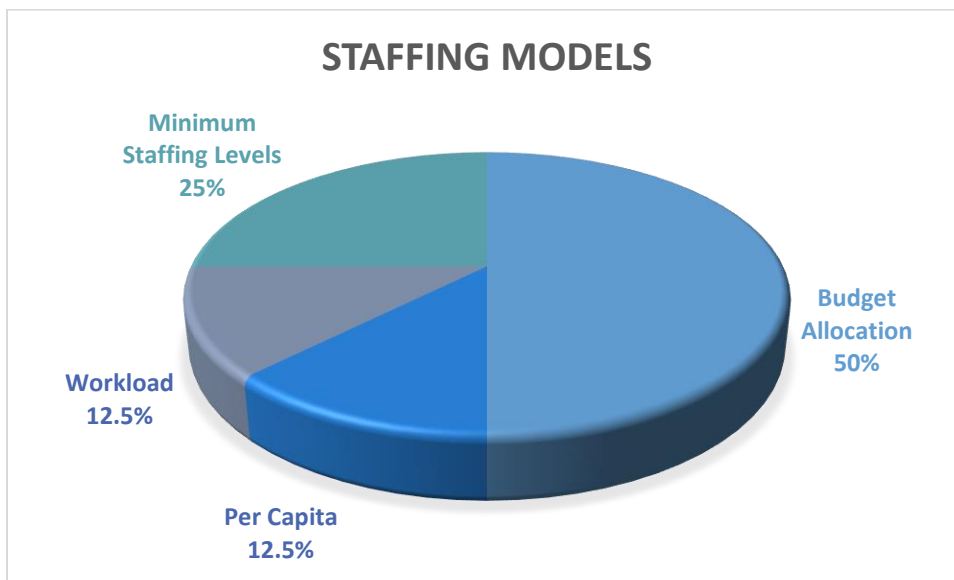
Sixty police departments across the state of Florida were surveyed and sixteen agencies responded which averages to a 27% response rate. The Survey Monkey link was sent out to all the selected agencies accreditation managers on February 1, 2022, and all data was collected by March 1, 2022. A variety of trends and weaknesses were identified through the results.

### **Staffing Models**

The respondent was asked to select the model(s) that their agency uses to determine appropriate staffing levels. The choices included per capita, minimum staffing levels, crime trends, budget allocation, and workload analysis. The respondent was able



to select an individual choice, all the above, or a combination of two or more answers. The results found that 50% of the agencies surveyed use budget allocation, 25% use minimum staffing levels and the per capita model and workload analysis were both 12.5% each. There were no agencies that use multiple staffing models, or any other staffing model not mentioned.



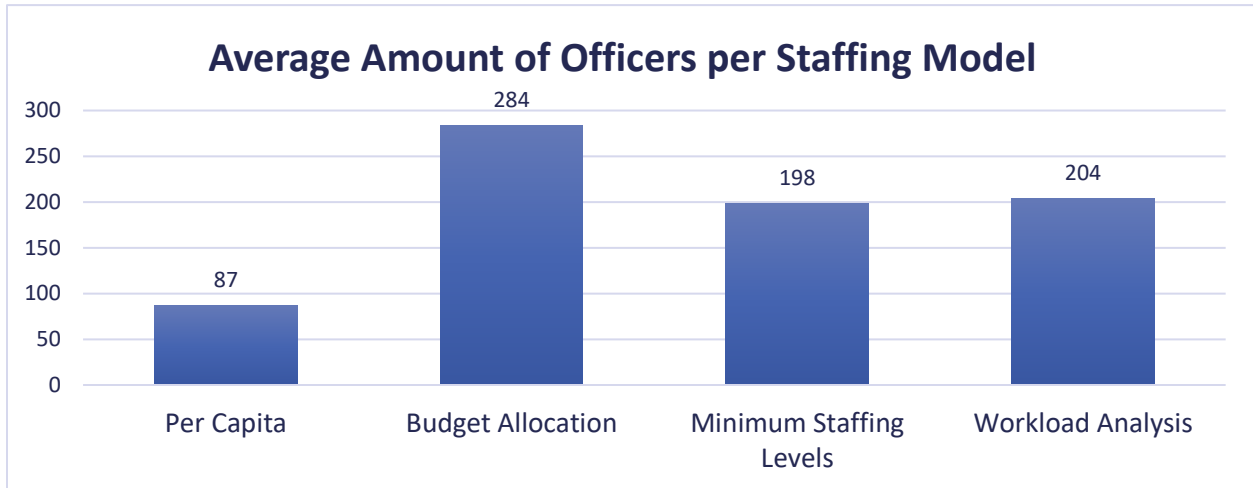
### Officers Per Agency

In total, the survey captured 3,646 officers which equates to an average of 228 officers per agency surveyed. The agency with the smallest number of officers had 56, and the agency with the greatest number of officers had 1,269. The second largest agency had 340 officers. The median number of officers per agency was conducted in addition to the average to prevent the largest agency from significantly skewing the data. The results showed that the median number of officers was 125 officers per agency.

In addition, each agency was asked how many current sworn officer vacancies they have. There was a total of 342 officer vacancies from the 16 agencies surveyed. The average number of officer vacancies was 21. The agency with the smallest number of vacancies was fully staffed, and the agency with the greatest number had 107 officer vacancies. However, the agency that reported 107 officer vacancies also reported that they had 107 current officers. This information is likely not valid and significantly skews the averages for agency vacancies. If the number is left in when calculating the average for agency vacancies, the average number of vacancies per agency would be 20 officers. As a result, a new average was calculated by removing the agency with 107 officer vacancies and dividing by 15 agencies. The recalculated average officer vacancies would be 15.

When comparing the average amount of officers to the staffing models, the following data was obtained. Budget allocation models had an average of 284 officers

which shows that larger agencies are more likely to use the budget allocation model. The per capita model had an average of 87 officers which shows that the smaller agencies are more likely to use the per capita model. The minimum staffing level model had an average of 198 officers and the workload analysis model had 204 officers.

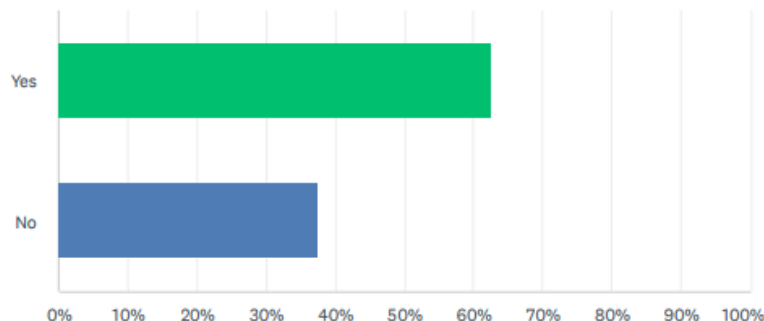


### Transient Population

Each agency was asked whether they have a transient population to include university students, tourist attractions or neighboring jurisdictions. The results of the data were 62.5% of the agencies surveyed have a transient population and 37.5% do not. Data was also collected and analyzed to determine the number of officers per 1,000 citizens in the surveyed agencies population. The data was compared to whether the agency has a transient population. The research showed that agencies that have a transient population have 2.3 officers per 1,000 citizens and agencies that do not have a transient population have 2.1 officers. The data was also analyzed by combining the number of officer vacancies per agency with the number of staffed officer positions to determine the number of officers per 1,000 citizens, if the agencies were fully staffed. The research showed that agencies that have a transient population would have 2.4 officers per 1,000 citizens, if fully staffed. The agencies that do not have a transient population would have 2.3 officers per 1,000 citizens, if fully staffed. The difference between the two was minimal.

## Q4 Does your agency service a geographical area that has a transient population (e.g. universities, tourist attractions, neighboring jurisdictions)?

Answered: 16 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	62.50%	10
No	37.50%	6
Total Respondents: 16		

### Calls for Service

Fifteen out of the sixteen agencies that responded to the survey provided the number of calls for service they responded to in 2021. When you compare the amount of sworn officers to the number of calls for service the findings are inconsistent. The lowest number of calls for service per officer was 209 calls per officer a year and the highest was 895 calls per officer. According to the 15 agencies that responded to the question the average calls for service per officer in 2021 was 487.

Agency Respondent	Calls for Service Per Officer	Sworn Officer in Agency	Calls for Service
1	209	82	17123
2	236	56	13216
3	264	316	83473
4	267	1269	339152
5	274	155	42507
6	440	107	47125
7	500	80	40000
8	511	340	173586
9	532	94	50000
10	557	96	53509
11	599	142	85000
12	647	95	61447

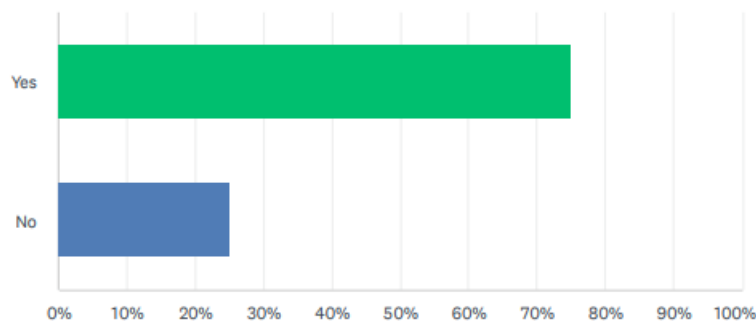
13	680	91	61901
14	701	245	171752
15	895	189	169078

### Supplemental Civilian

Agencies were asked whether they use civilian personnel to answer calls for service. The survey data results showed 75% of the agencies use civilian personnel to answer calls for service and 25% do not. The agencies were asked to provide how many civilian personnel they employ to answer calls for service and the 16 agencies advised they employ between one and 53 civilians.

#### Q6 Does your agency currently use civilian personnel to answer non-priority calls for service (e.g. community service officers/technicians)?

Answered: 16 Skipped: 0

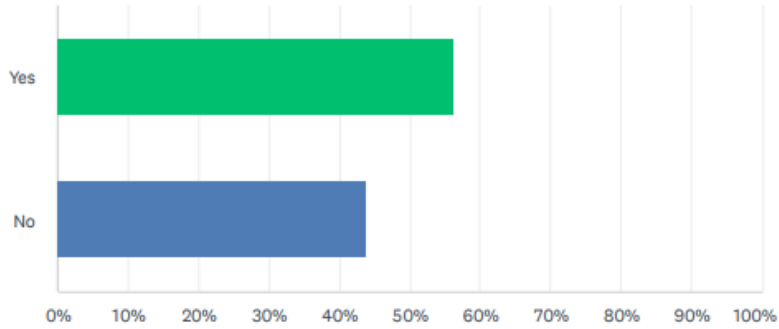


ANSWER CHOICES	RESPONSES	
Yes	75.00%	12
No	25.00%	4
TOTAL		16

The agencies surveyed were asked whether they use civilians for community engagements and relations. A total of 56.25% answered yes and 33.75% answered no. Of the nine agencies that use civilian personnel for community engagements they advised that they employ between one and nine civilian employees.

### Q7 Does your agency use civilian personnel for community engagements/relations?

Answered: 16 Skipped: 0

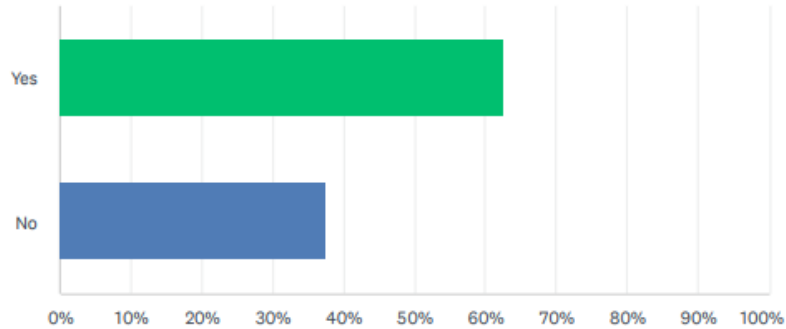


ANSWER CHOICES	RESPONSES	
Yes	56.25%	9
No	43.75%	7
Total Respondents: 16		

The last question surveyed was whether agencies have a Community Oriented Policing and Problem-Solving (COPPS) program. The data results showed that 62.5% have a COPPS program and 37.5% do not. The agencies were asked how many officers they have assigned to the COPPS program. The agencies surveyed have between three and 109 officers assigned to their COPPS program.

## Q8 Do you have a COPPS (Community Oriented Policing and Problem Solving) program?

Answered: 16 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	62.50%	10
No	37.50%	6
TOTAL		16

### Survey Weaknesses

The survey was sent out to all the agencies' accreditation managers to be completed. An important deficiency that occurred through Survey Monkey was the response only listed an IP address and not the agency email from the respondent. This made it difficult to identify which agency responded to the survey. A way to correct that issue would have been to ask the name of the agency as question number one. A reverse lookup of the IP address identified most of the agencies that responded, however there were a few that were unidentified. This became an issue when comparing numbers to the agencies populations. Some other weaknesses included that only 16 out of 60 agencies responded to the survey. The survey was completed by the agencies accreditation managers and if they did not know the answer they may not have decided to answer the survey. An additional weakness in the construct of the research is due to reliability. The person answering the survey may not be privy to how the staffing levels were determined or may not be aware of all the variables that were taken into consideration. This is also exacerbated because there may not be documentation on how those decisions were made.

## Discussion

The results of the survey brought to light that agencies across the state of Florida are inconsistent on how they determine their staffing levels. Most of the research from the literature review favored using workload analysis and adding alternative delivery systems to include civilian personnel taking calls for service, community engagements, and community policing. The results of the survey showed that only 12.5% of the agencies surveyed used workload analysis to determine staffing. An overwhelming 50% of the agencies surveyed used budget allocation to manage staffing levels. In addition, the survey data showed that agencies across Florida are now using civilians to assist their agencies with calls for service (75%) and community engagements (56.25%). The survey data also included additional transient population that impact the agencies. A total of 62.5% of the agencies surveyed have additional transient population to include universities, tourist attractions and neighboring jurisdictions. These additional transients account for thousands and sometimes millions of additional people visiting the agencies jurisdiction. The addition of that many people can drastically change the number of officers needed to effectively police their jurisdictions.

An ongoing problem throughout the country is staffing levels and police officer vacancies. The survey results showed that Florida is experiencing those same hardships. Of the 16 agencies that responded to the survey, the average number of officer vacancies was 15. Agencies in Florida are thinking of other ways to effectively provide a safe environment for citizens of their cities. They are using non-sworn civilians to answer nonpriority calls for service. They are also using civilians to represent police agencies with community engagements, public information personnel and other duties that could free up sworn personnel to answer priority calls for service.

There are no obvious trends between the number of calls for service per officer and which staffing models are used. The lowest number of calls for service per officer was 209 calls per officer a year and the highest was 895 calls per officer. According to the 15 agencies that responded to the question, the average calls for service per officer in 2021 was 487. However, the only calls for service numbers that were similar were agencies that had staffing between 91-96 officers. Of the 16 agencies surveyed, four of them had staffing between 91-96 officers. The four agencies had calls for service to include (1) 50,000, (2) 53,509, (3) 61,447 and (4) 61,901 calls. Those calls for service per officer totaled, (1) 532, (2) 557, (3) 647 and (4) 680. These numbers are consistent with staffing levels, calls for service and number of calls for service per officer. When analyzing the staffing models for each of these four agencies it varies, (1) used per capita, (3) used workload analysis and (2) and (4) used budget allocation. The research shows that there does not appear to be a clear-cut answer as to which model works best for staffing. The literature review findings showed that agencies across the country use multiple staffing models. The survey that was sent out gave the option of providing multiple responses to the staffing model question. All 16 of the responses listed only one staffing model that their agencies use.

## Recommendations

The survey results indicate that agencies in the state of Florida are barely getting by with staffing due to high vacancies and high calls for service. The survey results show that city officials are not considering transient population when staffing law enforcement agencies. In addition, law enforcement agencies have taken on so many additional roles to include community engagements, mental health, and homeless initiatives.

Managers should take time to dissect their agency and determine what staffing model is best for their community. The research has shown that all agencies are not alike and agency heads need to take into consideration how the community wants to be policed. Staffing is not all a numbers game; managers need to conduct an in-depth work analysis to determine where their staffing can be used effectively. The per capita approach is a quick way of looking at a city population and determining how many officers are needed per 1000 citizens. The problem with this model is that it does not consider the transient population that either live part time in the city or commute every day to and from. For example, the city of Tallahassee has approximately 198,000 citizens that live in the city limits. This does not consider the number of students that attend Florida State University, Florida A&M University, Tallahassee Community College and Keiser College. In addition, when the state legislature is in session it brings thousands of visitors to the city for months at a time.

If command staff members of all 16 agencies were asked what model they use to determine appropriate staffing, there is no doubt command staff members from the same agencies would provide different answers or not know the answer at all. Do command staff members know how many calls for service their officers respond to a year and how many calls are assigned to each officer? This is important information for command staff to know to run their agency effectively. Some agencies likely use different staffing models, and they are not aware of it. When choosing your staffing model there needs to be a research component to determine population size, number of calls for service, number of officers, number of officer vacancies, additional transient population numbers to include university student enrollments. Questions need to be asked about what communities expect out of their law enforcement officers.

The literature review research showed that agencies across the country use multiple different staffing models. The data from this survey showed that none of the 16 agencies in Florida that responded to the survey use multiple staffing models. Command Staff need to determine whether multiple different staffing models are beneficial to their agency.

When looking at the survey numbers, agencies will likely see that they are currently understaffed and need additional staffing numbers. Managers need to see what other agencies are doing across the country to effectively deal with this police officer shortage. It is beneficial to analyze the agency and see where civilian personnel can be used instead of using sworn officers. The recommendation is not to get rid of sworn police officers, it is to allocate those positions to more effective policing like COPPS programs, violent crime response teams, traffic enforcement, and other priorities the community requests to keep them safe. By hiring civilians to answer non-emergency calls for service, it helps with police staffing and is a gateway to training civilians to become police officers



in the future. There are many different ideas to assist with police staffing across the country and state. Managers need to be open minded and innovative with their ideas.

Lieutenant Jeff Mahoney has been in law enforcement for 23 years with the Tallahassee Police Department. He began his career in 1999 and has worked in many different assignments to include Sex Crimes, Homicide, Cold Case Homicide, U.S. Marshals Violent Fugitive Task Force and the Tactical Apprehension and Control Team. He was promoted to Sergeant in 2014 and supervised Patrol Officers and the Homicide Violent Crime Unit. In 2020 he was promoted to Lieutenant and has been assigned to the Watch Office and Patrol Administration Bureau. Lieutenant Mahoney is currently the Tactical Apprehension and Control Team Commander and the Acting Major over the Operational Support Bureau. Lieutenant Mahoney received a Bachelor's Degree in Criminology with a Minor in Psychology from Florida State University.

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## Appendix A

### Appropriate Staffing Levels- LEO Survey

Staffing levels have always been a major issue in law enforcement. A difficult question has been how are staffing levels measured and how many officers are enough for your agency to be effective? Many municipalities have additional transient population that are not accounted for when determining staffing levels. Recently, law enforcement agencies have started using non-sworn civilians to assist with calls for service to allow additional time for officers to address community policing needs in their cities. It is important to determine if your agency is using their staffing levels to the best of their ability to keep their city safe.

1. How many sworn police officers do you currently have at your agency?
2. How many current police officer vacancies do you have at your agency?
3. Which model(s) does your agency use to determine appropriate staffing levels (choose all that apply)?
  - Per Capita
  - Minimum Staffing Levels
  - Crime Trends
  - Budget Allocation
  - Workload Analysis
4. Does your agency service a geographical area that has a transient population (e.g. universities, tourist attractions, neighboring jurisdictions)?
  - Yes
  - No
  - If yes, approximately how many additional people are considered transient?
5. How many calls for service did your agency respond to in the calendar year 2021?
6. Does your agency currently use civilian personnel to answer non-priority calls for service (e.g. community service technicians)?
  - Yes
  - No
  - If yes, how many are employed by your agency?

7. Does your agency use civilian personnel for community engagements/relations?

- Yes
- No
- If yes, how many are employed by your agency?

8. Do you have a COPPS (Community Oriented Policing and Problem Solving) program?

- Yes
- No